A PORTFOLIO OF
STUDY, PRACTICE AND RESEARCH

Submitted for the Doctorate of Psychology (PsychD)
Clinical Psychology Conversion Programme
University of Surrey

Including

The development of a self-help treatment manual for
people with borderline personality disorder
and the preliminary evaluation of its use.

Lorraine Bell
2000
Acknowledgements

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## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Study Plan</td>
<td>1</td>
</tr>
<tr>
<td>Academic Dossier</td>
<td>5</td>
</tr>
<tr>
<td>What Predicts Failure to Engage in or Drop-out from Treatment for Bulimia Nervosa and what Implications does this have for Treatment?</td>
<td>6</td>
</tr>
<tr>
<td>Does Concurrent Psychopathology at Presentation Influence Response to Treatment for Bulimia Nervosa?</td>
<td>35</td>
</tr>
<tr>
<td>Professional Dossier</td>
<td>69</td>
</tr>
<tr>
<td>An Evaluation of A Supervised Self-help Programme for Bulimic Disorders</td>
<td>70</td>
</tr>
<tr>
<td>Curriculum Vitae</td>
<td>97</td>
</tr>
<tr>
<td>Research Dossier</td>
<td>108</td>
</tr>
<tr>
<td>The development of a self-help treatment manual for people with borderline personality disorder and the preliminary evaluation of its use.</td>
<td></td>
</tr>
</tbody>
</table>
Bulimia nervosa (BN) is a common disorder affecting at least 3% of young women. It is a disorder associated with high levels of distress and psychiatric co-morbidity. It has a cyclical and potentially chronic course and major psychological and physical sequelae. It is also likely to be increasing in incidence, particularly in developing countries. The treatment of BN has been studied extensively. Over 25 randomised controlled studies demonstrate that Cognitive Behaviour Therapy (CBT) is the treatment of choice (Hay & Bacaltchuk, 2000). However, up to 30% of patients fail to engage or drop-out and it is only effective for approximately two thirds of those who remain in treatment. Understanding which patient variables are associated with outcome may help us to match patients to treatments more effectively and indicate how we may need to modify treatments to improve engagement and outcome.

I introduced a supervised self-help programme for bulimia nervosa and binge eating disorder within Portsmouth Healthcare Trust six years ago and have supervised it throughout that time. It is an evidenced-based treatment designed to provide CBT to adults with bulimic disorders uniformly throughout the Trust. Evaluating the outcome is an important part of my role in promoting a good quality, effective service. A number of objectives have been made from annual audits of the service and improved outcomes achieved.
Research Dossier
The Development of a Self-help Treatment Manual for People with Borderline Personality Disorder and the Preliminary Evaluation of its Use.

Borderline Personality Disorder (BPD) is a severe condition associated with multiple psychiatric problems (Axis 1 disorders but also at times other Axis 11 disorders), commonly including substance abuse, repeated self-harm and/or suicide attempts. Unlike other personality disorders, BPD is associated with high service use, often involving residential treatment and care. There are a number of psychological therapies of benefit to people with BPD (DBT, CAT and CT) but insufficient people trained in these therapies to meet this need. Most patients with BPD do not receive formal psychological therapy. In addition, the uptake of the service by those with BPD is often fluctuating. This further inhibits their ability to engage in psychological therapy, which invariably involves waiting for treatment and requires consistent and sustained commitment. The aim of this study is to develop a self-help manual for people with borderline personality disorder (BPD) and multi-impulsive behaviours and evaluate its potential benefits for patients and staff.

Treatment manuals used by patients with or without supervision are now used in the initial treatment of a number of conditions, such as anxiety and bulimic disorders. They are now recommended as a cost-effective first intervention in the treatment of people with bulimia nervosa (Treasure et al, 1996), a common problem in people with BPD. A UK trial is currently underway using a manual with people who repetitively self-harm, a clinical group which would include some patients with multi-impulsive behaviours or BPD (Evans, Tyrer, Catalan et al, 1999). Treatment with such manuals rarely achieves the same outcome as full therapy. However, they do have benefits for a proportion of patients.

Aims of study
The aim of this study was to develop a self-help manual for people with BPD and pilot its use in a generic mental health service with no specialist service for people with BPD.
Research Questions

• Can people with BPD and multi-impulsivity use a self-help manual to any benefit?
• Which patients are likely to benefit and which factors might predict response to this intervention?
• Can this intervention be delivered by non-therapist mental health staff (community psychiatric nurses and psychiatrists)?
• Does the use of the manual change the attitudes of staff?

An additional aim of the study was to obtain feedback on the manual from staff and patients who have used it so that it might be modified and improved for use in a larger trial.

Methodology and design

The manual will be collated integrating three psychological approaches, CAT, Cognitive Therapy and Dialectic Behaviour Therapy. Referrals will be sought from CMHTs within Portsmouth Health Care Trust. Staff contact will be standardised across groups (24 weekly sessions of 30 minutes). Those referred will be interviewed before and after the intervention and at three months follow-up. Staff knowledge and attitudes will also be assessed.

Participants

Patients within Portsmouth HealthCare Trust who are identified with major borderline features. Staff involved in supervising patients would include trained psychiatric nurses and psychological therapists in community services. Inclusion criteria for patients will be those who meet DSM IV criteria for BPD or have multi-impulsive problems in at least three areas of the MIS.

Sample size

approximately 12

Measures

Three areas of data will be sought
1. measures of psychopathology including BPD criteria and impulsivity pre- and post-intervention.
Prospective participants will be interviewed with the SCID. In addition the following written measures will be given - Millon Multiaxial Clinical Inventory, Multi-Impulsivity Scale, Borderline Syndrome Index, CATS, DSQ and PSQ.

2. a measure of staff attitudes and conceptualisation of people with BPD before and after intervention.

3. qualitative feedback from patients regarding the use and helpfulness or otherwise of the manual.

References


Proposed timetable

Sept - Oct 1998 finalisation of research protocol inc. measures and sample size
Oct - Dec 1998 outline of programme and submission for ethical approval
Jan 1999 offering the programme within the Trust
March/April 1999 initial training and induction of staff
April 1999 introduction of the programme to patients and pre-intervention measures.
April 99 - March 2000 implementation of the programme over a six month period
Dec 99 - June 2000 follow-up assessments
March - August 2000 data analysis
April - Sept 2000 writing up.
What predicts Failure To Engage in or Drop-out from treatment for Bulimia Nervosa and what implications does this have for treatment?

Abstract:
The aim of this review was to analyse and summarise the research findings regarding which factors predict failure to engage (FTE) or drop-out from treatment for bulimia nervosa. A literature search was carried out with PubMed and PsychLit from 1985 to September 2000. Key terms searched were those classified as bulimia nervosa: outcome, FTE, drop-out and attrition. Outcome studies were also screened for inclusion of characteristics of those who failed to engage or dropped-out. Twenty eight studies were identified. They examined a range of factors - patient characteristics, patient-therapist and therapist factors. Three trials report different drop-out rates between treatments. Most samples studied are small and studies vary methodologically, making comparison difficult. FTE and drop-out is not a uniform phenomenon. The only robust finding for patient characteristics is that co-morbid borderline personality disorder increases the risk of FTE or drop-out. Discrepant expectations between patients and therapists may also contribute to drop-out. Drop-out is higher for medical treatment. Recommendations are made as to how clients may be more successfully engaged or maintained in treatment.

Key words: failure to engage, drop-out, attrition, bulimia nervosa.
INTRODUCTION

Bulimia nervosa (BN) is an eating disorder characterised by uncontrolled compulsive eating binges, followed by recurrent use of self-induced purging such as vomiting, laxative abuse or other inappropriate compensatory methods to prevent weight gain. Significant numbers of patients who are referred to a service never keep their first appointment, a phenomenon described as non-attendance or failure to engage (FTE). Rates of FTE are rarely reported in the literature. In one study (Burket & Hodgin, 1993) 28% of referrals to an eating disorder service ‘did not show’. Of those who do, a further one third of people drop-out of treatment for BN (Agras, 1993; Mitchell, 1991; Steel et al., 2000). Drop-out can be defined as premature termination of treatment which is unilaterally decided by the client. Though there is a body of literature concerning factors contributing to drop-out as a general phenomenon in mental health services and a recent paper discussing the phenomenon within the eating disorders field (Mahon, 2000), no previous review has examined the data specific to treatment for bulimia nervosa. Attrition is the term used to describe drop-out in research studies.

FTE and drop-out is not a uniform phenomenon. Some patients may drop-out because they have made sufficient progress (Giles, Young, & Young, 1985). However, most patients remain clinically disturbed (Fairburn et al., 1991). Those who fail to engage or drop-out represent a significant number of patients with a potential interest in addressing change. Given the small proportion of patients with bulimia nervosa who seek or are referred for treatment (Hoek, 1993), improving engagement and reducing drop-out are important goals. Understanding which factors are likely to increase the risk of FTE or drop-out could inform clinicians and service planners when considering possible modifications to treatment which could promote engagement and reduce drop-out.

Two studies assessed factors associated with FTE (see table 1). Twenty six studies were identified which found characteristics that distinguished those who dropped-out from those who completed treatment for BN, nine studied group therapy, eleven individual therapy and six a combination of both or other interventions (see table 2). Two studies of patients with mixed eating disorders diagnoses are included, the first...
(Clinton, 1996) because of its large sample size which was predominantly patients with BN\(^1\) and the second (Burket & Hodgin, 1993) because it is one of only two published studies to address FTE in treatment for eating disorders. Most studies examine a range of patient characteristics (including social and demographic variables, those related to eating psychopathology and co-morbidity, family functioning and history and other psychological variables). Three comparative trials report different drop-out rates between treatments (Freeman, Sinclair, Turnbull, & Anndale, 1985; Kirkley, Schneider, Agras, & Bachman, 1985 and Mitchell et al., 1990) but in most studies (e.g. Wilson, Rossiter, Kleifield, & Lindholm, 1986; Treasure et al., 1998 and Davis, Mcvey, Heinmaa, Rockert, & Kennedy, 1999) these do not reach levels of statistical significance. Only two studies so far published have examined patient-therapist factors.

There are numerous methodological problems. Most studies have small sample sizes and insufficient numbers to identify statistical relationships. Only a few recent studies have adequate sample sizes (see table 2). There is also wide variability between studies. These include which variables are measured and how, treatment features including waiting times, and definitions and clinical features of drop-outs in contrast to ‘completers’. Many outcome studies have not reported on drop-outs and of those which do, few report the criteria used, e.g. some may include patients who moved area, a factor which services will have little influence over. Very few studies report data or characteristics on both those who fail to engage and those who drop-out.

Reasons for FTE may be different from reasons for drop-out at later points in treatment. Some will be common to both, including patient variables. Relationship issues with therapists will not be a reason for FTE, though patients’ expectations (e.g. of therapist gender or orientation of treatment as described by referrer) may be. Another factor which is likely to influence FTE and drop-out is the perceived expertise of a service. One multi-centre study found significant differences in drop-out between treatment centres. Specialist services may have lower rates of FTE or drop-out but increased distance for patients to travel could nullify this.

\(^1\) The results of van Strien et al., 1992 are not included because their sample was predominantly anorectics.
PATIENT FACTORS

Demographic factors

Class or socio-economic status did not predict drop out in the Margitai, Blouin, and Perez (1987) or van Furth et al. (1996) study. Merrill, Mines, and Starkey (1987) found that those who dropped out were less likely to be employed. (There is some evidence that patients with other disorders and lower socio-economic status are more likely to drop-out, Baekland & Lundwall, 1975). Merrill et al. (1987) also found drop-outs were less likely to be married. However, Griffiths (1990), Davis et al. (1999) and Steel et al. (2000) found no differences in either marital or employment status.

Burket and Hodgin (1993) found those who fail to engage did not differ in age. Kirkley et al. (1985), Merrill et al. (1987), and Treasure et al. (1998) found drop-outs tended to be younger than ‘persisters’. This pattern is not unique to patients with BN (Baekland & Lundwall, 1975; Nicholson, 1994; Loumidis & Shropshire, 1997). However, where statistical analyses are reported, trends did not reach levels of significance. Five studies found age was not correlated with drop-out – Margittai et al. (1987), who also found age of onset did not predict drop out - Griffiths (1990), Olmsted et al. (1991) and McKisack and Waller (1996), Davis et al. (1999), Steel et al. (2000) and Agras et al. (2000a). Griffiths (1990) also found no differences between drop-outs and completers for age of onset.

Eating disorder psychopathology

Results are contradictory with regard to duration of disorder. Burket and Hodgin (1993) found those who fail to engage did not differ in the duration of their eating disorder. Coker, Vize, Wade, and Cooper (1993) found patients who fail to engage had a longer history than those who engaged, a mean of 10.8 years compared to 5.4. On the other hand, Kirkley et al. (1985) found drop-outs tended to have a shorter duration, as did McKisack and Waller (1996) who found drop-outs had an average of 5 years duration compared to 6.6 years for completers. The latter was however a very small sample. Troop et al. (1996) and Turnbull et al. (1997) suggest patients with a long duration of BN may be more motivated to give up bulimic behaviours. They may experience increasing negative effects (such as physical symptoms) or a realisation that
BN is not after all the solution to their problems. The largest studies to assess duration, Olmsted et al. (1991), Blouin et al. (1995), Davis et al. (1999), Agras, Walsh, Fairburn, Wilson, and Kraemer (2000b) and Steel et al. (2000) found no relationship between drop-out and duration of disorder.

It may be that the relationship between duration and response to treatment is non-linear, i.e. to be motivated to seek and remain in treatment you need to have the disorder long enough to suffer from unwanted aspects but not so long (perhaps 10 years or more, as in the Coker study) that you feel demoralised about the prospect of change. Results regarding a history of previous treatment shed no light on this hypothesis. Hsu and Holder (1986) found that a history of previous treatment was associated with drop-out, whilst McKisack and Waller (1996) found that those who had had previous treatment attended more group therapy sessions, but this narrowly failed to reach statistical significance.

Burket and Hodgin (1993) found those who fail to engage did not differ in levels of binge eating or vomiting. Similarly, most studies found no differences in levels of bingeing or purging for drop-outs\(^2\). However, laxative abuse has been associated with FTE (Coker et al., 1993; Burket & Hodgin, 1993) and drop-out. McKisack & Waller (1996) report that good attendance at groups is associated with more severe levels of bingeing and purging. This result has not been replicated in other studies, most of which have larger sample sizes.

Severity of bulimic cognitions did not predict drop-out in Margittai et al. (1987), Olmsted et al. (1991), Wilson et al. (1986), Wilson, Eldredge, Smith, and Niles (1991), Blouin et al. (1995) and Clinton (1996) studies or, on most measures, in Steel et al. (2000). Agras et al. (2000b) found a higher level of bulimic cognitions and greater concern about shape (an Eating Disorders Examination scale, Cooper & Fairburn, 1987) distinguished drop-outs more than any other variable. In one study, (Giles et al.,

1985), drop-outs had lower EAT scores (Garner & Garfinkel, 1979) and dropped out because they felt they had gained sufficient help. This highlights the point that those who fail to engage or drop-out are unlikely to be a homogenous group. It could, for example, include those who are demoralised by chronicity and or high severity and those who end treatment because they feel they do not need it. Van Furth et al. (1996) report drop-outs are comprised of those whose eating disorders are most and least severe.

Olmsted et al. (1991) found a trend for higher scores on the Ineffectiveness and Maturity fears scales of the Eating Disorders Inventory (EDI, Garner and Omlsted, 1984) to be associated with drop-out. The former was confirmed in the recent study by Steel et al. (2000), and was the only scale on the EDI which produced a statistically significant difference. Burket and Hodgkin (1993) found those who fail to engage were more dissatisfied with their current weight and tended to set lower desired weight. McKisack and Waller (1996) found drop-outs had higher scores on Drive for Thinness and Body Dissatisfaction EDI scales. Coker et al. (1993) found patients who fail to engage in treatment had greater dissatisfaction with their body weight than those who did engage, but did not differ in their weight history. It may be that the approaches in these two studies, supervised self-help and group Cognitive Behaviour Therapy (CBT) respectively, are less able to accommodate the weight concerns of individual patients. (Hence the finding was not replicated in the Steel et al. study of individual CBT).

Curiously, Hsu and Holder (1986) found that shorter patients were more likely to drop-out. This may reflect a reality-based anxiety about increasing their food consumption (the intervention was behavioural) as shorter people will need a lower food intake to maintain the same Body Mass Index (BMI) as taller people. In a larger sample, Griffiths (1990) found height did not predict drop-out. Wilson et al. (1986) and Agras et al. (2000b) found those with a history of anorexia nervosa (AN) or lower past weights were more likely to drop-out. In a review of early studies of group therapy, Osterheld, McKenna, and Gould (1987) state that one study, not identified, reports drop-outs had more anorectic features. Steel et al. (2000) found that drop-outs had had a wider adult weight range, i.e. extreme fluctuations in weight. Burket and
Hodgin (1993) and Coker et al. (1993) found that patients who failed to engage wanted a lower body weight. Consistent with this, McKisack and Waller (1996) found drop-outs had a higher BMI (24.4 rather than 22, a small but statistically significant difference). However, Margittai et al. (1987), with a larger sample, and Clinton (1996) found no relationship between BMI at presentation and drop-out. Olmsted et al. (1991), Blouin et al. (1995) and Davis et al. (1999) found no association between weight history and drop out.

One reason why findings regarding weight and weight history are inconsistent is that they may be an indirect and inaccurate measure of another variable which has not been measured, such as fear of weight gain. (This may not be the same as Drive for Thinness as measured on the EDI). This is likely to impair someone's capacity to adhere to the recommendations of a CBT programme, which places considerable emphasis on regular eating of a wide range of foods, including higher calorie foods. Those who are overweight, have anorectic tendencies or a history of wide weight fluctuations could all have grounds for greater anxiety about weight gain, increasing their risk of not starting or completing treatment.

Other psychopathology

Only one study (Olmsted et al., 1991) reports drop-outs have more disturbance on a measure of general psychological functioning, the SCL 90 (Derogatis, 1983). Margittai et al. (1987) and Griffiths (1990) found there was no association between drop-out and global functioning as measured respectively by the SCL 90 and General Health Questionnaire (GHQ, Goldberg & Hillier, 1979). Clinton (1996) found drop-outs did not differ in general psychiatric symptoms (using the Crown-Crisp Experiential Index, Crown & Crisp, 1979). Wilson et al. (1991) and Davis et al. (1999) found drop-outs did not differ in terms of general psychopathology (respectively SCL 90 and Brief Symptom Inventory, Derogatis 1993) or social adjustment, as measured by the Social Adjustment Scale (SAS, Weissman & Bothwell, 1976). Olmsted et al. (1991) and Agras et al. (2000b) found drop-outs had lower social adjustment on the Social Adjustment Scale Self-Report (SAS S-R, Weissman, Prusoff, Thompson, Harding, & Myers, 1978). Agras et al. (2000b) found the Inventory of Interpersonal Problems (IIP,
Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) did not distinguish drop-outs from completers.

Burket and Hodgin (1993) and Coker et al. (1993) found that those who failed to engage reported significantly more features of depression. Steel et al. (2000) and a larger study by Mussell et al., (2000) found that drop-outs had higher Beck Depression Inventory scores (BDI, Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). However Merrill et al. (1987), Edelstein, Yager, Gitlin, & Landsverg (1989); Wilson et al. (1991) Blouin et al. (1995), Davis et al. (1999) and Agras et al. (2000b) found patients who dropped out did not differ in BDI scores from those who remained in treatment.

Coker et al. (1993) found that people with a history of substance abuse were more likely not to engage in treatment. Olmsted et al. (1991) found that higher scores on the Dysthymic and Alcohol abuse subscales of the Millon Clinical Multiaxial Inventory (MCMI, Millon, 1983) were associated with drop-out. With regard to other Axis I psychopathology, Blouin et al. (1995) found that anxiety was not associated with drop-out. Griffiths (1990) reports that drop-outs did not differ in a history of suicide attempts.

Roy-Byrne, Lee-Benner, & Yager (1984) described 3 out of 8 drop-outs as ‘among the most disturbed, probably borderline personality disorders’. Merrill et al. (1987) observed that the presence of Axis II disorders increased the risk of drop-out. Olmsted et al. (1991) found drop-outs had higher Borderline Syndrome Index scores (BSI, Conte, Plutchik, Karasu, & Jerrett, 1980) and higher MCMI scores for a number of scales including the Borderline scale. Coker et al. (1993) found that of the six patients who failed to engage, five met criteria for borderline personality disorder (BPD) compared to only 8% of ‘engagers’. Six studies, including all those with larger samples, have found that the presence of Axis II pathology increases the risk of drop-out (including Margittai et al., 1987; Merrill et al., 1987; Cooper, Coker, & Fleming, 1996; Waller, 1997). Edelstein et al. (1989) and Fairburn, Peveler, Jones, Hope, & Doll (1993) found Personality Disorder Questionnaire scores (PDQ, Hyler, Reider, Spitzer, & Williams, 1978) were the only measure which distinguished drop-outs.
Scores were higher in those who did not remain in treatment or follow-up. Steiger, Leung, Thibaudeau, Houle, & Ghadirian (1993) found that patients with BPD were more likely to drop-out (one third) — over three times the percentage of those with no PD. Agras et al. (2000b) found drop-outs had higher levels of impulsivity. Waller (1997) found higher scores on the Borderline Syndrome Index and Dissociative Experiences Scale (Bernstein & Putnam, 1986) were associated with drop-out. Dissociation is a phenomenon related to the impact of trauma and is higher amongst those with BPD (Vanderlinden, van Dyck, Vandereycken, Vertommen, & Verkes, 1993).

**Family functioning and history**

Hsu and Holder (1986) found that patients with a family history of alcoholism were more likely to complete treatment. The authors suggest patients with such a background may be more motivated to address their own 'addictions'. Blouin et al. (1995) found that family environment as reported by the patient did not predict drop-out. In a study of 22 from the treatment sample of 50, Waller (1997) found those who failed to engage reported healthy family functioning and suggests patients who are unhappy in their families are more likely to seek outside help. Mahon, Bradley, Harvey, Winston and Palmer (in press) report that parental separation or divorce before the patient reaches 16 was highly predictive of drop-out from treatment and hypothesise that this could be related to the ability to make and maintain therapeutic relationships in adulthood.

**Low self-esteem**

Using the Rosenberg Self-Esteem Scale (Rosenberg, 1979), Coker et al. (1993) found those with low self-esteem were less likely to engage. Olmsted et al. (1991) found a trend for drop-outs to have low self-esteem but this was not found by Wilson et al. (1991), Davis et al. (1999) or Agras et al. (2000b). Lee and Rush (1986) report that drop-outs had significantly higher scores on the SCL-R hostility dimension than completers, but numbers were very small. Blouin et al. (1995) found that those who dropped out had difficulty trusting and relating to others. Both of these studies were of
group therapy, so it is likely that patients with such difficulties will feel less inclined to attend groups.

**Other psychological factors**

Griffiths (1990) found a trend for completers to have a higher expectation of treatment success than drop-outs, suggesting that self-efficacy may be helpful for engaging in treatment. However, Agras et al. (2000b) found drop-outs did not differ in self-efficacy. ‘Stage of change’ has predicted premature termination of treatment for other problems (Smith, Subich, & Kalodner, 1995; Mederios & Prochaska, 1993, cited in Prochaska & Norcross, 1994). Potreck-Rose (1987) reported that drop-outs from treatment for anorexia or bulimia nervosa did not differ from completers in demographic or clinical characteristics but only in terms of motivation for change. Osterheld et al. (1987) report that one study (unspecified) found drop-outs of group therapy for BN were less motivated. Fairburn et al. (1991) reported that most patients who dropped out of a randomised controlled trial had limited motivation to change and this overpowered any between treatment differences. Using a global measure of readiness for change, Treasure et al. (1998) were unable to find an association between stage of change (Prochaska & DiClemente, 1983) and drop-out (though those in the action phase achieved a significant reduction in binge eating). However, this may because the measure used was insufficiently sensitive. Clients usually want to give up bingeing but are less likely to want to give up ‘compensatory behaviours’. A global measure is unlikely to be very meaningful for BN. At present there is no published self-administered scale which measures readiness for change specific to different bulimic behaviours, though this is in development. With such a tool an association may emerge.

**PATIENT- THERAPIST FACTORS**

Clinton (1996) found lack of congruence between patients’ and therapists’ expectations of treatment predicted drop-out, but not patient-, therapist- or treatment-specific variables. The latter included therapist’ levels of training or years of experience.
TREATMENT FACTORS

Attrition rates vary across studies but statistically significant differences are rarely found between treatment conditions within any one study as typically numbers are small. Drop-out is significantly higher with medication which is less acceptable to patients than psychological interventions (Mitchell et al., 1990; Agras et al., 1990). In a recent systematic review (Bacaltchuk, Trefiglio, Oliveira, Lima, & Mari, 1999) the drop-out rate for medication was 40% compared to 18% for psychotherapy. The Mitchell et al. study found a significantly higher drop-out rate with imipramine compared to placebo and suggest that drop-out with medication is in part at least because of side-effects. Freeman et al. (1985) found drop-out rates were higher for CBT group than individual therapy (Garner, Fairburn, & Davis, 1987), but this is one small study. An average of the data published shows no difference (see table 1 below). However, this is only an estimate as studies do not consistently report intention to treat data, i.e. definitions of drop-out between studies vary.

Two early studies employing an open-ended, less structured group format had high attrition rates (63% for Dixon & Kiecolt-Glaser, 1984; 42% for Roy-Byrne et al., 1984). An early meta-analysis of results of group interventions for BN (Fettes & Peters, 1992) found none of a range of treatment factors predicted drop-out, but data were poor as they were also unable to identify any statistically significant differential effects of treatment on outcome. In a trial of two group treatments for non-purging bulimia nervosa, Wilfley et al. (1993) found a lower drop-out rate for the Interpersonal Therapy group (11%) than a CBT group (33%). However, this was not statistically significant. Interestingly, there was a significant difference between the two groups in attendance rates - 88% of IPT sessions were attended compared to 72% of CBT. One study found a significantly higher attrition rate for a non-directive group intervention compared to group CBT (Kirkley et al., 1985).

A recent two-centre trial (Agras et al., 2000b) found drop-out rates were significantly higher in one centre (36% compared to 18.5%), and suggest this may because of more severe associated psychopathology or geographic mobility.
DISCUSSION

Demographic features do not distinguish those who fail to engage or drop-out of treatment for BN and FTE and drop-out is not a uniform phenomenon (Griffiths, 1990; Mohan, 2000). A range of results suggest heightened fear of weight gain may cause FTE or drop-out and this issue needs to be addressed in treatment. Two recent major trials found depressive features were associated with drop-out, but the patient factor which most consistently increases risk of drop-out for treatment for BN is Axis II comorbidity, and specifically BPD. Though there are few studies of adequate sample size, all those which have assessed Axis II features or diagnoses found they are associated with higher rates of FTE or drop-out.

Patients with personality disorders are less likely to attend psychological therapy services (Nicholson, 1994; Loumidis & Shropshire, 1997) and those with BPD are well known for dropping-out of treatment (Gunderson et al., 1989). Those who do stay in treatment for BN may benefit (Bulik, Sullivan, Joyce, Carter, & Macintosh, 1998), but probably less so than patients who are not borderline (see for example Rossiter, Agras, Telch, & Schnieder, 1993). Other features identified (difficulty trusting others, Blouin et al., 1995) or hypothesised (child sexual abuse, Gleaves & Eberenz, 1994) as predictors of drop-out are also associated with BPD (Wonderlich & Swift, 1990).

Fahy, Eisler and Russell (1993) found that the association between BPD and poorer outcome for borderline bulimic patients was explained by lower BMI and higher rates of depression in those with BPD. It is unclear why borderline clients are less likely to engage in or complete therapy for BN. It may be that they are too chaotic to engage or sustain engagement in any treatment or because of interpersonal issues with therapists. The latter is consistent with the suggestion by Mahon et al. (in press) that clients who drop-out may have an impaired capacity to make and maintain relationships. Another possibility is that borderline clients have more reluctance to give up bulimic behaviours which may be especially functional for them in reducing intolerable affect (see Heatherton & Baumeister, 1991; Polivy & Herman, 1999).
Therapeutic alliance is known to have a significant impact on drop-out (Horvath, 1995) but is an under-researched area within BN research (Mahon, 2000). Congruity of treatment goals is particularly important in the treatment of people with eating disorders, which are for the most part egosyntonic. The strength of therapeutic alliance will affect the impact of other factors. For example where therapeutic alliance is strong, the patient’s concerns about weight gain may be addressed sensitively and the risk of drop-out averted.

Some aspects of service delivery which are known to increase FTE or non-attendance in generic services include venue and, in particular, waiting time (Loumidis & Shropshire, 1997). The relative impact of these factors compared to those assessed in published studies is unknown.

Medication and non-directive group approaches are less popular with patients and associated with an increased FTE or drop-out. Engagement in groups is probably enhanced when there is a problem focus, whether this be interpersonal or eating problems. Another factor which may contribute to drop-out in groups is that addressing individual concerns about weight gain or desired weight loss is less easy and may be overlooked (McKisack & Waller, 1996). Lack of congruence between client and therapists’ expectations in any type of therapy is likely to increase drop-out. Both medication and psychoeducational or CBT groups will be less flexible than individual therapy in accommodating the expectations and concerns of individual patients.

What modifications to treatment targeting BN, if any, would reduce drop-out? Keeping waiting times to a minimum is likely to improve engagement in treatment. Steel et al. (2000) suggest that interventions could be modified to reduce factors which increase the risk of drop-out – depression, helplessness and external locus of control. However, combining medication with CBT leads to as high a drop-out rate as medication alone (Bacaltchuk et al., 2000). Bacaltchuk et al. (2000) suggest medication should be reserved for those with higher bulimic severity. Whenever medication is prescribed, the reasons for its recommendation should be carefully explained to patients and if they choose not to take it this should respected.
With regard to patients with BPD, perhaps the treatment ‘dose’ is insufficient to meet their needs. One study using a psychodynamic treatment suggests that effective treatment for people with BN and BPD needs to be twice weekly (Johnson, Tobin, & Dennis, 1990). The Eating Disorder group at Freiburg (Hartmann, Herzog, & Drinkman, 1992) have concluded that bulimic patients with major comorbidity need treatment of longer duration, though this would not necessarily reduce drop-out. It may be that such patients need a treatment approach which will address their wider needs. Linehan, Armstrong, Suarez, Allmon and Heard (1991) reported a drop-out rate of 16.7% for Dialectic Behaviour Therapy (DBT). Cognitive Analytic Therapy (CAT) is an alternative approach with promising outcome in a recent trial for borderline patients (Ryle & Golinkina, 2000) which could be considerably more cost-effective. This trial reports a drop-out rate of 12%. Both DBT (Marcus, McCabe, & Levine, 1999; Gatward, McGrain, & Palmer, 2000) and CAT (Treasure & Ward, 1997; Bell, 1999) are used effectively in eating disorder services. Given the risk of completed suicide in those with BPD (Paris, 1993), their improved engagement in treatment for any aspect of their problems is a priority.

It behoves clinicians, particularly in specialist eating disorder services where treatment may only address part of a patient’s problems, to discuss with patients their treatment needs, wishes and priorities. The higher drop-out rates reported for medication are one reason why medication alone should not be given as a first line treatment for bulimia nervosa. (Others are that disordered attitudes are not addressed, Fairburn, Agras, and Wilson, 1992, and relapse is high, Walsh, Hadigan, Devlin, Gladis, and Roose, 1991). Where medication and group approaches are offered, a rationale explaining to the patient why these are recommended should be given, especially if no alternative is available. Given the evidence for a supervised self-help approach as a cost effective initial intervention for BN (Treasure, Troop, & Ward, 1996), the only rationale for providing group therapy in preference to individual treatment may be a feminist one, i.e. to empower women (Katzman, 1998).
CONCLUSION

The patient factor most likely to increase drop-out for BN is comorbid BPD. Axis II pathology and other factors (such as a trauma history) may impair patients' capacity to make and maintain relationships including one with a therapist. (The impact of therapeutic alliance on drop-out and outcome may override other factors but this has not been specifically researched in the treatment of BN). Non-directive, unfocussed group approaches and medical interventions significantly increase rates of drop-out. Where there are clinical grounds for using medication this should be carefully negotiated with patients.

FTE and drop-out is unlikely to be a unitary phenomenon. Qualitative research exploring with patients their reasons for not engaging or dropping out would also be helpful. Larger samples, using power analysis and multivariate data analysis, are also needed to assess the relative impact of depression, borderline pathology, treatment interventions, therapeutic alliance, patient expectations, mismatches between this and treatment offered and waiting times. This would be possible with multi-centre studies. A more accurate measure of readiness for change for different aspects of BN may yield another predictive variable.

It is important for those carrying out assessments as well as therapists to discuss patient expectations of treatment from the outset and address areas of potential discrepancy. Results to date indicate that identifying Axis II pathology is a priority for clinicians and services who assess patients presenting with bulimia nervosa. Borderline patients can benefit from a BN-specific intervention. However, where there are other presenting problems, a more comprehensive psychological therapy such as Dialectic Behaviour Therapy or Cognitive Analytic Therapy should be considered. These approaches potentially engage more patients and help them in areas other than eating problems.
REFERENCES


Table 1. Studies assessing factors associated with failure to engage in treatment for eating disorders

<table>
<thead>
<tr>
<th>Authors</th>
<th>sample size*</th>
<th>intervention</th>
<th>factors associated with FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burket &amp; Hodgin 1993</td>
<td>20/72</td>
<td>various</td>
<td>Laxative abuse, weight dissatisfaction</td>
</tr>
</tbody>
</table>

Table 2. Studies assessing factors associated with drop-out in treatment for BN

<table>
<thead>
<tr>
<th>Authors</th>
<th>sample size*</th>
<th>intervention</th>
<th>factors associated with drop-out</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CBT groups:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blouin et al 1995</td>
<td>25/87</td>
<td>Group CBT</td>
<td>Difficulty trusting others</td>
</tr>
<tr>
<td>Mussell et al 2000</td>
<td>14/32</td>
<td>Group CBT</td>
<td>BDI, hopelessness and external locus of control</td>
</tr>
<tr>
<td>Lee &amp; Rush 1986</td>
<td>4/15</td>
<td>Group CBT</td>
<td>SCL-R hostility</td>
</tr>
<tr>
<td>McKisack &amp; Waller 1996</td>
<td>4/15</td>
<td>Group CBT</td>
<td>Higher Drive for Thinness and Body Dissatisfaction, lower levels of bingeing &amp; vomiting, shorter duration, higher BMI</td>
</tr>
<tr>
<td><strong>Average drop-out rate 27.1%</strong></td>
<td></td>
<td></td>
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</tbody>
</table>

| **Non-directive group** |                  |                  |                                                                                               |
| Dixon & Kiecolt-Glaser 1984 | 19/30 | open-ended group | Higher social desirability scores                                                              |
| Roy-Byrne et al 1984     | 8/19        | open-ended group  | BPD                                                                                                |
| **Average drop-out rate 55%** |                  |                  |                                                                                               |
### Other group approaches

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Size</th>
<th>Approach</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merrill et al</td>
<td>17/53</td>
<td>Group therapy</td>
<td>Lack of employment, age, single status, Axis II disorders. Trend for younger age.</td>
</tr>
<tr>
<td>Kirkley et al</td>
<td>6/28</td>
<td>non-directive group versus CBT</td>
<td>Non-directive group Trends for younger age and shorter duration.</td>
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</table>

### Individual psychotherapy:

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Size</th>
<th>Approach</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agras et al</td>
<td>48/188</td>
<td>CBT</td>
<td>Higher levels of bulimic cognitions, greater concern about shape, greater impulsivity, past history of AN, or major depression, poorer social adjustment</td>
</tr>
<tr>
<td>Treasure et al</td>
<td>38/125</td>
<td>Motivational Enhancement Therapy versus CBT</td>
<td>Trend for drop-outs to be younger</td>
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<tr>
<td>Griffiths 1990</td>
<td>30/60</td>
<td>hypno-behavioural treatment</td>
<td>No demographic or psychological characteristics. Trend for lower expectations of treatment success.</td>
</tr>
<tr>
<td>Fairburn et al</td>
<td>25/75</td>
<td>Short-term psychological treatment</td>
<td>Higher PDQ scores</td>
</tr>
<tr>
<td>Clinton 1996</td>
<td>22/60</td>
<td>psychotherapy (mostly individual)</td>
<td>Lack of congruence between patient’s and therapist’s expectations of treatment.</td>
</tr>
<tr>
<td>Waller 1997</td>
<td>22/50</td>
<td>Individual CBT</td>
<td>Borderline features (BSI) dissociation (DES), BITE severity score, healthy family functioning</td>
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<tr>
<td>Cooper et al</td>
<td>15/82</td>
<td>Supervised self-help</td>
<td>Axis II disorders (SCID)</td>
</tr>
<tr>
<td>Steiger et al</td>
<td>15/73</td>
<td>Individual therapy</td>
<td>BPD</td>
</tr>
<tr>
<td>Steel et al</td>
<td>14/32</td>
<td>CBT</td>
<td>Higher BDI, hopelessness and external locus of control</td>
</tr>
<tr>
<td>Hsu &amp; Holder</td>
<td>11/56</td>
<td>behaviour therapy</td>
<td>Shorter height, history of previous treatment</td>
</tr>
<tr>
<td>Giles et al</td>
<td>6/34</td>
<td>behaviour therapy</td>
<td>Lower EAT scores</td>
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**Average drop-out rate 28.4%**
<table>
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<tr>
<th>Others:</th>
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</thead>
<tbody>
<tr>
<td>Mitchell et al 1990</td>
<td>46/254</td>
<td>mixed - RCT</td>
<td>Medication over placebo</td>
</tr>
<tr>
<td>Margittai 1987</td>
<td>25/103</td>
<td>medication</td>
<td>Axis II disorders</td>
</tr>
<tr>
<td>Davis et al 1999</td>
<td>15/71</td>
<td>RCT: group vs. group + individual CBT</td>
<td>None</td>
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<tr>
<td>Freeman et al 1985</td>
<td>14/60</td>
<td>individual vs. group</td>
<td>Group therapy</td>
</tr>
<tr>
<td>Edelstein et al 1989</td>
<td>9/36</td>
<td>medication</td>
<td>Higher PDQ scores</td>
</tr>
<tr>
<td>Wilson et al 1986</td>
<td>4/17</td>
<td>various</td>
<td>History of low weight</td>
</tr>
</tbody>
</table>

*numbers who dropped out/total sample size
Abstract
Pub Med and Psych Lit were searched for papers using key terms ‘outcome’ and ‘bulimia nervosa’ and studies which examined any aspect of psychopathology were included. No robust findings have emerged. This paper will review the methodological problems which beset this area then examine in detail the relationship between concurrent psychopathology, psychiatric co-morbidity and treatment outcome for BN. The psychological variable most likely to predict poorer outcome for BN is low satisfaction with or negatively perceived quality of friendships. With regard to psychiatric co-morbidity, no consistent relationship is found for any Axis I disorder. Most of the studies assessing Axis II dysfunction show borderline symptom severity or cluster B personality disorder (PD) impair outcome. Implications for clinical practice and directions for future research are suggested.

Key words: bulimia nervosa, co-morbidity, outcome.
INTRODUCTION

Studies have examined a range of variables and their association with good or poor outcome after treatment for bulimia nervosa (BN) and relapse (see Table 1). Two reviews have attempted to synthesise this data, Keel and Mitchell (1997) and Vaz (1998). Neither examine the studies in detail but give conclusions regarding key prognostic factors amidst a broader examination of treatment outcome. A number of errors were found in the latter review. For example Abraham, Mira and Llewelyn-Jones (1983) and Hsu and Holder (1986) are quoted as demonstrating a history of anorexia nervosa to be a negative factor for change – neither reported this in their publications. Vaz also cites studies based on mixed eating disorder (ED) samples without stating this. This review will attempt a more comprehensive and detailed examination of research findings concerning the relationship between broader psychological dysfunction (i.e. any non-eating disorder psychopathology) and treatment outcome for BN. Pub Med and Psych Lit were searched for papers on outcome and bulimia nervosa up to September 2000; studies which examined any aspect of psychopathology are included in the review.

It is difficult to compare results between studies due to wide variation in the following variables:

*Sample characteristics:*

Variations in sample characteristics can be problematic. For example, tertiary centre patients are often kept on waiting lists. This may mean those who finally attend are more motivated than a more routine clinical sample.

*Interventions:*

Interactions between prognostic factors and treatment effects are likely, though these are not obvious without a meta-analysis. (Table 1 categorises findings according to type of treatment). Different interventions may have preferential effects but there is, as yet, little evidence for which patients are better suited to different therapies. Factors influencing the outcome of medication will differ from those influencing the impact of a psychological treatment. The impact of attitudinal or body image disturbance on outcome is likely to vary with different treatments, according to how effectively they address these areas.
Measures:

Diverse measures are used to assess outcome. Reduction in bulimic behaviours is the measure most frequently used, i.e. Bulimic Inventory Test (Edinburgh) scores (BITE, Henderson & Freeman, 1987), frequency of bulimic behaviours or abstinence rates. These can vary widely. Patients who no longer meet DSM IV criteria do not need to be abstinent in bingeing and purging. However, abstinence, unless for a specified time period of at least three months, can be very unstable. Other changes are also relevant, e.g. eating disordered attitudes, fasting behaviour and weight, all of which may pose an increased risk of relapse. The variables studied are also measured differently. This is illustrated by Fahy and Russell (1993), Collings and King (1994) and Wonderlich, Fullerton, Swift, and Klein (1994), whose results varied according to the measures of pre-treatment variables and change used.

Time course:

Results will vary with duration of therapy and length of follow-up. Variables will have different impact at different times. For example, poor social adjustment may impair a patient’s capacity to trust a therapist or engage in therapy. Many studies only measure outcome at the end of treatment. Given the high rate of relapse in BN (Keller et al., 1992; Field et al., 1997), such results may be unreliable. Some studies found different results at different stages of follow-up (e.g. Herzog, Hartmann, Sandholz, & Stammer et al., 1991; Fahy & Russell, 1993; Fairburn, Peveler, Jones, Hope, & Doll, 1993).

Statistical analyses and degree of variance among scores on any one variable:

Some studies divide patients into two groups e.g. those with or without a history of anorexia nervosa, and carry out t-tests. In others a range of tests are used including multiple regression. Ames-Frankel, Devlin, and Walsh et al. (1992) carried out both and found that the categorical approach did not detect an association (change scores for those with and without a PD), whilst a correlation between Personality Disorder Examination (PDE, Loranger, Susman, Oldham, & Russakoff, 1987) trait scores and change in binge frequency did. Studies adopting multivariate analysis are superior.
Keeping these concerns in view, findings in each area of psychopathology will now be reviewed.

**Family disturbance**

Hsu and Holder (1986) report a family history of depression was associated with poorer outcome, though Hudson, Pope, Keck and McElroy (1989) and Fahy and Russell (1993) did not find this. Glassman, Rich, Darko and Clarkin (1990) found no association between a family psychiatric history and outcome. Collings and King (1994) found that a family history of alcohol abuse was associated with good outcome - such patients were 2.5 times more likely to recover; logistic regression showed this was independent of other factors. No association was found with a family history of psychiatric problems or obesity. Fairburn et al. (1995) found that at three to eleven years follow-up, a history of paternal obesity, but not parental depression or alcoholism was associated with poorer outcome. Parental overprotection as measured by the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979) was also associated with presence of an eating disorder at follow-up.

Krener, Abramowitz and Walker (1986) report that family variables associated with maternal warmth explain an appreciable proportion of the variance in the outcome. Giles, Young and Young (1985) describe poor responders as having family histories characterised by 'severely disturbed interpersonal relationships and marked parental instability or abuse'. Rorty, Yager and Rossootto (1993) report that many participants stated parents were more harmful than helpful in the recovery process and that lack of understanding by significant others hampered their recovery. Blouin et al. (1994) found family functioning was the most significant prognostic factor of a range of variables. Patients who responded least well reported their families as controlling, moralistic and conflicted. However, Ordman and Kirschenbaum (1985) found two measures of family functioning did not predict outcome. In the largest study, Turnbull et al. (1997) found neither discord in the family home, degree of parental control nor family history of alcohol abuse were associated with outcome at the end of treatment or at 18 month follow-up.


**Child sexual abuse**

Root and Fallon (1989) suggested from clinical observation that treatment for BN amongst child sexual abuse (CSA) survivors is ‘difficult, complicated and takes longer’ and that in order to give up bingeing and purging treatment needs to address the sequelae of the abuse. Glassman et al. (1990) found a trend that those who did not respond to treatment were more likely to report a history of CSA. In a large study of 464 bulimic women, Gleaves and Eberenz (1994) found those who had ‘poor prognostic features’, including three or more previous episodes of treatment, were significantly more likely to report CSA. They suggest bingeing and purging may have a coping function for people who have been abused which may lead them not to engage in or respond so easily to treatment. Matsanuga et al. (1999) found abused subjects had a poorer recovery from BN after 1 year. However, Fairburn et al. (1995) found that a history of CSA prior to onset of BN did not predict long-term outcome.

This is an under-researched area. Modifying BN treatment for abuse survivors makes good clinical sense but this decision is theoretically rather than empirically based. A more sensitive measure than simply the presence or absence of CSA, such as incest or unhelpful disclosure experiences could predict poorer outcome. There is considerable evidence that those people with BN who have been abused have greater psychiatric co-morbidity - both Axis I and II disorders (McClelland, Mynors-Wallis, Fahy, & Treasure, 1991; Wonderlich, Brewerton, Jocic, Dansky, & Abbott, 1997). Without further research we cannot say whether it is experiences related to abuse or co-morbidity which worsens outcome.

**Low self-esteem**

Baell and Wertheim (1992) found patients with low self-esteem did less well post-treatment and at three months follow-up. Fairburn, Kirk, O’Connor, Anatsaides and Cooper (1987) found scores on the Rosenberg Self-Esteem Scale (RSES, Rosenberg, 1965) were the strongest predictive variable for a range of outcome measures. This was replicated by Fairburn, Peeveler, et al. (1993). At three to 11 years (Fairburn et al., 1995) the association was less strong and non-linear, but still predicted global Eating Disorders Examination (EDE, Fairburn & Cooper, 1993) change scores. Davis, Mcvey, Heinmaa, Rockert and Kennedy (1999) found RSES scores were one of a group of
factors which predicted remission at 16 weeks follow-up. However, six studies failed to find an association between self-esteem and outcome, including the largest to study self-esteem, Agras et al. (2000)¹.

**Perceived ineffectiveness**

Garner et al. (1990) and Baell and Wertheim (1992) found that high scores on the Ineffectiveness scale of the Eating Disorders Inventory (EDI, Garner & Olmsted, 1984) were associated with poorer outcome. Baell and Wertheim (1992) found a high correlation between ineffectiveness and poor self-esteem. Self-efficacy has been found to influence outcome (Bara-Carril, 2000) and may be a more accurate predictor of outcome than self-esteem.

**Poor social functioning**

Garner et al. (1990) found a cluster of variables reflecting initial social adjustment and concurrent psychopathology explained about half of the variance in outcome. Four studies found higher Social Adjustment Scale scores (SAS, Weissman & Bothwell, 1976) were associated with a poor clinical outcome (Davis et al., 1992; Steiger, Leung, & Thibaudeau, 1993a; Rorty, Yager, Buckwalter, & Rosatto, 1999 and Agras et al., 2000). However, large studies found no such relationship at 6 month (Walsh et al., 1991) or 3-11 years follow-up (Fairburn et al., 1995). In total, six studies found pre-treatment social adjustment was not associated with relapse, including Fairburn et al. (1987), Fallon, Walsh, Sadik, Saoud and Lukasik (1991), Maddocks, Kaplan, Woodside, Langdon and Piran (1992), Johnson-Sabine, Reiss and Dayson (1992) and Olmsted et al. (1994).

Herzog, Keller, Lavori and Sacks (1991) found that outpatients with BN responded more quickly to treatment if they had more close friends. (Early progress in therapy may be the best predictor of outcome, Agras et al. 2000). Keller et al. (1992) found that having good friendships at pre-treatment predicted better outcome after 35-42 months. Reiss and Johnson-Sabine (1995) found being in a satisfactory relationship and

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¹ Others are Gamer, Olmsted, Davis et al. (1990), Walsh, Hadigan, Devlin, Gladis and Roose (1991), Davis, Olmsted and Rockert (1992), Rossiter, Agras, Telch and Schneider (1993), Blouin et al. (1994) and Olmsted, Kaplan and Rockert (1994).
having a fulfilling social life and job were associated with good outcome at 5 years. Rorty et al. (1999) found that people who remained bulimic had significantly fewer people in their friendship network to provide emotional support.

The important finding in the BN trial reported by Fairburn, Jones, Peveler, Hope and O’Connor (1993), that a therapy which only addresses relationships has equivalent impact by 12 months follow-up to cognitive behaviour therapy (CBT), highlights the important relationship which must exist between BN and social functioning. The women surveyed by Rorty et al. (1993) reported that empathic and caring relationships with others were essential to their recovery.

**Poor global functioning and psychiatric symptom levels**

Symptom rating scales have not correlated with outcome in most studies. Williamson et al. (1989), and Blouin et al. (1994) found levels of general psychopathology were not predictive of outcome. Contrary to expectations, Fallon et al. (1991) found that Global Assessment of Functioning (GAF, APA, 1987) scores at admission or before were not associated with outcome. Ordman and Kirschenbaum (1985), Walsh et al. (1991), (the third largest samples using this measure), and Davis et al. (1992) found no association between SCL 90 Global Severity Index scores (Derogatis, 1983) at the start of treatment and outcome. Collings and King (1994) found psychiatric symptoms at entry were not predictive of outcome. The largest study, Bulik, Sullivan, Joyce, Carter and McIntosh (1998), found pre-treatment and post-treatment GAF scores correlated with poorer outcome at 1 year. However, a similar sample size in Fairburn et al. (1995) found no association between severity of general psychiatric symptoms, as measured by the Present State Examination (PSE, Wing, Cooper, & Sartorius, 1974), and outcome by 3-11 years follow-up.

In a small study by Brotman, Herzog and Hamburg (1988), patients with other concurrent disorders (depression and PDs) did less well and required longer treatment. Fallon et al. (1991) found all patients with concurrent psychosis at admission remained bulimic at follow-up. Fahy and Russell (1993) found that a history of previous psychiatric admission was associated with poor outcome at 8 weeks post-treatment, but this effect disappeared with longer follow-ups. Collings and King (1994) found no
association between long-term outcome and psychiatric co-morbidity at presentation, or a history of inpatient psychiatric care.

A number of studies (e.g. Garner et al., 1990; Fallon et al., 1991; Collings & King, 1994) find high global dysfunction or co-morbidity at follow-up in poor responders.

Axis I Disorders:

Depression

Many studies have found an association between pre-treatment depression levels and outcome. Maddocks and Kaplan (1991) found that severity of depression as measured by the Beck Depression Inventory (BDI, Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was the most significant prognostic factor of a wide range of variables and accounted for 26% of the variance. Bossert, Schmolz, Wiegand, Junker and Krieg (1992) and Davis et al. (1992) found pre-treatment BDI scores the most powerful single predictor of outcome from a wide range of variables. Agras et al. (2000) found most (20 out of 24) non-recovered patients reported current depression at interview. This reached an effect size of .57. (Differences on the BDI did not reach statistical significance.) However, most studies have failed to find a significant association between depression levels at time of presentation and outcome. Mitchell, Davis, Goff and Pyle (1986) and Agras et al. (2000) found no differences in outcome for those with a history of treatment for depression. Herzog, Hartmann et al. (1991) found no association between BDI scores and outcome despite its correlation with Borderline Syndrome Index scores (BSI, Conte, Plutchik, Karasu, & Jerrett, 1980) which were predictive. Rossiter, Agras, Telch, & Schneider (1993) found significant correlations between BDI, self-esteem and the cluster B score, but only the latter predicted outcome.

Studies which include follow-ups have similarly contradictory findings. Fahy and Russell (1993) found that scores on the Montgomery-Asberg Depression Rating Scale

\footnote{Fairburn et al., 1985; Freeman et al., 1985; Hsu & Holder, 1986; Ordman & Kirschenbaum, 1985; Wilson et al., 1986; Fairburn et al., 1987; Herzog et al., 1988; Edelstein et al., 1989; Mitchell et al., 1989; Hudson et al., 1989; Glassman et al., 1990; Herzog, Hartmann et al., 1991; Walsh et al., 1991; Keller et al., 1992; Herzog, Keller et al., 1991; Herzog et al. 1993; Rossiter et al., 1993; Blouin et al., 1994; Olmsted et al., 1994; Turnbull et al., 1997; Mussell et al., 2000.}
(MADRS, Montgomery & Asberg, 1979) predicted outcome at 8 and 16 weeks at the end of treatment but not at 1 year. Three other follow-up studies found no relationship. Fairburn et al. (1995) found a history of affective disorder did not correlate with long-term outcome (3-11 years). In a large study (196 subjects), Fichter and Quadflieg (1997) found no association at 6 year follow-up. Collings and King (1994) found that Hamilton Depression Rating Scale (HDRS, Hamilton, 1960) scores at presentation did not predict outcome at ten years follow-up, though a case record of clinical depression did. (Keel and Mitchell, 1997, question these results as the interviews were not a structured part of a research protocol). Keel, Mitchell, Miller, Davis and Crow (1999) found HDRS scores did not predict long-term outcome but baseline diagnosis of depression were not made.

Statistical power would be expected to be lower at follow-up when numbers are smaller and as effects weaken with time. It is striking therefore that some studies do find a correlation at 12 months or longer follow-up. Bulik et al. (1998) found high HRSD scores tripled the risk of poor outcome at 1 year. Flament, Venisse, Mamar and Paterniti (1996) report that high BDI scores predicted an unfavourable course at 2 year follow-up. Fallon et al. (1991) found that patients who were still bulimic at 2-9 year follow-up had had significantly higher rates of depression at admission and at follow-up (as measured by a clinical interview).

The relationship between BN and depression is complex. Co-morbidity between the two disorders is high (Keller et al., 1989; Garner et al. 1990). Garner et al. (1990) found that whilst depressive symptoms do not appear to predict outcome, their decline is associated with improved target symptom control. Mitchell, Davis and Goff (1985) found those who relapsed by 12-15 months reported this was triggered by stressful events which led to anxiety and depression. One confounding factor in some studies is that depression at presentation may have been effectively improved, either with concomitant medication in a naturalistic study or in medication trials. (Most randomised controlled trials do not assess differential impact of pre-treatment variables between treatment groups). There may be a number of different relationships between depression and BN. It seems that depression at presentation need not necessarily
decrease your chances of recovery from BN but unremitting depression will. Post-
treatment depression significantly increases the risk of relapse (Keller et al., 1989).

Anxiety

Bossert-Zaudig, Zaudig, Junker and Krieg (1993) found concurrent anxiety disorder predicted poorer outcome in a small inpatient sample. Maddocks and Kaplan (1991) found Hamilton Rating Scale for Anxiety scores (HRSA, Hamilton, 1959) the second highest predictor of outcome after depression, but the same scale did not predict long-term outcome in Hudson et al. (1989), Johnson-Sabine et al. (1992), Collings and King (1994) or Keel et al. (1999). The latter two studies respectively had a long follow-up and significantly larger sample size. No association with outcome was found by Walsh et al. (1991) using a different measure.

Substance abuse

Studies which assess concurrent substance abuse at presentation report contradictory findings. Lacey (1983) found alcohol abuse was predictive of poor outcome. Garner et al. (1990) found those with a poor outcome scored more highly at presentation on the alcohol abuse scale of the Millon Clinical Multiaxial Inventory (MCMI, Millon, 1983). However, four studies found no association (Edelstein, Yager, Gitlin, & Landsverk, 1989; Glassman et al., 1990; Fallon et al., 1991 and Herzog, Hartmann et al., 1991).

Three small studies (Abraham et al., 1983; Mitchell et al., 1986; Piran, Langdon, Kaplan, & Garfinkel, 1990) found no association between a history of alcohol abuse and outcome. Unexpectedly, Fallon et al. (1991) found over half their recovered group had a life-time presence of alcohol misuse (a higher percentage than the non-recovered group). Strasser, Pike and Walsh (1992) found those with a history of substance abuse had a better outcome in terms of eating disorder attitudes, though no differences were found in terms of bulimic behaviours. Bulik et al. (1998) found those with a history of substance abuse had a better outcome.

Other large studies give equivocal results. Wilson et al. (1999) found a history of substance misuse was associated with poorer outcome, but this was not found in the larger sample of Agras et al. (2000). Fichter, Quadflieg and Rief (1994b) found a
history of substance abuse predicted two year outcome and Keel et al. (1999) found both life-time substance abuse and baseline reports predicted long-term outcome. However, neither Mitchell, Pyle, Eckert, & Hatsukami (1990) nor Fairburn et al. (1995), found a history of substance abuse or alcoholism respectively predicted long-term outcome.

**Impulsivity and Personality Dysfunction**

There is a high prevalence of Borderline Personality Disorder (BPD) amongst people with BN (Rossiter et al., 1993) and considerable evidence that people with Axis II disorders such as BPD do less well in treatment for other Axis I conditions (Nurnberg et al., 1989; Reich & Green, 1991; Shea, Widiger, & Klein, 1992)).

A major feature of BPD is impulsivity and a significant subgroup of people with bulimic disorders have other areas of maladaptive impulsive behaviour. Studies measuring impulsivity have mixed results. Johnson-Sabine et al. (1992) found those with a history of suicide attempts did not have a worse outcome. Abraham et al. (1983) found that suicide attempts during treatment was the only factor which predicted poor outcome. Bossert et al. (1992) found no association between impulsivity and outcome, but their sample was small. Fahy and Eisler (1993) found those with high impulsivity scores did less well at the end of an eight week treatment but there were no significant differences by 16 weeks and 1 year follow-up. Interestingly, they also found that although the multi-impulsive group reported higher rates of bingeing, no differences were found by the more accurate assessment of diary-keeping. A larger study by Fichter, Quadflieg and Rief (1994 a and b), found that multi-impulsive (those with three or more additional impulsive behaviours) and borderline patients improved with treatment, but less so than uni-impulsive patients. By 2 year follow-up, outcome on all measures (BN, psychopathology, marital and employment status) was significantly less favourable. However, the recent study by Agras et al. (2000) found no difference in impulsivity between recovered and non-recovered patients. This study differed from the Fichter study in two important respects, the measure of impulsivity and the treatment (individual CBT compared to inpatient treatment). Keel et al. (1999) found that baseline measures of impulse control problems did not predict outcome at 11.5 years follow-up, (trait impulsivity or PD diagnosis was not measured).
Many studies report a positive association between Axis II pathology and poorer outcome, although most have small sample sizes and measures are diverse (see table 2). Four studies find an association using a clinical interview. Glassman et al. (1990) found all nine patients who responded poorly had cluster B PDs. Using the Structured Clinical Interview for DSM–IIIR (SCID-II, Spitzer, Williams, & Gibbon, 1987), Cooper, Coker and Flemming (1996) found that patients with a PD were more likely to have poorer outcome on a supervised self-help programme. Fahy and Russell (1993) found the presence of personality disorder as measured by the Personality Assessment Schedule (PAS, Tyrer, 1988) predicted a poorer response to treatment at end of treatment, 8 weeks, 16 weeks and at 1 year follow-up. Both groups improved but those with PDs less so. This group also required a greater number of additional sessions. More non-recovered patients in the Agras et al. (2000) study had PDs but the effect size was smaller than for other variables.

Most studies using rating scales which measure Axis II pathology find a positive association between high scores and poorer outcome. Ames-Frankel et al. (1992) found that PDE cluster B trait scores but not diagnoses were correlated with changes in binge frequency. Giles et al. (1985) found four out of six poor responders met cut off for BPD using the BSI. Steiger and Stotland (1996) used both the SCID and BSI and found that borderline clients showed a poorer response to treatment in selected areas, but more significantly, general psychiatric symptoms remained high.

Rossiter et al. (1993) found a high cluster B PDE score significantly predicted poor outcome at 16 weeks (the only variable which was predictive; other variables included cluster C). These effects were the same for both CBT and medication and the trend continued at 1 year follow up. Johnson, Tobin and Dennis (1990) compared 21 borderline bulimic patients (classified by the BSI) to 19 non-borderline. At 1 year follow-up the borderline group made less progress, had higher drive for thinness and body dissatisfaction (EDI subscales) and depression. 62% of the borderline sample continued to meet DSM IIIR criteria for BN compared to only 21% of the non-borderline group. Further, those borderline clients who did well had significantly lower BSI scores than the non-responders. Treatment was successful for some borderline...
clients, though this required intensive psychotherapy (twice weekly). Herzog, Hartmann, et al. (1991) found BSI scores strongly predicted 1 year outcome. Fichter et al. (1994b) report that at two year follow-up those who met borderline cut off levels with the Freiburger Personality Inventory (FPI, Fahrenburg, Selg, & Hampel, 1973), had a worse outcome.

Davis et al. (1992) found higher scores on 4 scales of the MCMI (but not BPD) were associated with poor outcome at 1-4 months follow-up.

The relationship between BPD and BN is unclear (Carroll, Touyz, & Beumont, 1996). There is considerable overlap between BPD and depression in people with BN (Pope & Hudson, 1989). Garner et al. (1990) suggested co-existing psychopathology was secondary to the effects of a chronic or severe eating disorder. The findings of Ames-Frankel et al. (1992) suggests Axis II psychopathology may improve as BN improves, though this was trait scores rather than a PD diagnosis. Most other evidence contradicts this hypothesis. This does not seem to be the case for other Axis I disturbance (Loranger et al., 1991). Zanarini et al. (1990) found PDs were equally prevalent among different cohorts of current and improved bulimics, suggesting their PDs were not attributable to the eating disturbance. Kennedy, McVey and Katz (1990) found that the assessment of PD using self-assessment scales was very unreliable, whereas the diagnosis of BPD in patients with BN was generally stable before and after treatment, again suggesting BPD is not secondary to BN. In Steiger, Leung, Thibaudeau et al. (1993b), BPD subjects reported more co-morbid symptoms pre- and post-treatment and differences remained when the possible sequelae of BN were controlled for. Steiger, Stotland and Houle (1994) controlled for the possibility that borderline scores or a PD diagnosis were secondary to depression or fluctuating, by taking measures at three month intervals and identifying which patients had consistently high BSI scores across time. They demonstrated a clear characterological profile and those with stable high BSI scores met a diagnosis of BPD. A stable borderline profile was associated with poorer outcome at 6 or 12 months compared to those with low or transient BSI scores. They also had a lower probability of becoming abstinent from bulimic symptoms after 6 months.
Further analysis of earlier data reported by Fahy, Eisler and Russell (1993) showed that at the start of treatment patients with PDs had a lower Body Mass Index and were significantly more depressed than patients without PDs. When these two factors were taken into account there was no longer a statistical difference in all BN outcome measures. The authors conclude that PD increases the risk of affective disturbance and anorexic psychopathology (greater drive for thinness) which impairs their response to treatment. Steiger and Stotland (1996) similarly found patients with BPD only did worse at the end of treatment with regard to drive for thinness; levels of bingeing were similar for those with BPD, other PD, or no PD.

Seven studies have found no association between BPD and outcome for BN. These include Davis et al. (1992), as measured by the MCMI and BSI, and Edelstein et al. (1989), as measured by the Personality Diagnostic Questionnaire (PDQ, Hyler, Reider, Spitzer, & Williams, 1978). Fallon et al. (1991) found neither a life-time history of nor BPD at follow-up distinguished recovered from non-recovered patients. Steiger, Thibaudeau, Leung et al. (1994) found no differences in outcome by the end of treatment for those with BPD, PD or no PD. They hypothesise that borderline clients may do as well initially (as confirmed by Bulik, Sullivan, Carter, McIntosh, & Joyce, 1999), but be less able to sustain their progress. The results of Keel et al. (1999) suggest the opposite may be true - that those with borderline features may not do as well by the end of treatment but differences with non-borderlines fade with time. Bulik et al. (1998) found no association between any PD, as assessed by interview (SCID-II) including BPD, and outcome at 1 year. This study has the largest sample so casts doubt on the positive findings of numerous smaller studies. However, the Munich group (Fichter et al., 1994 a and b), reported that BPD or multi-impulsivity worsens outcome at 2 years follow-up. Detailed analysis of their six year follow-up was unfortunately never published. Given the contrary findings of two largest studies, replication of the findings of the Munich group with outpatients, using clinical diagnosis and BSI, would be valuable. It may be a diagnosis of BPD does not worsen outcome for BN but rather severity of stable borderline features (see table 2) or, as Fichter et al. 1994 suggest, multiple co-morbidity does.
There are a number of reasons why findings appear inconsistent. The measurement of BPD is notoriously difficult and different systems of assessment generate different results (Wonderlich et al., 1994). The reports of borderline patients may be unreliable - temporally variable but also progress may be down-played for fear of rejection by therapists. Their response to treatment for BN will depend on the intensity and duration of treatment. The presence of Axis II psychopathology may not reduce the success of treatment for BN if the treatment is adequate. Many specialists suggest borderline patients with BN are likely to require broader, intensive and lengthy treatment (Brotman et al., 1988; Johnson et al., 1990; Rossiter et al., 1993; Fahy et al., 1993). This claim needs to be tested. (In the Johnson et al. study, frequency of therapy was the only variable to discriminate between borderline patients who improved and those who remained bulimic. Studies evaluating optimal treatment ‘dose’ for borderline vs. non-borderline clients receiving CBT would be valuable). In those patients whose BN does improve with treatment, other behaviours may be substituted for managing distress (substance abuse or self-harm). Studies which show that borderline patients with BN can reduce bulimic behaviours with treatment do not necessarily reflect genuine progress for the patient. Finally, people with BPD are a heterogeneous group with varying severity and capacity to engage in treatment. Group means will obscure a range of different responses to treatment.

In summary, the most robust measure of Axis II pathology which correlates with poor outcome for BN is the BSI (see table 2), in particular high stable BSI scores. Both measures of impulsivity and a PD diagnosis give no consistent findings (see table 2). (Using a structured interview, four studies confirm an association and four find no association. The average sample sizes of the studies do not differ).
DISCUSSION AND CONCLUSIONS

Norre and Vandereycken (1991) describe the features of patients who do badly (multi-impulsivity, low motivation, disturbed family context, extreme social isolation), which would echo the experience of many clinicians in the field. Over 60 quantitative studies have failed to significantly increase our knowledge. In many studies, sample sizes are insufficient to detect effects as a number of other factors influence outcome - intervention, therapeutic alliance, therapist skill. Variation in follow-up also explains some contradictory findings as factors will have differential effects across time. As Davis et al. (1992) conclude “with all of these potential differences in experimental design, it is not surprising that studies do vary in their findings regarding prediction of outcome”. Single measures of co-morbidity may be too crude, while multiple or chronic co-morbidity are likely to influence outcome.

From the psychological variables studied, poor satisfaction with or perceived quality of friendships emerges as the most consistent predictor of poor outcome. A recent study also found pathological core beliefs were associated with poorer outcome on a range of indices (Leung, Waller, & Thomas, 2000). With regard to Axis I disorders, data are inconsistent regardless of sample size or length of follow-up, supporting the conclusion of Keel and Mitchell (1997) that concurrent Axis I disorders before treatment are not predictive of outcome. Many, though not all studies suggest that borderline symptom severity or cluster B personality disorder impairs outcome. Patients do improve but less so. However, the relationship may be indirect (Fahy et al., 1993) and studies conflict over whether the differences persist at long-term follow-up. Most prognostic factors interact, and causal rather than correlational relationships elude us. Given the high incidence of abuse or neglect in the histories of those with BPD (Herman, Perry, & van der Kolk, 1989; Wonderlich & Swift, 1990), it may be that it is a history of abuse (or a more refined factor such as multiple or severe abuse and/or neglect) rather than BPD which worsens outcome.
Research needs to move beyond the use of a cluster of measures in outcome studies to answering specific research question. The following questions are a priority:

- If borderline clients with BN have a more comprehensive psychological treatment (DBT, CAT or Schema Focussed Therapy), does their BN improve or can they then use a routine treatment for BN more effectively?
- What factors influence outcome in severely abused patients who are likely to meet BPD criteria? (Outcome may be poor unless treatment addresses underlying cognitive schema and the need for alternative coping mechanisms, Waller, 1994). Multivariate analysis is needed to assess the relative influence of Axis I (in particular depression and substance misuse) and Axis II psychopathology, psychosocial functioning and child sexual abuse; no studies have considered all these factors simultaneously.
- Do patients with major co-morbidity, in particular cluster B personality disorders, as claimed by Johnson et al. (1990) and Hartmann, Herzog and Drinkman (1992), need more intensive or longer treatment?
- Given that some borderline clients do respond to treatment for BN, which factors (patient and therapist characteristics or interventions) influence outcome to treatment for this group?

Modifications of treatment for BN because of co-existing psychopathology, in particular multi-impulsivity and BPD, are suggested by many authors (e.g. Leung et al., 2000) but this requires empirical evaluation (APA Practice Guidelines, 2000). Theories are needed which can generate testable hypotheses to explain not only which factors influence outcome but also how and why. The recent study by Leung et al. is such an example. Cognitive schema may be a promising field of enquiry as it could explain what enhances or inhibits change and how.
REFERENCES


Table 1. Studies examining associations between pre-treatment co-morbidity and outcome to treatment for bulimia nervosa (in order of sample size).

<table>
<thead>
<tr>
<th>authors</th>
<th>sample size</th>
<th>factors associated with poorer outcome</th>
<th>follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual therapy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agras et al. 2000</td>
<td>194</td>
<td>poor social adjustment</td>
<td>none</td>
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<tr>
<td>Treasure et al. 1999</td>
<td>125</td>
<td>stages of change</td>
<td>unclear - minimal</td>
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<tr>
<td>Cooper et al. 1996</td>
<td>82</td>
<td>PD diag (SCID)</td>
<td>6 months</td>
</tr>
<tr>
<td>Steiger &amp; Stotland 1996</td>
<td>76</td>
<td>BPD, but in selected areas only (drive for thinness)</td>
<td>3 &amp; 12 months</td>
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<tr>
<td>Fairburn, Peveler et al. 1993</td>
<td>75</td>
<td>low self-esteem</td>
<td>1 year</td>
</tr>
<tr>
<td>Steiger, Stotland et al. 1994</td>
<td>69/44</td>
<td>stable borderline features as measured by the BSI but not SCID 11.</td>
<td>6 &amp; 12 months</td>
</tr>
<tr>
<td>Steiger, Thibaudeau et al. 1994</td>
<td>61</td>
<td>None for BPD or other PDs (SCID)</td>
<td>none</td>
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<tr>
<td>Johnson et al. 1990</td>
<td>55</td>
<td>BPD (BSI)</td>
<td>1 year post-entry</td>
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<tr>
<td>Garner et al. 1990</td>
<td>50</td>
<td>higher Ineffectiveness scores (EDI)</td>
<td>none</td>
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<tr>
<td>Hsu &amp; Holder 1986</td>
<td>45/56</td>
<td>history alcohol abuse, family history depression &amp; alcohol abuse, treatment response at end of treatment</td>
<td>1 year minimum</td>
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<td>Steiger et al. 1993</td>
<td>44</td>
<td>social adjustment</td>
<td>none</td>
</tr>
<tr>
<td>Abraham et al. 1983</td>
<td>43/51</td>
<td>suicide attempts during treatment</td>
<td>1-6 years</td>
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<td>*Fahy &amp; Eisler 1993</td>
<td>39</td>
<td>none for multi-impulsives at follow-up</td>
<td>8 weeks, 16 weeks, 1 year</td>
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<tr>
<td>Fahy &amp; Russell 1993</td>
<td>39</td>
<td>PD (PAS)</td>
<td>1 year</td>
</tr>
<tr>
<td>Fahy et al. 1993</td>
<td>39</td>
<td>PD, but only a trend when mood &amp; BMI controlled for</td>
<td>1 year</td>
</tr>
<tr>
<td>Freeman et al. 1985</td>
<td>39</td>
<td>none pre-treatment</td>
<td>6 months</td>
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<tr>
<td>Herzog, Hartmann et al. 1991</td>
<td>37/42</td>
<td>higher BSI scores</td>
<td>1 year post-presentation</td>
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<td>Glassman et al. 1990</td>
<td>36/38</td>
<td>cluster B PD</td>
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<td>Giles et al. 1985</td>
<td>34</td>
<td>(BSI trend)</td>
<td>26-82 weeks</td>
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<td>Lacey 1983</td>
<td>30</td>
<td>trends for history alcohol abuse</td>
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<td>Krener et al. 1986</td>
<td>25</td>
<td>lack of maternal warmth</td>
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<td>Fairburn, Kirk et al. 1987</td>
<td>24</td>
<td>low self-esteem</td>
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<td>Ordman &amp; Kirschenbaum 1985</td>
<td>20</td>
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### Group CBT

<table>
<thead>
<tr>
<th>Authors</th>
<th>Sample Size</th>
<th>Intervention</th>
<th>Factors Associated with Poorer Outcome</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mussell et al. (2000)</td>
<td>143</td>
<td>not BDI</td>
<td>none</td>
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<tr>
<td>*Mitchell et al. 1990</td>
<td>91</td>
<td>no difference for those with history of substance misuse</td>
<td>2-5 years</td>
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<tr>
<td>Davis et al. 1999</td>
<td>71</td>
<td>combination of factors including low self-esteem and depression</td>
<td>16 weeks</td>
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<td>Blouin et al. 1994</td>
<td>69</td>
<td>poor family functioning</td>
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<td></td>
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<td>Davis et al. 1992</td>
<td>41</td>
<td>depression</td>
<td>1 month</td>
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<td>Baell &amp; Wertheim 1992</td>
<td>21</td>
<td>lower self esteem, higher ineffectiveness</td>
<td>3 months</td>
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<td>Leung et al. 2000</td>
<td>20</td>
<td>pathological core beliefs</td>
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### Medication

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<th>Sample Size</th>
<th>Intervention</th>
<th>Factors Associated with Poorer Outcome</th>
<th>Follow-up</th>
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<tbody>
<tr>
<td>*Strasser et al. 1992</td>
<td>75</td>
<td>desipramine</td>
<td>none for substance abuse</td>
<td>none</td>
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<tr>
<td>Johnson-Sabine et al. 1992</td>
<td>50</td>
<td>mianserin</td>
<td>social problems</td>
<td>5 years</td>
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<tr>
<td>Collings &amp; King 1994</td>
<td>50</td>
<td>mianserin</td>
<td>family history of alcohol abuse</td>
<td>10 years</td>
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<td>Hudson et al. 1989</td>
<td>42</td>
<td>trazodone</td>
<td>none</td>
<td>9-19 months</td>
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<td>Reiss &amp; Johnson-Sabine 1995</td>
<td>32/50</td>
<td>unspecified</td>
<td>low satisfaction with social life &amp; job</td>
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<td>Ames-Frankel et al. 1992</td>
<td>30</td>
<td>desipramine</td>
<td>pre-treatment cluster B trait scores and changes in cluster B trait scores</td>
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### Day Patient & Inpatient Treatment

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<tr>
<th>Authors</th>
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<th>Intervention</th>
<th>Psychiatric Comorbidity Including BPD (FPI), Multi-Impulsivity</th>
<th>Follow-up</th>
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<td>Fichter et al. 1994</td>
<td>196</td>
<td>inpatient tx</td>
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<td>2 years</td>
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<td>Maddocks &amp; Kaplan 1992</td>
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<td>day treatment</td>
<td>depression &amp; anxiety</td>
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<td>*Fichter et al. 1994</td>
<td>64</td>
<td>inpatient tx</td>
<td>multi-impulsivity</td>
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<td>Fallon et al. 1991</td>
<td>52</td>
<td>inpatient tx</td>
<td>Depression or psychosis</td>
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<td>31</td>
<td>inpatient tx</td>
<td>BDI</td>
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<td>24</td>
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<td>diagnosis of anxiety disorder</td>
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<td>Follow-up</td>
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<td>Flament et al. 1996</td>
<td>186</td>
<td>not stated</td>
<td>use of sedative drugs, depression (BDI)</td>
<td>2 years</td>
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<td>Keel et al. 1999</td>
<td>173</td>
<td>imipramine &amp; group therapy trials</td>
<td>history of substance abuse</td>
<td>mean 11.5 years</td>
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<td>Wilson et al. 1999</td>
<td>120</td>
<td>various</td>
<td>history substance abuse</td>
<td>none</td>
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<td>Herzog, Dorer et al. 1999</td>
<td>110</td>
<td>not defined</td>
<td>none for recovery, trends for partial recovery</td>
<td>7.5 years</td>
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<td>Bulik et al. 1998</td>
<td>101</td>
<td>various (RCT)</td>
<td>poorer global functioning, lower self-directedness, depression</td>
<td>1 year</td>
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<td>Mitchell et al. 1986</td>
<td>75</td>
<td>various</td>
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<td>71</td>
<td>CBT/desipramine</td>
<td>cluster B, PD</td>
<td>16 weeks &amp; 12 months</td>
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<td>Matsunaga et al. 1999</td>
<td>44</td>
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<td>physical and sexual abuse</td>
<td>1 year</td>
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<td>Rorty et al. 1999</td>
<td>40</td>
<td>unspecified</td>
<td>fewer emotionally supportive friendships and lower social functioning</td>
<td>mixed design</td>
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<td>Edelstein et al. 1989</td>
<td>36</td>
<td>various</td>
<td>none pre-treatment</td>
<td>1 year plus</td>
</tr>
<tr>
<td>Wonderlich et al. 1994</td>
<td>30 AN &amp; BN</td>
<td>unspecified</td>
<td>BPD</td>
<td>4-5 years</td>
</tr>
<tr>
<td>Keller et al. 1992</td>
<td>26/30</td>
<td>various</td>
<td>lower satisfaction with &amp; poorer quality friendships</td>
<td>35-42 months</td>
</tr>
<tr>
<td>Brotman et al. 1988</td>
<td>14</td>
<td>various</td>
<td>additional axis I &amp; II disorders.</td>
<td>unclear</td>
</tr>
<tr>
<td>Herzog, Keller et al. 1991</td>
<td>not clear</td>
<td>unclear</td>
<td>history suicide attempts, high EDI scores, fewer friendships</td>
<td>in process</td>
</tr>
</tbody>
</table>

**Major studies** (sample size above 100 or follow-up 2 years or more).

*Studies of particular sub-groups of people with BN.*
Table 2. Results of studies which have examined association between impulsivity or PD and outcome for BN

<table>
<thead>
<tr>
<th>Study &amp; sample size</th>
<th>End of treatment</th>
<th>1 - 4 month follow-up</th>
<th>6 – 12 mo follow-up</th>
<th>12 month follow-up</th>
<th>1 year plus follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No association found:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agras et al., 194</td>
<td>impulsivity</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Keel et al., 173</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Impulsive problems</td>
</tr>
<tr>
<td>Bulik et al., 101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PD (SCID)</td>
</tr>
<tr>
<td>Steiger, Thibaudeau et al., 61</td>
<td>BPD or other PD (SCID)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fallon, 52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Life-time history of PD</td>
</tr>
<tr>
<td>Davis et al., 41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MCMI BPD</td>
</tr>
<tr>
<td>Fahy &amp; Eisler, 39</td>
<td>impulsivity</td>
<td>impulsivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edelstein, 36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PDQ</td>
</tr>
<tr>
<td>Bossert, 31</td>
<td>Impulsivity (FPI scale)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ames-Frankel et al., 30</td>
<td>PD diag (PDE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Association found</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fichter, Quadflieg &amp; Rief, 64 and 196</td>
<td>Multi-impulsivity, BPD (FPI)</td>
<td></td>
<td></td>
<td></td>
<td>Multi-impulsivity, BPD (FPI)</td>
</tr>
<tr>
<td>Cooper et al., 82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PD diag (SCID)</td>
</tr>
<tr>
<td>Steiger &amp; Stotland, 76</td>
<td>Trend (SCID)</td>
<td>Selected areas (BSI &amp; SCID)</td>
<td>Selected areas (BSI &amp; SCID)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rossiter et al., 71</td>
<td>cluster B diag (PDE)</td>
<td></td>
<td>Trend continued</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steiger et al., 69/44</td>
<td>stable BSI</td>
<td></td>
<td>stable BSI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnson et al., 55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BSI</td>
</tr>
<tr>
<td>Garner et al., 50</td>
<td>BSI (trend)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis et al., 41</td>
<td>4 MCMPI scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fahy &amp; Eisler, 39</td>
<td>impulsivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fahy &amp; Russell, 39</td>
<td>PD diag (PAS)</td>
<td>PD diag (PAS), 8 &amp; 16 weeks</td>
<td>PD diag (PAS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herzog et al., 37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BSI</td>
</tr>
<tr>
<td>Glassman et al., 36</td>
<td>Cluster B diag (clinical assessment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giles et al., 34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BSI trend</td>
</tr>
<tr>
<td>Ames-Frankel, 30</td>
<td>Cluster B trait scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Those in bold have sample size over 100 or follow-up 2 years or more.
Professional Dossier
An Evaluation of A Supervised Self-help Programme for Bulimic Disorders

Abstract
Self-help programmes are recommended as cost-effective initial interventions for the treatment of bulimic disorders. This is a report of the effectiveness of such a programme in routine clinical practice. Twenty-one patients completed the programme and both pre- and post- measures. Patients were treated in a secondary mental health setting over an 11 month period from July 1998 to June 1999. Outcome was assessed using standardised measures and records of symptom levels and drop out rates. Significant improvements in depression, bulimic symptom and severity were observed.

Multi-impulsive clients (as indicated by clinically significant scores on bingeing and two other areas of impulsivity) had similar levels of bulimia but higher pre-treatment depression scores than non-impulsive patients. They made significant gains in most areas but, despite reduction in depression scores, remained significantly depressed. They also made less improvement in disordered attitudes than non-impulsive clients. A global measure of motivation did not predict drop out or outcome though numbers were small.

Patients who used “Getting Better Bit(e) by Bit(e)” and received motivational enhancement sessions made a greater reduction in fasting behaviour and were less likely to drop-out than those who used a more standard CBT programme, but these results could be due to other factors.
INTRODUCTION
A sequential treatment approach to bulimic disorders including such a programme is recommended by specialists in the field (Fairburn & Peveler, 1990; Tiller, Schmidt, & Treasure, 1993). A supervised self-help programme for people with bulimic disorders was established in 1995 as part of a co-ordinated Trust-wide Eating Disorder service serving a population of 540,000. The programme consists of 30 minute weekly sessions provided by an assistant psychologist using a published treatment manual which the patient normally purchases. The manual is based in a cognitive-behavioural approach which aims to normalise attitudes to weight and eating as well as eating behaviour. The programme is audited annually as part of a cycle of evaluation, standard setting and re-evaluation (Thompson et al., 1999). This report analyses the data of 55 patients who were referred to the programme during an eleven month period, July 1998 and June 1999 and used the Bit(e) by Bit(e) manual (Schmidt & Treasure, 1996). This manual integrates principles of motivational enhancement and CBT.

Previous research
A series of trials demonstrate the value of self-help manuals in the treatment of patients with bulimia nervosa (BN). The first trial by Huon (1985) randomly allocated 90 people with BN to three conditions - a postal self-help programme plus optional support from a cured bulimic, the self-help programme plus support from an improved bulimic or the programme without additional support. These were compared to a waiting-list control. Results of an end-of-programme assessment, 3 month and 6 month follow-ups found significant reductions in binge eating relative to the control group. 19% were symptom free and 68% improved at the end of treatment. By six month follow-up, 77% were improved of whom one third were symptom free; only those who had support continued to improve. Providing additional support produced greater change irrespective of the supporter’s own improvement.

Schmidt, Tiller, and Treasure (1993) rated change in 26 patients who were asked to use a manual for 4-6 weeks without supervision. 7% of patients dropped out, 46% were much improved and 31% were somewhat improved. Better results were achieved by Cooper, Coker, and Fleming (1994; 1996) when supervision was added for an
average of 8 sessions. Outcome was assessed 4-6 months later. Four out of eighteen patients had dropped out (22%). Amongst those completing the programme, bulimic episodes and vomiting decreased by 80% and 79% respectively, and two thirds of patients were abstinent at one year follow-up. Patient’s attitudes to their shape and weight improved, but to a lesser degree.

The first controlled trial by Treasure et al. (1994) compared the outcome of 81 patients randomly allocated to three groups - 8 sessions of ‘self-help’ (using a manual) with an optional 8 sessions of CBT, 16 sessions of CBT or a waiting list control (no treatment). Both self-help and the CBT groups demonstrated reduced symptoms. Though the CBT group had better remission rates, complete remission was achieved in 22% of patients who used the manual. Improvements were no different between those who had received previous treatment and patients who were new to treatment. Treasure et al. (1994) suggest that benefits could be enhanced by adding supervision and breaking down the programme into manageable steps. Further data is presented in their 1996 paper. 27% of patients dropped out and drop rates were not statistically different between groups. Thirty percent of both treatment groups achieved remission at the end of treatment, with no significant differences between them. Improvements continued post-treatment - 40% of the sequential group and 41% of the CBT group were symptom free at 18 months follow-up. Twenty-nine percent of patients given the manual alone significantly improved and did not require further treatment.

Treasure et al. (1996) conclude that 20% of all patients in treatment with bulimic-type disorders can significantly improve by following a manual without supervision. This rate can be increased to 30% with additional CBT sessions. Improvements continue after the end of treatment, reaching a remission rate of 40%. These results are equivalent to those obtained by using individual CBT. This study was replicated in Germany with a sample of 62 who were followed up for 6 months to 2 years (Thiels, Schmidt, Treasure, Garthe, & Troop, 1998). Both groups achieved significant improvement in a range of measures. The CBT group had faster reduction in depression levels but the self-help group had caught up by follow-up. Abstinence at follow-up was higher for the CBT group but this was not statistically significant. One
drawback was a trend for a higher drop-out rate in those receiving self-help. However this group gained in another respect - at follow-up their self-esteem was higher.

Carter and Fairburn (1998) carried out a randomised controlled trial (RCT) to establish whether additional supervision enhanced outcome in a self-help programme for binge eating disorder (BED). 72 patients were allocated to pure self-help, guided self-help or a waiting list control for 12 weeks. After 12 weeks those on the waiting list were then allocated to the 2 treatment conditions. Guided self-help consisted of 6-8 sessions of 25 minutes in which a facilitator supported them in using the book (Overcoming Binge Eating by C. Fairburn). Levels of bingeing reduced in both treatment groups compared to the waiting list control. However, there was considerably less compliance with the manual in the pure self-help who failed to show substantial reduction in dietary restraint. After treatment there was no statistical difference between pure self-help and guided self-help but by 3 and 6 month follow-up the guided self-help group had fewer binges though there were no difference in cessation rates. A high number of those in pure self-help had sought alternative treatment, thus inflating the outcome for that group and also indicating the need for patients to have personalised guidance as part of an effective treatment programme. Similar results were replicated in a study of binge eating by Loeb, Wilson, Gilbert, and Labouvie (2000), in which greater progress was made with guided than pure self-help.

Outline of study
Fifty five patients were referred to the programme in a 11 month period (July 1998 to June 1999), following initial assessments in community mental health teams by trained mental health staff (see figure 1). Referrals were checked by the Consultant Clinical Psychologist to ensure suitability. Three of the patients referred to the programme were excluded as they were deemed to be unsuitable for the programme due to the complexity of their problems. These patients were referred for individual treatment with a Psychologist or Nurse Therapists. All other patients were sent an initial appointment. Five (9%) patients did not attend this appointment and are classified as failed to engage. Each of the forty clients who entered the programme were seen
individually on a weekly basis, with each individual session lasting approximately 30 minutes. The mean number of sessions was 10, with a range of 4 to 18 sessions.

**The sample**

Forty three (78.2%) patients were diagnosed as having BN, 10 (18.2%) with BED and 2 (3.6%) with Eating Disorder Not Otherwise Specified. All were regularly bingeing and/or purging.

Referrals to the programme were made by a variety of disciplines. Fifteen (27.3%) were from CBT Nurse Therapists, eleven (20%) from Psychology, 10 (18.2%) from Community Psychiatric Nurses. Nine (16.4%) referrals were received from Psychiatrists, with the majority of these being from the Consultant Psychiatrist attached to the Eating Disorders Team. 6 were from the Dietetic Service (10.9%), 2 from GPs (3.6%) and 2 were incoming Extra Contractual Referrals (3.6%). Two (3.6%) of the patients referred were male, 53 (96.4%) were female. The average age of patients referred was 28 with a range of 18 to 51 years. Their average Body Mass Index (BMI) was 25 with a range of 16.5 to 44.6.

Patients were seen on average within 18 days of being referred to the programme, with a range of 2 to 74 days.
Outcome of patients referred to the Self Help Programme, July 1998 - June 1999

- Referred to Eating Disorders Team (55 patients)
  - 3 Not suitable referrals
  - 52 Screened by Eating Disorders Team and offered Self Help programme
    - 5 Failed to engage
    - 40 Entered Self Help programme
      - 7 Still waiting to start the programme
      - 10 Dropout
      - 21 Completed programme and assessed for potential discharge or further intervention
        - 9 Still on the programme, awaiting outcome
        - 6 Discharged, from programme
        - 15 Offered further intervention: e.g. Self Esteem Group (5), Dietician (4), BPD Programme (2), Psychologist (2), Occupational Therapy (1), Dietician & CBT Nurse Therapist (1).
Measures

Each patient completed the Beck Depression Inventory, Revised (BDI, Beck, Ward, Mendelson,Mock, & Erbaugh, 1979), Bulimic Investigatory Test, Edinburgh (BITE, Henderson & Freeman, 1987) and the Multi-Impulsivity Scale (MIS, Evans, Searle & Dolan, 1998). These measures were completed at the beginning and end of the programme and were selected for their previously well documented reliability and validity and relevance to this population group (Allison, 1995). In addition, patients were requested to complete a motivational inventory, “How I feel about my eating disorder” (Fernandez, 1998) (see appendix). This measure has received limited assessment of reliability and validity as the assessment of motivation within the eating disorders field has currently received little empirical research.

Attrition

Five patients failed to engage with the programme. The average age of this group was 27 years, with a range of 21 - 39 years. They were all female and had a diagnosis of BN. Five patients dropped out between sessions 1-3 (see figure 1) and a further five patients dropped out after session 3. 25% of those who entered the programme dropped out of treatment (37.5% of those we intended to treat).

Drop outs were all female. Nine patients were diagnosed with BN and one with BED. Their average age was 28 years, with a range of 20 to 38 years. Their average BMI was 23 with a range of 18 to 30.

Patients completing the programme

Twenty-one patients completed the programme during the study period. The average age of this group was 30 years, with a range of 18 to 51 years. The average BMI was 26.5 with a range of 18 to 39.5. Two were males (9.5%) and 19 (90.5%) females. No statistically significant difference was found between the age, BMI, pre-treatment BDI scores or pre-treatment BITE scores of clients completing the programme and clients dropping out of the programme.
With regards to diagnosis, 15 (71.4%) were diagnosed with BN, 5 (23.8%) with BED and 1 (4.8%) with Eating Disorder Not Otherwise Specified. Both males were diagnosed with BN. On average patients who completed the programme had to wait 17 days for their first appointment, with a range of 2 to 60 days. (The waiting time for first appointment is likely to increase substantially in the summer months due to change over of the Assistant Psychologist). 12 patients were still on the programme and 4 patients due to start at a later date.
RESULTS

Patients were typical of other studies in terms of age, BMI, BDI, and BITE symptom (disordered attitudes to eating) and severity (frequency of bulimic behaviours) scores (see table 1).

Table 1: Descriptive statistics of group

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
<td>BMI</td>
<td>26.5</td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>30.90*</td>
<td>16.88</td>
</tr>
<tr>
<td>BITE - symptom</td>
<td>24.83*</td>
<td>2.98</td>
</tr>
<tr>
<td>BITE - severity</td>
<td>11.00*</td>
<td>5.24</td>
</tr>
</tbody>
</table>

* above clinical cut off (BDI cut off 29, BITE-symptom cut off 20 and BITE-severity cut off 5)

Table 2. Mean change scores for those who completed treatment

<table>
<thead>
<tr>
<th></th>
<th>Pre treatment Mean (Standard Deviation)</th>
<th>Post treatment Mean (Standard Deviation)</th>
<th>Difference in mean scores pre and post programme</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>30.90 (16.88)</td>
<td>12.48* (14.77)</td>
<td>-18.43</td>
<td>-9.73</td>
<td>0.00</td>
</tr>
<tr>
<td>BITE - symptom</td>
<td>24.83 (2.98)</td>
<td>12.02* (7.29)</td>
<td>-12.81</td>
<td>-8.34</td>
<td>0.00</td>
</tr>
<tr>
<td>BITE - severity</td>
<td>11.00 (5.24)</td>
<td>3.09* (2.39)</td>
<td>-7.90</td>
<td>-6.77</td>
<td>0.00</td>
</tr>
<tr>
<td>BITE - fasting</td>
<td>1.76 (1.64)</td>
<td>0.38 (0.87)</td>
<td>-1.38</td>
<td>-3.69</td>
<td>0.001</td>
</tr>
<tr>
<td>BITE - bingeing</td>
<td>3.83 (1.09)</td>
<td>1.52 (1.47)</td>
<td>-2.31</td>
<td>-7.12</td>
<td>0.00</td>
</tr>
<tr>
<td>BITE - purging</td>
<td>5.07 (3.52)</td>
<td>1.19 (1.25)</td>
<td>-3.88</td>
<td>-4.92</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* within the range of normal population

Related t-test was used to test for a significant decrease

- in the scores for the BDI before and after intervention
- in the symptom and severity scores for the BITE before and after intervention.
T-tests reveal significant differences between the scores pre- and post- individual treatment for the BDI, and the BITE symptom and severity scores. Significant differences between pre- and post- fasting, bingeing and purging scores on BITE subscales are also revealed. These scores indicate a reduction in these behaviours over the course of treatment.

**Multi-impulsivity**

Multi-impulsivity was defined as presence of current problem with bingeing and two other areas of impulsivity. Of the 55 patients referred, 14 were multi-impulsive. 3 of the 10 drop outs were multi-impulsive and six of the 21 clients who completed the programme during this audit period. An independent t test was performed to see if the average number of areas of impulsivity (as scored in the MIS) was significantly different for patients who completed the programme and patients who dropped out.

The number of areas of impulsivity was not significantly different for clients who dropped out and clients who completed the programme (p value .301).

<table>
<thead>
<tr>
<th></th>
<th>Multi – impulsive (n=6)</th>
<th>Non-impulsive (n=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre treatment mean (sd)</td>
<td>Post treatment mean (sd)</td>
</tr>
<tr>
<td>BDI</td>
<td>44.6* (12.24)</td>
<td>29* (18.15)</td>
</tr>
<tr>
<td>BITE-symptom</td>
<td>25.5* (3.74)</td>
<td>18.2 (8.29)</td>
</tr>
<tr>
<td>BITE-severity</td>
<td>12.4* (4.99)</td>
<td>4.6 (2.32)</td>
</tr>
<tr>
<td>BITE-bingeing</td>
<td>4.2 (1.67)</td>
<td>2.6 (1.83)</td>
</tr>
<tr>
<td>BITE-fasting</td>
<td>2.2 (1.75)</td>
<td>0.2 (0.41)</td>
</tr>
<tr>
<td>BITE-purging</td>
<td>6.8 (3.09)</td>
<td>1.8 (1.22)</td>
</tr>
</tbody>
</table>

* Clinically severe
Table 3 shows that multi-impulsive patients were more symptomatic in levels of depression but not of bulimic behaviours. Both groups make significant improvements in depression and bulimic behaviours but the multi-impulsives remain severely depressed and have higher post-treatment BITE symptom scores (disordered attitudes) relative to non-impulsive patients. Table 4 confirms that multi-impulsive patients made significant changes in most areas. Reduction in fasting only reached trend levels for either group. (This is known to take longer to change than the duration of initial treatment).

**Table 4. T test to investigate whether the change in scores is statistically significant for multi-impulsive clients (n=6).**

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference in BDI</td>
<td>12.92</td>
<td>0.00*</td>
</tr>
<tr>
<td>Difference in BITE - Symptom</td>
<td>4.53</td>
<td>0.006*</td>
</tr>
<tr>
<td>Difference in BITE - severity</td>
<td>4.05</td>
<td>0.01*</td>
</tr>
<tr>
<td>Difference in BITE - fasting</td>
<td>1.0</td>
<td>0.36</td>
</tr>
<tr>
<td>Difference in BITE - purging</td>
<td>3.0</td>
<td>0.03*</td>
</tr>
<tr>
<td>Difference in BITE - bingeing</td>
<td>2.89</td>
<td>0.03*</td>
</tr>
</tbody>
</table>

*Statistically significant (p<0.05)

Further independent t tests were carried out to investigate the effects of multi-impulsivity on outcome. The hypothesis was tested that multi-impulsive patients would make significantly less improvement than patients who were not multi-impulsive.
Table 5. An independent T-test investigating whether there is a statistically significant difference between the relative change scores of multi-impulsive and non-impulsive clients

<table>
<thead>
<tr>
<th>Variable (unequal variance)</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>difference in BDI change score</td>
<td>0.90</td>
<td>0.39</td>
</tr>
<tr>
<td>difference in BITE - symptom</td>
<td>2.19</td>
<td>0.018*</td>
</tr>
<tr>
<td>difference in BITE - severity</td>
<td>0.05</td>
<td>0.96</td>
</tr>
<tr>
<td>difference in BITE - fasting</td>
<td>-0.68</td>
<td>0.52</td>
</tr>
<tr>
<td>difference in BITE - bingeing</td>
<td>1.06</td>
<td>0.34</td>
</tr>
<tr>
<td>difference in BITE - purging</td>
<td>-0.94</td>
<td>0.37</td>
</tr>
</tbody>
</table>

* statistically significant at 95% confidence

Table 5 shows that the only area in which multi-impulsives did less well statistically was in BITE symptom scores. No other statistically significant differences were found i.e. they made similar rates of improvement in depression and bulimic severity scores (frequency of bingeing and purging).

Motivation

An independent t test was used to investigate whether the motivation score of clients who dropped out of the programme was significantly different from the motivation score of clients who completed the programme. Clients scored 0 - 8 on each of 6 items in a brief measure designed to research motivation levels in BN (see appendix, Fernandez, 1998).

Table 6: Independent t test of differences in motivation scores for those who completed and those who dropped out.

<table>
<thead>
<tr>
<th>Variances</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unequal</td>
<td>-1.18</td>
<td>0.27</td>
</tr>
</tbody>
</table>

81
Table 6 shows that the mean motivation level of the group of clients who dropped out and the mean motivation level of the group of clients who completed the programme were not significantly different.

Product Moment Correlation Coefficients (PMCCs) were calculated to identify correlations between motivation and changes in pre- and post- treatment scores on the BDI, BITE - symptom, BITE - severity, BITE - fasting, BITE - purging, and BITE - bingeing. Table 7 shows that there is a significant positive correlation (to 95% CI) between changes in the BITE-bingeing score and motivation. This indicates that higher motivation score is correlated with greater change in BITE-bingeing scores. No other significant correlations between motivation scores and changes in BDI and BITE scores were found.

**Table 7. Correlations between motivation and changes in treatment score**

<table>
<thead>
<tr>
<th></th>
<th>correlations</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>-0.22</td>
<td>0.34</td>
</tr>
<tr>
<td>BITE-symptom</td>
<td>-0.05</td>
<td>0.82</td>
</tr>
<tr>
<td>BITE-severity</td>
<td>0.29</td>
<td>0.21</td>
</tr>
<tr>
<td>BITE-fasting</td>
<td>-0.001</td>
<td>1.00</td>
</tr>
<tr>
<td>BITE-bingeing</td>
<td>0.51</td>
<td>0.02*</td>
</tr>
<tr>
<td>BITE-purging</td>
<td>0.38</td>
<td>0.09</td>
</tr>
</tbody>
</table>

*significant at 95% CI

**Comparative outcome for CBT and CBT plus MET**

Results in this audit of patients using the Bit(e) by Bit(e) manual (Schmidt & Treasure, 1996) who received a programme integrating motivational enhancement (MET) and CBT were compared to those who followed the Peter Cooper manual (1995) in previous years which is based on standard CBT.
Table 8: Outcome for CBT versus CBT plus MET

<table>
<thead>
<tr>
<th></th>
<th>Peter Cooper</th>
<th>Bite by Bite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failed to engage</td>
<td>7/44 (15.6%)</td>
<td>5/45 (11%)</td>
</tr>
<tr>
<td>Drop out</td>
<td>22/37 (59.4%)</td>
<td>10/40 (25%)</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>45</td>
</tr>
</tbody>
</table>

29 out of the 37 who entered the programme dropped out of treatment when following the standard CBT programme (59.4%). In comparison 10 out of 40 (25%) of those who followed the CBT plus MET dropped out. Differences were not analysed as other factors have also influenced these results.

Table 9: Results with standard CBT

<table>
<thead>
<tr>
<th></th>
<th>Pre treatment mean (sd)</th>
<th>Post treatment mean (sd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>24.00(12.83)</td>
<td>8.93*(12.86)</td>
</tr>
<tr>
<td>BITE - symptom</td>
<td>23.30(3.91)</td>
<td>11.33*(8.96)</td>
</tr>
<tr>
<td>BITE - severity</td>
<td>11.43(4.5)</td>
<td>4.13*(4.61)</td>
</tr>
<tr>
<td>BITE - fasting</td>
<td>1.53(2.74)</td>
<td>0.67(1.14)</td>
</tr>
<tr>
<td>BITE - bingeing</td>
<td>3.83(3.66)</td>
<td>1.60(2.02)</td>
</tr>
<tr>
<td>BITE - purging</td>
<td>6.07(2.89)</td>
<td>1.87(2.52)</td>
</tr>
</tbody>
</table>

* within the range of normal population
**Table 10: Results with CBT plus MET**

<table>
<thead>
<tr>
<th></th>
<th>Pre treatment mean (sd)</th>
<th>Post treatment mean (sd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>30.90(15.34)</td>
<td>12.48*(15.89)</td>
</tr>
<tr>
<td>BITE - symptom</td>
<td>24.83(3.24)</td>
<td>12.02*(7.14)</td>
</tr>
<tr>
<td>BITE - severity</td>
<td>11.00(4.65)</td>
<td>3.09*(2.55)</td>
</tr>
<tr>
<td>BITE - fasting</td>
<td>1.76(1.43)</td>
<td>0.38(0.56)</td>
</tr>
<tr>
<td>BITE - bingeing</td>
<td>3.83(1.33)</td>
<td>1.52(1.59)</td>
</tr>
<tr>
<td>BITE - purging</td>
<td>5.07(3.51)</td>
<td>1.19(1.13)</td>
</tr>
</tbody>
</table>

* within the range of normal population

Results indicate that the BDI and BITE scores for both approaches significantly improved by the end of treatment. T-tests reveal significant differences between BDI, and the BITE symptom and severity scores pre- and post- treatment for both groups of patients. Significant differences between pre- and post- bingeing and purging scores on the BITE were also found for both groups. However, a significant reduction in fasting behaviour was only observed for those who received CBT plus MET.

Both approaches were effective in reducing depressive and bulimic symptomatology in patients with BN and BED. However, only those patients who received CBT plus MET were shown to have significantly decreased fasting behaviour. No other statistically significant differences were found between the two approaches.

71% of those patients who completed the programme were offered additional interventions after completing the programme. Five patients were referred to the self-esteem group, four were referred to a Dietician, two patients were referred to a research programme for people with Borderline Personality Disorder. A further two patients were referred to Psychology, one to Occupational Therapy for assertiveness work, and finally one patient was referred for a combination of Dietetic input and CBT with a Nurse Therapist. The remaining 29% of patients had no further intervention on completion of the programme.
DISCUSSION

Our results support the benefits of a supervised self-help intervention for bulimic disorders as documented in a number of research trials. This provides evidence of its effectiveness in routine clinical practice, which is consistent with its efficacy in clinical trials. (The need for such evidence is identified in the National Service Framework for Mental Health, 1999, p116).

The drop-out rate of 25% falls within the those reported in research trials carried out in tertiary centres – between 18 and 27% (Agras, 1993). The drop-out rate has markedly decreased in comparison to the previous year, following implementation of recommendations from previous audits to reduce the drop out rate (Bell, 1998). Two changes were made to the programme - a change in the manual and the inclusion of motivational enhancement for those who are pre-contemplative of change. Troop et al. (1996) suggested that patients who are pre-contemplative of change are at risk of drop-out. This was confirmed by Mussell et al. (2000), who found that drop-outs anticipated more difficulty giving up bulimic behaviours. The first manual used in the programme was “Bulimia Nervosa: a guide to recovery” written by Peter Cooper (1995). From July 1998 Bit(e) by Bit(e), by Schmidt and Treasure (1996), has been used. The latter was chosen as it was less directive and addressed the concerns of those patients who are pre-contemplative of change (Prochaska & DiClementi, 1982). In addition, four sessions of motivational interviewing (Miller & Rollnick, 1991) were included for patients who were pre-contemplative, before any contract to attempt change is agreed. From measuring motivation for change during the first session using a standardised measure, the supervisor can now gauge the patient’s motivation. Those who are considered to be in the action phase of the cycle of change are encouraged to set goals for change and work towards these goals early on in the programme. Patients who are pre-contemplative or contemplative of change are encouraged to address the costs and benefits of change and up to four sessions are spent working towards shifting the patients into the action phase. Patient feedback regarding Bit(e) by Bit(e) has been extremely positive, with patients reporting ‘it is the best book I have read’, ‘I found the book really easy to understand’, ‘I found the book so helpful, it made sense’, ‘the book covered all the problems I experience’. Patients using CBT plus motivational
enhancement showed significantly greater reduction in fasting behaviour as well as a significantly lower drop out rate. There were no significant statistical differences between the two groups in reducing depressive or other bulimic behaviours.

Our interpretation of results pertaining to the two approaches should be cautious. Differences may be due to other changes in the programme or factors which could not be controlled for, in particular variation in staff delivering the programme. Each year a new assistant psychologist is appointed. Their differing experiences of delivering CBT and individual personalities may have an effect on the successful establishment of a therapeutic alliance or patient confidence in the programme. These in turn may influence the number of patients who complete or drop out of the programme.

Another recommendation of the previous audit was for referrers to give clients a leaflet outlining the programme and emphasising the importance of commitment. This recommendation has been carried out and leaflets for the programme have been printed and are distributed to those who refer patients to the programme to pass on to their patients. These leaflets have also been placed in patient waiting rooms. Some patients are, as a result, requesting referral to the programme. It seems likely that these patients will be more motivated to address their eating disorder and to complete the entire treatment programme.

Before treatment commenced mean scores on the BDI indicated those on the treatment programme to be severely depressed. After completing the programme scores had significantly reduced, with the observed mean indicating scores to have fallen within the range of the normal population. Completing the programme was obviously effective in reducing depression, but this reduction is also due to other factors, including medication. It was recommended by the previous audit that medication should be considered for patients who are significantly depressed or have high levels of bingeing and purging. Such patients have been referred to a Consultant Psychiatrist or their GP for medication. Studies show that medication can enhance the benefits of CBT in the treatment of binge eating and bulimia nervosa (Whittal, Agras, & Gould, 1999) but may
increase drop-out (Bacaltchuk et al., 2000). Combined medication should therefore be carefully negotiated with patients and side effects monitored.

Similarly, mean scores on both the BITE symptom and severity scales indicated dramatic changes in patient attitudes to eating and the severity of bingeing and purging behaviours. Pre-treatment scores indicated that patients had disordered eating with the presence of binge eating and purging behaviours at clinically significant levels. Mean scores on the BITE post-treatment indicated infrequent bingeing and purging behaviours, falling within the normal limits for the population. Patients were following a regular structured eating pattern and within initial stages of recovery.

Many studies suggest patients with Axis II borderline pathology or impulsivity are less likely to respond successfully to treatment for BN (Sohlberg, Norring, Holmgren, & Rosmatk, 1989; Johnson, Tobin, & Dennis, 1990). Once a brief impulsivity measure, the Multi-Impulsivity Scale (MIS), was available for use, this was introduced alongside others given to patients on the programme. Multi-impulsive patients were more symptomatic in levels of depression but not bulimic behaviours (replicating numerous research findings e.g. Fichter, Quadflieg, & Rief, 1994). They benefited from the programme in all areas but reported significantly less reduction in bulimic attitudes (as indicated by the BITE symptom scale) than non-impulsive patients and remain significantly depressed. These conclusions are preliminary as the number of multi-impulsive clients are low.

The previous year’s audit also recognised the importance of addressing patients’ self-esteem and recommended a self-esteem intervention in addition the programme. This suggestion was made to reduce drop-out, risk of relapse and further help patients. All patients completing the programme are now offered a place in an eight-week self-esteem group. Changes in Robson Self Esteem Scale scores (RSES, Robson, 1989), suggest the groups are effective in increasing patients’ self-esteem. Research is needed to show whether patients who receive such help have a better long-term outcome for their eating disorder.
Further recommendations from the previous audit included the investigation of client’s readiness to change and its relationship to treatment outcome. The importance of motivation in successful outcome for treatment of BN was recently identified by Treasure et al. (1999), who found that readiness to change is more strongly related to improvement and the development of a therapeutic alliance than the type of treatment utilised. Neither this study nor our audit found that motivation level correlated with drop out. This result may reflect the motivational measure used and the lack of an accurate measure of motivation specific to bulimic behaviours. Existing published measures are unidimensional, which blurs different stages of change for restrictive eating, binge eating, purging and other ‘compensatory’ behaviours. We have therefore designed a new measure which we are currently piloting. In a future analysis we may be able to detect a relationship between motivation and drop out or outcome. We have also included a measure of self-efficacy as expectation of success or anticipation of difficulties with change may also predict outcome (Mussell et al., 2000).

Overall, the results of the programme have been positive and support the continuation of the programme. The majority of patients are offered additional treatment. Some patients with complex problems need more comprehensive treatment than that offered by the programme or conventional CBT for bulimic disorders (Wilson, 1996). Decreasing bulimic behaviours can result in increased self-harm or substance abuse (Johnson et al., 1990). The post-treatment levels of depression in multi-impulsive patients reflect their continuing problems and need for additional treatment. Outcome studies and expert consensus recommend such patients may need more intensive or a longer duration of therapy (Fairburn et al., 1993; Turnbull et al., 1997) or a wider treatment agenda (Rosenvinge, Martinussen, & Ostensen, 2000) such as Dialectic Behaviour Therapy (Linehan, 1993) or Cognitive Analytic Therapy (Ryle, 1997). However, this is not always readily available, as therapy resources are limited.

At present referral rates grossly under-represent predicted incidence rates of BN and BED for the population served. Referrals of people with BED are particularly low. Studies have found that approximately only 12% of people with bulimic disorders are in treatment (Welch & Fairburn, 1992; Hoek, 1993). A rolling programme of training
in the identification of bulimic disorders and the promotion of the programme is recommended. Referral rates could be improved by the provision of the programme in primary rather secondary care, as recommended in the National Service Framework for Mental Health (1999). However, other psychological disorders, (Axis I and II), are common in patients presenting for treatment (Herzog, Nussbaum, & Marmor, 1996), which suggests that assessment by experienced mental health professionals and allocation to a range of appropriate interventions are paramount.
CONCLUSIONS AND RECOMMENDATIONS

The results confirm that a self-help programme is useful as an early intervention in the treatment of bulimic disorders.

Many of the recommendations made by the previous audit report have been implemented and the aim to reduce the drop out rate has been achieved. The drop out rate is now in line with those reported from research trials in tertiary centres.

Patients with multi-impulsivity do benefit from the programme but require additional treatment e.g. to manage dysphoric mood states. The programme could be expanded to tackle such areas and matched to individual patients according to need (Wilson, 1999).

A more accurate measure of motivation is necessary to identify its relationship to treatment response. It is recommended that a measure of motivation specific to bulimic disorders is devised and piloted in combination with a measure of self-efficacy or expectation of success.

ACKNOWLEDGEMENTS

Thank you to Drs. Steve Rollnick and Janet Treasure for discussions about models and assessment of readiness to change.
APPENDIX
HOW I FEEL ABOUT MY EATING DISORDER

Please indicate your responses to the following questions by circling a number on the corresponding scales, as appropriate.

(1) How severe do you consider your eating disorder to be?

| It's not a problem at all | 0 1 2 3 4 5 6 7 8 | It's a big problem |

(2) How much do you wish to receive treatment for your eating disorder?

| I'm not interested at all | 0 1 2 3 4 5 6 7 8 | I'm very interested |

(3) How necessary do you think it is for you to receive treatment for your eating disorder?

| I don't need any treatment | 0 1 2 3 4 5 6 7 8 | It's absolutely necessary or me to receive treatment |

(4) How much do you think your eating disorder hinders you carrying on with normal life?

| Not at all | 0 1 2 3 4 5 6 7 8 | Very Much |

(5) How concerned are you about your eating disorder?

| Not concerned at all | 0 1 2 3 4 5 6 7 8 | Very concerned |

(6) How concerned do you think that your relatives are about your eating disorder?

| Not concerned at all | 0 1 2 3 4 5 6 7 8 | Very concerned |
REFERENCES


MATERIAL REDACTED AT REQUEST OF UNIVERSITY
- organising a programme of seminars for three years for community mental health staff;
- representation in the Education and Development Training committee for all mental health staff throughout the Trust (approximately 500 people) and organising training events within the Trust;
- planning and undertaking multidisciplinary training in the Care Programme Approach;
- assisting with the planning and delivery of staff retraining with the closure of Knowle Hospital.

Subjects I have given training or presentations on include user involvement and empowerment in mental health services, the Care Programme Approach, women and mental health, Cognitive Analytic Therapy, various aspects of eating disorders (service provision and psychotherapy) and borderline personality disorder.

Since establishing the Eating Disorders Team for Portsmouth HealthCare Trust I have run two training courses for all disciplines (primarily nursing staff) in the assessment and treatment of eating disorders, and am occasionally called upon to provide training in eating disorders elsewhere in the U.K.

I have always taken an active interest in training within clinical psychology. I contributed to a major review of the syllabus for the University of Southampton Doctoral Course in Clinical Psychology in 1995 and mark Reports of Clinical Activity for the course in addition to regular teaching.
Related Professional Activities

The voluntary sector:
I was an active member of MIND for many years. I was a member of the South West Regional Council of MIND as an advisor on user involvement and of the Opportunities for Volunteering Scheme (Mental Health) national funding committee for some years. I was an advisor for Winchester Samaritans and have been for the Eating Disorders Association for many years.

Division of Clinical Psychology (BPS):
I have been on the editorial panel of *Forum*, the professional journal for clinical psychologists, since April 1993. I jointly edited a special edition of *Forum* on eating disorders which was published in June 1996.

In October 1996 I launched a Special Interest Group in Eating Disorders for clinical psychologists, and was chair for three years. I have organised a symposium on eating disorders for the annual B.P.S. conference. I am an external assessor for B grade posts in adult mental health and eating disorders. I have been a member of a complaint investigation panel on behalf of the BPS.

Nationally:
I was a founding member of *Survivors Speak Out*, a national self-advocacy group for people with mental health problems and helped organise the first national conference of psychiatric service users in 1985. In 1994 I was a member, representing clinical psychology with adults, of a national working group which wrote standards for the treatment of people with eating disorders. I have organised four national day conferences on eating disorders of which I chaired three. I have reviewed articles in eating disorders and CAT for peer-reviewed journals.

Continuing Professional Development
I have attended numerous conferences and training days since qualifying on a range of subjects including the following:- brief psychotherapy, hypnosis, supervision skills,
developments in community mental health care, motivational interviewing, family therapy, cognitive therapy and management skills. I have completed brief training courses in treating survivors of child sexual abuse (basic and advanced training), Dialectic Behaviour Therapy for people with Borderline Personality Disorder and equal opportunities training in selection interviewing. I regularly attend the International Conferences in Eating Disorders. In 1997 I completed Part 1 of a U.K.C.P. training in Cognitive Analytic Therapy.

Research interests
My research interests include
- the treatment of people with borderline personality disorder,
- the treatment of bulimia nervosa,
- the process of change in anorexia nervosa.
I am a member of the Wessex Dissociation Research Group, which has designed and evaluated a new measure of dissociation. (I am joint author of a paper detailing this research has been submitted). I have supervised two trainee clinical psychologists in doctoral level research. I have recently written a manual for the treatment of people with borderline personality disorder (under a publication contract) and am piloting this for my doctoral research. I have also designed a measure of motivation for change in the treatment of disorders, which our team is currently piloting. I am part of a multi-centre research group which has passed the first stage for MRC funding for an RCT to evaluate the treatment of bulimia nervosa in primary care.

Hobbies and interests
I am a practising Buddhist. I sing in a choir and enjoy cooking, walking, travelling and my cat.
Conference Presentations
Seminar at Portsmouth University 1999
BPS Annual conference 1998
Annual CAT conference 1998
Day Conference on Eating Disorders 1998
British Association for Behavioural and Cognitive Psychotherapy
  Annual Conference 1997
Eating Disorders Day Conference, Wessex Region 1997
Annual Eating Disorder Conference, Maudsley Hospital 1996
Cognitive Analytic Therapy Annual Conference 1995
B.P.S. Annual Conference 1993
World Federation for Mental Health International Conference, Japan 1993
Women and Mental Health Day Conference, Maudsley Hospital 1992
‘Care for the Carers’ Day Conference, Brighton Health Authority 1990
Regional Conference on Mental Health Promotion 1990
Day Conference on Women and Mental Health, Brighton 1989
‘Common Concerns’ International Conference on User Involvement 1988
Annual Mind Conference 1987
Publications
What Predicts Failure to Engage in or Drop-out from Treatment for Bulimia Nervosa and what implications does this have for treatment? Clinical Psychology and Psychotherapy (accepted)

An evaluation of a supervised self-help programme for bulimic disorders. Clinical Psychology and Psychotherapy (accepted)


'Hurt, Harm and Clinical Psychology'. Clinical Psychology Forum, No. 61 Nov. 1993. (joint author)


'Is psychotherapy more empowering to the therapist than the client?'. Clinical Psychology Forum, No. 23 Oct. 1989.


Lorraine Bell October, 2000
Research Dossier
The development of a self-help treatment manual for people with borderline personality disorder and the preliminary evaluation of its use.

Abstract
A self-help manual for people with borderline personality disorder was written and piloted in a small group of patients (11) who met criteria for borderline personality disorder (BPD) or multi-impulsivity. The manual addressed key problem areas and was provided with 24 sessions of weekly supervision by mental health staff from different disciplines. A structured interview and range of measures were used before the programme, at the end and at three months follow-up. Qualitative feedback was also sought from participants and supervisors. Six patients completed the programme, four of whom reported it was of considerable benefit. Four patients made progress in a range of areas including impulsivity and suicidal behaviour and clinically significant change was demonstrated on at least one measure in three patients. A supervised self-help intervention is of value for some people with BPD or multi-impulsivity who are literate and well motivated.
1. INTRODUCTION

1.1.1. Need for this area of study

BPD is a severe and disabling condition with a high prevalence in psychiatric services, especially inpatient and forensic settings and is associated with considerable morbidity. There is some preliminary evidence that psychological interventions, particularly Dialectic Behaviour Therapy (DBT) and Cognitive Analytic Therapy (CAT), can be effective. However, several factors may militate against people receiving these treatments. Firstly, they require considerable training and are intensive to deliver. They are therefore expensive and not widely available. Secondly, people with BPD are difficult to engage and have a high drop-out rate. Thirdly, many staff have negative attitudes toward people with BPD and would not prioritise them for specialist care. This highlights the need to consider and develop interventions which could be delivered more easily in generic psychiatric services. There is considerable evidence of the value of self-help manuals for a range of disorders, some of which are common in people with BPD, such as bulimia nervosa and self-harm. So far, however, there has been no research investigating the possible benefits of self-help manual for BPD itself. The aim of the current research therefore is to conduct a preliminary investigation of the effectiveness of such a manual when delivered with supervision from a mental health professional.

1.1.2. What is BPD?

The Diagnostic and Statistical Manual IV (DSM IV, American Psychological Association, 1994, page 633) defines personality disorder as an enduring pattern of inner experience and behaviour that

- deviates markedly from the expectations of the individual's culture
- is inflexible and pervasive across a broad range of personal and social situations
- leads to clinically significant distress or impairment in social, occupational, or other important areas of functioning
- is stable and of long duration and its onset can be traced back at least to adolescence or early adulthood
• is not better accounted for as a manifestation or consequence of another mental disorder.

The DSM IV identifies 12 personality disorders of which BPD is one. The term ‘borderline’ was first introduced by Stern in 1938 and has been used in many different ways (Lang, Grotstein, & Solomon, 1987) which has inevitably led to confusion. BPD was not a formal diagnosis until 1980. It is better described in the ICD10 (WHO, 1992) as ‘emotionally unstable personality disorder’, but this term is less widely used. (A number of authors describe borderline clients as ‘the stably unstable’). The DSM IV defines BPD as follows A pervasive pattern of instability of mood, interpersonal relationships, and self image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by at least five of the following:

1. Frantic efforts to avoid real or imagined abandonment (do not include suicidal or self-mutilating behaviour in criterion 5).
2. A pattern of unstable and intense interpersonal relationships characterised by alternating between extremes of over idealisation and devaluation.
3. Identity disturbance: markedly and persistently unstable self-image or sense of self (including sexual orientation, long-term goals or career choice, type of friends desired, preferred values).
4. Impulsivity in at least two areas that are potentially self-damaging, e.g. spending, sex, substance use, shoplifting, reckless driving, binge eating (do not include suicidal or self-mutilating behaviour covered in criterion 5).
5. Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour.
6. Affective instability due to a marked reactivity of mood (e.g. intense episodic dysphoria, irritability, or anxiety, usually lasting a few hours and only rarely more than a few days).
7. Chronic feelings of emptiness or boredom.
8. Inappropriate, intense anger or difficulty controlling anger, e.g. frequent displays of temper, constant anger, recurrent physical fights.
9. Transient stress-related paranoid ideation or severe dissociative symptoms.
DSM IV criteria were used in the current study as the ICD-10 has a low threshold and is closer in severity to 'personality difficulty' (Tyrer, Merson, Onyett, & Johnson, 1994; Tyrer & Johnson, 1996).

Prevalence rates for BPD in epidemiological surveys vary widely from 1.1% to as high as 4.6% (Weissman, 1993). This is partly explained by changes in criteria but is also indicative of the heterogeneity and poor reliability of assessment procedures for this group. A critical examination of the data by Merikangis and Weissman (1986) estimates the prevalence of BPD in the community to be between 0.2 and 1.7%. The latter figure is similar to that found in a number of studies (see Widiger & Weissman, 1991). Widiger and Weissman suggest that such a high prevalence rate probably reflects a broader definition of BPD consistent with that of Kernberg (1975, 1984). However, they also suggest the high prevalence rate calls into question the validity of the diagnosis. BPD is probably the most common personality disorder (Widiger & Trull, 1992), though some studies dispute this (Zimmerman & Coryell, 1989; Loranger, 1990). Amongst people with personality disorders, up to one third of outpatients (Morey, 1988) and 50% of inpatients (Widiger & Weissman, 1991) meet BPD criteria.

People with BPD have high rates of mortality and morbidity. They tend to improve with time, though this may take 10-20 years (McGlashan, 1986; Paris, 1993). Most have improved after 15 years or by their early 50s and no longer meet BPD criteria (Paris, 1988; Berewolitz & Tarnpolosky, 1993). However, nearly 10% complete suicide, often when they are out of treatment (Paris, 1993). Of those who improve, their recovery is probably incomplete.

1.1.3. Criticisms of the concept of BPD

BPD may be more accurately described as a syndrome or as dysfunction (Berlowitz & Tarnopolsky, 1993). However, due to the influence of diagnostic classification it is now widely accepted as a personality disorder, despite its heterogeneity of pathogenesis and presentation.
There are numerous problems associated with the definition and diagnosis of BPD. Validity of the DSM IV classification of personality disorders is poor (Livesley, 1987). Hyler et al. (1990) point out that diagnosing a single personality disorder is frequently difficult because people exhibit traits that are not limited to a single disorder. To meet the diagnosis for BPD, people have to meet 5 out of nine DSM IV criteria. As with the diagnosis of schizophrenia, two people who meet the diagnostic criteria may have very different problems (and share only 1 of the nine criteria). There are over 100 possible combinations (Parnas, 1994). The figure five is arbitrary (Finn, 1982; Widiger et al., 1984) and the format implies all criteria are of equal weight, which research findings challenge (Widiger & Frances, 1989; Burgmer, Jessen, & Freyberger, 2000). State factors such as a suicidal crisis may obscure or accentuate more fixed and stable personality traits. Many ‘borderline’ behaviours fluctuate over time and, unlike, for example, criteria for bulimia nervosa, frequency for a sustained period is not defined for most of the criteria. Some people who meet PD criteria no longer do so once their Axis I disorders have improved (Reich, 1985).

Some specialists conclude there is limited empirical support for DSM IV categories of personality disorders which are arbitrary (Livesley, Jackson, & Schroeder, 1991; Young & Ghuhoski, 1996). BPD has been found to be associated with so many other Axis I and II disorders that its validity as an independent diagnostic entity has been questioned (Fryer et al., 1988). Co-occurrence is high in all personality disorders (Stuart et al., 1998). Many people with BPD meet criteria for other personality disorders (Dolan, Evans, & Norton, 1995). Most clients continue to meet criteria for BPD when reassessed but, in addition, some receive other personality disorder diagnoses (Pope et al., 1983), usually within the DSM IV ‘dramatic’ group. The presence of these disorders is likely to influence the assessment of BPD, e.g. histrionic patients may exaggerate their problems and anti-social patients may lie (Skodol & Oldham, 1991). Many specialists argue BPD should be conceptualised as a dimensional variable rather than a categorical diagnosis as implied in the DSM IV (Trull, Widiger, & Guthrie, 1990; Tyrer & Johnson, 1996).
Reliability of the diagnosis in routine clinical practice has been found to be low (Mellsop et al., 1982; Livesley, 1987), with low kappa co-efficients between clinicians. Criteria are vague, global and require much inference on the part of the diagnostician. Clinicians often under-diagnose or over-diagnose the disorder depending on their experience (Morey & Ochoa, 1989) and whether the client is poor or rich, male or female (Henry & Cohen, 1983).

Despite these problems, Loranger et al. (1994) conclude “it is possible to assess personality disorders with reasonably good reliability”. Berelowitz and Tarnopolsky (1993) conclude that reliability and validity of BPD assessments in particular are adequate. Widely used diagnostic instruments (such as the DSM III, as it then was) identify a characteristic phenomenological set of core features i.e.

- unstable interpersonal relationships
- idealisation and denigration of others
- intense unpredictable feelings
- impulsive behaviour
- self-destructive behaviour.

Clarke, Hafner, and Holme (1995) found longitudinal stability of people diagnosed with BPD was very high, thus supporting BPD as a valid diagnosis, though also reported that its treatment was generally haphazard and ineffective.

In the absence of any more rigorous classification, the DSM IV criteria are used for this study, as assessed by part of the Structured Clinical Interview for DSM-IIIR (SCID-II, Spitzer, Williams, & Gibbon, 1987). Additional psychometric measures will also be used which attempt to gauge severity. The manual will acknowledge the dimensionality of ‘borderline problems’ and where possible use this latter term.

1.2. Staff Attitudes to people with BPD

Many staff find patients with BPD difficult (Colson et al., 1985; Gallop & Wynn, 1987), and are more negative (Gallop, Lancee, & Garfinkel, 1989) towards them than other patients. BPD patients generate intense counter-transference responses (Book, Sadavoy, & Silver, 1978), including anger, hostility and helplessness (Colson et al.,
1986). Kelly and May (1982) suggest that patients are labelled 'difficult' if they cause staff to feel ineffective, angry and anxious. Gallop, Lancee, and Garfinkel (1989) hypothesise that nurses who respond negatively to people with BPD see them as 'bad' rather than 'mad'. Nurses struggle to make sense of the experience of people with BPD (O’Brien & Flote, 1997) and may respond less empathically to them than other patients (Fraser & Gallop, 1993). O’Brien and Flote (1997) highlight the need for nurse education about BPD and its treatment and supervision. An unpublished study (Reece, 1988) suggested a positive relationship between nurses’ knowledge about BPD and attitudes toward patients with the disorder. Miller and Davenport (1996) found that a self-instructional manual about BPD improved knowledge of and attitudes towards patients with BPD and suggest that active self-directed learning was one reason why it was successful.

1.3.1. Psychological treatment of BPD

Few controlled studies of any psychological therapy for BPD other than DBT have been carried out. Drop-out rates are reported between 23 and 67% (Gunderson et al., 1989; Skodol, Buckley, & Charles, 1983). There are five approaches used in the psychological treatment of BPD. These will be outlined in historical order with a brief description of their evidence base.

1.3.1.1 Psychodynamic therapy

The earliest models of BPD were psychodynamic (Kernberg, 1975, 1984; Kohut, 1977, 1984)). There is indirect support for a psychodynamic model of BPD e.g. over-reliance on people as transitional objects for self-soothing can be seen in borderline clients (Modell, 1968). Uncontrolled studies demonstrate the value of psychodynamic therapy for people with BPD (Waldinger & Gunderson, 1984; Stevenson & Meares, 1992). However, therapy is long and expensive and can only be delivered by a small number of highly trained staff. In the first study patients averaged 3 sessions per week over 4.5 years; in the second participants received twice weekly therapy for 12 months.
1.3.1.2 Milieu therapy (Therapeutic Communities)

Tucker, Bower, Wagner, Harlam, and Sher (1987) report data on 40 of 62 patients treated in a residential programme for between 6 months and 1 year reporting moderate improvements at two years follow-up. However, Rosser, Birch, Bond, Denford, and Schachter (1987) found borderline patients did no better by 5 year follow-up in the residential programme than in a standard psychiatric institution.

1.3.1.3 Cognitive Therapy

In the last decade the theory and practice of cognitive therapy has been applied to the treatment of personality disorder (Beck et al., 1990; Young, 1990, 1994; Davidson, 2000) and BPD in particular (Layden, Newman, Freeman, & Byers Morse, 1993; Perris, 1994; Arntz, 1994; Newman, 1998; Fossel & Wright, 1999). Support for a cognitive model of BPD comes from a study by Arntz, Dietzel, and Dreessen (1999). They showed that negative core beliefs in people with BPD are remarkably stable and mediate the relationship between childhood trauma and BPD pathology. There is, as yet, no evidence for the application of cognitive therapy to people with BPD, though a considerable body of evidence exists as to its efficacy in treating a wide range of Axis I disorders. Salkovskis, Atha, and Storer (1990) reduced suicidal behaviour with five sessions of CBT plus homework. Davidson and Tyrer (1996) conducted a series of single case studies with people with antisocial and borderline personality disorder using an unpublished treatment manual. Most patients reported that concentration on a limited number of problems was therapeutic. Davidson and Tyrer conclude that important clinical changes in dysfunctional behaviour and attitudes can be achieved with short-term cognitive therapy. However, their results were not statistically significant and there was no follow-up.

1.3.1.4 Dialectic Behaviour Therapy (DBT)

DBT is both a well-formulated model of BPD and treatment package (Linehan, 1993; Shearin & Linehan, 1994). In one of the few controlled studies of psychotherapy with people with BPD, DBT, compared to treatment as usual (TAU), reduced parasuicidal behaviour, improved global functioning and reduced length of inpatient care in parasuicidal women who met criteria for BPD (Linehan, Armstrong, Suarez, Allmon,
& Heard, 1991). The TAU controls made more suicide attempts and spent significantly more time as inpatients. They were also significantly more likely to drop-out (50% compared to 16.7% in the DBT group). Progress in the DBT group was maintained at 1 year follow-up (Linehan, Heard, & Armstrong, 1993). There is therefore more evidence of the benefit of DBT in the treatment of BPD than any other intervention. However, the treatment is lengthy and intensive and has limited applicability to routine generic clinical practice. Further research is being carried out in order to ascertain which components of BPD are most effective and whether a briefer treatment is of value.

1.3.1.5 Cognitive Analytic Therapy (CAT)
CAT is an integrative model of brief psychotherapy which incorporates the problem focus and functional approach of cognitive therapy with an object relations understanding of the patients' relationship toward herself and others. This has an obvious relevance to helping people with BPD and has been developed in part for specific use with borderline clients (Ryle, 1997 a and b). A randomised controlled study of a 24 session protocol is currently underway and preliminary results are encouraging (Ryle, 1998). The value of CAT in treating people with BPD has been suggested by single case studies (Ryle & Beard, 1993) and clinical observations (Ryle & Marlowe, 1995; Ryle, 1997b).

1.3.2. Factors associated with response to treatment
Substance misuse tends to delay recovery or worsen outcome (Links, Heslegrave, Mitton et al. 1995) and is also associated with higher levels of violence (Stone, 1990). Stone found those with a history of imprisonment had consistently poor outcome, but parental brutality had the greatest statistical power for predicting poor outcome. Those who have been sexually abused in childhood are less likely to recover (Mitton, Links & Durocher, 1997). Other factors predictive of negative outcome are self-harm and inappropriate anger (Plakun, Burkhardt & Muller, 1985), continuous dysphoria (Paris, Brown & Nowlis, 1987), personality fragmentation (Wildgoose, 1997) and suicidal behaviour (Mehlum, Friis, Vaglum & Karterud, 1994). In the latter study borderline clients without suicidal behaviour had an outcome nearly as good as non-BPD patients.
Links, Heslegrave, and van Reekum (1998) found initial levels of BPD psychopathology and impulsivity were the only factors which predicted outcome at 7 year follow-up. Links and Heslegrave (2000) confirm that impulsivity predicts outcome at 7 to 10 years. There is also some evidence suggesting that borderline clients with lower levels of disturbance respond better to psychological treatment (Higgitt & Fonagy, 1993). There are contradictory findings with regard to depression. One study found co-morbid depression predicted a worse outcome (Gunderson & Philips, 1991); Links et al. (1995) did not. Any research into treatment for BPD needs to assess the factors which may be related to outcome.

1.3.3. A self-help manual for people with BPD

BPD is a severe complex condition with a high prevalence in psychiatric services and high service use (Tyrer, Seivewright, Ferguson, et al., 1990). The proportion of psychiatric outpatients who meet BPD criteria is estimated at between 8 (Widiger & Trull, 1992) and 11% (Widiger & Frances, 1989). At least 15% of inpatients meet criteria for BPD (Widiger & Weissman, 1991; Widiger & Trull, 1992). The need for psychological interventions for this client group is therefore considerable. However, there are a number of factors which militate against people with BPD using psychological services. They are notoriously difficult to engage and treat (Roth & Fonagy, 1996), have a high drop-out rate (Gunderson et al., 1989) and respond less well to treatments for Axis I disorders (Reich & Green, 1991). They comprise a significant proportion of patients who do not respond to initial treatments for common Axis I disorders such as depression and anxiety (Comtois, Cowley, Dunner, & Roy-Byrne, 1999) as well as bulimic disorders. Many authors, such as Cauwells (1992), conclude that people with BPD rarely receive the help they need or range of services they could benefit from.

Many experts stress the importance of a structured treatment (Linehan, 1993) as without it clients can bring repeated crises to sessions, therapy become unfocussed and the therapy relationship under more strain (Davidson, 2000). Although DBT is considered the gold standard treatment for BPD, brief interventions have been found
effective with similar client groups. Suicidal behaviour can be reduced with brief
cognitive therapy (Salkovskis et al., 1990) or a self-help manual (Evans et al., 1999).

Whilst a self-help manual alone would not be expected to be an adequate treatment for
all people with BPD, it may have certain merits. Firstly, many clients with BPD do not
receive psychological therapy; a self-help manual could deliver a targeted psychological
intervention of some benefit at a minimal cost. Secondly, recommended psychological
treatments are scarce and require considerable training. Full training in the UK in
schema-focussed cognitive therapy is not available and has only recently become
available in DBT. CAT is the only UK training specifically tailored to treating people
with BPD and this is a minimum of two years post-core professional training. There is
an urgent need for effective pragmatic interventions (Miller, Eisner, & Allport, 1994).
Thirdly, the use of the manual by Community Mental Health Team staff may help
educate and train staff and help achieve a better knowledge and understanding of the
disorder and improved attitudes towards patients. Fourthly, individual psychotherapy is
intensive for both patients and therapists, involving complex relationship or
transference issues. One treatment study for bulimia nervosa found that borderline
patients did no worse (Davis, Olmsted, & Rockert, 1992). The authors suggested that
a psychoeducational intervention which is not based on an intensive relationship could
be more suitable for them. Even a recent psychodynamic manual for BPD (Langley,
2000) recommends minimising dependency and is entitled ‘Self-Management Therapy
for Borderline Personality Disorder’. Fifthly, the course of BPD is usually 10-15 years
(Paris, 1993) and for most clients treatment is intermittent. A supervised self-help
manual could provide a structured problem-focussed intervention which the client can
build on when not in active treatment and can be returned to when problem areas need
to be re-addressed. Finally, self-directed interventions can have good maintenance
(Glasgow & Rosen, 1978).

Manuals may be helpful even though additional interventions will be needed (Pallonen
et al., 1994).
1.4.1. Structured treatment
Clinicians believe in the importance of tailoring treatment to the particular needs of individual clients. However, one study found that experienced therapists who were allowed free reign to use their subjective clinical judgement achieved less success than their counterparts who followed a standardised treatment protocol in the treatment of phobic disorders (Schulte, Kunzel, Pepping, & Schulte-Bahrenburg, 1992). These results were irrespective of the degree of clinical experience of the therapists and highlight the value of using standardised treatments. Wilson (1995, 1996) gives well argued rationale for the greater use of manualised treatments. Hibbs et al. (1997) point out that structured manuals are easy to use by novice or unsupervised therapists or those who do not have access to optimal training or supervision.

1.4.2. Self-help manuals
Self-help manuals are available for a range of psychiatric disorders including panic disorder and agoraphobia (Craske, Meadows, & Barlow, 1994). They can usefully complement therapist-administered treatment in several ways (Craske et al., 1994). Patients can
• read the manual in advance of the session
• resort to it after therapy ends
• have family or friends read it to help provide a more supportive social context for change.

An early review by Glasgow and Rosen (1978) conclude that self-manualised treatments produce at least short-term benefits for weight and fear reduction with promising results for problem drinking (Miller & Munoz, 1976), insomnia (Thoresen & Coates, 1976) and relaxation training (Rosen, 1976, 1977). Later studies confirm the value of self-help manuals for people with problem drinking (e.g. Spivak, Sanchez-Craig, & Davila, 1994), smoking (e.g. Hjalmarson, Hahn, & Svanberg, 1991; Warnecke, Langenberg, Wong, Flay, & Cook, 1992) and Axis I disorders such as depression (Selmi et al., 1990).
Bibliotherapy has been shown to be as effective as therapist-administered treatments for a variety of problems (Marrs, 1995). Studies demonstrate that clients can successfully self-direct desensitisation with no or minimal aid from a therapist. Clarke (1973) had snake phobics participate in five self-administered training sessions that employed a self-help desensitisation manual and a relaxation audiotape. Participants rated their fear as significantly reduced. However, almost half dropped out (14 out of 29 participants), a percentage rate quoted in many studies (Glasgow & Rosen, 1978). Burgess, Marks, and Gill (1994) effectively treated recurrent nightmares with support only by post.

Gosh and colleagues (Gosh & Marks, 1987; Gosh, Marks, & Carr, 1988) showed equal gains from self-help instructions (by manual or computer) to treatment by professionals for agoraphobia. Lidren et al. (1994) randomised 36 patients with panic disorder to bibliotherapy, group therapy or a waiting list control. They found that both treatment groups were superior on a range of measures and that benefits were maintained at 3 and 6 month follow-up. White (1995) randomly allocated clients on waiting lists for treatment for anxiety disorders to one of three conditions - an assessment appointment which included advice on managing their problem, an assessment coupled with a CBT self-help package or no intervention. All clients were seen three months later. Clients who had received the self-help package required significantly fewer treatments sessions than clients in either of the other conditions. 40% of the self-help recipients required no treatment at all.

Studies demonstrate that benefits can be well maintained, e.g. at two year follow up (Rosen, Glasgow, & Barrera, 1977; Scogin, Jamieson, & Davis, 1990). There is also evidence of the benefit of self-help manuals for problem areas common in BPD. A series of trials demonstrate the value of self-help manuals in the treatment of patients with bulimia nervosa. In the first published trial, (Schmidt, Tiller, & Treasure, 1993), clinicians rated change in 26 patients who were asked to use a manual for 4-6 weeks without supervision. Two patients dropped out (7%), 46% were much improved and 31% were somewhat improved. Better results were achieved by Cooper, Coker, and Fleming (1994, 1996) with added (though minimal) supervision over an average of 8
sessions. Outcome was assessed 4-6 months later. Four out of eighteen patients dropped out (22%). Among the remainder, bulimic episodes and vomiting had decreased by 80% and 79% respectively, and two thirds were abstinent at one-year follow-up. Attitudes to shape and weight improved, but by a smaller amount. In a randomised controlled trial of 81 patients, Treasure et al. (1994) compared the outcome of ‘self-help’ (using a manual) with 8 sessions of CBT and with no treatment (waiting list). Twenty-three dropped out and were excluded from the results. Characteristics of drop-outs or treatment allocation are not specified. There were no statistically significant differences in attrition rates between groups. Both the self-help and the CBT groups had reduced symptoms. The CBT group had better remission rates, complete remission was achieved in 22% of patients who used the manual.

A further randomised controlled trial of 110 patients, comparing sequential treatment of patients given a manual plus top up CBT (as needed) with those given 16 sessions of CBT (Treasure et al., 1996). In this study, 27% dropped out (with no statistically significant differences between groups). Almost one third of those in sequential treatment required no additional sessions. For those who did, the average number of top up sessions was three. Improvements were made in both groups. Thirty percent of both groups achieved remission at the end of treatment, with no significant differences between them at end of treatment or at 18 months follow-up. Improvements continued post-treatment - 40% of the sequential group and 41% of the CBT group were symptom-free at 18 months follow-up. Twenty-nine percent of patients given the manual alone significantly improved and did not require further treatment. Similar results were achieved when the study was replicated in Germany (Thiels, Schmidt, Treasure, Garthe, & Troop, 1998). Treasure et al. (1996) conclude that 20% of all patients in treatment with bulimic-type disorders can significantly improve by following a manual without supervision. This rate can be enhanced to 30% with additional CBT sessions. Improvements continue after the end of treatment, reaching a remission rate of 40%. These results are equivalent to those obtained by using individual CBT.

One trial is under way evaluating the benefit of a brief cognitive-behavioural self-help manual for people with a history of self-harm. Preliminary results are encouraging
(MacLeod et al., 1998). A further report by Evans et al. (1999) found a trend of reduced rate of suicidal acts in patients with cluster B or dramatic ‘personality difficulties’ (as measured by the Personality Assessment Schedule, Tyrer, 1988) who used a manual compared to treatment as usual. They also had a significantly greater reduction in depressive symptoms. This study demonstrates the potential benefit of simplified interventions which target skills enhancement for people with personality disorders.

1.4.3. Supervised self-help


1.4.4. Conclusion

Self-help manuals are valuable in the treatment of a wide range of psychological disorders including problem areas common in BPD such as bulimic disorders and self-harm. Engagement and outcome is likely to be enhanced with supervision. However, there are currently no studies attempting to evaluate the effectiveness of self-help manuals in BPD itself. There are of course concerns and risks in using self-help manuals. Gould and Clum (1993) found that certain problems were more amenable to self-help methods, mainly skills deficits and fear based problems, such as phobias or panic disorder. Reported drop-out rates in many studies, surprisingly, are no worse than for individual therapy, perhaps reflecting the fact that clients perceive the intervention as appropriately focused and if supervised, providing personalised support. However, failure to make progress might lead those who are unsuccessful to believe
that they cannot be helped by such interventions, which could diminish the effectiveness of the use of these approaches in further individual therapy.

Those most likely to benefit from pure self-help are those high in self-efficacy and internal locus of control (Mahalik & Kiviglan, 1988). Another important factor may be the quality of social support available to the individual (Smith, 1987). Outcome will be affected by compliance (Gould & Clum, 1993) i.e. the extent to which clients read the manual (Warnecke et al., 1992; Troop et al., 1996), though this would also be true for other interventions.

1.5.1. Aims of current study

The aim of this study was to develop a self-help manual for people with BPD and pilot its use in a generic mental health service with no specialist service for people with BPD.

Research Questions

- Can people with BPD and multi-impulsivity use a self-help manual to any benefit?
- Which patients are likely to benefit and which factors might predict response to this intervention?
- Can this intervention be delivered by non-therapist mental health staff (community psychiatric nurses and psychiatrists)?
- Does the use of the manual change the attitudes of staff?

An additional aim of the study was to obtain feedback on the manual from staff and patients who have used it so that it might be modified and improved for use in a larger trial.

In order to identify possible factors predicting response to the programme (including engagement or drop-out), the following were measured as they have been associated with response to other treatments for BPD (see section 3.2 above):

- Severity of BPD (SCID-II) (Spitzer, Williams, & Gibbon, 1987), Millon Clinical Multiaxial Inventory (MCMI 111, Millon, Millon, & Davis, 1994) and Borderline Syndrome Inventory (BSI, Conte, Plutchik, Karasu, & Jerrett, 1980).
• **Current substance misuse** (as measured by the MCMI\(^1\) alcohol scale and items on the Multi-Impulsivity Scale, MIS, Evans, Searle, & Dolan, 1998).

• **Dissociation**, as measured by the Dissociation Questionnaire (DISQ, Vanderlinden et al., 1993).

• **Fragmentation**, as measured by the Personality Structure Questionnaire (Pollock, Broadbent, Clarke, & Ryle, 2000).

• **Childhood abuse**, as measured by the Child Abuse and Trauma Scale (CATS, Sanders, & Becker-Lausen, 1995).

• **Depression and dysphoria**. The major depression and dysphoria scales of the MCMI were used so as not to increase the time required for completion of measures which can affect responses.

• **Borderline pathology** as measured by the BPD section of the Structured Clinical Interview for DSM-III-R.

• **Impulsivity and self-harm**, as measured by the MIS.

\(^1\) The MCMI drug dependency scale does not accurately measure current drug misuse.
2. METHOD

2.1. Design

A self-help manual for the treatment of BPD was developed for use with supervision by mental health professionals. It was piloted on ten clients with BPD and one with multi-impulsivity, six of whom completed the programme. Participants were assessed pre-treatment, post-treatment and at three months’ follow-up. Outcome data was computerised using SPSS software and analysed using criteria for clinical significance (Jacobsen, Follette, & Revenstorf, 1984). The study was carried out over a two year period in the following phases:

Table 2.1. Phases of study

<table>
<thead>
<tr>
<th>Development of the manual</th>
<th>Literature review.</th>
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<tbody>
<tr>
<td></td>
<td>Manual drafted incorporating DBT, CT and identifications of ‘states’ (CAT).</td>
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<tr>
<td></td>
<td>Manual given to two psychologists experienced in treating people with BPD &amp; to Anthony Ryle, originator of CAT. Comments received and manual revised.</td>
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<tr>
<th>Design of programme</th>
<th>Programme designed according to aims of research:</th>
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<tr>
<td></td>
<td>Patients to use manual with individual weekly supervision for 24 sessions (time estimated to be required to cover material).</td>
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<td></td>
<td>Sessions restricted to 30 minutes to promote self-help, minimise dependency and keep strict focus.</td>
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<td></td>
<td>Inclusion criteria for patients will be a minimum of five DSM IV criteria for BPD or multi-impulsive problems in at least three areas of the MIS.</td>
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<td></td>
<td>Submission for ethical approval.</td>
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<tr>
<th>Recruitment of participants and supervisors</th>
<th>Community mental health teams (CMHTs) informed of programme and referrals sought within Portsmouth Health Care Trust. Insufficient referrals so neighbouring Trust approached.</th>
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<tr>
<td></td>
<td>Referrals assessed and offered programme. Supervisors identified.</td>
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<th>Programme and re-assessments carried out</th>
<th>Training &amp; induction of staff.</th>
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<tr>
<td></td>
<td>Programme commenced over 6 month period. Post-treatment measures taken.</td>
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<td></td>
<td>Participants re-assessed at three month follow-up.</td>
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2.2. The manual

The manual was developed by incorporating those elements of best practice in psychological approaches to BPD (see section 1.3.1 above) which are deliverable in a self-help format, i.e. predominantly cognitive therapy and Dialectic Behaviour Therapy. It was decided to integrate these approaches as research into their relative efficacy is still in its infancy and clients with BPD need a flexible approach (Berewolitz & Tarnopolsky, 1993; Meissner, 1993). Many BPD specialists recommend an integrated approach (Turner, 1989 and 1992; Katz & Levendusky, 1990; Stone, 1990b; McGlashan, 1993; Patrick, 1993a; Paris, 1993; Sperry, 1999, Livesley, 2000). The manual shares many features of DBT but differs from it in a number of ways. Areas are tackled in a more conventional psychoeducational format with chapters addressing specific problems. Other treatment models are incorporated, notably cognitive therapy (recognising and tackling core beliefs), recognising emotional states rather than just emotions (from cognitive analytic therapy) and motivational interviewing. The latter is considered essential when addressing areas of change which the client feels ambivalent about, notably substance misuse and eating disorders. Finally, the materials are written for a British population. (DBT materials are noticeably North American).

The manual comprised 15 chapters and aimed to inform patients about the condition and systematically address specific areas of psychopathology and skill deficit (see chapter headings in appendix 1). Each area is introduced with an explanation of its role in BPD and possibilities for change. Clients are asked questions throughout and given exercises, all of which are highlighted in boxes and italic print. Clients are encouraged to experiment with change and find their own solutions. Where homework tasks are challenging, it is suggested that they are discussed with supervisors. At the end of each chapter references are given including suggestions for further self-help literature, followed by a page asking clients to estimate the percentage read, which exercises were completed and how helpful they were. Clients and supervisors were then asked to give comments. The manual was given in a loose-leaf folder so that clients could incorporate notes and diaries. Chapters were printed in different colours.
Part 1 consists of 7 chapters, six of which were given to clients and worked through with a planned timetable over the course of 11 sessions. Chapter 1 outlines common problems and discusses the diagnosis of BPD, considering the pros and cons. It then introduces the programme. Chapter 3 explains how BPD develops. Chapter 4 outlines basic self-care, explains the importance of commitment to the programme and reviews the role and possible benefits of medication. Chapter 5 considers the client’s personal use of drugs and alcohol. Chapter 6 addresses emotional modulation skills using the concept of skilful and unskilful means, mindfulness and ‘the middle way’. Chapter 7 describes unhelpful cognitive habits and, using the schema questionnaire, identifies core beliefs. Schema mechanisms are explained and examples given.

The next 7 chapters (part 2) were selected from according to the individual needs of the client. This was discussed and agreed between supervisor and client. Chapter 8 addresses child abuse - sexual, physical and emotional - and the emotional sequelae of these. This begins with the Young Parenting Questionnaire (1994). Common effects of abuse are described using Finkelhor’s model (1984, 1986). Chapter 9 looks at strategies for overcoming self-neglect and self-hate and enhancing self-esteem. Chapter 10 deals with self-harm including self-care following self-harm, self-soothing skills and alternative coping strategies. Chapter 11 addresses relationships and outlines common problems such as idealisation and denigration, mistrust, poor boundaries and clinging and placatory behaviour. It then specifically reviews the relationship with the supervisor Chapter 12 addresses the remaining problem areas of casual sex, eating disorders and hallucinations. A quiz is included to examine disordered eating attitudes. Chapter 13 deals with overcoming depression and managing difficult mood states. It begins with monitoring mastery and pleasure and considers ways of cultivating alternative mood states. Chapter 14 teaches anger management. The final chapter addresses plans for the future and termination issues.

Chapter 2 is notes for supervisors (referred to as guides). This chapter was not given to patients though it was made clear they were welcome to see it. It discusses BPD in more detail and the challenges of working with people with BPD. Specific session-by-session guidelines are given. Essential components to the successful application of the
programme are then outlined - support and consultation between sessions, shared multidisciplinary care, generalisation across settings, supervision and recognising therapy-interfering behaviour. Ten core skills are then defined - assessment of risk, openness, boundary setting, staying warm and keeping your cool, motivational interviewing, validation, being simultaneously problem- and solution-focussed, collaborative problem-solving, dealing with self-harm and cognitive reappraisal.

The total length of the manual was 50,227 words. The Flesch Reading Ease score, a measure of readability, was 60.7. The outline was submitted and accepted for publication with Psychology Press. Writing the manual was a major undertaking. It entailed

- a thorough review of the treatment literature for BPD
- comprehensive reading of the self-help literature for the problems addressed in the manual, including child abuse, self-harm, substance misuse, depression and interpersonal problems
- balancing the need for comprehensive and adequate coverage of the problem areas and change strategies for each, with the need to keep the manual concise, bearing in mind that many clients will have a limited attention span.

The original draft was read and commented on by Susan Simpson, Clinical Psychologist and schema focussed cognitive therapist, Dr. Anthony Ryle, originator of cognitive analytic therapy and Dr Fiona Kennedy, Consultant Clinical Psychologist. The manual was modified in light of their comments.

2.2.2. The Programme

The programme consisted of both patients and supervisors (community mental health staff) working through the manual with 30 minute supervision sessions per week for 24 sessions. The session length was decided so as to reduce the time for patients to talk in detail about their day-to-day problems, keep the focus on the material in the manual and on the clients taking responsibility for undertaking as much of the 'work' themselves as possible.
2.3.1. Ethical approval
Ethical permission for the study was obtained in each Trust (see appendix 2).

2.3.2. Recruitment of participants
Participants were recruited from two Trusts. Trust A serves a population of 570,000. There are 13 community mental health teams. 11 people were selected from the psychology waiting list. All community staff in the adult mental health and substance misuse service were written to by name, over 200 in all. Key therapists likely to be treating patients with BPD were contacted in person and seven consultant psychiatrists were spoken with (six in person and one by phone). Three presentations were made to teams about BPD and to the research and the senior management group. During the first three months only ten referrals were received, many of whom were unsuitable. A number of reasons for not referring were given, including:
- staff were too busy to commit to 24 sessions of 30 minutes plus supervision,
- patients were either too disturbed or chaotic or were stable and the consultant did not want to risk unsettling them.

A neighbouring Trust (Trust B) was therefore approached and four patients were assessed. Meanwhile other patients were identified in Trust A. Only a minority of patients were referred with someone identified in the community mental health team (CMHT) willing to provide supervision. In some cases patients were assessed and no one came forward from the CMHTs. Four patients were therefore seen by members of the psychological therapies team – two nurse therapists qualified in CBT and two third year trainee clinical psychologists on placement with me.

A total of 33 patients were referred; one of whom was psychotic and therefore considered unsuitable. 32 patients were sent assessment interviews. 24 attended; 8 clients did not keep this appointment. All patients were assessed by myself after the study was explained and a written outline given. The assessment consisted of the SCID-II for BPD (see appendix 3 for scoring sheet), an exploration of their problems and thoughts and feelings about treatment, followed by completion of the self-report.
measures either in my presence or in a neighbouring room so I could be found to clarify any confusion.

Any client was included who met criteria for *five* DSM IV criteria for BPD as identified by the BPD section of the SCID-II or a total SCID (BPD) score of 15 (i.e. $5 \times 3$; a criterion is met with a score of three). This latter threshold was used as a cut off for multi-impulsive patients, ensuring an equivalent level of severity (see appendix 3). (Only one patient had a SCID score of 15 and above who did not meet five DSM criteria for BPD, patient 1). Those with a recent history of violence (i.e. forensic patients) or those deemed unable to participate in or benefit from the programme (due to psychosis, severe substance misuse or other personality disorder) were excluded.

10 patients did not meet BPD criteria, 9 met partial BPD criteria and 1 had another personality disorder. Two patients were unlikely benefit – one was an inpatient under section 3 of the Mental Health Act; one also had a dependent personality disorder and expressed no desire to change. A total of 13 patients were excluded.

After a period of 5 months, twelve patients were assessed and offered the programme. One declined. 11 agreed to participate who ranged from 20 to 31 years of age. Patients signed a consent form after the study was explained and an information sheet given to them (see appendix 4).

The path from referral to treatment completion is shown in Figure 2.1.

2.3.3. Procedure

Clients were seen weekly by their supervisors for a total of 24 sessions. Clients were withdrawn if they missed four consecutive sessions without reason (such as illness or child care problems) or explanation, and were told this would be the case.
Figure 2.1 Patients seen in pilot study of a supervised self-help programme for BPD

33 patients considered / referred

32 patients sent assessments

24 patients assessed

25% failure to engage
8 DNA (5 men, 3 women)

39% not suitable
2 unsuitable for programme

10 did not meet BPD criteria

14 patients met BPD criteria

12 patients offered programme

33 patients considered / referred
1 declined

11 participants one male, ten female

4 with a psychological therapist:

5 with CPNs
1 Withdrawn
1 transferred
3 Dropped out

132
2.4. Assessment

For the reasons given in 1.1.2, assessment for BPD is not straightforward and reliability is often poor. A number of studies show poor concordance rates between different measures of BPD (Angus & Marziali, 1988; Kavoussi, Coccaro, Klar, Bernstein, & Siever, 1990; Nelson et al., 1985). Reliability is improved by the use of a structured interview (Mellsop et al., 1982; Zimmerman & Mattia, 1999). Skodol and Oldham (1991) conclude that no single diagnostic instrument has clearly demonstrated superiority over others and that someone who is diagnosed by more than one instrument is more likely to be a valid case than someone about whom the instruments disagree. It was therefore decided to include three measures of borderline pathology - a structured interview - the BPD component of the SCID-II (see appendix 3 for SCID scoring) and two self-report inventories, the MCMI and BSI. Four other self-report measures were used (see table below for a summary of the purposes of each measure).

The BPD component of the Structured Clinical Interview for DSM-IIIIR (SCID-II, Spitzer, Williams, & Gibbon, 1987). This is a brief semi-structured interview addressing each of the DSM criteria for BPD. No data are available on the reliability or validity of the SCID-II, although a number of studies have investigated the reliability of its predecessor, the SCID-I. First, Gibbon, Spitzer, Williams, & Benjamin (1997) found an overall kappa of .53. Other studies report higher kappa values (quoted in Spitzer et al., 1987)

Multi-Impulsivity Scale (MIS, Evans et al., 1998).
The MIS was developed in order to measure the range, frequency and severity of multi-impulsive behaviour. It consists of 11 subscales, each with a separate action and impulse score frequency range from 1-6. For the purpose of this study 3 (‘sometimes’) was taken as a cut off for the presence of impulsivity in that area.

Millon Clinical Multiaxial Inventory (MCMI III, Millon, Millon & Davis, 1994)
The MCMI is a valid and reliable measure of personality disorder (Reich, 1985) and also provides a measure of Axis I and other Axis II pathology. Scores above 75 indicate likely presence of a disorder and scores above 85 presence of the disorder.
Self-report inventories such as the MCMI tend to over-diagnose BPD i.e. generate false positives (Piersma, 1987). However they do have a role in initial screening (Lewis & Harder, 1991; Skodol & Oldham, 1991) and give an additional rating of severity.

**Borderline Syndrome Inventory (BSI, Conte et al., 1980).**
The BSI, a 52 item questionnaire, was found to have a high internal consistency and to discriminate DSM III borderline clients from other outpatients (Conte et al., 1980; Edell, 1984). Scores of 25 or over indicate probable BPD.

**Child Abuse and Trauma Scale (CATS, Sanders & Becker-Lausen, 1995).**
The CATS was also used as parental, physical and sexual abuse have been found to correlate with poorer treatment outcome (Stone, Unwin, & Beacham et al., 1988; Stone, 1990). The CATS produces a total score and three sub-scales; higher scores reflect more frequent abuse experiences and are an index of severity of trauma.

**Dissociation Questionnaire (DISQ, Vanderlinden et al., 1993).**
The DISQ was included as high levels of dissociation have been found in people with BPD (Vanderlinden et al., 1993) and may be an important mediating factor between severity of pathology, aspects of child abuse experiences and response to treatment. The DISQ was chosen as, unlike the DES (Bernstein & Putnam, 1986), it has been found to be a reliable measure of change in dissociation over time (Vanderlinden, Vandereycken, & Probst, 1995). Scores above 2.5 indicate clinical disturbance.

**Personality Structure Questionnaire (PSQ, Pollock et al., 2000).**
The PSQ was developed as a measure of personality integration with a score range of 8-40. The authors suggest scores of 28 or more indicate significant personality fragmentation. Most who score 34 or over will meet criteria for BPD. The standard deviation for two samples of patients with BPD were 5.9 and 7.7 respectively.
Table 2.5. Measures used and their purposes

<table>
<thead>
<tr>
<th>Measure</th>
<th>Purpose</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Screening</td>
<td>Outcome</td>
<td>Prediction of outcome</td>
</tr>
<tr>
<td>SCID-II for BPD</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>MIS</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>MCMI</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>BSI</td>
<td></td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>CATS</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>DISQ</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>PSQ</td>
<td></td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

All measures except the CATS (which was administered pre-treatment only) were administered pre-treatment, post-treatment and at three month follow-up. A single case study design with baseline measures taken at intervals prior to the intervention would have been ideal. However, this was not possible for ethical reasons (delaying treatment in a high risk group) and also was not permitted in the time period available for completion of the research (see personal study plan).

2.5. Analyses of results

Differences between drop-outs and completers were tested for statistical significance using the Mann Whitney non-parametric test. Change scores at post-treatment and 3 month follow-up were tested for clinical significance using calculations given by Jacobsen et al. (1984). Given the small sample size, correlations between measures and change scores were not calculated.

2.6. Staff attitudes

One measure of staff attitude was identified in the literature but unpublished. The authors were written to but no response was received. A questionnaire was therefore constructed to assess staff attitudes toward and their confidence in treating people with BPD (see appendix 5). This was presented to staff before and after completion of the
intervention. The questionnaire has 14 items, seven weighted positively and seven negatively to minimise acquiescence effects. The maximum score is 70, a high score indicating positive attitudes.

2.7. Feedback
Patients and staff were asked to complete brief feedback questionnaires after each chapter and at the end of the manual. Feedback was also asked for in client interviews (see interview schedule, appendix 6).
3. RESULTS

3.1. The Sample
Table 3.1 presents demographic and initial severity scores for treatment completers and non-completers. Scores indicate considerable pre-treatment severity. Those who completed the programme scored above the cut-off of 85 (indicating presence of disorder) in the avoidant, depressive and dependent scales as well as the BPD scale of the MCMI. They were over one standard deviation higher on the BPD scale compared to the BPD patients' data reported by Millon (1997). Scores were exceptionally high for anxiety, as found by Zanarini et al. (1998). Similarly, BSI scores (36) were higher than for BPD patients reported by Conte et al. (1980) (26.31).

3.2. Discontinuation
5 out of 11 dropped out or were discontinued. One client stopped attending and dropped out of the service altogether. Two clients said they no longer wanted to continue and 3 stopped attending and dropped out of treatment completely. The only male client never attended and was eventually admitted to hospital and detained under a section of the Mental Health Act. Police were brought to the unit on occasion because of his violence.
Table 3.1. Comparative data for drop-outs and completers

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean for drop-outs/those withdrawn (sd) (n=5)</th>
<th>Mean for completers (standard deviation) (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>27.4 years (4.28)</td>
<td>28 (5.29)</td>
</tr>
<tr>
<td>Number of diagnostic criteria (BPD, SCID-II)</td>
<td>6.4 (.89)</td>
<td>5.5 (1.64)</td>
</tr>
<tr>
<td>Total BPD SCID-II score*</td>
<td>29.8 (3.35)</td>
<td>23.3 (3.27)</td>
</tr>
<tr>
<td>MCMI 2A Avoidant</td>
<td>67.6 (16.47)</td>
<td>87.5 (10.31)</td>
</tr>
<tr>
<td>MCMI 2B Depressive*</td>
<td>77.2 (10.89)</td>
<td>91.2 (5.56)</td>
</tr>
<tr>
<td>MCMI 3 Dependent</td>
<td>74.8 (19.82)</td>
<td>90.3 (7.15)</td>
</tr>
<tr>
<td>MCMI 6A Antisocial PD*</td>
<td>82.2 (12.76)</td>
<td>62.8 (11.02)</td>
</tr>
<tr>
<td>MCMI 6B Sadistic (Aggressive)</td>
<td>79 (25.83)</td>
<td>60 (4.34)</td>
</tr>
<tr>
<td>MCMI S Schizotypal</td>
<td>73 (13.75)</td>
<td>76 (15.58)</td>
</tr>
<tr>
<td>MCMI C Borderline</td>
<td>87.2 (11.19)</td>
<td>89 (10.81)</td>
</tr>
<tr>
<td>MCMI D Dysthymia</td>
<td>77.2 (23.57)</td>
<td>84.5 (24.87)</td>
</tr>
<tr>
<td>MCMIB Alcohol Dependence</td>
<td>85.4 (15.76)</td>
<td>71.2 (13.88)</td>
</tr>
<tr>
<td>MCMIT Drug dependence*</td>
<td>90.6 (22.19)</td>
<td>61.7 (2.42)</td>
</tr>
<tr>
<td>MCMI R PTSD</td>
<td>68.8 (11.43)</td>
<td>77 (14.17)</td>
</tr>
<tr>
<td>MCMI SS Thought Disorder</td>
<td>79 (16.25)</td>
<td>74.7 (9.71)</td>
</tr>
<tr>
<td>MCMI CC Major Depression</td>
<td>76.4 (27.46)</td>
<td>86.2 (16.68)</td>
</tr>
<tr>
<td>MIS mean</td>
<td>2.02 (.64)</td>
<td>2.21 (.27)</td>
</tr>
<tr>
<td>Mean number of areas of multi impulsivity</td>
<td>2 (2.12)</td>
<td>2.33 (1.86)</td>
</tr>
<tr>
<td>BSI</td>
<td>33.6 (11.15)</td>
<td>36.5 (7.58)</td>
</tr>
<tr>
<td>DISQ</td>
<td>2.7</td>
<td>2.85 (.81)</td>
</tr>
<tr>
<td>PSQ</td>
<td>30.4 (.744)</td>
<td>30.8 (6.24)</td>
</tr>
<tr>
<td>CATS Sexual abuse</td>
<td>.8 (.89)</td>
<td>1.2 (.95)</td>
</tr>
<tr>
<td>CATS Punishment</td>
<td>1.7 (.17)</td>
<td>2.6 (.9)</td>
</tr>
<tr>
<td>CATS Neglect</td>
<td>1.5 (1.23)</td>
<td>2.3 (.71)</td>
</tr>
<tr>
<td>CATS Emotional abuse</td>
<td>1.6 (.97)</td>
<td>2.6 (.62)</td>
</tr>
<tr>
<td>CATS</td>
<td>1.3 (.69)</td>
<td>1.93 (.54)</td>
</tr>
</tbody>
</table>

*Statistical difference (p<0.05).
Those above cut-off for the presence of a disorder are in bold.

Mann Whitney tests were carried out to test for statistically significant differences between drop-outs and completers. Differences on five measures reached significance at the 5% level, four MCMI scales – depressive personality (p=.017), antisocial personality (p=.022), drug dependence (p=.042) and avoidant personality (p=.045), and the total BPD SCID score (p=.028).

3.3.1. Mean change scores for completers

Table 3.3.1. presents the mean scores of completers at pre-, post- and follow-up. It can be seen from this that improvements were made on all measures apart from the MCMI Drug dependence scale, which showed an increase over the course of the study. Individual variability in key measures for each of the six completers are shown graphically (3.3.1-7).
Table 3.3.1. Pre-, post- and follow-up treatment means for completers (n=6)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pre-treatment mean, (sd), range</th>
<th>Post-treatment mean, (sd), range</th>
<th>Follow-up mean, (sd), range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of diagnostic criteria (BPD, SCID-II)</td>
<td>5.5 (1.64) 5</td>
<td>1.5 (1.38)* 4</td>
<td>1.6(1.14)* 3</td>
</tr>
<tr>
<td>Total BPD SCID-II score</td>
<td>23.3 (3.27) 8</td>
<td>16.3 (3.33)* 9</td>
<td>15.9 (4.34)* 10</td>
</tr>
<tr>
<td>Number of areas of impulsivity</td>
<td>2.5 (1.64) 5</td>
<td>1.7 (1.03) 1.67</td>
<td>1.33(1.51) 4</td>
</tr>
<tr>
<td>Mean Total Multi Impulsivity Score</td>
<td>2.21 (.27) 0.78</td>
<td>1.9 (.5) 1.37</td>
<td>1.92 (.76) 2.27</td>
</tr>
<tr>
<td><strong>MCMIC Borderline</strong></td>
<td><strong>89 (10.81) 30</strong></td>
<td><strong>86.5 (9.73) 21</strong></td>
<td><strong>79.3 (13.28) 37</strong></td>
</tr>
<tr>
<td>MCMI P Paranoid</td>
<td>73.7 (15.63) 44</td>
<td>64.2 (25.33) 74</td>
<td>66.7 (23.75) 75</td>
</tr>
<tr>
<td>MCMIA Anxiety</td>
<td>93.5 (10.67) 31</td>
<td>83.2 (18.41) 52</td>
<td>78.5 (27.51) 72</td>
</tr>
<tr>
<td>MCMI H Somatoform</td>
<td>66.3 (21.89) 63</td>
<td>53.5 (26.36) 72</td>
<td>42.8 (35.26) 81</td>
</tr>
<tr>
<td>MCMI D Dysthymia</td>
<td>84.5 (24.87) 67</td>
<td>63.3 (19.03)* 52</td>
<td>55.8 (28.41)* 71</td>
</tr>
<tr>
<td>MCMIB Alcohol Dependence</td>
<td>71.2 (13.88) 37</td>
<td>67.8 (15.14) 39</td>
<td>66.3 (6.35) 16</td>
</tr>
<tr>
<td>MCMIT Drug dependence</td>
<td>61.7 (2.42) 6</td>
<td>65.7 (24.35) 71</td>
<td>74.8 (16.14) 39</td>
</tr>
<tr>
<td>MCMI R PTSD</td>
<td>77 (14.17) 33</td>
<td>73.3 (21.74) 64</td>
<td>71.3 (23.22) 68</td>
</tr>
<tr>
<td>MCMI CC Major Depression</td>
<td><strong>86.2 (16.68) 47</strong></td>
<td>61.7 (30.88) 90</td>
<td>49 (42.85) 104</td>
</tr>
<tr>
<td>BSI</td>
<td><strong>36.5 (7.58) 23</strong></td>
<td><strong>27 (15.79) 40</strong></td>
<td><strong>23.8 (13.27) 32</strong></td>
</tr>
<tr>
<td>DISQ</td>
<td>2.9 (.81) 2.16</td>
<td>2.4 (.91) 2.29</td>
<td>2.5 (.80) 2.19</td>
</tr>
<tr>
<td>PSQ</td>
<td>32.17 (4.96) 13</td>
<td>31.5 (5.32) 14</td>
<td>28.5 (5.65) 15</td>
</tr>
</tbody>
</table>

*Change scores more than one standard deviation of sample.
Scores above cut off are in bold.
Five out of six patients met BPD criteria at pre-treatment. All patients including patient 3 no longer met BPD criteria at post-treatment and follow-up. All patients improved and continued or maintained progress by follow-up, except patient 3 who appeared to have exaggerated her progress at the end of treatment and remained unstable. (Follow-up data was not available for patient 1 as she left the area so was not interviewed - other scales were sent and returned by post). It was not possible to carry out a test of the clinical significance of these changes as there are no published norms on the SCID-II.
Four patients improved in the number of areas of impulsive behaviour. One made no lasting change (patient 4), though her score was already low and one became worse (patient 3). As with the SCID, the patient who scored most highly made most progress.
Five out of six patients improved on their mean impulsivity score, three made marked improvement including the two with the highest pre-treatment scores. However, patient 3’s impulsivity scores increased so much that the mean for the group as a whole shows little improvement.
Five patients exceed the cut off of 85 on the MCMI BPD scale at pre-treatment (indicating presence of disorder). (The score of patient 3 suggests she did not reply accurately. She asked for her daughter to help complete the forms as she was anxious and may have had some literacy problems). Four patients improved and by end of treatment or follow-up achieved scores lower than 85. One remained unchanged and one deteriorated. Most patients continued to show borderline features at follow-up.
Three patients showed significant change by the end of treatment on the BSI (see table 3.3.4i) and by follow-up four no longer met the suggested cut off of 25 for BPD.
At pre-treatment, four patients were on or above threshold on the DISQ but only two by the end or at follow-up. The multi-impulsive patient (1) had the highest score and made dramatic progress and maintained much of this by follow-up. The other patient with a high level of dissociation (patient 3) was the patient who made no overall progress.
Five patients had marked fragmentation at the start of the programme. Three improved by the end of treatment and by follow-up.
3.3.3. Summary of changes

All patients no longer met BPD criteria. Five out of six patients improved on the SCID and mean impulsivity score and continued or maintained progress by follow-up, except patient 3 who inflated her progress at the end of treatment assessment and remained unstable. Four patients improved on a range of measures. Patient 3 and 4 made no lasting change and patient 3 became worse on some measures. Most patients continued to improve during the three month follow-up but still showed borderline features. In order to ascertain the validity of these changes, criteria and calculations of clinical change at end of treatment and follow-up were employed.

3.3.4. Clinical validity of changes

Jacobsen, Follette, and Revenstorf (1984) suggest two ways of determining clinical improvement for individual patients. This requires norms for both a normal control and for the clinical group under study. Firstly, is the change reliable (as calculated using the change score divided by the published standard deviation for the normal sample)? Secondly, is it clinically significant?

Three criteria for clinical significance are defined:

‘Does the level of functioning at post-test fall within the range of the functional or normal population where the range is defined as beginning at two standard deviations from the mean for the dysfunctional population?’ (level a).

‘Does the level of functioning at post-test suggest that the subject is statistically more likely to be in the functional than the dysfunctional population, that is, is the post-test score statistically more likely to be drawn from the functional than the dysfunctional distribution?’ (level c).

‘Does the level of functioning at post-test fall outside the range of the dysfunctional population, where range is defined as extending to two standard deviations from the mean for that population?’ (level b).

Data from only three measures could be assessed as norms and standard deviations for a normal population and equivalent clinical population as well as reliability coefficients are required – the BSI, DISQ and PSQ. (See appendix 7 for calculations).

Clinical significance is only calculated when the change is reliable.
### Table 3.3.4(i). ‘Reliable change index’ for change score pre- and post-treatment

<table>
<thead>
<tr>
<th></th>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
<th>Patient 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI</td>
<td>significant</td>
<td>not significant</td>
<td>significant deterioration</td>
<td>significant</td>
<td>significant</td>
<td>significant deterioration</td>
</tr>
<tr>
<td>DISQ</td>
<td>significant</td>
<td>not significant</td>
<td>significant deterioration</td>
<td>significant</td>
<td>significant</td>
<td>significant deterioration</td>
</tr>
<tr>
<td>PSQ</td>
<td>not significant</td>
<td>not significant</td>
<td>not significant</td>
<td>significant</td>
<td>not significant</td>
<td>not significant</td>
</tr>
</tbody>
</table>

### Table 3.3.4(ii). Clinical significance of change pre- and post-treatment

<table>
<thead>
<tr>
<th></th>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
<th>Patient 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI</td>
<td>significant at a and c</td>
<td>-</td>
<td>not significant</td>
<td>not significant</td>
<td>significant at a and c</td>
<td>not significant</td>
</tr>
<tr>
<td>DISQ</td>
<td>significant at a and c</td>
<td>-</td>
<td>not significant</td>
<td>significant at a and c</td>
<td>significant at a and c</td>
<td>not significant</td>
</tr>
<tr>
<td>PSQ</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>significant at a</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Patients 1, 4 and 5 made clinically significant progress in two measures, the DISQ and either the BSI or PSQ. Patients 2, 3 and 6 did not make clinically significant change in any direction.

### Table 3.3.4(iii). Reliable change index for change score pre- and follow-up treatment

<table>
<thead>
<tr>
<th></th>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
<th>Patient 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI</td>
<td>significant</td>
<td>not significant</td>
<td>not significant</td>
<td>not significant</td>
<td>significant</td>
<td>not significant</td>
</tr>
<tr>
<td>DISQ</td>
<td>significant</td>
<td>significant</td>
<td>significant</td>
<td>significant</td>
<td>significant</td>
<td>not significant</td>
</tr>
<tr>
<td>PSQ</td>
<td>significant</td>
<td>not significant</td>
<td>not significant</td>
<td>significant</td>
<td>significant</td>
<td>significant deterioration</td>
</tr>
</tbody>
</table>
Table 3.3.4(iv). Clinical significance of change pre- and follow-up treatment

<table>
<thead>
<tr>
<th></th>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
<th>Patient 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI</td>
<td>not</td>
<td></td>
<td></td>
<td></td>
<td>significant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>significant</td>
<td></td>
<td></td>
<td></td>
<td>at a and c</td>
<td></td>
</tr>
<tr>
<td>DISQ</td>
<td>not</td>
<td>significant</td>
<td>not</td>
<td>significant</td>
<td>significant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>significant</td>
<td>deterioration at a</td>
<td>significant</td>
<td>at a and c</td>
<td>at a and c</td>
<td></td>
</tr>
<tr>
<td>PSQ</td>
<td>significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>not significant</td>
</tr>
<tr>
<td></td>
<td>at a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Patients 1, 4 and 5 made clinically significant progress by follow-up on the PSQ. Patients 4 and 5 made clinically significant progress on the DISQ and patient 5 on the BSI. Patient 2's score on the DISQ had significantly deteriorated by follow-up.

3.3.5. Pattern of responses

Of the six patients who completed the programme, two responded well in all areas (1 and 4). Two patients who reported benefiting from the programme had periods of major stress during the programme. One made no progress (patient 3); the other made partial progress (patient 6). One patient significantly improved (patient 5) but attributed this to her medical treatment for her mood disorder and one patient did not report the programme as that helpful or make major change (patient 2). The table below compares these patients grouped according to outcome and their response to the programme. Patient 5 has not been included as although she improved she did not attribute this to the programme.
Table 3.3.5. Pre-treatment means for two outcome groups

<table>
<thead>
<tr>
<th></th>
<th>Poor outcome</th>
<th>Good outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patients 2 &amp; 3</td>
<td>patients 1, 4 and 6</td>
</tr>
<tr>
<td>MIS total (areas)</td>
<td>2.18 (2.5)</td>
<td>2.53 (3.33)</td>
</tr>
<tr>
<td>SCID total (no of criteria met)</td>
<td>24.5 (5.5)</td>
<td>23.7 (5.33)</td>
</tr>
<tr>
<td>MCMI C (BPD)</td>
<td>82</td>
<td>93</td>
</tr>
<tr>
<td>MCMI CC (major depression)</td>
<td>99</td>
<td>73.3</td>
</tr>
<tr>
<td>MCMI D (dysthymia)</td>
<td>95.5</td>
<td>71.3</td>
</tr>
<tr>
<td>MCMI B (alcohol dependency)</td>
<td>65</td>
<td>66.6</td>
</tr>
<tr>
<td>MCMI T (drug dependency)</td>
<td>63</td>
<td>61.6</td>
</tr>
<tr>
<td>BSI</td>
<td>41</td>
<td>33.7</td>
</tr>
<tr>
<td>DISQ</td>
<td>2.7</td>
<td>3.05</td>
</tr>
<tr>
<td>PSQ</td>
<td>33.5</td>
<td>30.3</td>
</tr>
<tr>
<td>CATS</td>
<td>2.37</td>
<td>1.57</td>
</tr>
<tr>
<td>Mean % manual read</td>
<td>96.6</td>
<td>99.3</td>
</tr>
<tr>
<td>Mean % exercises completed</td>
<td>50.8</td>
<td>56.66</td>
</tr>
</tbody>
</table>

3.3.6. Case descriptions of those who completed the programme and their responses

Descriptions of each client who completed the programme and their responses to it are summarised below.

*Client 1 (Trust A)*

This client was a young multi-impulsive woman, age 20, (the only participant not to meet five DSM IV criteria). She had been referred to the service for the first time and presented with bulimia nervosa, self-harm and substance misuse. She was supervised on the programme by a third year trainee clinical psychologist and read 100% of the manual though only completed 57.9% of the exercises. She gave detailed feedback regarding the manual and reported that the programme and support of her supervisor had been very helpful. She made good all-round progress despite having high impulsivity and a high MCMI score (C) score. (This is reflected in changes in her

151
MCMI depression, MIS, BSI and DISQ scores). Progress in her BSI and DISQ scores were clinically significant at post-treatment (see table 3.3.4(ii). She had instigated more structure to her day, and significantly reduced self-harm and alcohol use. She reported the manual as very helpful. This client moved during the follow-up period but returned questionnaires and wrote a long letter. She was doing very well, though still had an eating problem. Her degree of change remained reliable but only the change in fragmentation was clinically significant at level a (see table 3.3.4.iv).

Client 2 (Trust A)

This client was a young woman of 29 who had been off sick for over two years and had had repeated contact with psychiatric services here and abroad. She had very unhappy memories of her childhood and her CATS punishment score was high. She had also been raped in her teens. She presented to the service with depression and substance misuse. She was supervised by a community psychiatric nurse (CPN) but after two sessions the CPN felt she was unable to manage her level of distress. (The client brought in a drawing of a knife dripping with blood in response to the first exercise in the manual.) The client wanted to continue the programme. No one else from the CMHT was available so I took over seeing her myself. This client was compliant in keeping appointments, reading the manual (100%) and carrying out exercises (89.7%) but was extremely ‘schema-avoidant’ and made minimal progress in tackling this. For example, she had had angry outbursts and fell out with others in a number of jobs so would not contemplate returning to work or participating in a sheltered work programme. She refused to increase her activities and remains relatively isolated. She found termination on the programme very difficult and one possible reason she made minimal progress (see table 3.3.4i) was that her relationships in the service were crucial to her – progress could mean losing these. She made improvement in the SCID, reporting that she had reduced her substance misuse, but her scores on the MCMI alcohol scale do not confirm this. She probably therefore wanted to please the researcher. Her mood remained low. There was no notable change at follow-up and by then her DISQ score had deteriorated at a clinically significant level (see table 3.3.4(iv). The client admitted that she had not made as much use of the programme as she may have done.

152
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problems. She had made considerable progress since becoming a Christian and being in a stable relationship but could not overcome cyclical bulimia and alcohol misuse and severe mood swings. She was eager to participate in the programme as an alternative to long-term residential treatment, which would cause a major disruption to her life and social network which were understandably very important to her. She was supervised by a third year trainee clinical psychologist and read 97.9% of the manual and completed 67.8% of the exercises. She had high levels of distress and her supervisor found it very difficult to attend to the programme within 30 minute sessions and deal with the frequent crises which she needed to talk through. She made considerable progress and reported the programme as very helpful indeed. She made more improvement in her SCID score than any patient. Her progress was also reflected in changes in her mean MIS and BSI score. Her improvement in BSI, DISQ (dissociation) and PSQ (fragmentation) were clinically significant (see table 3.3.4ii). She still had a binge eating problem and was referred to a dietician in the Eating Disorder service as she had gained two stones since giving up self-induced vomiting. She was also referred for further help with anxiety. At three month follow-up she had applied for a job, left sheltered housing and discharged herself from the substance misuse service. She no longer met any BPD criteria and showed continued improvement on BSI, depression, MCMI borderline scale, mean impulsivity and PSQ. Her progress on DISQ and PSQ remained clinically significant (see table 3.3.4iv). She reported continuing problems with binge eating and anxiety but did not feel she needed further treatment for these.

Client 5 (Trust B)
This client was 32 years old with a history of numerous episodes of major depression, self-harm and suicide attempts. When assessed for the programme she was receiving ECT as an outpatient and when reassessed had no memory of having met me before. Despite a financially privileged background, she felt very emotionally neglected by her family but unable to criticise them and therefore found some areas of the programme very challenging. She was supervised by her consultant psychiatrist who had a special interest in BPD and with whom she had a very supportive relationship. She read 97.2% of the manual but only completed 53.3% of exercises. Despite feeling supported by her supervisor, she reported that he never discussed the content of her homework with her.
and she found this very disappointing and de-motivating. She made some improvement during the programme (as reflected in changes in her SCID, MIS and BSI scores) but attributed her progress to ECT and medication. Changes in her DISQ and BSI scores were clinically significant (see table 3.3.4ii). She maintained her progress at three months follow-up, though was having problems with her medication which distressed her. She made considerable improvement in her mood and alcohol use during the follow-up period and changes in BSI, DISQ and PSQ were clinically significant (see table 3.3.4iv).

Client 6 (Trust B)
This client was 25 years old, had had numerous psychiatric admissions and a long history of self-harm and suicide attempts. At assessment she had just discharged herself from a tertiary unit for people with personality disorders after three months, feeling that she had made sufficient progress. Her scores at assessment were affected by this optimistic but unrealistic state and under reflected her 'latent' problems. She was supervised by a senior registrar in psychiatry. This doctor changed jobs and was unable to complete the 24 sessions as agreed. This sent the client into a state of acute abandonment and anger and she made repeated suicide threats. She was offered an admission but declined this, knowing that she needed to manage more independently. I had to complete the last 8 supervision sessions with her. She reported that the programme had been enormously beneficial to her and she was sub-threshold on the SCID, MIS and MCMI at post-treatment. Because of the disruption her subjective distress did not improve as reflected in lower scores on the BSI DISQ and PSQ. These were not clinically significant however, (see table 3.3.4 i and ii). She read 100% of the manual and completed 52% of exercises. She had instigated a structure to her day, and made progress in self-harm, impulsive spending and binge eating. I requested that she was referred for further psychological therapy. Behavioural progress continued to improve during the follow-up period but not her DISQ and PSQ scores. She had broken up with her partner and managed this and had not self-harmed for some months. She only met two BPD criteria – mood disturbance and associated suicidal threats. She was seeing a CPN and psychiatrist and still using the manual at times.
3.4. Staff Attitudes

Table 3.4. Mean attitude scores

<table>
<thead>
<tr>
<th></th>
<th>Those who supervised drop-outs</th>
<th>Those who supervised completers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-treatment</td>
<td>52</td>
<td>57</td>
</tr>
<tr>
<td>Post-treatment</td>
<td></td>
<td>61.5</td>
</tr>
</tbody>
</table>

Scores ranged from 49-67 pre-treatment and 52-67 post-treatment. Higher scores indicate more positive attitudes. The maximum score is 70.

3.5. Professional background and skill level of supervisors

Given the small numbers involved in the pilot, no firm conclusions can be drawn. However a number of observations can be made. Six patients dropped out or were withdrawn for repeated non-attendance\(^2\), five of whom were supervised by CPNs, the sixth by a recently trained nurse practitioner in CBT. All the patients who remained on the programme were supervised by therapy-trained or medical staff. Staff who supervised patients who dropped out or were withdrawn had more negative attitudes according to the measure used than those who supervised completers. Only the therapy staff (two trainee clinical psychologists and two nurse therapists) attended supervision regularly and used supervision appropriately. CPNs in particular were poor attenders.

3.6.1. Feedback from patients

Three of those who were withdrawn from the programme did not read the manual or complete feedback. One reported that the manual was too difficult and not always relevant. The fifth drop-out said she could ‘relate to a lot of it’ but that it was boring and that she did not set aside the time to do it. Two drop-outs found chapter 4 (addressing life-style issues - eating, sleeping, friendships etc) prescriptive.

\(^2\) Attendance rates cannot be given as they were not consistently recorded by all staff involved. Patients who DNAd four consecutive sessions were withdrawn.
All completers rated most chapters of the manual as helpful. No chapters were rated as not helpful, though some were rated as ‘don’t know’. One client said the manual was “a best friend, a guide”, another that “it helped me to link problems with my past experience and understand myself”. Specific elements reported as helpful included

- The explanation of the diagnosis/ the factual information. “Now I know and understand why, I can take as much responsibility as I can & don’t feel so mad, useless or hopelessly feeble”.
- The structure.
- The chapter on schemas (two clients said this). “I found this the most helpful chapter because when I am in crisis, it can stop you from killing yourself knowing about schemas. It is totally invaluable because when you want to die if you can depersonalise it you can keep hope”.
- The ‘middle way’ concept.

Different clients found different techniques helpful, one reported that meditation was helpful; another that it was scary. One found the mastery and pleasure monitoring valuable in realising that there were too few areas of fulfilment in her life. One client wrote

“I have found this manual to be so helpful, and has really changed a lot of my behaviour. I no longer self-harm by cutting, no longer starve myself of food or water. I have learned to try and respect myself more than I ever believed I could….I certainly DO NOT (patients own capitals) think it would be at all possible to do this manual without the knowledge that there was 24 hrs support by phone.....Please try and get this treatment for as many BPDs as possible”.

Negative comments included:

- Too many exercises/ chapters too long (4 clients)
- Not enough time to address manual and process events of the week (3 clients and all staff) “I feel very rushed”, “Not enough time, which is a shame as it could sort so much more”.
- Language too technical at times (2 clients)
- References to Buddhism (2 clients)
- Material did not always apply e.g. substance misuse, childhood trauma.
In addition, the following specific feedback to individual chapters was given:

- Chapter 4 was patronising (2 clients).
- Chapter 6 (on emotional dysregulation) was ‘completely overwhelming’.
- In the chapter on abuse there was too much focus on sexual abuse and not enough on neglect. Four clients found this chapter difficult, one of whom managed those feelings by avoiding doing the chapter. Another client said “I think this chapter was very well written – it was very sensitively done”.
- Re self-harm chapter “didn’t feel it was in depth enough”.
- Re chapter 12 “a bit more about why the behaviours are there”.

Changes suggested at interview included

- Reduce the jargon
- Make the manual simpler and shorter (two clients)
- Make the text easier to read – larger text, illustrations, flowcharts.

Changes to the format of the programme which were suggested included

- Extra support, e.g. a concurrent group or phone help-line
- Repeating the programme or having extra sessions three months later
- A reward scheme e.g. the presentation of a certificate.

3.6.2. Staff feedback

Staff gave the following feedback

- More time was needed to discuss exercises and issues raised in the manual (most staff)
- There was too much to cover in the time available (most staff)
- A clearer plan for supervising sessions would have been helpful (1 person)
4. DISCUSSION

4.1. This study represents a first attempt to offer and evaluate a supervised self-help programme to patients with BPD and multi-impulsivity in generic mental health services. Recruitment was not easy but 11 patients began the programme, six of whom completed the full 24 sessions. Four patients improved on a range of measures, most of which continued to improve during the three month follow-up period and reported the manual and programme as helpful. Where published norms were available, change scores were analysed for clinical significance which was demonstrated on at least one measure in three patients (patients 1, 4 and 5). Patients 2, 3 and 6 made no significant changes, though one deteriorated on the DISQ during the follow-up period. The small sample size means that conclusions must remain tentative.

Before considering these findings in more detail implications of the study criteria will be considered.

4.2. Problems of definition. The heterogeneity of people with borderline dysfunction

It was decided to use fairly strict inclusion criteria i.e. DSM criteria or an equivalent SCID-II (BPD) severity score of 15 in order to determine whether the programme might benefit those for whom more complex treatments are advocated. However, this meant many clients who were assessed for this study, 10 patients out of 24, did not meet the criteria for the research. For example, one client with a past history of severe suicide attempts, self-harm and substance misuse had effectively stopped herself from doing these things since getting married because they upset her husband. However, she continued to be troubled by severe mood swings and a chronic sense of emptiness, i.e. had significant continuing problems. Some clients had other personality disorder features. Other patients were young ‘multi-impulsive’ women who could not be said to have a personality disorder, mainly because of the recent duration of their problems. The DSM IV emphasises that to meet criteria for a personality disorder, characteristics must be pathological, persistent and pervasive. Persistence is defined as spanning at least five years. This is a major problem in the diagnosis of BPD. (Patients typically
present in their teens and a number of deaths occur in young patients with a history of less than five years duration. If BPD, and therefore the severity of their problems, is identified earlier, more appropriate help may be arranged and deaths potentially prevented. (Client 1 was the only multi-impulsive client who had a minimum of 15 points on the SCID BPD section, see appendix 3, and was therefore included. She benefited significantly. It may be that a programme like this would be of particular merit in treating multi-impulsive patients).

The field is currently very confused about when multi-impulsivity constitutes BPD. Some eating disorder specialists have delineated multi-impulsivity as a clinical category. Lacey and Evans (1986) describe it as a variant of bulimia nervosa, though it is unclear why multi-impulsivity should be ancillary to bulimic behaviours rather than other areas of impulsivity or dysfunctional mood management, such as substance misuse or self-harm. Another problem with the DSM IV criteria is that it does not include substance misuse which is not impulsive. However, non-impulsive substance misuse may be an integral part of borderline problems e.g. as a blocking strategy for unmanageable negative affect. Fahy and Eisler (1993) question the validity of conceptualising such behaviours as impulsive. For some patients, 'addictive' or 'compulsive' may describe many of their problematic behaviour patterns more accurately than 'impulsive'. (Svrakik et al., 1992, found BPD was associated with compulsive as well as impulsive behaviour.) Defining a behaviour as impulsive obscures its function or the motives for it, which are likely to be to seek sensation (Zuckerman, 1994) or block a negative emotional state. Both of these roles have been identified for bulimic behaviours, a commonly co-occurring disorder (Heatherton & Baumeister, 1991; Rossier, Bolognini, Plancherel, & Halfon, 2000). Borderline functioning, like dissociation and fragmentation, clearly falls on a continuum with individuals varying in the extent to which they manifest borderline symptomatology (Trull, Widiger, & Guthrie, 1990; Ryle, 1997a). Whilst this may be so for all psychological disorders, even thought disorder (e.g. some racist beliefs have delusional features), many people with borderline problems have major psychological disturbance yet currently do not meet criteria for any psychiatric disorder. This clearly differs from 'sub-clinical' anxiety or eating disorders or depression.

160
Secondly, the DSM IV criteria for BPD are based on certain schema mechanisms or ‘procedures’ more than others (those which are the most dramatic or problematic to others). Many clients operate much of the time in schema avoidance mode. For example, in the first criterion, a problem with abandonment is described as frantic efforts to avoid abandonment. Some clients systematically avoid situations in which abandonment may happen, e.g. avoiding making any new relationships. Similarly, many female borderline clients do not express their anger, which they feel guilty about, or for fear of disapproval or rejection by others. This still constitutes borderline functioning in that they

- only have two extreme polarised choices (to get close to others and fear being rejected, or to avoid intimacy; to show anger and risk rejection or suppress it or take it out on oneself) and

- are unable to tolerate ‘normal’ loss and separation.

Thirdly, severity is also poorly defined. This is particularly problematic for the impulsivity criterion which fails to define when a behaviour which may be culturally normal (e.g. getting drunk) reaches levels of impulsivity.

Many writers have questioned the relevance of a category approach to something as complex as human personality. Kernberg (1984) questioned the value of the existing classification and proposed in its place a broader concept of borderline personality organisation. Berelowitz and Tarnolpolsky (1993) suggested it might be better regarded as a measure of severe personality dysfunction than as a distinct diagnostic entity. Tyrer and Johnson (1996) propose a four level dimensional model. Clearly some nosological system is needed, though modifications have been suggested (e.g. Nurnberg et al., 1991). Fonagy and Higgitt (1990) describe three unequivocal features of BPD - marked heterogeneity of symptoms and co-morbid diagnosable mental disorders; variability and lability in behaviour and impairment of interpersonal relationships. They consider the latter to be the most striking feature. In a later publication (Higgitt & Fonagy, 1993) they point out that the meaningfulness of the term “is reduced by the possibility of an individual being given a diagnosis of BPD when not impulsive, with no history of unstable and interpersonal relationships and
showing no inappropriate or intense anger”. They conclude the concept of BPD is a heuristic device not a comprehensive psychological model, whose days are probably numbered. Tyrer et al. (1990) failed to identify any predictive value in terms of response to a variety of treatments associated with categories of personality disorder. This suggests that current classification of personality disorder may be over-refined with few practical benefits. Some writers have identified large sets of traits shared by what had been assumed to be separate personality disorders. Nurnburg et al. (1991) identified two broader groups, interestingly one of these was borderline personality (the other, schizotypal).

Given the dimensionality of BPD and wide number of clients with borderline features, further research should consider broader inclusion criteria as the programme could benefit a wider population.

4.3. The sample
Scores on the basement index of the MCMI were above 75 for both drop-outs and completers, suggesting that patients may have exaggerated their problems. This would be expected in borderline patients for whom describing their distress dramatically is a cry for help.

Scores indicate significant pre-treatment severity. Those who completed the programme scored above the cut-off of 85 (indicating presence of disorder) in the avoidant, depressive, dependent scales as well as the BPD scale of the MCMI. They were over one standard deviation higher on the BPD scale compared to the BPD patients’ data reported by Millon (1997). Scores were exceptionally high for anxiety, as found by Zanarini et al. (1998). Similarly, BSI scores (mean of 36) were higher than for BPD patients reported by Conte et al. (1980) (mean of 26.31). The progress achieved in four patients is noteworthy therefore.

4.4. Reasons for drop-out/discontinuation
Participants who dropped out or were withdrawn scored more highly on the Antisocial Personality Disorder and Drug Dependency scale. Completers did not meet cut off for
the presence of this disorder. This confirms reports in the literature. Drop-outs also met more DSM IV criteria and had a statistically higher total SCID score. Completers, by contrast, scored more highly on the Depressive sub-scale of the MCMI, something which presumably motivated them to remain in treatment. They also had higher scores on the Punishment and Emotional Abuse CATS subscales (though these did not reach statistical significance) and Avoidant sub-scale of the MCMI, and, unlike drop-outs, scored above cut-off levels for the presence of these disorders. Those who are more avoidant will be less chaotic or behaviourally disturbed and therefore likely to be easier to maintain in a therapeutic relationship.

Given the number of measures used some differences would occur by chance but Bonferroni corrections were not used because of the small sample size.

Two of the clients who dropped out or were withdrawn had extrinsic motivation for starting the programme - one was awaiting a court appearance for taking out a gun in a bank and hoped that undergoing treatment would help reduce her sentence. Another client had had four children taken into care and her remaining child was on the child protection register. She hoped that receiving treatment would assist her keeping the child. After poor attendance and compliance with the programme this client was offered individual psychotherapy which she commenced but then dropped out after approximately five sessions. Two of those who were discontinued had reading difficulties. It therefore appears that pre-requisites for effective participation in the programme are adequate literacy, behavioural stability and reasonable motivation.

4.5. Outcome

4.5.1. Use of manual

Those who completed treatment read most of the manual, though completion of exercises varied. Two of the three clients who were most motivated (patients 1 and 4) completed most but not all exercises. The third well-motivated client was extremely schema-avoidant and though she reported the manual as very helpful ('like her bible'), she often completed no exercises. Those who did well completed more exercises, but
doing so may be necessary but not sufficient for change. (For instance, one client who completed 87% of exercises made minimal progress.)

4.5.2. Changes in outcome measures

Mean scores for completers were above clinical cut off on all key measures at the start of the programme - diagnostic criteria met (SCID), MCMI scales for BPD, anxiety and major depression, DISQ and the BSI. Four of these were sub-clinical by the end of treatment – the number of diagnostic criteria met, anxiety and major depression and the DISQ. Means for the two borderline scales were sub-clinical by follow-up (see table 3.3.1). The greatest change was in the SCID-II for DSM IV BPD criteria. No patient post-intervention met BPD criteria (five did pre-treatment). From a clinical perspective, this is an important result. Although levels of BPD pathology do fluctuate, changes were generally maintained at follow-up, reflecting a consistent course and, in combination with qualitative feedback on the programme suggest the programme can be of value. It has been suggested that a successful treatment outcome for patients with a personality disorder is when they no longer meet criteria (Ratto & Capitano, 1999). The mean number of criteria met post-threshold was 5.5 pre-treatment and 1.5 post-treatment, 3 standard deviations taken from this sample. Those who met the most DSM IV criteria at the start of treatment made the most improvement. Though the SCID was not carried out independently, it was less subject to short-term fluctuation than most of the other measures, and structured interviews are considered more reliable than questionnaires. Of these measures, only BSI scores could be assessed for clinical significance. Three patients achieved a reliable change score but only two of these reached clinical significance according to the criteria suggested by Jacobsen et al. (1984).

All but one mean score on self-report measures improved post-treatment (see table 3.3.1). Mean change scores post-treatment were greater than one standard deviation of the treatment completers’ pre-treatment scores on four measures - the number of diagnostic criteria met, total SCID-II (BPD) score, dysthymia (MCMI scale) and BSI scores. Scores on five MCMI scales continued to improve at follow-up - the BPD, anxiety, somatoform, dysthymia and major depression scales. Unfortunately this data
Increase in the MCMI drug dependence scale does not mean use of illegal drugs increased during treatment as all questions refer to past drug use. Increased use of illegal drugs was not confirmed by the MIS (see appendix 8). An examination of the items used to create the drug dependency scale in the MCMI revealed that all items could be answered positively on the basis of past rather than current drug misuse. The most likely explanation of the increased score, given the MIS data, is that patients were more aware of the impact of their past drug misuse after the programme than before.

In order to evaluate the degree of change following the programme, the sign test of statistical significance was considered. However, statistical significance in a sample of six would not be found unless all six scores were in the same direction. This was not the case because of the deterioration of patient 3. According to the analysis of clinical significance (see table 3.3.4ii), no change scores which worsened at post-treatment were clinically significant.

Results regarding impulsivity were mixed, in part reflecting the common finding that results vary according to measures used. The SCID impulsivity scores improved greater than one standard deviation for the sample. The greatest change in scores for individual criteria were in suicidal behaviour and impulsivity (see appendix 8). However, interpretation of this should be cautious because of possible assessor or presentation bias. There was some improvement on the MIS total score and number of areas of impulsivity met. Alcohol use and self-harm were the two areas with the highest pre-treatment score. Both improved at post-treatment and follow-up (see appendix 8). However, total action means on the MIS did not improve. This was because patient 3 deteriorated in response to a crisis. Graph 3 shows that impulsivity was well improved in 4 out of 6 patients. Though the MIS lacks norms, it is an important tool as it is the only measure which quantifies actual behaviours and specifies a time period for patients to estimate from (the last two months). It is also rated by the patient themselves, which averts assessor bias. However, that introduces errors made when completing the
measure. For example, the reported increase in fire setting, see appendix 8, is likely to be an error as no patient revealed this despite apparently reporting it on the MIS. Other measures such as the SCID do not specify a time period (all impulsive behaviours are subject to wide temporal fluctuation).

The above results suggest that such a programme can reduce impulsivity, including suicidal behaviour, and that high levels of impulsivity do not necessarily prevent patients from using such a programme and benefiting, an encouraging result. Improvement in impulsivity is an important goal as high levels if impulsivity predict poorer outcome Links, Heslegrave, and van Reekum (1999) found that impulsivity predicted almost 25% of the variance in outcome for BPD at 7 year follow-up. Patient 1 who scored most highly, reporting 7 areas of impulsivity, made considerable progress, though it must be noted that she did not meet BPD criteria at pre-treatment.

Minor reductions in alcohol use were reported in both MIS and MCMI measures. The greatest reduction on the MIS was in alcohol use, see appendix 8. Alcohol use had the highest mean MIS score (see appendix 8), though according to the mean MCMI score this did not reflect even a likely presence of the disorder. Johnson (1991) recommends that patients whose problems include substance misuse should have that addressed first. However, a number of clients reported improvement in substance misuse. This suggests that only severe substance misuse should exclude patients from such treatments.

DISQ scores clinically improved for three patients post-treatment and follow-up (table 3.3.4ii and iv); an interesting result given that one would not expect a psychoeducational intervention to impact on dissociation. Only one patient made clinically significant improvement in fragmentation by post-treatment (see table 3.3.4ii) but by follow-up three had made such improvements. This suggests that patients who benefit from a skills-based treatment can begin to integrate their personality without psychodynamic therapy.
Five out of six patients needed further help. However, this does not constitute failure for the intervention as remission is an unrealistic target (Layden et al., 1993) and many patients with BPD need intermittent active intervention (Paris, 1993). A cost-benefit analysis of such an intervention would be useful.

4.5.3. Factors associated with change

Unfortunately it is not possible with a sample of six to identify factors which predict response to such a programme. All 6 clients read most of the manual but their completion of exercises varied widely; those who completed more exercises benefited the most. It appears that borderline severity or high levels of dissociation need not prevent clients participating or responding well - the two clients who responded well had a high DISQ and PSQ score. Surprisingly, severity of BPD or impulsivity (on a number of measures) did not appear to be associated with treatment response. Substance misuse levels were not high in either category. However, those who responded poorly had elevated depression and dysthymia MCMI scores and reported higher levels of abuse. Both factors have been associated with poorer outcome in follow-up studies (Mitton, Links, & Durocher, 1997; Paris, Brown, & Nowlis, 1987). Depressed patients may be less likely to be able to effectively use a self-help programme or less likely to respond well to any treatment, though there is no consistent data, for example, that this is the case for bulimia nervosa (see review). This result highlights the importance of a multi-disciplinary approach to treatment and the value of pursuing a range of medication to find that which may be most effective for each client (Soloff, 2000). There are few obvious changes which could be made to the programme to enhance its effectiveness in addressing depression. This confirms again the need for a supervisor skilled in CBT to use the manual effectively with the client. The chapters addressing mood problems come relatively early in the programme (6 and 7). One modification could be to include a Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and highlight the importance of addressing this area for patients with a high score.

The distinguishing feature of the two patients who responded well was their level of motivation, as observed during assessment interviews and as reported in supervision.
This is not easy to measure but is well known to affect participation and response to treatment for a wide range of psychological or psychiatric disorders, including bulimic disorders, which are common to this population. Treasure et al. (1999) showed that patients in the action stage of change showed greater improvement in a supervised self-help programme for binge eating than those in contemplation stage. Any further evaluation of the programme should attempt to measure motivation or readiness to change. The importance of motivation to outcome may help explain why therapists may be better supervisors. Nurses and doctors predominantly work from a medical model in which solutions are prescribed or recommended. Therapists are more likely to use a collaborative approach and when patients find change difficult, use a motivational interviewing approach. Though this is not a formal component in DBT, a collaborative approach enhancing motivation is. It seems likely that it is an essential component to any effective treatment for people with BPD for whom sustained change is infamously difficult. It is arguably the most important role for supervisors helping patients to use a self-help manual.

Both patients who responded poorly to this programme continued with mild levels of substance misuse, but substance misuse scores did not differ between the groups. There was insufficient variation in levels of substance misuse for to indicate any pattern of association.

It may be that those with more severe trauma histories find it difficult to use a self-help manual effectively. The client with the highest CATS score (2.6) wrote for her feedback about chapter 8 (addressing abuse) “sick. Don’t want to even think about it”. She estimated that she had read 25% of the chapter. However, most specialists in BPD do not recommend addressing abuse issues before reducing impulsivity and self-harm in particular (Linehan, 1993; Zanarini, 2000). A larger sample is need to address this and other issues.

---

Half of those who completed the programme had eating disorders, including the two who responded well.
The two clients who made the least change can both be described as 'schema avoiders'. One read a lot of the manual (not the chapter on abuse) but did few exercises. The other was reasonably compliant with the manual but made no significant behavioural changes other than reducing her substance misuse. She remained socially isolated and depressed. Davidson (2000) suggests a high degree of avoidance may be a negative predictor of change as less change is likely to take place! These clients may need long-term psychotherapy, as recommended by Young or Padesky. Given the protective value conferred by schema avoidance, a motivational approach within therapy may also be helpful (see e.g. Vitousek, Watson, & Wilson, 1998).

4.6.1. Criticisms of the study
Due to the following, interpretations of the results must be cautious and risk of Type 1 error is high. Firstly, the sample was small. Due to the preliminary nature of the study the sample size was likely to be small and a number of difficulties were encountered with recruitment. Secondly, there was no control group (Glasgow & Rosen, 1978). Patients may have improved from time and attention given them by supervisors and as participants in research. This seems particularly likely for this client group who crave attention and concern from others. The qualitative feedback offsets this to a degree, e.g. patient 5 made considerable progress but did not attribute this to the programme. (She was supervised by her consultant psychiatrist which would have signified special attention as the patient was very familiar with psychiatric care in which time with a consultant is a premium.) Controls could have been obtained from another service but time did not permit this.

Thirdly, the rater was not independent. This was a major methodological weakness. There was evidence that two patients (2 and 3) inflated their progress at interview, as their claims were not reflected in their psychometric scores. However, this was not true for all patients. Patient 5 was critical of the programme but made progress in her SCID scores. Most changes in SCID scores were reflected in MIS scores. A fourth weakness was that other factors influencing change were not controlled for notably medical treatment for depression. All patients were on medication simultaneous to the programme and most received some form of treatment during the follow-up period,
though none received comprehensive psychological therapy. All patients had been under medical care for some years so it is unlikely that medication made significant difference. One exception was the introduction of a new drug lamotrigine used in Trust B (patient 5 and 6). This appeared to make little difference to patient 6 but could account for the progress in patient 5. It is unlikely that ethical approval or compliance by consultants would have been obtained for withholding other treatment for such a vulnerable group of patients. Such research is usually carried out in services which have total responsibility for a patient’s treatment, such as tertiary or DBT services.

Fifthly, BPD is a long-term disorder with fluctuating course and longer follow-up would have been preferable. Six and twelve month follow-ups are the norm for this population but given the time involved in writing the manual, obtaining patients for the study and carrying out the intervention, longer follow-ups were not possible. Roth and Fonagy (1996) suggest at least two years because of the chronically cyclical nature of the disorder. Finally, numerous measures were used, increasing the risk of positive change by chance.

However, where means did improve, the small sample size and resulting lack of statistical analysis may also mean that change was achieved by the intervention but this could be not be demonstrated.

4.6.2. Limitations of the measures used

The DSM IV BPD criteria and hence the SCID-II has numerous problems. Unlike in most Axis II disorders, time scales for problems are not specified and questions vary between ‘do you?’ (current/recent past) and ‘have you ever?’ This makes it very difficult to use the SCID as an index for change. Categorical models like DSM IV are known for poor convergent validity (agreement between assessors) and poor discriminate validity; and their results known to be temporally unstable. Although assessment of BPD has the highest reliability when structured interviews are used, temporal reliability may still be poor (Tyrer, Strauss, & Cichetti, 1983). This was apparent in the pilot. Two clients had had crises; one with her housing and the council and the other with the mental health service - both triggering neglect or abuse schema.
As a result, their post-treatment SCID scores were higher. Because of the high temporal variability of presenting problems in people with BPD, repeated measures, as recommend by Steiger, Stotland, and Houle (1994), could have offset this but the time scale of the study did not permit this.

The BSI was more sensitive to change than the MCMI borderline scale. The MCMI-I was found to generate false positives (Piersma, 1987) & has low kappa values (Widiger & Frances, 1989) and limited utility as a screening tool for BPD (Patrick, 1993b). Patrick suggests that only clinicians with expertise in the diagnosis of personality disorders can make effective assessments. Kennedy, Katz, Mendlowitz, Ralevski, and Clewe (1995) found the MCMI-II was not a reliable measure of axis II personality disorders compared to the SCID. The MCMI drug dependency scale was not a satisfactory measure of current drug misuse and hence change. The MIS is a new scale with no published norms but was the most accurate measure of current or recent behavioural disorder, compared either to the MCMI or SCID-II.

Post-treatment assessment of outcome is fraught with difficulties. The benefits of therapy may not be apparent upon discharge (Roth & Fonagy, 1996). Given the high levels of dissociation in borderline patients, and reduction in dissociation (mean DIS Q) in this study, increased awareness could well result in higher symptom scores. This seems especially likely in this study due to the short time scale of six months (the recommended duration of DBT and Schema Focussed Therapy is two years). Patients' perception of their own problems may not be accurate, particularly pre-treatment, which could reduce change scores and even lead to a negative change score (a strong possibility in patient 3). One study found observers identified progress in mood in bulimic patients when participants did not (Johnson-Sabine, Wood, & Wakeling, 1984). Borderline patients may improve with treatment but not report this for fear of the consequences i.e. loss of treatment contact or concern. Others may inflate their progress in order to reward the researcher. One client admitted to doing this. Despite my intention not to deliver the programme, I had to take over two cases to complete the programme. However, in these cases there was no evidence either patient inflated
their scores. Both clients were very direct and uncompromising about their need for further help.

Other areas may correlate with outcome which were not measured, including problem-solving skills, locus of control.

4.7. Staff skills and attitudes

The supervision of staff suggested that more positive staff attitudes were important in maintaining engagement in the programme but were necessary rather than sufficient in successfully helping patients to change. In addition, the successful engagement and treatment of patients required process skills. It is likely that therapists are more likely to have both, though this will not apply in every case.

Positive staff attitudes and therapeutic skills were not sufficient to maintain patients on the programme – the patient's capacity to attend appointments and read the manual was also important. This required

- relative stability in terms of behavioural disturbance and
- adequate literacy skills

The other significant factor in the successful engagement and response of patients appeared to be

- patient motivation or readiness to change as demonstrated in their willingness to read the manual, attend appointments and complete homework tasks.

Some manualised treatments or supervised self-help programmes have used non-therapy trained staff, whilst others have used therapists trained in a different tradition. A number of studies echo the benefits of therapy trained staff delivering manualised treatments. A meta-analytic study by Crits-Christoph et al. (1991) lends support not only to the use of manuals for treatments but also the use of experienced therapists trained to performance criteria before the start of the study. Cohen (1995) argues that all treatments should be provided by well-trained, expert therapists. Wilson (1998) points out that it cannot be assumed that untrained therapists can automatically implement manual-based treatment.
The skills required to implement manualised interventions effectively are easily underestimated. A recent study by Bein et al. (2000) found that neither psychiatrists nor psychologists achieved competence in a manualised therapy. The authors conclude that considerable training and supervision is required for manualised treatments to be effective. Optimal manual-based treatment requires therapists to maintain a consistent focus on explicit therapeutic goals while maintaining an effective therapeutic alliance (Spanier, Frank, McEachran, Grochocinski, & Kupfer, 1996; Wilson, 1996). It is well established that many staff experience difficulty in balancing these twin skills (Henry, Schact, Strupp, Butler, & Binder, 1993; Rounsaville et al., 1987). There would inevitably be variable skills between staff supervising clients. Skills would include

- developing rapport and building a positive therapeutic alliance. (This correlates with outcome across a range of therapeutic approaches and disorders, Horvath 1995).
- nurturing commitment to change and helping clients overcome ambivalence about change
- technical expertise in the use of specific strategies
- non-specific skills needed for any therapeutic approach
- the ability to adhere to the structure of the manual-based treatment without undermining the therapeutic alliance.

4.7.2. Professional differences

Non-therapists attended their own supervision irregularly. Many experts recommend supervision as essential in the treatment of people with BPD (Anon, 1991). All of the patients treated by CPNs were withdrawn or dropped out.
4.8. Revision of the programme

The advantages and disadvantages to the self-help format are summarised in the following table:

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>It promoted education about the disorder which was reported as positive by those who gave feedback.</td>
<td>It required good literacy skills, which two out of eleven clients who wanted treatment lacked.</td>
</tr>
<tr>
<td></td>
<td>Identifying clarifying and understanding their problems was not sufficient to move clients on from deeply entrenched habits such as schema avoidance unless they were well motivated.</td>
</tr>
<tr>
<td>It promoted a collaborative working relationship which helped clients own their problems &amp; enhanced their dignity and autonomy.</td>
<td>Too much was expected of clients - most could not meet these expectations.</td>
</tr>
<tr>
<td>It minimised difficult transference because of its transparency, time-limited contract and educational approach.</td>
<td>Many people with BPD have an impaired capacity for self-motivation.</td>
</tr>
<tr>
<td>It enabled non-therapy trained staff to develop skills and feel more competent in helping borderline clients.</td>
<td>There was insufficient time allowed to process the distress clients need to air and share.</td>
</tr>
<tr>
<td>It is a cost-effective intervention which could be provided by non-psychologists.</td>
<td>All drop-outs were supervised by nursing staff most of whom were not skilled enough to engage clients by promoting the intervention confidently or containing clients’ anxiety, or did not adhere to the programme.</td>
</tr>
<tr>
<td>A self-help format enabled variation in areas addressed compared to manualised therapy.</td>
<td>All CPNs were poor attenders to supervision and the two psychiatrists did not comply with the programme. This left supervisors confused at times about how to proceed.</td>
</tr>
</tbody>
</table>

Summary of findings and suggested changes to the programme

A summary of key findings is given below and as a result modifications to the programme are suggested.
Finding
It was difficult for non-therapy staff to commit the dedicated time or motivation to work to a planned contract with patients with BPD. The wider service culture did not support this and essential aspects of good practice such as attendance to regular supervision were not prioritised.
Non-therapy trained staff were less able to engage patients or adhere to programme.

There is a wide spectrum of problem severity in people with 'borderline problems'. DBT or individual schema focussed therapy is intensive and scarce. A more cost effective intervention may be sufficient for clients who are psychiatrically stable, may be described as 'multi-impulsive' or well motivated.

Patients who continued with the programme reported the self-help approach as very positive.
The material was too complex or there was too much jargon. Two clients who dropped out had poor literacy skills.

Both staff and patients reported that sessions were too short. Some patients reported that material was confusing.

24 x 30 minute sessions was inadequate for most patients to cover the material thoroughly.
Specific feedback was given on particular wording or chapters.

Suggested Modification
Psychological therapists should be the core providers of psychological interventions for this client group.

Skills training for people with BPD needs to be provided by those with training and experience in CBT.
There is potential for a self-managed psychoeducational approach for some people with BPD.
A stepped care approach may be helpful as recommended e.g. in the treatment of bulimia nervosa.

The manual was revised. Jargon has been reduced and font size increased. Cartoons will be sought to complement the text.

Longer sessions are needed to provide more 'hands on' help, either individually or in groups. 36 1-2 hour sessions in batches of 12 are suggested to maintain an educational format, enable breaks and minimise dependent attachment.
Chapter 4 has been re-written to be less directive.
Staff did not always find it easy to manage the flexibility of the programme. One requested tighter guidelines.

In light of the findings of this study, the following modifications have been made to the programme

1. Numerous changes were made to the manual including
   - Chapter 4 was made less directive.
   - References to Buddhism were removed.
   - Language was simplified where possible.
   - Some chapters were shortened.

2. As non-therapy staff were unlikely to deliver the programme effectively (engage patients successfully or comply with the programme), the psychoeducational part of the programme would be provided more consistently via a group, as in DBT. Groups are also recommended by Miller (1994) to reduce estrangement and social marginalisation, a problem reported by many clients. In addition, one-to-one support sessions with a therapist or key worker briefed in the principles of the intervention, will be needed for clients with BPD, though not necessarily those who are multi-impulsive.

3. Reducing the number of exercises and length of some chapters was suggested. However, this may reduce the value of the intervention so it may be more beneficial to allow more time to cover the material. The programme will be extended to 36 sessions so that the material is not so rushed and less is expected of the clients to undertake independently.

Most of the text & exercises in the chapter on abuse has been modified to apply to all forms of abuse.

The term Buddha or Buddhism has been removed from the text.

Have a more structured timetable with patients who have not been abused or do not self-harm possibly having the option not to attend those sessions.

Have a more structured timetable with patients who have not been abused or do not self-harm possibly having the option not to attend those sessions.
4.9. **Comparison with good practice in the field.**

Results of the pilot confirm many of the principles of DBT, namely

- the need for concurrent skills training, one-to-one support sessions and telephone contact in crisis
- the need for treatment by staff trained and skilled in CBT.

However, there are also differences suggested by this pilot

- Feedback suggests that patients may benefit from a wider range of strategies than are used in DBT. (A more integrative approach is recommended by many specialists in the field). Two patients specifically valued identifying their schemas; a component missing in DBT which relies more on behavioural than cognitive interventions. Zanarini and Frankenburg (1997) emphasise that there are different ‘pathways to health’ for people with BPD.
- Treatment for people with borderline problems can be titrated according to problem severity and less intensive interventions may be helpful for some patients.
5. CONCLUSION

6 out of 11 patients engaged with the programme and participated in follow-up assessments, a similar rate to that expected for individual psychotherapy. Drop-outs were more likely to have antisocial personality or drug dependence. Those who were unable to use this approach had

- poor literacy skills
- a high level of behavioural disturbance
- less motivation for change.

However, it was difficult to assess such factors with such a small sample.

Clients valued the manual, which they read most of, and the supervision, but most were limited in their ability to complete work independently at home. 5 out of 6 clients who completed the programme reported it was helpful. Crucial factors influencing outcome were the motivation of the client and therapeutic skills of the supervisor, particularly their ability to work collaboratively and enhance motivation.

Mean scores for completers were above clinical cut off on all key measures and below cut off by the end of treatment or follow-up. Four out of six patients made comprehensive progress; three achieved clinically significant change in at least one measure. One patient attributed her progress to her medical treatment, the other five reported benefiting from the programme. Evaluation of outcome was hampered in two patients by significant stresses during the study, one generated within the programme itself (departure of a supervisor). The programme was successful in reducing multi-impulsivity, in particular suicidal behaviours. Reduction of risk alone is a worthwhile outcome and a more appropriate goal than ‘cure’ (Higgitt & Fonagy, 1993). Two patients did not make progress in their subjective distress, both reported higher levels of child abuse, depression and dysthymia at pre-treatment.

A supervised self-help programme has considerable potential for patients with BPD or those meeting partial DSM IV criteria who are currently described as ‘multi-impulsive’. Patients need to be literate and well motivated. However, in future, less must be
required of patients to carry out independently and non-therapy trained staff are unlikely to provide an effective psychological intervention to this client group. A more intensive treatment, approximating DBT, with the skills training provided by therapists trained in CBT is recommended. A further pilot of this format would be valuable.

Large scale studies of a stepped care approach to the treatment of borderline problems would be very helpful, given the major resource constraints in providing ‘gold standard’ treatments to all patients. In addition, research in the treatment of people with BPD examining the following two issues would be valuable. Firstly, treatment ‘dose’. It is predicted that patients will do better with a concurrent skills training group. This needs to be empirically tested. Treatment intensity has a number of aspects in particular length of treatment and components (e.g. group skills training with or without individual sessions) and skill level of staff involved in delivering the treatment. All of these factors need to be tested in controlled studies. Secondly, the role of motivation or readiness to change in engagement and response to treatment. This would merit further investigation as a possible predictor of outcome.
Appendices

1. manual title and contents outline
2. Ethical approval
3. SCID scoring sheet
4. Patient information Sheet
5. Staff questionnaire
6. Follow-up interview schedule
7. Clinical Significance calculations
8. Changes in areas of impulsivity and borderline criteria
Appendix 1.

Getting It Together:
managing intense emotions and
overcoming self-destructive habits

A self-help manual for people with multi-impulsive
behaviour, 'emotionally unstable' or
'borderline personality disorder'.
## CONTENTS

### PART 1: Understanding the problems and first steps

| 1. Introduction - who the manual is for and how to use it (session 1) | 3 |
| 2. Notes for supervisors/guides and therapists | 13 |
| 3. How the problems develop (session 2) | 37 |
| 4. Foundations for living well (session 3) | 44 |
| 5. How I use drugs and alcohol (sessions 4 & 5) | 53 |
| 6. Understanding and managing emotions (sessions 6-8) | 55 |
| 7. Investigating and modifying thinking habits and beliefs (sessions 9-11) | 74 |

### PART 2: Tackling the problems

| 8. Child abuse - sexual, physical and emotional (1-5 sessions) | 90 |
| 9. Me and me. Overcoming self-neglect and self-hate (4-5 sessions) | 107 |
| 10. Self-harm: The silent scream (0-3 sessions) | 119 |
| 11. Me and other people (5 sessions) | 126 |
| 12. Other problem areas - casual sex, eating problems, hallucinations (0-6 sessions) | 142 |
| 13. Overcoming depression and managing difficult mood states (3-4 sessions) | 159 |
| 14. Managing and reducing anger (1-5 sessions) | 170 |
| 15. What then? (Session 24) | 186 |
Dear Ms Bell

REC Proposal No: 12/98/775
Full Title: The development of a self-help manual for people with borderline personality disorder and multi-impulsivity; its preliminary evaluation.

This is to confirm that the Research Ethics Committee has approved the above study. Approval for the study is only granted until the end of June 2000, if your study continues after this date further Ethics Committee approval will be required.

The Ethics Committee will require a copy of the completed study for its records, you are therefore requested to submit a copy of the completed study to the address above. In addition the Committee must be informed of any untoward or adverse events which occur during the course of the study.

The Ethics Committee must also be informed of, and approve, any proposed amendments to your initial application.

Please note it is the policy of the Committee NOT to deal direct with sponsoring companies. All correspondence (including telephone enquiries) MUST be from the first named researcher. Enquiries from other sources will be refused.

Ethics Committee approval means that the proposal is ethically sound. It does not mean approval of resources, access to data or any other requirement relating to the project. These must be agreed with the organisation where the research / project is to take place.

If you have any further questions please do not hesitate to contact me quoting the Research Ethics Committee Proposal Number given above.

Yours sincerely

Secretary - Research Ethics Committee

NB The committee endorses the Royal College of Physicians Report on “Fraud & Misconduct in Medical Research Practice 1991”. This states that all original data (eg Questionnaires, lab books, hard copies of any computer data) are kept for a minimum of ten years in a retrievable form. If storage is to be outside either Portsmouth Hospitals or Portsmouth Healthcare NHS Trust’s premises, the committee must be informed of the site of storage. It is a condition of any approval that such storage occurs.
Appendix 3. DIAGNOSTIC CRITERIA FOR BPD (DSM IV, 1994)

A pervasive pattern of instability of Mood, interpersonal relationships, and Self image, and affects, and marked Impulsivity beginning by early adulthood And present in a variety of contexts, as Indicated by at least five of the following:

| 1. Frantic efforts to avoid real or imagined abandonment (do not include suicidal or self-mutilating behaviour in [5]) | Absent | Sub Threshold | Mild | Moderate | Severe |
| 2. A pattern of unstable and intense interpersonal relationships characterised by alternating between extremes of over idealisation and devaluation | Absent | Sub Threshold | Mild | Moderate | Severe |
| 3. Identify disturbance: markedly and persistently unstable self-image or sense of self (including sexual orientation, long-term goals or career choice, type of friends desired, preferred values) | Absent | Sub Threshold | Mild | Moderate | Severe |
| 4. Impulsivity in at least two areas that are potentially self-damaging, e.g. spending, sex, substance use, shoplifting, reckless driving, binge eating (do not include suicidal or self-mutilating behaviour covered in [5]) | Absent | Sub Threshold | Mild | Moderate | Severe |
| 5. Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour | Absent | Sub Threshold | Mild | Moderate | Severe |
| 6. Affective instability due to a marked reactivity of mood (e.g. intense episodic dysphoria, irritability, or anxiety, usually lasting a few hours and only rarely more than a few days) | Absent | Sub Threshold | Mild | Moderate | Severe |
| 7. Chronic feelings of emptiness or boredom | Absent | Sub Threshold | Mild | Moderate | Severe |
| 8. Inappropriate, intense anger or difficulty controlling anger, e.g. frequent displays of temper, constant anger, recurrent physical fights | Absent | Sub Threshold | Mild | Moderate | Severe |
| 9. Transient stress-related paranoid ideation or severe dissociative symptoms | Absent | Sub Threshold | Mild | Moderate | Severe |
Appendix 4. Patient Information Sheet

Evaluation of a self-help manual
Self-help manuals have been found to be of benefit for a range of mental health problems such as anxiety disorders and bulimia. You are invited to participate in a research study designed to evaluate the benefit of a self-help manual for people with complex mental health problems. You have been selected by the community mental health team as someone likely to benefit from this intervention.

The study involves
- an initial assessment of your problem by review of your psychiatric file, an interview and written questionnaires. This will take approximately two hours of your time to complete.
- the provision to you of a manual which you will be given in sections to read for yourself and work through with the support of your key-worker or therapist.
- a weekly meeting with a supervisor for 24 sessions (for approximately six months).
- an assessment interview to evaluate your progress and follow-up three months later. This will involve a single interview, repeated written questionnaires (taking approximately two hours in total) and review of your psychiatric file.

All information gathered will be stored securely and handled with the strictest confidence. Any reports or publications arising from this research will not identify any participant by name or by personal details.

It is your choice whether to participate in the study. You are welcome to say no or withdraw at any time without giving any reasons for your decision.

If you have any questions about the research, please feel free to contact me or your key worker.

Lorraine Bell
Consultant Clinical Psychologist.
Appendix 5. Staff Questionnaire

Here are some statements about people with borderline personality disorder. Please tick the column that best matches how much you agree with each statement.

<table>
<thead>
<tr>
<th></th>
<th>totally agree</th>
<th>agree</th>
<th>unsure</th>
<th>disagree</th>
<th>totally disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I feel confident I can help people with borderline personality disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I think the mental health service should not encourage people with borderline personality disorder to access the service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I think people with borderline personality disorder often learn to behave in certain ways because of how they have been treated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I don’t like these patients and would rather not treat them myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I think people with borderline personality disorder have comprehensive and severe problems and need considerable help</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I find people with borderline personality disorder difficult to empathise with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I think the mental health service has an important role in supporting people with borderline personality disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I don’t think people with borderline personality disorder can be helped</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I think the mental health service can compound experiences of rejection or abuse for these clients</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>People with borderline personality disorder are untrustworthy and manipulate others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I understand how borderline personality disorder develops and why people with the disorder can be so self-destructive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I don’t feel able to help people with borderline personality disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I am willing to work with these clients over a long period of time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Mental health services should prioritise other patients who are more likely to respond to treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 6. Follow-up Interview Summary

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Post-treatment / 3 month follow-up</th>
</tr>
</thead>
</table>

**About the manual:**
what was helpful?

what was difficult?

what changes would you suggest?
Appendix 7. Calculations for clinical significance

See Jacobsen et al. (1984) for equations

<table>
<thead>
<tr>
<th>Criterion</th>
<th>DISQ</th>
<th>BSI</th>
<th>PSQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.61 = 2(0.4) = 2.4</td>
<td>5.92 + 2(5.5) = 16.92</td>
<td>20.3 + 2(4.67) = 29.64</td>
</tr>
<tr>
<td>B</td>
<td>2.8 - 2(0.6) = 1.6</td>
<td>26.31 - 2(8.27) = 9.77</td>
<td>30.4 - 2(5.9) = 18.6</td>
</tr>
<tr>
<td>C</td>
<td>0.4(2.8) + 0.6(1.61)/0.4 + 0.6 = 2.09</td>
<td>5.5(26.31) + 8.27(5.92)/5.5 + 8.27 = 14.06</td>
<td>4.67(30.4) + 5.9(20.3)/4.6 + 5.9 = 24.76</td>
</tr>
</tbody>
</table>

Client 1
Change scores at post-treatment:
DISQ = 3.98 - 1.84 / 0.1469 = 14.57 = >1.96. Therefore change is significant.
DISQ at post-treatment = 1.84 = < a or c so significant at criteria a or c
BSI RC= 40 - 7 / 2.34 = 14.10 = >1.96. Therefore change is significant.
BSI at post-treatment = 7 = < a, b or c so significant at criteria a, b and c.
PSQ RC = 32 - 35 / 2.13 = -1.41 = <+-1.96. Therefore change is not significant.
Post-treatment PSQ = 35 = > a, b and c so not significant for a, b or c criteria.
Change scores at follow-up:
DISQ RC = 3.98 - 2.71 / 0.1469 = 8.645 = >1.96. Therefore change is significant.
DISQ = 2.71 = > a, b or c so not significant at any criteria.
BSI RC= 40 - 25 / 2.34 = -6.34 = >-1.96. Therefore change is significant.
BSI = 25 = > a, b or c, so not significant at any criteria.
PSQ RC = 32 - 27 / 2.13 = 2.35 = >1.96. Therefore change is significant.
PSQ = 27 = < a, so significant at criterion a.

Client 2
Change scores at post-treatment:
DISQ = 1.83 - 1.83 / 0.1469 = 0 = <1.96. Therefore change not significant.
BSI RC= 46 - 47 / 2.34 = -0.939 = <1.96. Therefore change is not significant.
PSQ RC = 31 - 29 / 2.13 = -1.878 = <+-1.96 so change not significant.
Change scores at follow-up:
DISQ RC = 1.83 - 2.38 / 0.1469 = -3.74 = <+-1.96. Therefore significant negative change.
DISQ 2.38 = < a, so significant negative change at criterion a.
(This is below clinical threshold however).
BSI RC = 46 - 43 / 2.34 = 1.28 = <1.96. Therefore change is not significant.
PSQ RC = 31 - 31 / 2.13 = 0 = <1.96 so change not significant.

Client 3
Change scores at post-treatment:
DISQ = 3.59 - 4.11 / 0.1469 = -3.6 = >+-1.96. So significant negative change.
Post-treatment DISQ = 4.11 = > a, b, and c. So not significant for any criteria.
BSI RC= 36 - 43 / 2.34 = -2.99 = >-1.96. Therefore significant negative change.
Post-treatment BSI = 43 = > a, b and c, so not significant at any criteria.
PSQ RC = 36 - 40 / 2.13 = -1.878 = <+-1.96 so change not significant.
Change scores at follow-up:
DISQ RC = 3.59 - 3.94 / 0.1469 = -2.3826 = >+-1.96. So significant negative change.
DISQ = 3.94 = >a, b, and c. So not significant for any criteria.
BSI RC = 36-37/ 2.34 = -0.4274 = <-1.96. Therefore change not significant.
PSQ RC = 36-37/ 2.13 = -0.4695 = <-1.96 so change not significant.

Client 4
Change scores at post-treatment
DISQ RC = 2.89-1.95/ .1469 = 6.399 = >1.96. Therefore change is significant.
Post-treatment DISQ = 1.95 = < a and c so significant at criteria a or c.
BSI RC = 38-11 /2.34 = 11.54 = >1.96. Therefore change is significant.
Post treatment BSI = 11 = > a, b or c so not significant for all criteria.
PSQ RC = 36-27/ 2.13 = 4.23 = >1.96. Therefore change is significant.
Post-treatment PSQ = 27 = <a so significant at criterion a.

Change scores at follow-up:
DISQ RC = 2.89-1.75/ .1469 = 7.76 = >1.96. Therefore change is significant.
DISQ = 1.75 = < a and c so significant at criteria a or c.
BSI RC = 38-11 /2.34 = 11.54 = >1.96. Therefore change is significant.
BSI = 11.54 = < a, b or c so significant at criteria a or c.
PSQ RC = 36-22/ 2.13 = 6.57 = >1.96. Therefore change is significant.
PSQ = 22 = <a so significant at criterion a or c.

Client 5
Change scores at post-treatment:
DISQ RC = 2.52-1.9 / .1469 = 4.2205 = >1.96. Therefore change is significant.
Post-treatment DISQ = 1.9 = < a and c so significant at criteria a and c.
BSI RC = 36-18 / 2.34 = 7.6934 >1.96 so change is significant.
Post-treatment BSI = 18 = >a, b and c so not significant if any criteria used.
PSQ RC = 35-32/2.13 = 1.4084 = <1.96. Therefore change not significant

Change scores at follow-up:
DISQ RC = 2.52-1.8 / .1469 = 4.9 =>1.96. Therefore change is significant.
DISQ = 1.8 = < a and c so significant at criteria a and c.
BSI RC = 36-14 / 2.34 = 9.4 =>1.96 so change is significant.
BSI = 14 = <a and c so significant at a or c criteria.
PSQ RC = 35-23/2.13 = 5.63 =>1.96 so change is significant
PSQ = 23=< a or c, so significant at a or c.

Client 6
Change scores at post-treatment:
DISQ RC = 2.3-2.7 / .1469 = 2.7229 =>1.96. Therefore change is significant.
Post-treatment DISQ = 2.7 = > a, b and c so not significant at any criteria.
BSI RC = 23-30 / 2.34 = -2.99= =>-1.96 so significant negative change.
Post-treatment BSI = 30 = >a, b and c so not significant if any criteria used.
PSQ RC = 23-26/2.13 = 1.4084 = <1.96. Therefore change not significant

Change scores at follow-up:
DISQ RC = 2.3-2.4 / .1469 = -0.68 =<1.96, so change not significant.
BSI RC = 23-23 / 2.34 = 0=<1.96 so change not significant.
PSQ RC = 23-31/2.13 = -3.76 = >1.96, so significant negative change.
PSQ=31 > a, b and c, so not clinically significant.
## Appendix 8. Changes in areas of impulsivity and borderline criteria

<table>
<thead>
<tr>
<th>Means for completers</th>
<th>pre-treatment</th>
<th>post-treatment</th>
<th>Change score</th>
<th>Standard deviation</th>
<th>Follow-up change score of pre-treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binge eating</td>
<td>2.33</td>
<td>2.17</td>
<td>-.16</td>
<td>1.5</td>
<td>2.17</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>3.33</td>
<td>2.5</td>
<td>-.83</td>
<td>1.86</td>
<td>2.5</td>
</tr>
<tr>
<td>Shoplifting</td>
<td>1.00</td>
<td>1.17</td>
<td>+.17</td>
<td>0</td>
<td>1.17</td>
</tr>
<tr>
<td>Gambling</td>
<td>1.00</td>
<td>1.33</td>
<td>+.33</td>
<td>0</td>
<td>1.0</td>
</tr>
<tr>
<td>Physical aggression</td>
<td>1.5</td>
<td>1.83</td>
<td>+.33</td>
<td>.55</td>
<td>1.33</td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>1.5</td>
<td>2.33</td>
<td>+.83</td>
<td>.84</td>
<td>1.33</td>
</tr>
<tr>
<td>Setting fires</td>
<td>1.00</td>
<td>1.00</td>
<td>0.00</td>
<td>0</td>
<td>1.00</td>
</tr>
<tr>
<td>Self-harm</td>
<td>2.5</td>
<td>1.17</td>
<td>-.66</td>
<td>1.76</td>
<td>1.5</td>
</tr>
<tr>
<td>Overdosing</td>
<td>1.17</td>
<td>1.00</td>
<td>-.17</td>
<td>.41</td>
<td>1.17</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>1.83</td>
<td>1.83</td>
<td>0.00</td>
<td>1.17</td>
<td>2.00</td>
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<tr>
<td>Casual sex</td>
<td>1.17</td>
<td>1.00</td>
<td>-.17</td>
<td>.41</td>
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<tr>
<td>Action mean</td>
<td>1.68</td>
<td>1.58</td>
<td>-.10</td>
<td>.34</td>
<td>1.61</td>
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<tr>
<td>Impulse mean</td>
<td>2.73</td>
<td>2.27</td>
<td>-.46</td>
<td>.6</td>
<td>2.24</td>
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<tr>
<td>Total areas</td>
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<td>1.5</td>
<td>-1.00</td>
<td>2.19</td>
<td>1.33</td>
</tr>
<tr>
<td>Total mean (action &amp; impulse)</td>
<td>2.21</td>
<td>1.93</td>
<td>-.28</td>
<td>.27</td>
<td>1.92</td>
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**SCID**

<table>
<thead>
<tr>
<th>Fear of abandonment</th>
<th>2.5</th>
<th>2</th>
<th>-.5</th>
<th>1.03</th>
<th>2.2</th>
<th>-.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstable relationships</td>
<td>2.00</td>
<td>1.5</td>
<td>-.5</td>
<td>.63</td>
<td>1.2</td>
<td>-.8</td>
</tr>
<tr>
<td>Identity disturbance</td>
<td>2.17</td>
<td>1.33</td>
<td>-.94</td>
<td>1.17</td>
<td>1.6</td>
<td>-.57</td>
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<tr>
<td>Impulsivity</td>
<td>3.17</td>
<td>1.83</td>
<td>-1.34</td>
<td>.75</td>
<td>1.8</td>
<td>-1.37</td>
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<tr>
<td>Suicidal behaviour</td>
<td>3.5</td>
<td>2</td>
<td>-1.5</td>
<td>1.05</td>
<td>1.6</td>
<td>-1.9</td>
</tr>
<tr>
<td>Affective instability</td>
<td>3.67</td>
<td>2.67</td>
<td>-1</td>
<td>1.03</td>
<td>3.4</td>
<td>-.27</td>
</tr>
<tr>
<td>Chronic emptiness</td>
<td>2.5</td>
<td>1.5</td>
<td>-1</td>
<td>.84</td>
<td>1.4</td>
<td>-1.1</td>
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<tr>
<td>Inappropriate anger</td>
<td>2.17</td>
<td>1.67</td>
<td>-.5</td>
<td>1.22</td>
<td>1.6</td>
<td>-.57</td>
</tr>
<tr>
<td>Paranoia/Dissociation</td>
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<td>1.33</td>
<td>-.5</td>
<td>.98</td>
<td>1.2</td>
<td>-.63</td>
</tr>
</tbody>
</table>
References


