An examination of how the label 'antisocial personality disorder' affects staff's causal attributions of challenging behaviour and how stress interacts with this process & clinical research portfolio

Part One

(Part two bound separately)

Gwen Keenan

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

Acknowledgements

I would like to begin by thanking my supervisors for the time and advice they have given me and the emotional support they have provided when that was needed too! I started this project under the supervision of the late Dr Liz Campbell and a very special thanks goes out to her. During the early phase of this project she supported me when formulating a research question and her advice was invaluable. Her personality was inspiring too and it was always a joy to spend time discussing my research (and children) with her too. I am so sorry she is no longer with us.

Dr Emma Drysdale, my field supervisor, thanks to you for all your help getting this project of the ground. Your contacts within the secure units were invaluable and really helped me access the sample I needed.

Professor Kate Davidson, my research supervisor, thanks to you for all of your ideas and constructive advice. Of course I am grateful too for your understanding and kind nature when I felt particularly stressed about managing this project alongside work and family life.

To Lucia, mum and dad, thank you all, for the enormous amount of childcare you have provided over the summer months! Also mum and dad, thank you for always encouraging me throughout school and university. Your editorial skills have been useful too!

Thanks to friends and classmates for much needed fun and laughter. Thank you to Gillian for kindly taking time to evaluate papers for the systematic review.

I must also thank my partner Tony for all of his love and support over the last 14 years. You have always encouraged me to keep going when I wanted to give up and you have always had belief in me and that has kept me going. The amount of childcare you have done over the last few months is worthy of a massive thank you too! Thank you also to my lovely children Eve and Luca for providing me with such fun and laughter; the perfect thing to get through a doctorate! You have both only ever known me as a student and I look forward to all the fun things we can do when I do not have to spend my evenings attached to my lap top.

Faculty of Medicine Graduate School "Declaration of Originality Form"

You have a responsibility to the University, the Faculty, your classmates, and most of all to yourself, to act with integrity in your academic work. In particular, the work that you submit for assessment, other than for team exercises, *must be your own.* Just as cheating in examinations is a serious offence, so any form of collusion or plagiarism in assessed exercises is dishonest and unacceptable to the University. **The following is an extract from the University's Statement on Plagiarism. Please read it carefully and sign the declaration below.**
Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without acknowledgement of the sources. Plagiarism can also arise from one student copying another student's work or from inappropriate collaboration. Allowing someone else to copy your work is just as bad as copying someone else's work yourself. It is vital that you do not allow anyone else to copy your work. Take care when discarding work and do not leave copies of your own files on a hard disk where others can access them. If you have any doubt as to what level of discussion is acceptable, you should consult your lecturer or the Course Director.

The incorporation of material without formal and proper acknowledgement (even with no deliberate intent to cheat) can constitute plagiarism.

With regard to essays, reports and dissertations, the rule is: if information or ideas are obtained from any source, that source must be acknowledged according to the appropriate convention in that discipline; and any direct quotation must be placed in quotation marks and the source cited. Any failure to acknowledge adequately or to properly cite sources of information in submitted work constitutes an act of plagiarism. Plagiarism is considered to be an act of fraudulence and an offence against University discipline. Alleged plagiarism will be investigated and dealt with appropriately by the University.

The University Plagiarism statement is available from: **http://senate.gla.ac.uk/academic/plagiarism.html**
Please complete the information below in BLOCK CAPITALS.

Name GWEN KEENAN

Matriculation Number 0601270

Course Name DOCTORATE IN CLINICAL PSYCHOLOGY

Assignment Number/Name CLINICAL & RESEARCH PORTFOLIO

DECLARATION:

I am aware of the University's policy on plagiarism and certify that this assignment is my own work.

Signed…….. Date…….

Table of Contents

Part One (this bound volume)

Chapter One

Systematic Literature Review

A systematic review of psychological interventions for Borderline Personality Disorder that examine suicidal behaviours and include a long-term follow-up

Gwen Keenan[1]

University of Glasgow

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

Tel: 0141 211 3920

Fax: 0141 211 0356

gkeenan@nhs.net

Prepared in accordance with requirements for submission to *the Journal of Personality Disorders (Appendix 1)*
Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

[1]Author for correspondence

Abstract

Suicide is a significant problem in Scotland which impacts upon health care services. Mental illness has been identified as a major risk factor to both self-harm and suicide and one group at particular risk of engaging in suicidal behaviours are individuals with a diagnosis of borderline personality disorder. One diagnostic feature of borderline personality disorder is engaging in suicidal behaviours therefore this review is interested in psychological interventions that have targeted this as a treatment outcome. It has been argued that borderline personality disorder is persistent and there is evidence of pessimism regarding treatment therefore only studies that included a post treatment follow up were reviewed. Psychological interventions are important to this population especially as there is a lack of evidence for pharmacological efficacy. This review systematically examines the evidence for psychological interventions designed to treat borderline personality disorder. It asks; do the effects of psychological interventions for suicidal behaviours in BPD persist over time and which psychological interventions are best supported by the scientific literature?

Following a systematic search of various electronic databases and hand searches, nine studies were included in the review. Methodological quality was evaluated using an adapted quality rating scale.

There is evidence from high quality studies that psychological interventions are effective at reducing suicidal behaviours in individuals with borderline personality disorder and that this effect persists overtime. These findings are discussed along with an evaluation of the methodological strengths and weaknesses or the studies reviewed. Areas for future research are indicated and implications for clinical practice are discussed.

Introduction

This systematic review examines the existing evidence base for psychological therapies addressing suicidal behaviours in individuals with a diagnosis of Borderline Personality Disorder (BPD) and poses two questions: Do the effects of psychological interventions for suicidal behaviours in BPD persist over time? Secondly, which psychological interventions are best supported by the scientific literature?

Suicide

Suicide affects many people, either through their own personal experience of suicidal behaviours or through supporting a friend or relative experiencing suicidal thoughts. Sadly, many of us will have experienced the loss of someone through suicide. Data obtained from the Scottish Public Health Observatory indicate that it is a significant problem in Scotland with 843 deaths by deliberate self-harm being recorded in 2008. It is also reported here that over 7000 people are treated in hospitals each year for non fatal deliberate self harm, some of whom will have been attempting suicide. It is clear then, that not only does suicide present an emotional burden to society but it also significantly impacts on health care services. Due to such high figures the Scottish Government have developed targets and strategies to tackle this problem. The Scottish Executive's 'Choose Life' strategy and action plan was launched in 2002 and addressed the challenge of reducing the rate of suicide in Scotland. This strategy contains action plans for a range of sectors and is not specific to health care services. In order to help meet the ambitious objectives set out in this strategy it is necessary to recognise populations at risk of suicidal behaviours and to have evidence-based interventions available to this population. In 2006, the Scottish Government reviewed the 'Choose Life' strategy and action plan and the importance of concentrating additional efforts on those groups at highest risk of suicidal behaviour was highlighted.

Suicide and Borderline Personality Disorder

Several studies have demonstrated that mental illness is a significant risk factor to suicidal behaviour. A literature review, including 27 studies (14 from within Europe), with a total of 3275 completed suicides, found that out of the total number of suicides, 87.3% had been diagnosed with a mental disorder prior to their death (Arsenault-Lapierre, Kim & Turecki, 2004). Approximately one-quarter of people who have completed a suicide in the UK had been in contact with mental health services in the year prior to their death (Swimson, Ashim, Windfuhr, Appleby & Shaw, 2007). The term 'mental illness' covers a wide range of diagnoses with varying symptomology therefore some groups may be more at risk than others. One group frequently referred to in the literature as being at risk of suicidal behaviours are those with a diagnosis of Borderline Personality Disorder (BPD). BPD is a personality disorder characterised by a pattern of unstable personal relationships, affect and self-perception beginning in early adulthood (American Psychiatric Association, 1994). Individuals with BPD experience feelings of emptiness, dysphoria and intense, inappropriate anger. Impulsivity affects many aspects of their lives including sexual promiscuity, substance use, self-harm and suicidality. Suicidal behaviours are so inherent in this population that the DSM-IV has included this aspect of the disorder in its diagnostic criteria (American Psychiatric Association, 1994). A history of suicidal behaviour or parasuicide, is the best predictor of completed suicide (O'Connor, Sheehy & O'Conner, 2000) therefore this group is at high risk of completed suicide. Paris (2002) reviewed the literature on chronic suicidality among patients with BPD. This review indicates that 1 in 10 individuals with BPD will commit suicide. Stone (1993) estimated that the rate of suicide among individuals with BPD was 50 times higher than that of the general population. Given the risk of suicide

and suicidal behaviours within this population it is crucial that health care services are able to identify such individuals and able to offer evidence-based interventions that address suicide.

Psychotherapies for Borderline Personality Disorder

Various factors are understood to contribute to the development of a BPD. These include genetic factors (Skodal, Siever, Livesley, Gunderson, Pfhol & Widiger, 2002; Torgersen, Lygren, Per, Onstad, Edvardsen, Tambs, et al., 2000; Livesley, Jang & Vernon, 1998), adverse events during childhood such as physical and sexual abuse (Leib, Zanarini, Schmahl, Linehan & Bohus, 2004; Paris, 1990) and neglect and overprotection (Paris, 1990). BPD is frequently comorbid with Axis 1 diagnoses (Oldham, Skodal, Kellman, Hyker, Doidge & Rosnick,1995; Zanarini, Frankenburg, Dubo, Sickel, Trikha, Levin, 1998) and as a result has led some to argue that it should be classified as a mood disorder rather than a personality disorder. Others propose that due to its association with past trauma it should be conceptualised as a delayed post traumatic stress disorder (Yen & Shea, 2001). Many psychological therapies have been found to be effective at treating mood disorders and of all the personality disorders, BPD is probably the most researched in terms of treatment studies with many of these producing promising findings. With an increasing understanding of aetiological factors underlying the condition, psychological therapies have been developed to help facilitate change in such individuals. The evidence for the effectiveness of pharmacological interventions for treating BPD is limited (Olabi & Hall, 2010) therefore it is important that research investigating psychological interventions are conducted and regularly reviewed to ensure treatment choice for this patient group.

Several controlled trials have indicated that psychological interventions are beneficial in the treatment of borderline personality disorder and these include both individual psychotherapies and group therapies drawing on a range of models and therapies that might be considered on a spectrum from psychodynamic to cognitive behavioural models of BPD. In 2008, the Scottish Government and the National Health Service Education Board published the 'The Matrix - a Guide to Delivering Psychological Therapies in Scotland'. This document summarises which psychological interventions are best supported by scientific evidence. Although there is not a section addressing psychological interventions for suicide there is a section recommending therapies for BPD. It recommends; Cognitive Behavioural Therapy (CBT) for BPD, Schema-focussed CBT, Transference-focussed psychotherapy, Systems Training for Emotional Predictability and Problem Solving (STEPPS), Dialectical Behavioural Therapy and Mentalization based therapy. All of these therapies have been supported by high quality studies such as a randomised controlled trial and are highly recommended.

Despite promising findings from a range of high quality trials there is still a need to improve the evidence base. Many of the studies reporting symptomatic relief have had methodological weaknesses such as small sample size, high attrition rates yet no intention-to-treat analysis, non blinding of investigators and participants switching across from the control to the intervention group. There is also a lack of controlled follow-up studies within the literature. Bateman and Fonagy (2001) argue that the cyclical nature of BPD means that long term follow-up of psychological interventions is essential. The assertion that BPD is cyclical in nature contrasts with the findings by Zanarini, Frankenburg, Reich, Fitzmaurice, Weinberg and Gunderson (2008) who reported that individuals with BPD do recover over a course of

10 years with 75% having made some recovery at six years. This contrast in findings regarding the course of BPD and pessimism about treatment, suggests that follow-up evaluations after treatment are important for this population. This systematic review is interested in such studies. It has been argued that the excessive number of outcome measures used in trials renders study cross comparisons very difficult (Duggan, Hubband, Smailagic, Ferriter & Adams, 2007). This review is interested in studies that have measured suicidal behaviours as an outcome measure. Given that suicidal behaviours are a feature characterising this disorder and are predictive of suicide attempts and completed suicide, this outcome measure will be the focus of this review.

Binks, Fenton, McCarthy, Adams and Duggan (2009) carried out a systematic review examining psychological therapies for people with BPD. They only included randomised controlled trials (RCT's) and concluded that some of the problems frequently encountered by people with BPD may be improved by psychological intervention. This review indicated that dialectical behavioural therapy may be effective in reducing the rate of self-harm or para-suicide and reduce scores relating to suicidal ideation. This review included 11 articles published between 1991 and 2002 (Bateman & Fonagy, 1999; 2001; Koons, Robins, Tweed, Lynch, Gonzalez, Morse et al., 2001; Linehan et al., 1991; 1993; 1994; 1999; 2002; Turner, 2000 & van den Bosch, Verhaul, Schippers & van den Brink., 2002; 2003). Of the studies reviewed only three examined participant functioning at post treatment follow-up (Bateman & Fonagy, 2001; Linehan, Heard & Armstrong., 1993; van den Bosch et al., 2002) therefore little is known about whether treatment effects persist over time, particularly because both Bateman and Fonagy (2001) and Linehan et al. (1993) allowed participants in the intervention group to continue receiving the intervention across the follow-up period. Binks

et al. (2009) also indicate that there is a lack of controlled trials with large sample sizes. Since the time of their review there have been several controlled trials with large sample sizes that have specifically examined suicidal behaviours as an outcome measure and included a post-treatment follow-up (Linehan, Comtois, Murray, Brown, Gallop, Heard et al., 2006; Davidson, Norrie, Tyrer, Gumley, Tata, Murray et al., 2006; Blum, John, Pfohl, Stuart, McCormick, Allen et al., 2008). This current review has included studies of both an RCT design and controlled observational design that include a post treatment follow-up period and that examine suicidal behaviours as an outcome measure.

Throughout this review the term suicidal behaviours will be used to refer to self harm, self-mutilation, parasuicide and suicide attempts.

Objectives

This systematic review is therefore interested in examining papers that have investigated psychological interventions for suicide attempters with a BPD, that have included suicidal behaviours as an outcome measure and that have a follow-up period.

Research Questions

1) Do the effects of psychological interventions for suicidal behaviours in BPD persist over time?

2) Which psychological interventions are best supported by the scientific literature?

Method

Search Protocol

The following electronic databases were searched for appropriate studies:

- Medline (1950-July, 2010)
- Embase Classic + Embase (1947-July, 2010)
- EBSCO- searched Psych Info, Psych Articles and Psychological and Behavioural Sciences Collection (All years to July, 2010)
- Eric (1965-July, 2010)
- Cochrane Library: All EBM Reviews (1950- July, 2010)
- Web of Knowledge (All years up to July, 2010)

The search included a multi-database text word search, individual database text word search and subject heading searches. The search terms were extensive and are therefore included in appendix 2.1. This appendix lists the search terms, the use of truncation and wildcards and how the search terms were combined.

The titles of the studies were reviewed and those that described appropriate studies were selected. The abstract was then reviewed, followed by review of the paper.

The reference lists of the selected articles and a recent systematic review (Binks et al., 2009) were then reviewed to detect any further papers.

The Archives of General Psychiatry (2003 to July 2010) were hand searched. This journal was chosen because several articles generated by the database search came from it.

Inclusion criteria

- Studies examining psychological therapies for borderline personality disorder.
- Suicidal behaviours were an outcome measure.
- To ensure the studies were of high quality only randomised controlled trials, quasi experimental and controlled observational studies were included.
- Studies with a minimum of six month post treatment follow up.
- Due to time constraints studies needed to be published in the English language.

Exclusion criteria

- Observational studies without a control group
- Case Studies
- Books and dissertations
- Studies that did not measure suicidal behaviours as an outcome measure

Critical Appraisal of Methodological Quality

To measure the methodological quality of the studies included in the review several existing checklists were considered. These were the Scottish Intercollegiate Guidelines Network (SIGN) guidelines (SIGN, 2004), the Consolidated Standards of Reporting Trials (COSORT) guidelines (CONSORT, 2010) and the Clinical Trials Assessment Measure (CTAM) (Tarrier and Wykes, 2004). These guidelines were chosen to ensure the scientific rigour of the review process due to their thoroughness and use in reviewing many scientific studies. In order to maximise the relevance of these guidelines to the current review they were merged and several items either removed or amended.

The adapted quality rating scale contained 26 items addressing six aspects of the studies (appendix 2.3). This included the research question, sampling, design, assessment, intervention, analysis and discussion. For 25 of the items on the rating scale, studies were rated as adequate (2 points), partial (1 point) or inadequate (0 points). This item could also be rated as 'not applicable'. For one item addressing study design, it was scored as 'randomised controlled trial' (3 points), 'quasi-experimental' (2 points) and 'controlled observational' (1 point). This quality rating scale could yield a maximum score of 53 points which was then calculated as a percentage. If any item was rated as 'not applicable' then scoring was adapted accordingly. The papers were then given an overall rating. This included excellent (80%-100%), good (60%-79%), adequate (50%-59%) and poor (below 49%).

Results

Search Strategy

The results of the search strategy are displayed in figure 1. This search generated 434 possible articles. The titles of the studies were reviewed and those that described appropriate studies were selected. The abstract was then reviewed, followed by review of the paper. Seven studies were selected for the review.

A hand search of the reference lists were then carried out to detect any further papers of which two studies were included. One of these studies focus on the effect of psychological

interventions on substance abuse in BPD and this may explain why it did not appear in the database search.

The hand search of Archives of General Psychiatry (2003 to July 2010) did not produce further articles.

Insert figure 1 here

Critical Appraisal of Methodology

A summary of the nine studies included in the review are presented in table 1.

These studies examined the effectiveness of different psychological interventions. These were Cognitive Behavioural Therapy (CBT) (Davidson et al., 2006) Dialectical Behavioural Therapy (DBT) (Linehan et al., 2006; Linehan, Heard & Armstrong, 1993; van den Bosch et al, 2002) Systems Training for Emotional Predictability and Problem Solving (STEPPS) (Blum et al., 2008), Psychoanalytically Orientated Partial Hospitalisation (Bateman & Fonagy, 2001), Mentalization-Based Treatment (MBT) (Bateman & Fonagy, 2008), Time-limited Group Treatment (Munroe-Blum & Marziali, 1995) and Out-patient Group Psychotherapy (Wilberg, Friis, Karterud, Mehlum, Urnes & Vaglum, 1998). Some researchers have changed the names of the therapies they are describing from the original study, when reporting the follow up (Bateman & Fonagy, 2008; Linehan et al., 1993). Each intervention is briefly described below.

Cognitive Behavioural Therapy for Borderline Personality Disorder (Davidson, 2000)

Davidson et al. (2006) investigated the efficacy of CBT using the CBT protocol developed by Davidson (2000). CBT is a structured, time-limited psycho-social intervention. Initially the therapist and patient develop a collaborative formulation within a cognitive framework. The focus of the intervention is on the patient's beliefs and behaviours that impair social and interpersonal functioning. Priority is given to behaviours which can cause harm to self or others. Patients were offered 30 sessions of CBT, each lasting one hour over one year.

Behavioural Treatment (Linehan et al., 1993) and Dialectical Behavioural Therapy (DBT) (Linehan et al., 2006; van den Bosch et al., 2002)

Although the titles of these articles use different labels to describe the treatment, the content within the article refers to both interventions as 'dialectical behavioural therapy'. This therapy is a manualised treatment that combines behavioural, cognitive and supportive psychotherapies (Linehan, 1984). It combines both weekly individual and group therapy. Individual therapy consists of directive, problem orientated techniques (including behavioural skills training, contingency management, cognitive modification and exposure to emotional cues) that are balanced with supportive techniques such as reflection, empathy and acceptance. Behavioural goals are prioritised in order of importance with suicidal behaviours given the highest priority. Patients can also have telephone contact with therapists between sessions. Group therapy is weekly and follows a psycho-educational format, teaching interpersonal skills, distress tolerance, reality acceptance skills and emotion regulation skills.

Systems Training for Emotional Predictability and Problem Solving (STEPPS) (Blum et al., 2008)

STEPPS is a manual based group treatment for out-patients with BPD. It is designed to supplement the patient's ongoing treatment and is not a stand-alone intervention. It incorporates cognitive behavioural elements with skills training and is administered in groups using a seminar style format. The program involves 20, two hour, weekly sessions. It is systemic and involves family members, significant others and their mental health professional who are educated about BPD and how best to interact with their relative or friend with the disorder. STEPPS has three components: 1) psycho-education about BPD; 2) emotion management skills training; 3) behaviour management skills training.

Psychoanalytically Orientated Partial Hospitalisation (Bateman & Fonagy, 2001), later termed, Mentalization-Based Treatment (Bateman & Fonagy, 2008)

Bateman and Fonagy (1999) developed a psychoanalytically orientated intervention that they claim is for targeting severe borderline personality disorder cases that incorporates both group and individual psychoanalytic psychotherapy within a time-limited, flexible but structured, consistent and reliable partial hospitalisation program. The programme includes once weekly psychoanalytic psychotherapy, three times weekly group analytic psychotherapy, once a week expressive therapy and a weekly community meeting. This constitutes six hours of therapy spread over five days weekly. Therapies and informal patient-staff contact are organised by the psychoanalytic model of borderline personality disorder of attachment, separation tolerance and mentalization. Although the authors changed the name of the therapy from 'Psychoanalytically Orientated Partial Hospitalisation' (Bateman & Fonagy, 1999; 2001) to 'Mentalization-Based Treatment' (Bateman & Fonagy, 2008) they are reporting findings derived from the same intervention and on the same sample.

Short-term Group Treatment (Munroe-Blum & Marziali, 1995)

Munroe-Blum and Marziali (1995) compared two treatments; interpersonal group psychotherapy (time-limited) and individual dynamic psychotherapy (not time-limited). Interpersonal group psychotherapy is a manualised treatment consisting of 30 sessions each lasting 1 ½ hours. It is hypothesised that a core feature of BPD is a conflicted, unstable and poorly defined self system which is dependent on here and now interpersonal transactions for self-definition and this is targeted by the group treatment. Individual dynamic psychotherapy was considered the 'treatment as usual' comparison and consisted of traditional psychodynamic strategies including interpretation, confrontation and exploration (Marziali, 1991).

Outpatient Group Psychotherapy (Wilberg et al., 1998)

Wilberg et al. (1998) examined the effectiveness of a combined model of treatment. They compared a group of patients who had received initial day treatment followed by long-term outpatient group psychotherapy with patients who had only received the day treatment. The day treatment required daily attendance from 8.30 to 15.00 and consisted of two daily community meetings the first of which was confrontational and revealing dealing with acting out, attendance and group dynamics. The second community meeting provided containment and conflict resolution. Patients also attended group psychotherapy (1 hr, 3x weekly), art therapy and body awareness groups (1 ½ hrs, 2x weekly) individual psychotherapy (1-2 hrs weekly) and occupational therapy (1-3 hrs weekly). The outpatient group ran on group analytical principles (Foulkes & Anthony, 1957) with an emphasis on treatment continuity and a focus on attachment and transference.

Insert table 1 here

Characteristics of the Studies

Sample

Full details of sample sizes including the numbers randomised into treatment and then analysed are found in table 2. Across the studies reported, there is variability in the sample size. Collectively these studies have randomised or intended to treat 700 participants with a BPD and have gathered and analysed follow-up data on 562 participants following a range of psychological interventions. These figures are different due to attrition rates within the studies and missing data. Five of the nine studies included in this review did not carry out an intention to treat analysis (Blum et al, 2008; Munro-Blum & Marziali, 1995; Linehan et al., 1993; Wilberg et al, 1998; Bateman & Fonagy, 2008). The sample sizes range from 41 participants (van den Bosch et al., 2002) to studies containing 124 participants (Blum et al., 2008). Three of the nine studies reported a power calculation (Linehan et al., 2006; Davidson et al., 2006; Munroe-Blum & Marziali 1995) ensuring that their studies had adequate power for their analysis. However Munroe-Blum and Marziali (1995) had a high attrition rate and a small sample size was included in the analysis possibly causing their study to be under powered. Although Blum et al. (2008) did not report a power calculation they had the largest sample size. Three studies recognised that their sample size was small suggesting that they were under powered (Bateman & Fonagy, 2001; 2008; van den Bosch et al., 2002; Linehan et al., 1993). Although Wilberg et al. (1998) did not recognise their small sample size it is possible that they too were underpowered.

Insert table 2 here

Quality Rating Scale

The studies included in this review were rated as poor to excellent. Details of this can be found in table 3. A second rater, a qualified Clinical Psychologist rated 60 percent of the papers. Agreement between raters was 100% on quality category.

Insert table 3 here

Design

Randomised Controlled Trials

The efficacy of DBT was investigated by two randomised controlled trials with a 12 month post treatment follow up (Linehan et al., 1993; 2006). Van den Bosch et al. (2002) examined DBT with a randomised controlled design and a six month post treatment follow up. MBT was investigated using a randomised controlled design in one study and the authors have published three articles (Bateman & Fonagy 1999; Bateman & Fonagy, 2001; Bateman & Fonagy, 2008) the later two of which are reviewed here, reporting on the same cohort from the original study followed up at 18 months and five years post treatment. One study examined the efficacy of CBT using a randomised controlled design with 12 months of treatment and a 12 month post treatment follow-up (Davidson et al., 2006). Blum et al. (2008) used a randomised controlled design to investigate STEPPS in conjunction with

treatment as usual and reported on a 20 week treatment and a 12 month post treatment follow-up. A randomised controlled design was used to investigate a short-term group treatment for BPD and included a 12 month post treatment follow up (Munroe-Blum & Marziali, 1995).

Retrospective Controlled Study

Wilberg et al. (1998) report on retrospective data collected from participants who had participated in a day hospital treatment. A group also participated in an outpatient group therapy treatment following discharge and are compared with those who did not get allocated to this treatment. They were retrospectively followed over a 3 year period.

Control Groups

Treatment as Usual in Randomised Controlled Trials

Davidson et al. (2006) describe treatment as usual as that which is provided by the National Health Service including General Practitioner care and access to Community Mental Health Teams as well as contact with emergency services and inpatient care if necessary. Blum et al's (2008) control group continued with their usual care including individual psychotherapy (53% in control group and 63% in intervention group), medication and case management. Linehan et al's (1991; 1993) treatment as usual group was offered an alternative psychotherapy in the community, of which 13 received individual psychotherapy and nine were not in psychotherapy. Bateman & Fonagy (1999; 2001; 2008) compared their intervention with 'treatment as usual'. This included regular psychiatric review, inpatient admission if necessary, discharge to non-psychoanalytic psychiatric partial hospitalisation and outpatient and community follow-up. The description of treatment as usual in the van

den Bosch et al. (2002) study is reported by Verheul, van den Bosch, Koeter, De Ridder, Stijnen & van den Brink (2003). It consisted of clinical management from the original referral source which were addiction teams (n=11) and outpatient psychiatric services (n=20)

Treatment as Usual in Retrospective Controlled Study

Wilberg et al. (1998) compared the efficacy of a continued outpatient psychoanalytic group with TAU. The treatment as usual group could receive what was on offer in their community. Sixty-eight percent of the control group and 51% of the intervention group received outpatient therapy.

Community Treatment by Experts

Linehan et al. (2006) used a control group that received 'Community Treatment by Experts' in an attempt to disentangle the unique benefits of DBT. Although the treatment delivered was uncontrolled by the study, Linehan et al. (2006) selected the therapists on the basis of their expertise and they were asked to ensure a minimum of 1 session per week. None of these 'experts' were cognitive behavioural therapists.

Individual Dynamic Psychotherapy

Munroe- Blum and Marziali (1995) used a control group that received individual dynamic pychotherapy. This was delivered by therapists with comparable training and experience in BPD as the intervention group. They received sessions once to twice per week.

Inclusion Criteria and Matching of Intervention and Control Groups

Diagnostic Tool

As can be seen from table 1, all of the studies included in this review used standardised diagnostic tools to diagnose BPD. Wilberg et al. (1998) diagnosed participants retrospectively using case notes.

Matching of groups

Several studies used a matching procedure prior to randomisation to ensure that the groups were balanced on a number of possible covariates and this is described below. This review is interested in between group differences in the rate of suicidal behaviours and in order to compare the studies it is necessary to examine which studies measured this as a primary outcome measure and matched participants on previous suicidal behaviours prior to randomisation. Between group differences on this variable will have implications for evaluating treatment effects on this outcome measure.

Prior Suicidal Behaviours

Three of the studies reported here required participants to have a history of suicidal behaviours. Davidson et al. (2006) only included participants that had received inpatient psychiatric services or an accident and emergency assessment for self harm or a suicide attempt in the 12 months prior to randomisation. Linehan et al. (2006; 1993) required participants to have a history of at least two suicide attempts or acts of self-harm in the last five years with one episode occurring in the last five (Linehan et al., 2006) or eight weeks (Linehan et al., 1993) prior to randomisation. It is therefore possible that these studies are reporting on a sample that is more clinically unwell.

Studies examining suicidal behaviours as a primary outcome variable

Six of the studies included in this review examined treatment effects on suicidal behaviours and described this as a primary outcome measure (Bateman & Fonagy, 2001; 2008, Linehan et al, 1993; Linehan et al 2006, Davidson et al., 2006; Munro-Blum & Marziali, 1995). As described previously, three of these studies matched participants prior to randomisation on their history of suicidal behaviour (Linehan et al., 1993; 2006 & Davidson et al., 2006). Bateman and Fonagy (1999; 2001; 2008) carried out post treatment comparisons on a number of variables however they did not report measuring prior history of suicidal behaviours. Munro-Blum and Marziali (1995) did not report examining between group differences on baseline data.

Studies with other primary outcome measures.

Blum et al. (2008) state that they are interested in measuring whether STEPPS plus TAU would result in greater improvement in borderline traits, social functioning, global functioning and mood. They included crisis variables, suicide attempts and self harm acts as secondary outcome variables. They compared the two groups post randomisation and found no between group differences on prior suicidal history. Wilberg et al. (1998) aimed to report on the follow up status of participants who had received in patient treatment followed by out patient group therapy in terms of global functioning and perceived symptom level. Although they examined suicidal behaviours this was not a primary focus of treatment. They report a number of between group differences however they did not examine prior suicidal behaviours. Van den Bosch et al. (2002) conducted a study examining whether DBT is effective at reducing borderline symptomotology in individuals with a BPD and comorbid substance misuse and whether DBT would also reduce substance misuse. Groups were matched on age, alcohol problems, drug problems and social problems. This study did not

describe outcome measures relating to suicidal behaviours across the six month post treatment period therefore discussion of this study will be limited.

Follow-Up Periods

Details of the post treatment follow up periods are described in table 4. All studies included in this review had a minimum follow up period of six months. However the study by Bateman and Fonagy (2001) and Linehan et al. (1993), although reporting the study as a post treatment follow up, participants in the intervention group continued to receive some treatment.

Outcome Measures

Of the five studies that measured suicidal behaviours as a primary outcome variable, a range of methods were employed. All studies used an interview method to gather information regarding suicide attempts and self-harm acts (see table 4). Bateman and Fonagy (2001; 2008) report a rigorous procedure for assessing this. The primary measure was the Suicide and Self-Harm Inventory developed by Dr Bateman. This inventory distinguishes between suicide attempts and self harm, seriousness/dangerousness of the act and intent. Information gathered here was corroborated with medical and psychiatric records. In their five year follow up, information regarding non-suicidal self-harm is not reported as the authors report that participant recall was not reliable and the information could not be corroborated. They report inter-rater agreement in excess of 90% for all variables used. Given that participants were in this study for eight years the corroboration of information is important as participants are vulnerable to allegiance effects when self-reporting. Davidson et al. (2006) used the Acts of Deliberate Self Harm Inventory (Davidson, 2007) to measure suicidal behaviours. This

inventory distinguishes between self harming and suicide attempts. Inter-rater reliability was calculated for occurrence and number of suicidal acts (κ=1.0) and occurrence of self-harm (κ=1.0). Davidson et al. (2006) also reported corroborating information gathered from the Acts of Deliberate Self Harm Inventory by objectively measuring hospitalisations and accident and emergency use via medical and case records. Linehan et al. (2006) measured suicidal behaviours on the Suicide Attempt Self Injury Interview (Linehan, Comtois, Brown, Heard & Wagner, 2006). This measures the 'topography', suicide intent, and medical severity of each suicide attempt and self-harm act. The authors do not report corroborating this information with medical records. To gain information about contact with health care services they relied on self-report from the Treatment History Interview (Linehan, unpublished work, 1987). This is less reliable as participants may be vulnerable to acquiesce with researchers or may be unwilling or unreliable sources of information. Linehan et al. (1993) measured suicidal behaviours using the Parasuicide History Interview (Linehan, Wagner & Cox, 1989). This measures the frequency and severity of suicide attempts and self-harm acts. Information was also gathered on the Treatment History Interview. Although the original study (Linehan et al. 1991) describes using a number of self-report inventories regarding suicidal ideation, these are not reported in the follow up study. Munroe-Blum and Marziali (1995) measure suicidal behaviours using the Objective Behaviours Index (Munroe-Blum & Marziali 1986). This is an interview where the clinician elicits the patient's reports on eight types of behaviours that indicate dysfunction, one of which is suicide attempts.

The remaining three studies (Blum et al., 2008; von den Bosch et al., 2002 & Wilberg et al., 1998) also looked at the impact of treatment on suicidal behaviours however this was not a primary outcome measure. Details of how this was measured can be found in table 4.

Effects of Interventions on Suicide Behaviour Outcome Measures

Comparison 1: Psychological Intervention versus Treatment as Usual

DBT versus Treatment as Usual

Linehan et al's study (1993) reports on the follow up status of a cohort of participants from an earlier study (Linehan et al., 1991). These studies were interested in the effects of DBT on suicidal behaviour. These findings are displayed in table 4. In the study reported in 1991, it was found that during each four monthly assessment point during 12 months of treatment, control participants engaged in more parasuicidal acts ($p<0.01$). The medical risk scores of those engaging in parasuicidal acts were higher for controls. In the follow-up study, data was collected at six months and 12 months post treatment and the authors predicted that the effects found in the original study would be maintained. It was found that throughout the follow up year those receiving DBT had a lower repeat rate of parasuicide than those in the control group ($p<0.01$). Although it is reported that there was also a lower likelihood for any psychiatric hospitalisation in the DBT group this only approached significance ($p<.07$). During the first six months of the post treatment follow up the mean number of parasuicidal acts was significantly lower for the DBT group ($p<0.001$) however this was not significant between six and 12 months. Similarly for the number of medically treated paracuicidal acts, there were fewer episodes in the DBT group during the first six months ($p<0.01$), however this was not significant during the following six months. The number of psychiatric admissions (number of days in hospital) was lower in the DBT group between six and 12 month follow up ($p<0.05$).

Van den Bosch et al. (2002) carried out a study examining whether substance abuse would modify the treatment effects of DBT on BPD symptomotology. They also examined if DBT

would reduce participants' substance use. The study reports that the efficacy of DBT in terms of the course of substance use behaviours and borderline symptomotology at 18 month (six months post treatment) will be reported. However, the data regarding borderline symptomotology at 18 months is not reported. The paper describes finding that DBT resulted in greater reductions of self-mutilating behaviour and self damaging impulsive acts than TAU. However no statistics are reported and it is unclear whether they are referring to the treatment year or the six month post treatment follow up. Due to the lack of follow up information this study will not be discussed further.

CBT versus Treatment as Usual

Davidson et al. (2006) report on the effectiveness of CBT plus TAU on a number of outcome variables. The primary outcome variables were suicidal acts, inpatient psychiatric hospitalisation and accident and emergency attendance. It was hypothesised that these variables would be reduced across the 12 month treatment phase and 12 month post treatment follow-up. As can be seen from table 1 and more clearly in table 2, Davidson et al. (2006) did find significant reductions in the mean number of suicidal acts across the treatment year and the 12 month follow up period in favour of CBT plus TAU (P=0.02). There were no significant differences in the number of participants engaging in suicide attempts, in hospitalisations and accident and emergency contact across the treatment year and 12 month follow up period.

STEPPS versus Treatment as Usual

Blum et al. (2008) measured suicidal behaviours by collecting data on crisis variables including suicide attempts and self-harm acts and compared the treatment groups (STEPPS +

TAU versus TAU control) on time to first suicide attempt and self-harm act. Participants were followed up for 20 weeks during treatment and the assessments were repeated at one, three, six, nine and 12 months post treatment. They found no between group differences in terms of time to first suicide attempt ($p=0.99$) or first self-harm act ($p=0.90$).

Mentalization Based Treatment versus Treatment as Usual

Bateman and Fonagy (2001; 2008) investigated the effects of MBT on suicidal behaviours over an 18 month and five year post treatment follow up (although participants in the intervention group continued to receive group analytic therapy twice weekly during the initial 18 month 'post treatment' follow up). During the first 18 months of 'follow-up' they found that significantly more participants in the intervention group reported not engaging in self harm acts at six, 12 and 18 months ($p<0.001$, $p<0.001$ and $P<0.004$ respectively). At six and 18 month follow up fewer participants had made a 'serious suicidal gesture' ($p<0.04$ and $P<0.004$). It is also reported that across the 18 month follow up there were fewer suicide attempts in the intervention group ($p<0.001$). The cohort continued to be followed over the next 5 years, where no participants received the intervention (although they could engage in TAU). The initial 18 month follow up had found that not only had treatment effects been maintained but there had also been improvement. In recognition that the intervention group had received continued group analytic therapy and this may have caused the continued improvements, they investigated whether the treatment gains were maintained over the next five years. The primary outcome measure for this follow up was the number of suicide attempts. They did not use data collected regarding self-harm episodes as participant recall was not reliable and the information could not be corroborated with medical notes. Over the five year follow up, 23% (n=5) of the treatment group and 74% (n=14) of the control group

attempted suicide. There was a significant difference in the total number of suicide attempts across the 5 year period (P<0.0001). Significant difference between the groups emerged during treatment and remained significant at all 3 post treatment periods. The mean difference in emergency room visits over the 5 year follow up were also significantly different with less use by the treatment group (P<0.0001).

Out-patient group therapy versus treatment as usual

Wilberg et al. (1998) assessed suicide attempts during follow up using self-report at interview. Participants completed a day treatment program and then during the follow up period of up to 3 years some were given additional outpatient group therapy while others were not. This study found no significant differences between the 2 groups in number of suicide attempts during the follow up period.

Insert table 4 here

Discussion of Comparison 1

Several studies have demonstrated that a psychological intervention is superior to treatment as usual at reducing suicidal behaviours and that this effect can persist over time. Bateman & Fonagy (2001; 2008) have reported a significant reduction in both self mutilating acts and suicidal gestures across a five year follow up. This contrasts with the findings by Linehan et al (1993). Although they report an overall reduction in parasuicidal episodes over the one year follow-up period, at 12 months this difference was not significant. This could suggest that MBT is a more effective treatment at reducing suicidal behaviours compared to DBT

however there are some other factors that could be contributing to Bateman and Fonagy's (2001; 2008) findings. The intervention group received group psychoanalytic therapy twice weekly throughout the 18 month follow up. Although Linehan also offered participants in the intervention group the opportunity to continue receiving either one-to-one psychotherapy or DBT, only 35% of participants received this. It is possible that this ongoing intervention maintained the reduced suicidal behaviours in the intervention group. Linehan et al. (1993) also required participants to have made at least one suicide attempt in the last five years with one being made within the last eight weeks. A prior suicide attempt is a strong predictor of future suicide attempts (O'Conner et al., 2000) therefore it is possible that the sample in Linehan et al's (1993) intervention group were at a higher risk of engaging in suicidal behaviours than those in Bateman & Fonagy's (1999; 2001; 2008) sample.

Both Linehan et al. (1993) and Bateman and Fonagy (2001; 2008) have reported more significant reductions in suicidal behaviours than the results reported by Davidson et al. (2006) and Blum et al. (2008). Davidson et al's (2006) study was methodologically strong, (Quality Rating, excellent) increasing confidence in their findings. Although Davidson et al. (2006) reported a significant reduction in the mean number of suicidal acts across the two years in favour of CBT plus TAU their other comparisons were not significant. Both groups showed a reduction in the use of psychiatric and accident and emergency services. Davidson et al. (2006), like Linehan et al. (1993) required participants to have received hospital treatment for a self-harm or suicide attempt within the 12 months prior to randomisation therefore their sample is possibly more at risk than the sample participating in the Bateman and Fonagy (2001; 2008) study. Their study did not have participants continuing in an intervention during the follow up therefore giving a more transparent indication of the post-

treatment period than that of both Bateman & Fonagy (2001; 2008) and Linehan et al (1993). Davidson et al. (2006) reported that 51% of participants randomised into CBT plus TAU had 15 or more sessions of CBT and received an average of 16 sessions. Previously they reported that less than 15 sessions would be an inadequate amount of therapy and could be indicative of non-engagement (Davidson et al., 2006). It is recommended that individuals receive 30 sessions in order for treatment to be effective on long term conditions and to develop new ways of thinking and behaving (Davidson et al, 2000) and it is therefore possible that participants did not receive enough active treatment in order for treatment effects to be maintained. Davidson et al. (2006) also provide an 'intention to treat' analysis which is a more conservative approach. Linehan et al. (1993) and Bateman and Fonagy (2001) did not report an intention to treat analysis, which increases the likelihood of finding significant results. Blum et al. (2008) did not report any significant differences in time to suicide attempt or self-harm act between the groups. Like Davidson et al. (2006) this study was rated as methodologically stronger (Quality Rating, good) than the studies by Linehan et al. (1993) and Bateman and Fonagy (2001; 2008). It had a large sample size and reported an intention to treat analysis. Also they did not offer continued treatment during the follow-up period. This study had a high attrition rate and many of the follow-up observations were missed which will have deflated their results.

Wilberg et al's (1998) study was of the poorest methodological quality (Quality Rating, poor). They conducted a follow up study of a post treatment group therapy compared to post treatment, treatment as usual. All participants had been treated in a day unit and following discharge some had participated in outpatient group psychotherapy (the G group, N=12) and others received TAU (the non G group, N=31). Although this study did not find any group

differences in relation to suicidal behaviours they did find differences on other variables. However it is not possible to attribute the differences found to the outpatient group treatment due to several factors. The two groups differed on a number of variables. The group receiving the continued outpatient group therapy were significantly younger (mean age at admission of 27yrs versus 32yrs) and fewer of them had been married. This could represent a more mentally unstable group as BPD is most prevalent in the third decade of life and this group have less social support. Despite this they are reported to perform better on a number of outcome variables. This group had a significantly longer stay in the day treatment which may explain the superior functioning during the follow up period. The median time from discharge from day treatment to follow-up was 28 months for the group receiving continued group therapy and 33 months for the control group. This could affect functioning on the outcome variables as the control group have had a longer period of time since discharge from the day treatment than the intervention group. The mean time from end of group therapy to follow up was 22 months. However this was variable with one participant remaining in treatment during the follow-up assessment. Participants stayed in group therapy for an average of 12 months however this ranged from one month to 33 months. This makes it impossible to determine if there is sustained improvement during follow-up as the performance of those still receiving treatment and those with a shorter follow-up period will elevate the scores for the group as a whole. Although the writers report that there was no difference between the groups in additional axis II diagnosis it would appear that they compared the groups on each disorder individually, however collectively it would appear that there are more participants in the control group with an axis II diagnosis (23 in non G group versus eight in the G group) suggesting that this group may have had more complex difficulties.

Comparison 2: Psychological Intervention versus alternative 'active' intervention

DBT versus Community Treatment by Experts (CTBE)

Linehan et al. (2006) examined suicidal behaviours in BPD following DBT versus CTBE. Although participants were followed up at four month intervals throughout 12 months of treatment and during a 12 month follow up, the results do not indicate mean differences between the groups at these different time points. Differences in rates of change were compared for the two treatment groups. The DBT group had half the rate of suicide attempts compared with the control group ($P<0.01$). Similarly, half as many participants in the DBT group made 'nonambivalent' (serious) suicide attempts however this was not significant ($p=0.18$). There were significantly fewer suicide attempts per period in the DBT group across the two years when controlling for the number of suicide attempts during the pretreatment year ($P=0.04$). The mean proportions of suicide attempters per treatment group per period were 6.2% (DBT group) and 12.2% (control group). Both treatments were effective in reducing the number of non-suicidal self injury but the difference in the rates of change between the groups was not significant. Among participants that did make a suicide attempt the highest medical risk was significantly lower for the DBT group than for the control group ($P=0.04$). Both groups significantly improved across the two years in suicidal ideation and reasons for living however the difference between the groups was not significant.

Short-Term Group Treatment versus Individual Psychotherapy

Munroe- Blum & Marziali (1995) compared the intervention of short-term group therapy with individual psychotherapy as a control group and found no significant differences on these outcome variables at post treatment and 12 month follow-up however both groups

significantly improved on these outcome variables both at post treatment and 12 month follow up.

Discussion of Comparison 2

Compared to the 'TAU' comparison, the control groups here were receiving a structured intervention. This allows the researcher to determine whether their treatment has advantages over and above that of receiving any intervention. Linehan et al's (2006) study clearly demonstrates that DBT does improve suicidal behaviours in BPD and that this effect cannot be attributed to the participants receiving expert care as the control group also received this. This study was methodologically strong (Quality rating, excellent). They had a large sample size, matched participants on suicidal history and conducted an 'intention to treat analysis' therefore strengthening confidence in their findings. This study did find that the DBT group received more hours of therapy from their study therapist than the CTBE group. However they also report that there were no significant between group differences in total hours of therapy when including study and non-study provided treatment. Despite this it could be that a more intensive and consistent treatment of any kind has the effect of reducing suicidal behaviours in BPD rather than the treatment effect being unique to DBT. This study relied upon self-report inventories of suicidal behaviour and this is not as reliable as other methods, where information has been gathered from medical records. Some studies have reported improvement in participants with BPD on a range of self-report measures however this has not equated with improvement in actual rates of change or number of suicidal behaviours. For example, Blum et al. (2008) found that following their intervention, participants demonstrated a greater rate of change in all of their self report outcome variables however

they do not detect a rate of change in suicidal behaviours. It is possible that there is a tendency among individuals with BPD to favourably self-report.

Although Munroe-Blum and Marziali (1995) did not find an advantage to a short-term group treatment in reducing suicidal behaviours it is possible that the outcome measure employed was not as sensitive as the suicide and self harm interviews used in other studies reporting superior findings. The Objective Behaviour Index gathers information about eight types of behaviour indicative of dysfunction of which suicide attempts is one. Perhaps a more thorough measure of self-harm and suicide attempts would have indicated change over time. Despite finding no between group differences they do indicate the cost-effective benefit of this treatment compared with individual psychotherapy as both groups were comparable at reducing suicidal behaviours and this effect was maintained over the 12 month follow up.

Discussion

Do the effects of psychological interventions for suicidal behaviours in BPD persist over time?

Several studies have reported that a psychological intervention was effective at reducing suicidal behaviours and that this persists over time post treatment. MBT (Bateman & Fonagy, 2001; 2008) appears to be effective at reducing suicidal behaviours five years post treatment. Linehan et al. (1993) and Linehan et al. (2006) have reported that DBT reduced suicide behaviours at six months and at a 12 month follow up compared to both treatment as usual and CTBE. Blum et al. (2008) reported a significant reduction in emergency room use at a 12 month follow up following STEPPS plus TAU and this may be indicative of a reduction in self-harming or suicide attempts. Davidson et al. (2006) report that following

CBT, there was a reduction in the mean number of suicidal acts across the treatment year and the 12 month follow up. Wilberg et al. (1998) and Munroe-Blum & Marziali (1995) both examined the effects of a group treatment. Although Munroe-Blum and Marziali (1995) did not find any difference on suicidal behaviours in comparison to a group receiving one to one psychotherapy, both groups had a significant reduction in suicidal behaviours and this persisted across their one year follow up. It would appear that the outpatient group treatment examined by Wilberg et al. (1998) was not effective at reducing suicidal behaviours however due to methodological problems it is difficult to draw conclusions from their findings.

Which psychological interventions are best supported by the literature?

Davidson et al. (2006) and Linehan et al. (2006) conducted the studies that were methodologically strongest. Both studies had large sample sizes based on power calculations, matched their groups on prior suicide history and reported an intention to treat analysis. Their sample size and sample characteristics were very similar. It can be seen from table 4 that Linehan et al. (2006) reported more significant findings relating to reducing suicidal behaviours across the follow up period. This could suggest that DBT is a more effective treatment than CBT at reducing suicide behaviour variables. However, as previously discussed, Linehan et al's (2006) reliance on self-report measures may have inflated their findings regarding this outcome variable. It should be noted that in Davidson et al's (2006) study the average number of sessions of CBT was 16 sessions across a 12 month period and this may not have been an adequate amount of therapy. Also this study was conducted in multi centre clinical settings rather than an exploratory trial conducted under perhaps more optimal settings. DBT offers a more intensive therapy than CBT consisting of individual psychotherapy, group therapy and telephone support. DBT has several goals and of primary

importance is the reduction in suicidal gestures. It also aims to reduce behaviours that interfere with therapy such as nonengagement (Linehan et al., 1993). In contrast, CBT is guided by a collaborative formulation which may not have prioritised suicidal gestures. It is possible that BPD patients require a more intensive and directive treatment, particularly when they have a history of suicidal behaviours.

Bateman and Fonagy (2001; 2008) report the most significant between group differences on the suicidal behaviour outcome variables and this persists over a five year follow-up. However their initial 18 month follow-up had participants in the intervention group participating in ongoing group psychoanalytic therapy which could have added to or maintained the effect of the MBT intervention. However they do report significantly less suicide attempts in the intervention group at a five year follow up. Unfortunately the sample size is small which limits the statistical power. Given their promising findings, future research with a large sample size should be conducted and this is currently underway. Bateman and Fonagy (2009) carried out a study examining suicidal behaviours in BPD using a methodologically strong design. The study was adequately powered and carried out an intention to treat analysis. They compared the effects of 18 months of MBT with structured clinical management for BPD. Similar to the study by Linehan et al. (2006), both control and intervention groups were comparable on therapist expertise and adherence to protocol. As an inclusion criterion, participants were required to have a BPD diagnosis and to have made a suicide attempt or an episode of life-threatening self-harm within the last six months. This methodology is more similar to that employed by both Davidson et al. (2006) and Linehan et al. (2006). Bateman and Fonagy (2009) have found that although improvement was found in both groups, MBT was associated with greater improvement on most outcomes including

suicidal behaviours and self-harm. Follow-up data is currently being collected but as yet is not published.

Blum et al. (2008) found a significant reduction in emergency room use. Although they did not assess the purpose of the emergency use it is assumed this reflects suicidal behaviours. It is possible that STEPPS does help reduce suicidal behaviours and this persists over time. This is a short-term treatment of less intensity than DBT and MBT and is therefore likely to be a more cost effective intervention that can be implemented into health care services with relative ease.

Other than for STEPPS plus TAU, there is less support from the literature for the effectiveness of group therapies at reducing suicidal behaviours in BPD. Munroe-Blum and Marziali (1995) report comparable findings between their short-term group intervention and individual psychotherapy on a number of outcome variables and indicate the advantage of the group therapy in terms of cost-effectiveness. It is possible that given the variable nature of BPD, one to one therapy is necessary in order to develop an idiosyncratic formulation and to tailor one to one therapy accordingly.

Implications for Clinical Practice

Psychological interventions offering intensive treatments are particularly effective in this population as demonstrated by both the studies investigating DBT and MBT. It can also be seen that any form of structured intervention is beneficial to this populations. It is therefore important when treating this patient group to focus therapy around treatment goals. Many studies suffered from high attrition rates, particularly the group interventions (Blum et al.,

2008; Munro-Blum & Marziali, 1995) which suggests that engagement of this particular patient group can be difficult. Early assessment and treatment of this patient group should focus on developing a therapeutic relationship and engagement to maximise attendance and the subsequent benefits of the psychological intervention. Therapists working with this population should be careful when monitoring treatment effects and risk of suicide. Some of the studies reported here found that individuals would self-report improved mood however they continued to engage in self-harm and suicidal behaviours. This suggests that reliance on mood scales to monitor treatment may not be reliable and professional clinical judgement should be utilised.

Conclusion

Several studies here have reported promising findings and this instils some optimism about BPD, its course and treatment, an area that is often surrounded by pessimism. Linehan et al. (2006) describe BPD as a persistent disorder. Previously, Bateman & Fonagy (2001) described borderline personality disorder as chronically cyclical in nature. What these studies have demonstrated is that with treatment, BPD does improve and this continues over time. Several of the studies here have also demonstrated some remission within the TAU control group. A recent study followed individuals with a BPD prospectively over 10 years and demonstrated considerable reduction in both self harm and suicide attempts (Zanarini et al., 2008). They found that while self-harming behaviours and suicide attempts were more frequent and severe in this group compared to other axis II disorders, the course of BPD is more benign than previously thought. These findings regarding remission, alongside good outcomes reported following a range of psychological intervention, should increase both patient and practitioner confidence that recovery is possible.

In conclusion, there is evidence that psychological interventions do reduce suicidal behaviours in BPD and that this persists over time. At this time DBT has had the strongest empirical support on the basis of methodologically strong studies. There is also evidence for the long-term efficacy of CBT and STEPPS, however their findings were not as powerful. MBT could be effective at reducing suicidal behaviours in the long-term however replication of the current findings in a large sample size is needed. There is limited evidence that group therapy reduces suicidal behaviours in BPD.

References

*Study included in review

**Abstract or full article considered for review

**Alper, G., & Peterson, S. J. (2001). Dialectical behavior therapy for patients with borderline personality disorder. *Journal of Psychosocial Nursing & Mental Health Services, 39*(10), 38-45.

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders.* (4th ed). Washington, DC: Author.

Arsenault-Lapierre,G., Kim,C., & Turecki,G. (2004). Psychiatric diagnoses in 3275 suicides: a meta-analysis. *BMC Psychiatry,* 4 37

**Atha, C., Salkovskis, P. M., & Storer, D. (1992). Cognitive behavioral-problem solving in the treatment of patients attending a medical emergency department - a controlled trial. *Journal of Psychosomatic Research, 36*(4), 299-307.

**Bateman, A., & Fonagy, P. (1999). Effectiveness of partial hospitalization in the treatment of borderline personality disorder: A randomized controlled trial. *American Journal of Psychiatry, 156*(10), 1563-1569.

*Bateman, A., & Fonagy, P. (2001). Treatment of borderline personality disorder with psychoanalytically oriented partial hospitalization: An 18-month follow-up. *American Journal of Psychiatry, 158*(1), 36-42.

*Bateman, A., & Fonagy, P. (2008). 8-year follow-up of patients treated for borderline personality disorder: Mentalization-based treatment versus treatment as usual. *American Journal of Psychiatry, 165*(5), 631-638.

**Bateman, A., & Fonagy, P. (2009). Randomized controlled trial of outpatient mentalization-based treatment versus structured clinical management for borderline personality disorder. *American Journal of Psychiatry, 166*(12), 1355-1364.

Binks, C. A., Fenton, M., McCarthy, L., Lee, T., Adams, C. E., & Duggan, C. (2006). Psychological therapies for people with borderline personality disorder. *Cochrane Database of Systematic Reviews,* (1), 005652.

*Blum, N., St, John, D., Pfohl, B., Stuart, S., McCormick, B., et al. (2008). Systems training for emotional predictability and problem solving (STEPPS) for outpatients with borderline personality disorder: A randomized controlled trial and 1-year follow-up. *American Journal of Psychiatry, 165*(4), 468-478.

**Bohus, M., Haaf, B., Simms, T., Limberger, M. F., Schmahl, C., Unckel, C., et al. (2004). Effectiveness of inpatient dialectical behavioral therapy for borderline personality disorder: A controlled trial. *Behaviour Research & Therapy, 42*(5), 487-499.

**Bohus, M., Haaf, B., Stiglmayr, C., Pohl, U., Bohme, R., & Linehan, M. (2000). Evaluation of inpatient dialectical-behavioral therapy for borderline personality disorder--a prospective study. *Behaviour Research & Therapy, 38*(9), 875-887.

**Carter, G. L., Willcox, C. H., Lewin, T. J., Conrad, A. M., & Bendit, N. (2010). Hunter DBT project: Randomized controlled trial of dialectical behaviour therapy in women

with borderline personality disorder. *Australian & New Zealand Journal of Psychiatry, 44*(2), 162-173.

**Chiesa, M., Fonagy, P., & Gordon, J. (2009). Community-based psychodynamic treatment program for severe personality disorders: Clinical description and naturalistic evaluation. *Journal of Psychiatric Practice, 15*(1), 12-24.

**Chiesa, M., Fonagy, P., Holmes, J., & Drahorad, C. (2004). Residential versus community treatment of personality disorders: A comparative study of three treatment programs. *American Journal of Psychiatry, 161*(8), 1463-1470.

The Consolidated Standards of Reporting Trials (CONSORT): CONSORT 2010 checklist of information to include when reporting a randomised trial. Website: http://www.consort-statement.org/consort-statement/

Choose Life: A National Strategy and Action Plan to Prevent Suicide in Scotland (2002). Website: http://www.scotland.gov.uk/Publications/2002/12/15873/14466

**Comtois, K. A., Elwood, L., Holdcraft, L. C., Smith, W. R., & Simpson, T. L. (2007). Effectiveness of dialectical behavior therapy in a community mental health center. *Cognitive and Behavioral Practice, 14*(4), 406-414.

*Davidson, K., Norrie, J., Tyrer, P., Gumley, A., Tata, P., Murray, H., et al. (2006). The effectiveness of cognitive behavior therapy for borderline personality disorder: Results from the borderline personality disorder study of cognitive therapy (BOSCOT) trial. *Journal of Personality Disorders, 20*(5), 450-465.

Davidson K. (2007) *Cognitive Therapy for Personality Disorders: a guide for clinicians*. London: Arnold (Hodder). 2nd Ed (in press). Hove: Routledge.

Davidson, K.M. (2000). *Cognitive Therapy forPersonality Disorders: A Guide for Clinicians.* London: Arnold (Hodder). 2nd Ed (in press). Hove: Routledge.

Duggan, C., Huband, N., Smailagic, N., Ferriter, M. & Adams, C. (2007). The use of psychological treatments for people with personality disorder: A systemtic review of randomized controlled trials. *Personality and Mental Health, 1,* 95-125

Foulkes, S. H. & Anthony, E. J. (1957) *Group Psychotherapy – The Psychoanalytic Approach*. London: Karnac

**Gratz, K. L., Lacroce, D. M., & Gunderson, J. G. (2006). Measuring changes in symptoms relevant to borderline personality disorder following short-term treatment across partial hospital and intensive outpatient levels of care. *Journal of Psychiatric Practice, 12*(3), 153-159.

**Hampton, M. C. (1997). Dialectical behavior therapy in the treatment of persons with borderline personality disorder. *Archives of Psychiatric Nursing, 11*(2), 96-101.

**Karterud, S., Vaglum, S., Friis, S., Irion, T., Johns, S., & Vaglum, P. (1992). Day hospital therapeutic-community treatment for patients with personality-disorders - an empirical-evaluation of the containment function. *Journal of Nervous and Mental Disease, 180*(4), 238-243.

**Kern, R. S., Kuehnel, T. G., Teuber, J., & Hayden, J. L. (1997). Multimodal cognitive-behavior therapy for borderline personality disorder with self-injurious behavior. *Psychiatric Services, 48*(9), 1131-1133.

**Kern, R. S., Kuehnel, T. G., Teuber, J., & Hayden, J. L. (1997). Rehab rounds - multimodal cognitive-behavior therapy for borderline personality disorder with self-injurious behavior. *Psychiatric Services, 48*(9), 1131-1133.

**Kleindienst, N., Limberger, M. F., Schmahl, C., Steil, R., Ebner-Priemer, U. W., & Bohus, M. (2008). Do improvements after inpatient dialectial behavioral therapy persist in the long term? A naturalistic follow-up in patients with borderline personality disorder. *Journal of Nervous & Mental Disease, 196*(11), 847-851.

**Koons, C. R., Robins, C. J., Tweed, J. L., Lynch, T. R., Gonzalez, A. M., Morse, J. Q., et al. (2001). Efficacy of dialectical behavior therapy in women veterans with borderline personality disorder. *Behavior Therapy, 32*(2), 371-390.

**Korner, A., Gerull, F., Meares, R., & Stevenson, J. (2006). Borderline personality disorder treated with the conversational model: A replication study. *Comprehensive Psychiatry, 47*(5), 406-411.

Lieb, K., Zanarini, M.C., Schmahl, C., Linehan, M.L. & Bohus, M. (2004). Borderline Personality Disorder. *The Lancet, 364,* 453-461

Linehan, M.M. (1984). *Dialectical Behavior Therapy for Treatment of Parasuicidal Woman: Treatment Manual.* Seattle, Washington: University of Washington

**Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry, 48*(12), 1060-1064.

Linehan, M. M., Comtois, K. A., Brown, M. Z. Heard, H. L., Wagner, A. M. (2006). Suicide Attempt Self-Injury Interview (SASII): Development, Reliability and Validity of a Scale to Assess Suicide Attempts and Intentional Self-Injury. *Psychological Assessment, 18*(3), 303-312.

*Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., et al. (2006). Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry, 63*(7), 757-766.

**Linehan, M.M., Dimeff, L.A., Reynolds, S.K., Comtois, K.A., Welch, S.S., Heagerty, P. & Livlahan, D.R. (2002). Dialectical behaviour therapy versus comprehensive validation therapy plus 12-step for the treatment of opiod dependent woman meeting criteria for borderline personality disorder. *Drug and Alcohol Dependence, 67,* 13-26

*Linehan, M. M., Heard, H. L., & Armstrong, H. E. (1993). Naturalistic follow-up of a behavioral treatment for chronically parasuicidal borderline patients. *Archives of General Psychiatry, 50*(12), 971-974.

**Linehan, M.M., Schmidt, H., Dimeff, L.A., Craft, J.C., Kanter, J. & Comtois, K.A. (1999). Dialectical behaviour therapy for patients with borderline personality disorder and drug dependence. *American Journal of Addictions, 8,* 279-292.

**Linehan, M.M., Tuteck, D.A., Heard, H.L. & Armstrong, H.E. (1994). Interpersonal outcome of cognitive behavioural treatment for chronically suicidal borderline patients. *American Journal of Psychiatry, 151*(12), 1771-1776

Linehan, M. M., Wagner, A. W. & Cox, G. (1989). *Parasuicide History Interview: Comprehensive Assessment of Parasuicidal Behaviour.* Seattle: University of Washington.

Livesley, W.J., Jang, K.L. & Vernon, P.A. (1998). Phenotypic and genetic structure of traits delineating personality disorder. *Archives of General Psychiatry,* 55, 941-48.

**Martens, W. H. J. (2006). Effectiveness of psychodynamic treatment in patients with borderline personality disorder. *Journal of Contemporary Psychotherapy*, *36*(4), 167-173.

**McQuillan, A., Nicastro, R., Guenot, F., Girard, M., Lissner, C., & Ferrero, F. (2005). Intensive dialectical behavior therapy for outpatients with borderline personality disorder who are in crisis. *Psychiatric Services*, *56*(2), 193-197.

Mental Health in Scotland. The Matrix: A Guide to Delivering Evidence-Based Psychological Therapies in Scotland. (2008). Website: http://www.bps.org.uk/dcp-scot/information-and-resources-for-professionals/delivering-psychological-therapies-the-matrix.cfm

*Munro-Blum, H. & Marziali, E. (1995. A controlled trial of short-term group treatment for borderline personality disorder. *Journal of Personality Disorders, 9*(3), 190-198.

Munro-Blum, H. & Marziali, E. (1986). *Objective Behavioral Index: Scoring Manual.* McMaster University, Hamilton, Ontario.

O'Conner R.C., Sheehy, N.P. & O'Connor, D.B. (2000). Fifty cases of general hospital parasuicide. *British Journal of Health Psychology, 5,* 83-95

Olabi, B. & Hall, J. (2010). Review: Borderline personality disorder: current drug treatments and future prospects. *Therapeutic Advances in Chronic Disease,1(2),* 59-66.

Oldham, J.M., Skodal, A.E., Kellman, H.D., Hyker, S.E., Doidge, N. & Rosnick, L. (1995). Comorbidity of axis I and axis II disorders. *American Journal of Psychiatry, 152,* 571-578

Paris, J. (1990). Completed suicide in borderline personality disorder. *Psychiatric Annals, 20,* 19-21.

Paris, J. (2002). Chronic Suicidality Among Patients With a Diagnosis of Borderline Personality Disorder. *Psychiatric Services. 53*(6), 738-742.

**Sachsse, U., Vogel, C., & Leichsenring, F. (2006). Results of psychodynamically oriented trauma-focused inpatient treatment for women with complex posttraumatic stress disorder (PTSD) and borderline personality disorder (BPD). *Bulletin of the Menninger Clinic, 70*(2), 125-144.

The Scottish Public Health Observatory. Website: http://www.scotpho.org.uk/home/Healthwellbeinganddisease/MentalHealth/Data/mental_suicide.asp

SIGN (Scottish Intercollegiate Guidelines Network) 50: A guideline developers' handbook. Section5:Systematicliteraturereview.Website:http://www.sign.ac.uk/guidelines/fulltext/section5.html

**Simpson, E. B., Pistorello, J., Begin, A., Costello, E., Levinson, J., Mulberry, S., et al. (1998). Use of dialectical behavior therapy in a partial hospital program for women with borderline personality disorder. *Psychiatric Services, 49*(5), 669-673.

Skodol, A.E., Siever, L.J., Gunderson, J.G., Pfohl, B. & Widiger, T.A. (2002). The borderline diagnosis II: biology, genetics and clinical course. *Biol Psychiatry;* 51, 951-963.

**Stevenson, J., & Meares, R. (1992). An outcome study of psychotherapy for patients with borderline personality-disorder. *American Journal of Psychiatry, 149*(3), 358-362.

Stone, M. H. (1993). Paradoxes in the management of suicidality in borderline patients. *American Journal of Psychotherapy, 47*(2), 255-272.

Swimson, N., Ashim, B., Windfuhr, K., Appleby, L., & Shaw, J. (2007). National Confidential Inquiry into Suicide and Homicide by People with Mental Illness: new directions. *The Psychiatrist, 31,* 161-163.

Tarrier, N. & Wykes, T. (2004). Is there evidence that cognitive behavioural therapy is an effective treatment for schizophrenia? A cautious or cautionary tale? *Behaviour Research and Therapy,* 42, 1377-1401.

Torgerson, S., Lygren, S., Per, A., Onstad, S., Edvardsen, J., Tambs, K., et al. (2000). A twin study of personality disorders. *Comprehensive Psychiatry, 41,* 416-425

**Turner, R. M. (2000). Naturalistic evaluation of dialectical behavior therapy-oriented treatment for borderline personality disorder. *Cognitive and Behavioral Practice, 7*(4), 413-419.

**Tyrer, P., Tom, B., Byford, S., Schmidt, U., Jones, V., Davidson, K., et al. (2004). Differential effects of manual assisted cognitive behavior therapy in the treatment of recurrent deliberate self-harm and personality disturbance: The POPMACT study. *Journal of Personality Disorders, 18*(1), 102-116.

*van den Bosch, L.M., Verheul, R., Schippers, G.M. & van den Brink. (2002). Dialectical Behavior Therapy of Borderline patients with and without substance use problems. Implementation and long term effects. *Addictive Behaviors, 27,* 911-923

**van Wel, E. B., Bos, E. H., Appelo, M. T., Berendsen, E. M., Willgeroth, F. C., & Verbraak, M. J. (2009). [The efficacy of the systems training for emotional predictability and problem solving (STEPPS) in the treatment of borderline personality disorder. A randomized controlled trial]. *Tijdschrift Voor Psychiatrie, 51*(5), 291-301.

Verheul, R., van den Bosch, L.C., Koeter, M.W.J., De Ridder, M.A.J., Stinjen, T. & Wim Van Den Brink. (2003). Dialectical behaviour therapy for woman with borderline personality disorder. *British Journal of Psychiatry, 182,* 135-140.

*Wilberg, T., Friis, S., Karterud, S., Mehlum, L., Urnes, O., & Vaglum, P. (1998). Outpatient group psychotherapy: A valuable continuation treatment for patients with borderline personality disorder treated in a day hospital? A 3-year follow-up study. *Nordic Journal of Psychiatry, 52*(3), 213-221.

Yen, S., & Shea, M.T. (2001). Recent developments in research of trauma and personality disorders. Current Psychiatry Reports, 3, 52-58

Zanarini, M.C., Frankenburg, F.G., Dubo, E.D., Sickel, A.E., Trikha, A., Levin A. & Reynolds, V. (1998). Axis I comorbidity of borderline personality disorder. *American Journal of Psychiatry, 155,* 1733-1739

Zanarini, M. C., Frankenburg, F. R., Reich, D. B., Fitzmaurice, G., Weinberg, I., & Gunderson, J. G. (2008). The 10-year course of physically self-destructive acts reported by borderline patients and axis II comparison subjects. *Acta Psychiatrica Scandinavica, 117*(3), 177-184.

Figure 1.

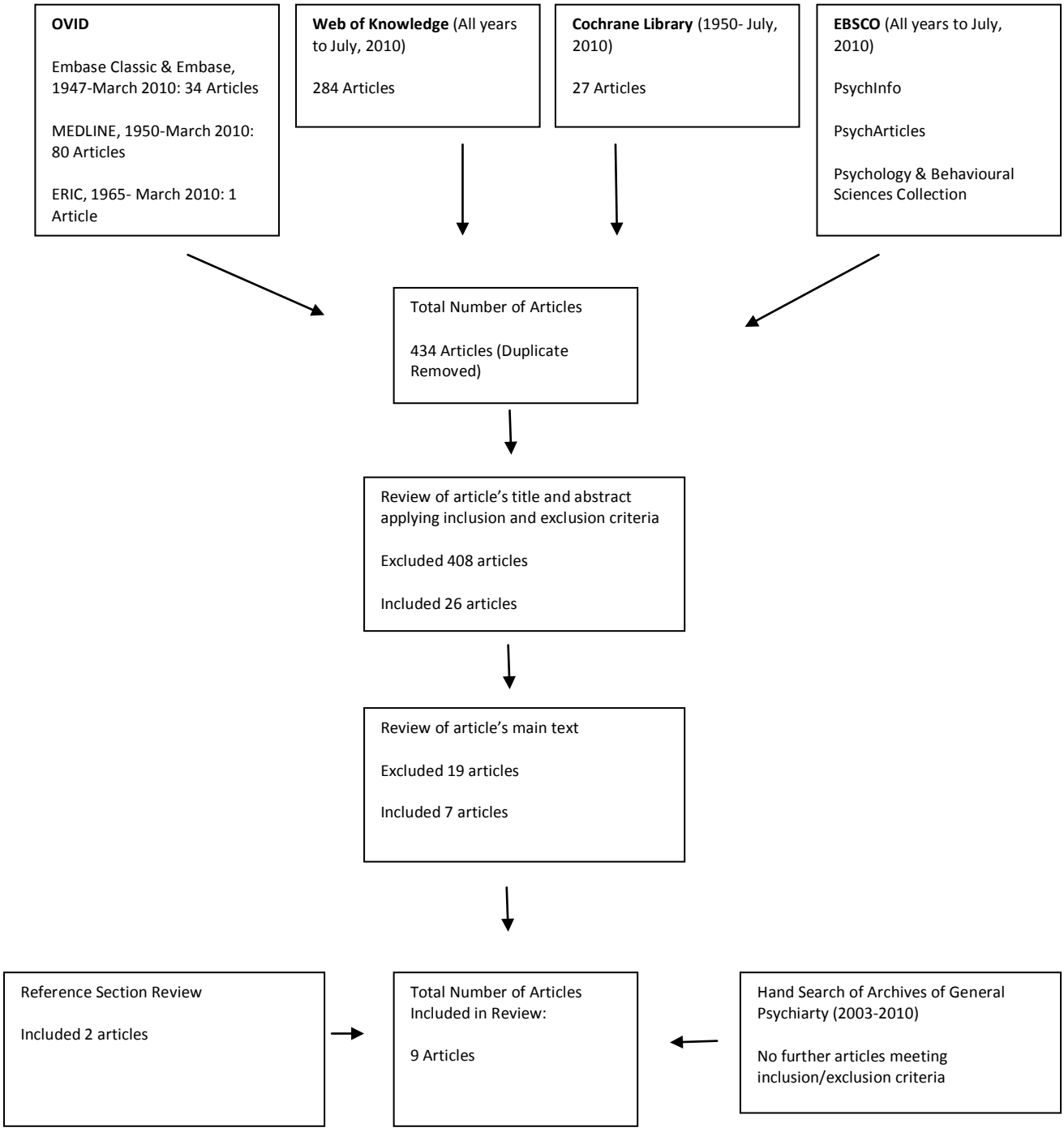
OVID
Embase Classic & Embase, 1947-March 2010: 34 Articles
MEDLINE, 1950-March 2010: 80 Articles
ERIC, 1965- March 2010: 1 Article
Web of Knowledge (All years to July, 2010)
284 Articles
Cochrane Library (1950- July, 2010)
27 Articles
EBSCO (All years to July, 2010)
PsychInfo
PsychArticles
Psychology & Behavioural Sciences Collection
Total Number of Articles
434 Articles (Duplicate Removed)
Review of article's title and abstract applying inclusion and exclusion criteria
Excluded 408 articles
Included 26 articles
Review of article's main text
Excluded 19 articles
Included 7 articles
Reference Section Review
Included 2 articles
Total Number of Articles Included in Review:
9 Articles
Hand Search of Archives of General Psychiarty (2003-2010)
No further articles meeting inclusion/exclusion criteria

Table 1. Data extraction table

Study, Quality Rating (QR) and Design	Sample N, sex and age range, matching	Intervention and control	Baseline and Outcome measures	Follow up	Follow up outcome measures	Analysis	Results across follow up	Limitations
Davidson et al. (2006) QR Excellent RCT	106 randomised CBT:N=54 M age 32.3, 83.3% female TAU:N=52, M age 32.3, 84.6% female **Had received inpatient services or A&E assessment of self harm/suicide attempt in previous 12 mths**	CBT+TAU Versus TAU	**Primary Outcome: suicidal acts measured on the Acts of Deliberate Self Harm Inventory, in-patient psychiatric hospitalisation and accident and emergency attendance** **Secondary Outcomes: Acts of self-mutilation measured on Acts of Deliberate Self Harm Inventory**, Brief Symptom Inventory, BDI-II, State-Trait Anxiety Inventory, Social functioning questionnaire (Qu) , Inventory of Interpersonal Problems, Schema Qu, The Euro QOL Blind assessment	12 month post treatment follow up	As before	Intention to treat analysis To compare 3 primary outcomes between groups logistic regression models for P's with an event Global odds ratios Time to SA: log rank stats and Cox proportional hazards regression models	Primary Outcomes: **No significant difference at 12 mth and 24 mth between groups on in-patient hospitalisation and A&E admission** **Significant reduction over 2 yrs in mean number of suicidal acts in CBT group** Secondary outcomes: 24mth: Significant mean difference on State Anxiety, Young's Schema Questionnaire in favour of CBT+ TAU 12mth: Significant mean difference on Brief Positive Symptom Distress Index in favour of CBT + TAU All patients saw improvements in secondary measures	Positive: administered in clinical setting- ecological validity Did not assess purpose of A&E attendance Average attendance of 16 sessions- suggested 15 may not be enough therefore problematic
Linehan et al. (2006) QR Excellent RCT	111 randomised DBT:N=52, mean age 29 CTBE:N=49, mean age 29.6 All female Participants matched on number of variables prior to randomisation **History of 2 suicide**	DBT Versus Therapy by experts	**Suicide Attempt (SA)Self Injury Interview (measured topography, suicide attempt and medical severity of suicide attempt and self-injury), The Suicidal Behaviours Questionnaire (assess suicidal ideation), The Reasons for Living Inventory, Treatment History Interview**,	12 month post treatment follow up. Assessed at 4 month intervals	As before	For repeated measures data: mixed-effects modelling (random regression modelling and MMANOVA) Difference in rates of change measured Cox	**DBT half rate of SA than CTBE** **DBT half rate of nonambivilant SA** **Fewer SA per period across 2 years when controlling for number of SA in pre-treatment yr** **Among SA'ers highest medical risk lower in DBT**	More group therapy in BDT Although psychotropic med intake reduced during treatment year it resumed in following year therefore some of the effects seen at follow up may be attributed to this for both groups Higher dropout in CTBE however stat analysis controlled for this

	attempts or SH in last 5 years and with one being in last 8 weeks.		Hamilton Rating Scale for Depression. Blind assessment			proportional hazards regression model survival analysis- time to 1st SA t-tests Assessed effects of missing data	**Both groups improved in suicide ideation and reasons for living** **DBT used fewer crisis services throughout 2 yrs** 3X higher risk of drop out in CTBE Both groups reduction in depression scores During treatment yr use of psychotropic meds decreased more in DBT group but no difference during follow up yr CTBE- higher attrition	
Blum et al (2008) QR Good RCT	165 randomised. Data included: N=124: STEPPS:N=65, 52F, Mean age: 31.4 TAU:N= 59, 51F, Mean age: 31.6 **No previous suicide attempt required**	STEPPS program +TAU Versus TAU	Primary Outcome: Zanarini Rating Scale for BPD, Secondary Outcome: The Borderline Evaluation of Severity Over Time, PANAS, BDI, SCL-90-R, Barratt Impulsiveness Scale, Social Adjustment Scale, Clinical Global Impression Scales (self and other rated), Improvement and Severity Scales**, Crisis variables, SA and SH**.	12 month follow up	Borderline Evaluation of Severity over time, BDI, PANAS, CGI severity and improvement ratings, Global Assessment Scale and Social Adjustment Scale. **Crisis variables, SA and SH**.	No Intention to Treat Analysis. For follow up: ANOVA measuring group changes from week 20 to week 72. Group differences on probability of using services Compared on times to first suicide attempts and self harm (not frequency)	Of treatment: greater rate of change in I Group on all measures **but not crisis variables, SA and SH** Large effect size in primary outcome measure (0.84) No difference at follow-up Except other rated CGI rating **More emergency room visits in C Group however not clear what emergency room visit means or measures**	Did not repeat primary outcome measure at follow up 66% assessed at least once during follow up More avoidant PD in TAU group and this associated with baseline severity High attrition 1 year follow up- - I group scores are going up whereas treatment as usual is going down- suggests effects not maintained 63% I Group and 54% C Group receiving psychotherapy- more in I group- could affect findings.
Linehan et al., (1993) QR Good RCT	N:39 Female Age range: 18-45 Matching prior to randomisation	DBT Versus TAU: 13 in individual	**Parasuicide History Interview (PHI) (obtains information about frequency and medical treatment for SA and SH), Self-report scale for**	12mth post treatment	PHI, THI, State Trait Anger Scale, Social Adjustment Scale Interview, Longitudinal Interview Follow-	Not intention to treat analysis. Mann-Whitney and binominal tests, ANCOVA (pre-treatment	**Throughout follow up yr, parasuicide repeat rate lower in DBT.** Claim that likelihood of psychiatric hospitalisation also lower but this approached significance (p<.07)	Allowed continuation in DBT after study termination Small sample size Inflate findings in discussion

	Had to have made at least 1 suicide attempt in last 5 years with one being in last 5 weeks	psychotherapy and 9 not in psychotherapy	**suicidal ideators (measure suicidal ideation),** Treatment History Interview (THI) BDI, Beck Hopelessness Scale (BHS**), The Reasons for Living Inventory** (RLI) Survival and Coping Scale (SCS) Blind assessment		up Evaluation (LIFE) Base Schedule, GAS score, Social Adjustment Scale self report	scores as covariate)	**Fewer parasuicide episodes and medically treated episodes at 6 mth, NS at 12 mth in DBT** **No diff on parasuicide measures between 6 and 12 mth between groups** Lower psychiatric admission between 6-12mth in DBT but no diff 0-6mth. At 6 and 12 mth DBT better employment performance and interviewer rated global adjustment. At 6 mth DBT reported less anger and better social adjustment. At 12 mth DBT better interview rated social adjustment	somewhat- claim that treatment effects are generally maintained in treatment year- maybe 6 mth but not 12 months
Bateman& Fonagy (2001) QR Good RCT	Sample size: 38 I Group: N= 19, Mean age 30.3, 13Female C group:N= 19 Mean age 33.3, 9Female **No previous suicide attempt required** No matching prior to randomisation but groups did not differ on demographic or clinical outcomes measures with exception of higher state trait anxiety scores and lower social adjustment scores in I group. Did not measure prior	Psychoanalytically Orientated Partial Hospitalisation Versus Treatment as Usual	**Suicide and self harm inventory**, Hospital admissions and length of stay, Symptom Check List-90-R, (SCL-90-R) Beck Depression Inventory (BDI), Spielberger State-Trait Anxiety Inventory (SSTAI), Social Adjustment Scale (SAS), Inventory of Interpersonal problems (IIP) Blinding: NA, Self report measures	18 months.	S&SHI at 6, 12 and 18mth SCL-90-R at 6, 12 and 18mth. SSTAI and BDI at 3, 6, 9, 12 and 18 mth. SAS and IIP at 18mth. Hospital admissions and length of stay,	ANCOVA, Pair-Wise Comparisons, Fisher's exact test Intention to treat analysis unclear: state intention to treat but also did analysis excluding drop-outs- unclear which is reported	**Significantly more in I group report non engaging in SH at 6, 12 and 18mth follow up** **More in C group report engaging in SH during 18mth follow up** **Significantly fewer I group made serious suicidal gesture after 6 mth and 18 mth follow up** **Fewer SA during 18mth follow up in I group** Reduced use of services in I group (hospital admission, outpatient psychiatric appointments, community centre visits, medication use) Favourable scores for I group on state anxiety, depression, SCL-90-R scores, interpersonal problems,	I group had ongoing treatment throughout follow up Small sample size I group- more structured professional attention Not clear what aspect of intervention causes effect

	suicidal behaviours						social adjustment.	
Bateman& Fonagy (2008) QR Good RCT	Sample size: 38 I Group: N= 19, Mean age 30.3, 13Female C group:N= 19 Mean age 33.3, 9Female **No previous suicide attempt required** No matching prior to randomisation but groups did not differ on demographic or clinical outcomes measures with exception of higher state trait anxiety scores and lower social adjustment scores in I group. Did not measure prior suicidal behaviours	Psychoanalytically Orientated Partial Hospitalisation Versus Treatment as Usual	**Suicide and self harm inventory,** Hospital admissions and length of stay, Symptom Check List-90-R, (SCL-90-R) Beck Depression Inventory (BDI), Spielberger State-Trait Anxiety Inventory (SSTAI), Social Adjustment Scale (SAS), Inventory of Interpersonal problems (IIP) Blinding: Partial	5years following end of previous follow up	**Number of suicide attempts over 5 years**, service use, symptom status (using Zanarini Rating Scale for DSM-IV) and Global Assessment of Functioning Scale (GAF), vocational status	Non parametric Mann-Whitney and Mann-Whitney, MANOVA	**Fewer suicide attempts in I group** Symptom reduction on Zanarini Rating Scale Reduced utilisation of services (emergency room, psychiatric out patient, community support, medication use. More employed	Small sample size Changed name of treatment in this paper from that used in original studies. Measurement of new outcome measures- scales not used in original. Not clear what it is that is maintaining effect Allegiance effects
Munroe-Blum & Marziali (1995) QR Good RCT	110 randomised, 79 accepted treatment allocation. Group:N=38 Individual Treatment:N=41 **No previous suicide attempt required** No matching of groups or reported post hoc comparisons between	Short-term group treatment Versus Individual psychotherapy	**Objective Behaviours Index (interview examining hospitalisations, SA, problems with law, substance use, impulse control, house moves, psychotherapy and service use)** Social adjustment Scale BDI Hopkins Symptom	Follow up over 12 months. Assessment at post treatment, 6 mths and 12 mths.	As before	Not Intention to Treat Analysis Between group differences at post treatment and 12 month follow up:MANOVA Differences in total cohort between time points: MANOVA	No significant differences between groups at post treatment and 12 month follow up on any outcome variables Total cohort findings over time: Significant improvements over time on behavioural indicators, social adjustment, global symptoms and depression. Behavioural dysfunction, social adjustment, global symptoms index and depression: significant improvements at post treatment	High attrition Discussion does not relate to original hypothesis No limitations recognised

	the groups		Checklist			Correlational analysis of OBI and other outcome measures	and 12 months	
Van den Bosch et al. (2001) QR Good RCT	58 female participants randomised. Intervention: n=27, mean age 35.1 Control: n=31, mean age 35.7 **No previous suicide attempt required** Mixed sample of BPD and BPD + substance misuse Groups matched on age, substance use and social problems. No difference between groups on prior suicidal behaviours.	12 month DBT Versus TAU	Described in original study by Verheul et al (published 2003 but in submission at time of van den Bosch publication) Borderline Personality Disorder Severity Index (parasuicide and impulsivity section) Lifetime Parasuicide Count Described in van den Bosch et al (2001) European version of Addiction Severity Index	6 months	The Addiction Severity Index	General Linear Mixed Models ANOVA and ANCOVA	At 12 months (end of treatment phase): DBT retained patients in therapy (attrition rate of 37% in DBT and 77% in TAU) **DBT: greater reduction in self-mutilating behaviour and self damaging impulsive acts than TAU (at end of treatment).** Beneficial impact on frequency of self-mutilating behaviours more pronounced in those with higher baseline rate than lower baseline rate. Substance Abuse did not modify impact of BDT No treatment effects on substance use throughout treatment and 6 month follow up	Despite reporting that they would examine the efficacy of DBT on course of substance use **and** borderline symptomotology at 18 month (6 month post treatment) follow-up, they only report efficacy in terms of the course of substance use behaviours. All outcome measures for suicidal behaviours are only reported in another article which at the time of this papers publication, had not been published (Verheul et al., 2003). Does not report statistics for treatment effects on BPD symptomotology, again this is contained in the Verheul et al (2003) article Small sample size for type of analysis (3-way interactions)
Wilberg et al. (1997) QR Poor Controlled Observational	Original study: 49 participants with BPD. Follow-up N=43 G group:N= 12, 11 F, mean age 27 Non G group:N=31, 22 F, mean age 32 **No previous suicide attempt required** No matching	Day Treatment followed by outpatient group therapy Vs Day Treatment followed by TAU	Health Sickness Rating Scale, SCID I and II, Global Symptom Index (SCL-90R) and assessment of employment, social contact, **suicide attempts** and treatment during follow-up	Retrospective over 3 year period. Average follow up time is 28 mths for the G group and 33 mths for the non-G group	As before	T tests, chi square, Fisher's exact test and multiple regression analysis	G group higher HSRS scores Both groups changed sig in HSRS scores G group sig lower GSI scores at FU but not at admission and discharge Both groups sig drop in GSI scores during stay (G 0.05 and non G 0.01- bigger diff in non G) however this not maintained in	Retrospective Groups different sizes G Group younger Demographic table contains error G group longer stay in day unit therefore could account for some long term differences

	Post hoc comparisons made on range of variables including previous suicide attempts						FU Rehospitalisation lower in G group but only approaching sig (0.06) G group- more remission from substance but not significant **No significant differences in suicide attempt** Outpx group therapy made significant contribution to variance	States no sig diff in axis II comorbidity yet 8 patients in G group had comorbid diagnosis compared with 23 in non G group which could lower long term prognosis outcomes Medication accounted for significant part of variance Expectation bias (acknowledged in discussion) Results refers to differences that are not significant

Table 2. Sample size

Blum et al. (2008)	Munroe-Blum & Marziali (1995)	Davidson et al. (2006)	Linehan et al. (2006)	Linehan et al. (1993)	Van den Bosch et al (2002)	Wilberg et al. (1997)	Bateman & Fonagy (2001)	Bateman & Fonagy (2008)
165 randomised 124 received treatment and included in analysis Intervention: n=65 Control: n=59	110 randomised 48 included in analysis Intervention: n=17 Control: n=31	106 randomised Intention to treat analysis Intervention: n=54 Control: n=52	111 randomised (8 training cases in DBT group and 2 pilot cases in CBTE group) 101 analysed (intention to treat analysis) Intervention: n=52 Control: n=49	63 randomised and 44 analysed in original study (Linehan et al. 1991). In follow up: 41 included and 39 analysed Intervention: n=19 Control: n=20	58 randomised Intention to treat analysis Intervention: n=27 Control: n=31	43 participants in follow up Intervention: n=12 Control: n=31	44 participants randomised in original study (Bateman & Fonagy (1998) 44 included in follow up. Intention to treat analysis not clear (state intention to treat and then later say that drop-outs excluded)	41 participants Not intention to treat analysis

Table 3. Quality Ratings

	Davidson et al. (2006)	Linehan et al. (2006)	Blum et al. (2008)	Linehan et al. (1993)	Bateman & Fonagy (2001)	Bateman & Fonagy (2008)	Munroe-Blum & Marziali (1995)	Van den Bosch et al (2002)	Wilberg et al. (1997)
Rater 1	98% (excellent)	98% (excellent)	77% (good)	74% (good)	75% (good)	75% (good)	69% (good)	61% (good)	47% (poor)
Rater 2	98% (excellent)	92% (excellent)	79% (good)	NA	77% (good)	77% (good)	NA	NA	NA

Table 4. Between Group Differences on Suicidal Behaviour Outcome Measures Across Follow Up

Study	Suicide outcome measures	Findings across treatment phase	0-6 mth follow up (post treatment)	0-12 mth follow up (post treatment)	0-24 mth follow up (post treatment)	0 mth -5 yrs follow up (post treatment)
Davidson et al (2006)	Acts of Deliberate Self Harm Inventory (measures and distinguishes suicidal attempts and acts of self-mutilation) Inpatient psychiatric hospitalisations Accident and emergency attendance	12 month treatment Significant reduction in mean number of suicidal acts in favour of CBT+TAU No significant differences in number of participants engaging in a suicide attempts, hospitalisation and accident and emergency contact at post treatment		Significant reduction in mean number of suicidal acts across treatment year and 1 year follow up in favour of CBT +TAU No significant differences in number of participants engaging in suicide attempts, hospitalisation and accident and emergency contact at 12 mth follow up	NA	NA
Linehan et al (2006)	The Suicide Attempt & Self-Injury Interview (measures topography, suicide attempts and medical severity of suicide attempt and self injury) The Suicidal Behaviours Questionnaire (assesses suicidal ideation) The Reason for Lining Inventory The Treatment History Interview	12 month treatment Significantly fewer SA attempts per period (4 mthly) during treatment year when controlling for number of SA during pretreatement) Fewer DBT subjects used emergency department at least once for any psychiatric reason (43.1% versus 57.8%) or for suicidal ideation (15.7% versus 33.3%) Fewer DBT subjects admitted to hospital at least once for any psychiatric reason (19.6% versus 48.9%) or		Throughout follow up year DBT half rate of SA (p=0.05) Half number in DBT group made 'non-ambivalent' SA (p=.18NS check with Kate) Significantly fewer suicide attempts per period (4 monthly) across 2 yrs (treatment yr and follow up yr) when controlling for number of suicides in pre-treatment year (p=0.04) Both treatments reduced SH but difference in rates of change between groups NS Of those engaging in SA/SH, highest medical risk lower for DBT (p=0.04) Both groups improved on	NA	NA

		for suicidal ideation (9.8% versus 35.6%)		reason for living and suicide ideation and rate of change between groups NS DBT group used crisis services significantly less that CTBE group throughout treatment and 12 month follow up Fewer emergency department visits for any reason in DBT group (treatment year and 12 month follow up p=0.04) Fewer emergency room visits for suicidal ideation (treatment year and 12 month follow up p=0.02) Fewer hospital admissions for any reason (p=0.007) or for suicidal ideation (p=0.004)		
Blum et al (2008)	Crisis Variables (hospitalisations, emergency department visits, crisis phone calls) Suicide attempts and self-harm acts (self-reported)	20 week treatment STEPPS plus TAU improvements greater than TAU alone but differences not significant		No difference between groups in time to first suicide attempt or self-harm episode across 12 month follow up TAU group made more use of emergency room	NA	NA
Linehan et al (1993)	Scale for Suicidal Ideators, Reason for Living Inventory, Survival and Coping Scale (in treatment phase only) Parasuicide History Interview	12 month treatment (reported in Linehan et al. 1991) During each 4 monthly time period and throughout treatment year, controls engaged in more parasuicidal acts (p<0.01 over treatment yr).	DBT fewer parasuicide episodes (P<0.001) DBT fewer medically treated episodes (p<0.01)	Difference in mean number of parasuicide episodes between 6- 12 mth follow up NS Difference in mean number of medically treated episodes between 6- 12 mth follow up NS Throughout follow year DBT group lower repeat rate of		

		Medical risk scores (of parasuicidal acts) higher for controls (p<0.05) More medically treated episodes for control group (p<0.05) however higher risk scores still higher for control group when comparing control and DBT participants with medically treated episode		parasuicide (p<0.001) Psychiatric in patient days lower in DBT between 6-12 mth follow up (p<0.05)		
Bateman &Fonagy (2001)	Suicide and Self-Harm Inventory (Bateman)- information cross-checked with medical and psychiatric records	18 months treatment SH decreased in I group but remained constant in control group Group differences in SH emerged at 12 mths Significant difference between admission and 18 mths in number of SA in I group but not control group At end of treatment significantly more I group had refrained from SH in preceding 6 months (P<0.005) At end of treatment significantly fewer I group had made an SA in preceding 6 mth (p<0.004)	At 6mth significantly more in I group report not engaging in self-mutilating acts (P<0.0001) Fewer I group had made a 'serious suicidal gesture' at 6 mth follow up (p<0.04)	At 12mth significantly more in I group report not engaging in self-mutilating acts (P<0.0001)	At 18mth significantly more in I group report not engaging in self-mutilating acts (P<0.0004) More SH by control group across 18 month follow up (p<0.001) Fewer I group had made a 'serious suicidal gesture' at 18 mth follow up (p<0.004) Fewer suicide attempts across 18 mth follow up in I group (P<0.001)	NA
Bateman &Fonagy	Suicide and Self-Harm Inventory	18 months treatment	As Above	As Above	As Above	Significantly fewer suicide

(2008)	Emergency service use (assessed by interview and cross checked with medical records- patient recall of self harm was unreliable and could not be independently corroborated from records and so is not reported)	SH decreased in I group but remained constant in control group Group differences in SH emerged at 12 mths Significant difference between admission and 18 mths in number of SA in I group but not control group				attempts across 5yr follow up (P<0.0001) Significantly less use of emergency room (p<0.0001)
Munroe-Blum &Marziali (1995)	Objective Behaviours Index	No significant differences	No significant between group differences post treatment	No significant between group differences at 12 month follow up		
Van den Bosch et al. (2002)	Reported in Verheul et al (2003): Parasuicidal and self damaging impulsive behaviours measured using the appropriate sections of the BPD Severity Index. Self-mutilating Behaviours measured using the Lifetime Parasuicide Count	Van den Bosch et al (2002) report that DBT resulted in reduced self-mutilating behaviours and self damaging impulsive acts Substance misuse did not modify this treatment effect	Only report on substance abuse outcome			
Wilberg et al (1997)	Self-reporting of suicide attempts	Does not report effects on this variable during treatment.			No Significant differences across follow up	

Chapter Two

Major Research Project

An examination of how the diagnostic label 'antisocial personality disorder' affects staff's causal attributions and how staff stress interacts with this process

Gwen Keenan[1]

University of Glasgow

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

Tel: 0141 211 3920

Fax: 0141 211 0356

gkeenan@nhs.net

Prepared in accordance with requirements for submission to *the Journal of Personality Disorders (Appendix 1)*

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

[1]Author for correspondence

Abstract

The aim of this study was to investigate the effects of the diagnostic label 'antisocial personality disorder' on health care staff's causal attributions of challenging behaviour, their emotional responses to that challenging behaviour, their optimism about treatment and behavioural change and their propensity to help. Of additional interest was how three aspects of burnout might impact on the above variables.

This study employed a between subjects questionnaire methodology. There were 62 participants that comprised of healthcare staff working in low and medium secure mental health settings. Participants were given a case vignette describing a challenging behaviour. In one group, the character in the case vignette was described as having a diagnosis of 'antisocial personality disorder', in another group he was described as having a diagnosis of 'schizophrenia' and in the third group no diagnosis was provided. Participants then rated the causal attributions, emotional responses, optimism and helping behaviour. All ratings were taken on seven point bipolar scales. Finally they completed the Maslach Burnout Inventory (1996).

Participants who were given the vignette with the ASPD diagnosis gave higher ratings for causal attributions of control. The no label group responded with the highest ratings of anger. On the sample as a whole, attributions of controllability and internality were correlated. Controllability was correlated with emotional responding and helping behaviour. Optimism was correlated with helping behaviour. Emotional exhaustion was associated with attributions of controllability and internality. Depersonalisation was also associated with attributions of controllability. Diminished personal accomplishment was associated with optimism.

The label antisocial personality disorder may influence how staff make causal attributions of control. This may have implications for how staff respond to such patients. Attributions of control were associated with more anger, less sympathy and less helping behaviour. In addition staff that are experiencing high levels of stress may also have been more vulnerable to making attributions of control. This study found that qualified nursing staff were more likely to experience stress. These findings are discussed in relation to current literature and the clinical implications are described particularly in relation to the formulation of interventions for healthcare staff.

Introduction

The effect of labelling on subsequent perception and evaluation of the environment has been extensively studied and the effects established. Labels provide a useful way of categorising our environment and adapting subsequent judgements and behaviour. The social environment is too complex to accurately represent and it is necessary to categorise information into groups, groups about which we have generalised knowledge (Fiske & Neuberg, 1990). Whilst labelling is a useful and necessary strategy, the effect of labels on subsequent information processing is pervasive and not easily adapted (Huguenard, Sagar & Ferguson, 1970). This is concerning, particularly if that label has negative connotations, as the label may interfere with making an objective evaluation. As diagnostic labels are important and extensively used in clinical settings many studies have examined the effects of mental illness labels on clinicians' subsequent judgements (e.g. Langer & Abelson, 1974; Lewis & Appleby, 1988; Rocket, Murrie & Boccaccina, 2007) and behaviour (Fraser & Gallop, 1993). Langer and Abelson (1974) found that providing clinicians with the label 'patient' caused an increase in negative evaluations about an individual compared to the label 'interviewee'. If this effect is found for the label 'patient' by experienced clinicians, the effects of the label 'personality disorder' could be even greater given the negative attitudes found in staff that work with this patient group (Bowers, Carr-Walker, Allan, Callaghan, Nijman & Paton 2006)

The labelling effects of 'Personality Disorder' (PD) warrant considerable attention due to high prevalence rates of PD both in general and clinical populations. Ten percent of the general population meet diagnostic criteria for a PD. In Mental Health Services, it is estimated that 30-40% of outpatients and 40-50% of inpatients have a PD although this is not always the presenting problem (Casey, 2000). Antisocial PD (ASPD) is estimated to affect

3.6% of the population (Grant, Hassin, Stinson, Dawson, Chou, Ruan et al. 2004) and in prison populations it is estimated that as many as 78% have a PD and 63% have an ASPD (Singleton, Meltzer, Gatward, Coid & Deasy. 1998). The labelling effects of this label will be investigated in this study due to its high prevalence in offending populations. ASPD is characterised by frequent disregard for social norms and the law, persistent lying and deceitfulness, impulsivity, reckless disregard for the safety of others and both physical and verbal aggression (American Psychological Association, 2000). It follows a childhood diagnosis of conduct disorder therefore represents a persistent disorder. Many studies have indicated that there is a general dislike of patients with PD by health care professionals, and several studies have demonstrated that the treatment of such patients is surrounded by pessimism, rejection and hostility (Bowers et al. 2006). Within services there is also ambiguity regarding how to treat PD and whether or not treatment is effective (Bateman and Tyrer 2003). This combination of both lack of skills and knowledge, and dislike of patients with a PD diagnosis, impacts upon patient care. Professionals working in this field may experience role ambiguity as there is a lack of clarity regarding how to treat and care for those with a PD. This impacts upon job satisfaction and stress (Piko, 2006).

Historically the diagnosis of PD has been controversial, with some disputing its reliability as a diagnosis (Kreitman, Sainsbury, Morrisey, Towers & Scrivener, 1961) and its conceptual foundations (Mischel, 1968). However it is a label that is widely used today both in clinical and forensic settings. It has been argued that PD is a derogatory label that results in poor care (Gunn & Robertson, 1976). Lewis and Appleby (1988) found that clinicians judged patients with the PD label as difficult, less deserving of care, manipulative, attention-seeking, annoying and more in control of their suicidal urges and debts compared to controls. The finding that PD patients are judged to be more in control of their symptoms is interesting.

Those viewed as ill are seen as less responsible and less in control of their actions (Rabkin, 1974; Weiner, 1980) and this also applies to 'mental illness'. It is possible that the notion of 'illness' also leads to the belief that the causes of certain behaviour are extrinsic to the person: rather than the cause being attributed to the person it is attributed to the illness. Although PD is now recognised as a mental disorder in the 'Mental Health (Care and Treatment) (Scotland) Act 2003', it was not always recognised as such. This could affect how observers make judgements regarding the person's level of responsibility and controllability. The consequence of this will impact upon the care of patients with PD as judgements of responsibility and controllability are linked to subsequent emotional responses and helping behaviour (Weiner, 1980).

Weiner's Attribution Model (1974) could provide a useful framework for investigating the effect of labels on subsequent evaluative processes and will be utilised in this study. Weiner (1980) argues that humans seek out causal attributions in order to explain behaviour. He asserts that all causal attributions can be characterised across three dimensions; locus (behaviour caused by internal or external factors), stability (behaviour the same or out of character) and controllability (behaviour either under control or uncontrollable). These causal attributions invoke an emotional reaction (e.g. sympathy) which determines subsequent behaviour. Thus it is how behaviour is causally attributed and not the behaviour itself that determines subsequent reactions. In relation to negative behaviour, Weiner's model predicts that if behaviour is evaluated as being under deliberate control, this will invoke anger, however if that behaviour is seen as being uncontrollable then feelings of sympathy will ensue. It is this emotional response that will determine helping behaviour: feelings of anger will result in rejection and feelings of sympathy will result in help.

This theoretical framework could be illuminating of the cognitive processes involved in those caring for PD. Research has indicated that staff working with PD experience negative emotions and that there is a general disliking of patients with PD by health care professionals (Bowers et al. 2006). If PD is not recognised as a mental illness, then staff may be more likely to attribute the causes of their behaviour to personally controllable factors causing negative affective reactions and a decreased propensity to help. In order to investigate whether this is the case, this study has compared staff responses to the label 'ASPD' with 'schizophrenia', an established mental illness label. It is expected that the 'schizophrenia' label will give rise to more externalised and uncontrollable attributions which will cause feelings of sympathy and an increase in helping behaviour. However the PD label will not have this effect. Markham & Trower (2003) demonstrated that patients with a label of 'Borderline PD' (BPD) attracted more negative responses from staff than those with a label of 'schizophrenia' or 'depression'. Staff regarded patients with a BPD diagnosis to be more in control of negative behaviour. Markham & Trower (2003) did not compare the effects of diagnostic labels with a 'no label' condition. The addition of this condition allows an examination of how labels in general influence staff attributions of challenging behaviour and how challenging behaviours are causally attributed without a diagnostic label to organise information.

There is controversy in the attribution literature as to what it is that predicts helping behaviour; emotional responses (Weiner, 1980) or optimism (Sharrock, Day, Qazi & Brewin 1990). Central to Weiner's model of helping behaviour is the mediating role of emotional responses. It is argued that the behaviour elicits a causal search strategy in the observer. The attributional style then causes an emotional response (anger versus sympathy) and this affects the observer's propensity to help. Weiner (1980) found that even when controlling for the

effects of causal attributions, emotional responses were still significantly correlated with participants' propensity to help. However, when emotional responses were held constant, attributional style was no longer correlated with propensity to help (Weiner, 1980). A criticism of this study is that it was carried out using university students as participants who had to rate artificial scenarios. Several studies have tried to replicate this model of helping in clinical settings (Sharrock et al. 1990; Dagnan, Trower & Smith, 1998; Stanley & Standen, 2000). These studies have produced mixed findings regarding the role of emotional responses. Sharrock et al. (1990) investigated the application of this model in a secure mental health setting. This study found that staff ratings of optimism were most clearly associated with helping behaviour and that optimism was negatively correlated with stable, internal and controllable attributions: when staff attributed a challenging behaviour to stable, internal and controllable causes, they were less optimistic about recovery and had lower ratings on propensity to help. Dagnan et al. (1998) investigated this model in care staff working in learning disabilities and found that attributions of controllability predicted negative affect which decreased optimism and this impacted upon helping behaviour. This study intends to explore this issue further, examining the impact of labels on staff's causal attributions, emotional responses, optimism and ratings of propensity to help. It is expected that the label 'ASPD' will cause internal and controllable attributions. This will cause negative affect (anger), decreased optimism and lower ratings of propensity to help. The label 'schizophrenia' will cause less internal and more uncontrollable attributions (in comparison to the ASPD label), positive affect (sympathy), increased optimism and higher ratings of propensity to help. If diagnostic labels do affect attributions then the group given a vignette without a diagnostic label should demonstrate the most internal and controllable attributions, the most negative affect, lowest optimism scores and the lowest ratings of propensity to help.

It is possible that other factors affect causal attributions about challenging behaviour, emotional responses, optimism regarding patient recovery and propensity to help. It is possible that staff stress levels will have an impact upon the processes outlined above. Health care staff have been identified as being an occupational group at high risk of stress and burnout (Tyler & Cushway, 1995). Burnout is a condition causing emotional exhaustion, depersonalisation and diminished personal accomplishment and is recognised as being an occupational hazard. Burnout is caused by prolonged exposure to chronic job-related stress (Maslach, Jackson & Leiter, 1996). Those working with patients with a personality disorder may be particularly at risk due to this patient group's complex, demanding and challenging behaviour (Kurtz & Turner, 2007).

With Weiner's attribution model in mind, it could be hypothesised that staff stress will have an impact upon their propensity to help. As already outlined the construct of burnout has three aspects; emotional exhaustion, depersonalisation and diminished personal accomplishment. Emotional exhaustion is caused by the depletion of emotional resources, inhibiting staff from being able to give to others on a psychological level. This should affect attributions. Gilbert & Osbourne (1989) propose a two stage attribution process. When attributing a person's behaviour, one immediately believes the behaviour is intrinsic to the person then external clues are looked for to explain behaviour. They argue that stress interferes with this two stage process. Those who are experiencing high levels of stress are too preoccupied to reach the second stage of attributing behaviour and are therefore more likely to make internal, controllable attributions. Emotional exhaustion could be the mechanism interfering with this two stage process. Depersonalisation refers to negative and cynical attitudes and feelings about clients. Ryan (1971) argues that this can cause staff to perceive their clients as more deserving of their troubles. This is likely to give rise to

internal, controllable attributions of their challenging behaviour. Diminished personal accomplishment refers to staff evaluating their work negatively, particularly regarding their work with patients (Maslach et al. 1996). This is likely to impact upon optimism ratings, perhaps over and above attributional style.

This study examines the following questions; is there a relationship between attribution ratings and emotional exhaustion, depersonalisation and diminished personal accomplishment scores, which attributions (internal-external, stable-unstable, controllable-uncontrollable) are most closely related and how does this impact upon emotional responses, optimism and propensity to help?

It is important to develop our understanding of the cognitive and emotional responses of staff working with PD. Hastings and Remington (1994) suggest that inappropriate care staff attributions about challenging behaviour in learning disabilities will result in inappropriate interventions. Bowers Alexander, Simpson, Ryan and Carr-Walker (2007) demonstrated how staff attitudes to PD affect the type of interventions utilised. Understanding the causal attributions made by staff working with individuals who have a diagnosis of PD will help identify such inappropriate beliefs and allow the development of training programmes which promote a better understanding of PD and how to manage it. This is especially important given recent changes to The Mental Health Act (2003). The criteria for compulsory detention in the new act are assessment of mental disorder combined with a set of conditions that are intended to establish the unavoidable need for treatment in order to prevent harm to self or others. In contrast to the Mental Health Act (1983), the definition of mental disorder places an emphasis on resulting psychological dysfunction rather than on the classification of an underlying mental illness, impairment or psychopathic disorder. Due to such changes

secondary health services should see an increase in patients with a PD. It is therefore important that staff cognitions and emotions are examined and considered.

Aims

This study has several aims:

- Examine the effect diagnostic labels have on care staff's causal attributions of challenging behaviour, care staff's emotional responses to the challenging behaviour, their ratings of optimism regarding treatment and their ratings of propensity to help.
- Examine the relationship between care staff's causal attributions, emotional responses, optimism and helping behaviour.
- Examine the three aspects of burnout measured by the Maslach Burnout Inventory (1996), and examine how these are related to care staff's causal attributions, emotional responses, optimism and helping behaviour.

Hypotheses

To address these aims this study will examine four hypotheses.

- The 'antisocial PD' label will cause higher internal and controllable attributions than the 'schizophrenia' label. No label will cause the highest internal and controllable attributions.
- Higher attributions to internal, controllable and stable causes will increase negative emotional responses and result in lower levels of optimism and a decreased propensity to help. Attributions to external, uncontrollable and unstable causes will result in

more positive emotional responses and in higher levels of optimism and an increased propensity to help.

- On the basis of the hypothesised attributional responses, the 'no label' group will have higher scores in anger and lower scores on sympathy, optimism and propensity to help. The 'schizophrenia label' group will have the lowest ratings of anger, and higher scores on sympathy, optimism and helping behaviour.

- Stress levels will impact upon the attribution process. Emotional exhaustion and depersonalisation will be associated with internal and controllable causal attributions. Diminished personal accomplishment will be associated with optimism scores.

Method

Participants

To calculate sample size a power calculator was used (G*Power 3. 0. 10). In line with convention, alpha of 0.05 (two-tailed) and power of 0.8 was set. Mean and standard deviations for the groups were obtained for causal attributions reported in a study by Markham & Trower (2003). The values used were those relating to attributions of 'control of event' following being presented with the label 'borderline personality disorder' (Mean 25.5, S.D. 5.1) and 'schizophrenia' (Mean 18.0, S.D. 7.6). This study obtained an effect size of 0.50. To obtain this effect size a sample size of 42 is required.

Participants were qualified and non-qualified nursing and care staff, working in low and medium secure mental health hospitals within the city of Glasgow, Scotland. Patients residing in these facilities have a diagnosis of psychosis and many have co-morbid personality disorder. The following inclusion criteria were applied:

Inclusion Criteria

Nursing and care staff with daily patient contact

Over one year experience (in current job or similar capacity (mental health settings))

Working over 20 hours per week

English as a first language

Sample Characteristics

Sixty-two participants took part in this study, 31 females and 31 males. The age range was 20 years old to 59 years old and the mean age was 38 years old. Thirty-one participants had 0-5 years of experience in their current role or a similar capacity, 9 had 5-10 years of experience, 5 participants had 11-15 years of experience and 16 participants had 16+ years of experience. Thirty-six participants were qualified nursing staff and 26 were non-qualified nursing assistants. The characteristics of each group are summarised in table 1.

Measures

Causal attributions, emotional responses, optimism and propensity to help.

To assess the effect of labels on causal attributions three vignettes were created for the study. Vignette one described a challenging behaviour and no diagnostic label was used to describe the individual. Vignette two described the same challenging behaviour and a diagnosis of 'anti-social personality disorder' was provided. Vignette three described the same challenging behaviour and a diagnosis of 'schizophrenia' is provided. These case studies were created for the study.

The rating scales are designed to tap into care staff's causal attributions of challenging behaviour, their emotional responses to that challenging behaviour, their level of optimism regarding patient recovery and their propensity to help. Rating scales have been found to be the method of choice when studying causal attributions (Elig & Frieze, 1979). The rating scales are described below and were developed and provided by Professor Dagnan (1998).

Causal attributions were measured on a seven-point bipolar scale for locus (internal/external), stability (stable/unstable), globality (global/specific) and controllability (controllable/uncontrollable). Higher scores on these scales indicate greater internality, stability, globality and controllability.

Emotional responses were assessed by obtaining ratings of 'anger' and 'sympathy' on a seven-point bipolar rating scale. For the 'anger' scale a rating of one indicated 'not angry at all' and a rating of seven indicated 'extremely angry'. For sympathy, a rating of one indicated 'not sympathetic at all' and a rating of seven indicated 'extremely sympathetic'. These two emotions have been found to be the most important in predicting subsequent helping behaviour (Weiner 1980).

Optimism was assessed on ten, seven-point bipolar rating scales. Participants rate how strongly they agree with a set of statements regarding optimism about treatment and patient recovery when a person displays the challenging behaviour described in the case vignette. This scale is derived from the optimism-pessimism scale developed by Sharrock et al. (1990) and also used by Dagnan et al. (1998).

Propensity to help was assessed on a seven-point bipolar rating scale. A rating of one indicated a person was willing to invest 'as much extra help as possible' and a rating of seven indicated that they would give 'no extra help at all'. This item was scored in reverse.

Staff burnout was assessed using the Maslach Burnout Inventory (1996). This is a 22-item inventory designed to measure three aspects of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. The reliability and validity of this scale have been studied. Internal consistency was estimated by Cronbach's coefficient alpha (n=1316). The reliability coefficients for the subscales were: .90 for emotional exhaustion, .79 for depersonalisation and .71 for reduced personal accomplishment. Data on test-retest reliability has also been gathered and the reliability coefficients for the subscales were: .82 for emotional exhaustion, .60 for depersonalisation and .80 for reduced personal accomplishment. Although these coefficients range from low, medium to high, all are significant at the .001 level. Convergent and discriminant validity has also been demonstrated (Maslach et al. 1996).

Procedure

Following obtaining ethical approval (appendix 3.1), permission was sought to contact the ward managers of a medium and low secure unit. A meeting was set up with the ward managers where the study aims, procedure and utility was described. Participants were met in their work place and taken to any quiet and available room. They were then informed of the nature of the study both verbally and on an information sheet. Following this consent was obtained. Participants then completed questionnaire one, which obtained information regarding age, job title, qualifications, years of experience and frequency of supervision (the information sheet, consent form and occupation details questionnaire are in appendix 3.2-3.4). Once the full sample had been recruited, the sample was assigned to three groups using a pseudo randomisation procedure. First the , whole sample's response forms were divided into two groups; 35 years old and under and 36 years old and over (35yrs was the mediun age). To account for years of experience a further subdivision was carried out (describe

groups). Having then balanced the participants by age and years of experience, they were then allocated into the three groups; describe groups.. Twenty participants were assigned to the 'no label' group, 20 were assigned to the 'schizophrenia label' group and the remaining 22 were assigned to the 'Antisocial PD (ASPD) label' group. Study packs were made for each participant containing instructions (appendix 3.5), the case vignette (appendix 3.6), the causal attribution, emotional responding, optimism and helping questionnaire (appendix 3.7) and the Maslach Burnout Inventory (1996) (appendix 3.8). These study packs were left with the ward managers to give out and collect. The researcher visited the wards up to four times per week to collect the study packs. Seventeen participants did not return their questionnaires. Due to time constraints the researcher visited the wards and approached members of staff who had not participated. They were taken to any available, quiet room and given an information sheet and then consent was obtained. Participants were then given the study pack to complete. This procedure did not imbalance the groups for years of experience ($\chi^2 = 1.87$; $df = 6$; $p = .93$) or age ($F = .38$ (2, 59); $p = .68$).

To stop future participants from knowing that the diagnostic label had been manipulated, debriefing did not occur until all participants had completed the study (debriefing sheet in appendix 3.9). All data was made anonymous.

Data Analysis

To test that there were no significant differences between the groups for age a one-way analysis of variance (ANOVA) was employed. To ensure that there was no significant difference between the groups for gender, qualification level and length of time in job, a series of Chi-square analyses were employed. Details of supervision was not analysed as the data collected was extremely variable and it was noticed during data collection that many participants could not complete this question due to never having received supervision.

Exploration of the data revealed that data for all variables other than for ratings of 'optimism' 'emotional exhaustion', 'depersonalisation' and 'diminished personal accomplishment' were skewed as indicated by the Kolmogorov-Smirnov statistic (appendix 3.10). It was not possible to transform these variables therefore non parametric tests were employed. To examine whether the diagnostic label affected participant responses on the dependent variables (causal attributions of internality, controllability, globality and stability, emotional response ratings, optimism ratings (summed score) and propensity to help) the Kruskal-Wallis test was employed. Where differences were found the Mann-Whitney test was carried out to assess differences between ratings for the 'ASPD label' condition, the 'schizophrenia label' condition and the 'no label' condition. As three sets of comparisons were being made the level of significance for the Mann-Whitney test was adjusted by dividing the .05 significance level by three. Significance was therefore set at .017.

Spearman's correlation test was carried out to assess the associations between the dependent variables. To examine the relative impact of causal attributions, emotional responses and optimism on propensity to help parametric partial correlations were calculated.

Ethics

This study was reviewed by and ethical approval obtained from the West of Scotland Research and Ethics Committee. The approval letter is in appendix 3.1

Results

Sample characteristics

Table 1 displays sample characteristics for the three groups. The groups were balanced on age (F = .38 (2, 59); p = .68) years of experience (χ^2 (6) = 1.87; p = .93) gender (χ^2 (2) = .52; p=.77) and on number of qualified nursing staff versus non qualified nursing staff (χ^2 (2)

=1.77; p = .41). To examine the effect of years of experience on the dependent variables (causal attributions, emotional responses, optimism, propensity to help, emotional exhaustion, depersonalisation and diminished personal accomplishment) the Kruskal-Wallis test was carried out. There were no significant differences on any of the dependent variables (see appendix 3.11). Mann-Whitney test examined differences between qualified and non qualified staff on the dependent variables. As can be seen in table 2 qualified staff had lower mean scores for causal attributions of stability, higher mean scores for level of optimism. Within the qualified nursing staff group there was a significant correlation between attributions of stability and optimism about treatment (r_s = -42; p = .006). Attributions to more unstable causes were associated with higher scores on optimism about treatment. Qualified staff also had higher mean scores for emotional exhaustion.

Insert table 1 here

Inset table 2 here

Hypothesis One

The first hypothesis was that the 'ASPD' label will cause higher internal and controllable attributions than the 'schizophrenia' label. No label will cause the most internal and controllable attributions. This hypothesis was partially supported.

Table 3 displays the means, standard deviations, medians and interquartile range for each group's causal attributions. To examine between group differences on these variables the

Kruskal-Wallis test was used and the level of significance was set at .05. The hypothesis is directional therefore one-tailed results are reported. There was a significant difference in mean scores on attributions of controllability between the three groups (H (2) =16.21, p = .003). For all other causal attribution scores there were no significant differences between the groups (see table 3). The Mann-Whitney test examined differences between each group for attributions of controllability. The significance level was set at .017. Means, standard deviations, medians and interquartile ranges are displayed in table 4. There was not a significant difference between the 'no label' group and the 'schizophrenia label' group on attributions of controllability (U = 172.00, p = .22, r = -.12). There was a significant difference between the 'no label' group and the 'ASPD' group on attributions of controllability; the 'ASPD' group were causally attributed as more in control of their challenging behaviour (U =122.00, p =.009, r = -.37). There was a significant difference between the 'schizophrenia label' group and the 'ASPD label' group on attributions of controllability; the 'ASPD label' group attributed the challenging behaviour to more controllable causes (U = 98.00, p =.002, r = -.48). It was expected that there would be group differences on ratings of internal/external attributions. It can be seen from table 3 that the highest mean score on ratings of internality is for the 'no label' group and the lowest score is for the 'schizophrenia label' group however these differences are not significant (H (2) =.28, p=.43).

Insert table 3 here

Insert table 4 here

Hypothesis Two

The second hypothesis was that higher attributions to internal, controllable and stable causes will increase negative emotional responses and result in lower levels of optimism and a decreased propensity to help. Attributions to external, uncontrollable and unstable causes will result in more positive emotional responses and in higher levels of optimism and an increased propensity to help. Attributions of controllability will be most closely associated with emotional responding. This hypothesis was partially supported.

The Spearman's correlation coefficient was calculated for all of the dependent variables. As there was only one group difference on attributions of controllability the subsequent correlational analysis was performed on the whole sample. These are reported in table 5. Attributions of internality and controllability are correlated (r_s = .26; p = .02) however neither internality nor controllability attributions are correlated with stability or globality attributions. Attributions of controllability were correlated with anger (r_s = .26; p = .03), sympathy (r_s = -.49; p<.001) and helping (r_s = -.32; p = .006). When the person in the case study was regarded to be more in control of their challenging behaviour they were also responded to with higher scores of anger and lower scores of sympathy and lower scores in ratings of propensity to help. There was a trend for higher scores on attributions of controllability to be correlated with lower scores for optimism (r_s = -.19; p = .08) however this was not significant. Attributions of globality was correlated with optimism (r_s=.26; p=.03). Attributions of internality did not correlate with anger, sympathy, optimism or propensity to help.

High scores in anger were correlated with lower scores in optimism (r_s= -.31; p=.008). Sympathy was correlated with propensity to help with those reporting more sympathy also reporting a higher level of propensity to help (r_s= .53; p<.001). Anger was not correlated with propensity to help (r_s=.16; p =.12). Optimism was correlated with propensity to help (r_s= .24; p = .035). Those who were optimistic about treatment were more willing to invest extra help.

Insert table 5 here

Consistent with Weiner's model (1980), attributions of control were significantly correlated with emotional responses. As has been reported, propensity to help was significantly correlated with attributions of controllability, sympathy, optimism and helping. To examine the relative impact of these variables on helping, partial correlations were calculated where the effect of one variable is held constant. The relative impact of both optimism and sympathy on propensity to help was examined. When controlling for the effects of sympathy, optimism was no longer correlated with propensity to help (r_s=.06; p=.33). When controlling for the effects of optimism, sympathy and propensity to help were significantly correlated (r_s=.48; p<.001). To examine the relative impact of attributions of controllability and sympathy on propensity to help partial correlations were calculated. When controlling for the effects of sympathy, attributions of controllability are no longer correlated with propensity to help (r_s=.009; p=.47). When controlling for the effects of controllability, sympathy and propensity to help are significantly correlated (r_s=.45; p<.001). While controllability is associated with sympathy, it is sympathy that is associated with propensity to help.

Hypothesis Three

On the basis of the hypothesised attributional responses it was expected that the 'no label' group will have higher scores in anger and lower scores on sympathy, optimism and propensity to help. The 'schizophrenia label' group will have the lowest ratings of anger and higher scores on sympathy, optimism and helping behaviour. This hypothesis was partially supported.

The impact of diagnostic label on emotional responding, optimism and helping behaviour was examined. These results are reported in table 6. The Kruskal-Wallis test indicated no significant differences between the groups on scores for sympathy, optimism or helping. There was a significant difference between the groups on their ratings of anger (H (2) =5.79; p=.03). To examine where this difference lay, the Mann-Whitney test (one tailed) was employed with the level of significance set at .017. Means, standard deviations, medians and interquartile ranges are reported in table 7. There was a significant difference in median scores between the 'no label' group and the 'schizophrenia label' group (U = 116.50; p = .009, r =.37). Those in the 'no label' group reported more anger in response to the challenging behaviour than those in the 'schizophrenia label' group.

Insert table 6 here

Insert table 7 here

Hypothesis Four

It was expected that stress levels will impact upon the attribution process. Emotional exhaustion and depersonalisation will be associated with internal and controllable causal attributions. Diminished personal accomplishment will be associated with optimism scores. This hypothesis was supported.

It was found that emotional exhaustion was correlated with attributions of internality (r_s = .40; p = .001) and controllability (r_s = .26; p = .04). Participants who were experiencing higher levels of emotional exhaustion attributed the cause of challenging behaviour as being more internal and controllable. Depersonalisation was correlated with attributions of controllability (r_s = .41; p = .001) but not internality (r_s = .09; p = .26). Diminished personal accomplishment was correlated with optimism (r_s = .35; p = .003).

Discussion

This study examined how causal attributions regarding challenging behaviour, relate to subsequent emotional responding, optimism and helping behaviour. Of further interest was how diagnostic labels might affect this process and what the impact might be of three aspects of burnout; emotional exhaustion, depersonalisation and diminished personal accomplishment.

The effects of diagnostic labels on causal attributions

It was expected that the ASPD label would give rise to higher internal and controllable attributions than the 'schizophrenia' label. This expectation was based on the premise that when someone has an 'illness' the cause of their symptoms is extrinsic to the person and out of their control. By not providing a diagnostic label (no label condition) participants do not have a reference to facilitate causal attributions and this may result in the most internal and

controllable attributions because having a diagnostic label would influence their beliefs about being unwell. It was found that there was a significant difference between the groups on attributions of controllability. Participants who read a case study describing a challenging behaviour by a person with the ASPD label, responded with higher scores for attributions of controllability than the other two groups. This suggests that those with ASPD are regarded as being more in control of the causes of their challenging behaviour than those with a diagnosis of schizophrenia. This is consistent with the findings of Markham & Trower (2003) who found that participants in their study evaluated patients with a diagnosis of borderline personality disorder as being more in control of their challenging behaviour than those with a diagnosis of schizophrenia or depression. However, it was expected that the provision of any diagnostic label would attenuate attributions of controllability and that this would be demonstrated by comparison with a 'no label' condition where the most controllable attributions would be found. However, even in comparison to this condition, participants rated the ASPD case as being more in control of the causes of their challenging behaviour. This label has an effect on how mental health workers evaluate the causes of challenging behaviour. Rather than objectively evaluating the behaviour, the diagnostic label leads to attributing the person as being in control of their behaviour; an attribution that has been shown to be associated with subsequent negative emotional responses (Weiner, 1980). Dagnan et al. (1998) found that staff attributions of controllability also lead to staff negatively evaluating the patient. Bowers (2006) found that those with a PD label are often met with hostility. The causal attribution process may be what is causing these prevalent negative attitudes reported in the literature. Patients with ASPD are regarded as having more control over the causes of their negative behaviour. This implies that they are also regarded as being in control of changing that behaviour. ASPD is pervasive and is characterised by poor behavioural control and both physical and verbal aggression (American Psychological

Association, 2000). This could lead to frustration in staff working with this group; while their behaviour is persistently challenging, they are viewed as having control over the cause of this behaviour, implying self-efficacy to overcome it.

It had been expected that a diagnostic label may cause staff to respond with lower ratings of internal attributions as the patient would be regarded as having less *personal* control over their challenging behaviour. There were no between group differences on this variable. For all groups, internality was rated midway between internal and external points of the rating scale. It is possible that participants found it difficult to rate this item as there was very little contextual information in the vignette that would have facilitated external attributions. It is also possible that a diagnostic label in itself does not lead to the cause of the challenging behaviour being externalised. Although those with schizophrenia are viewed as less in control of the causes of their challenging behaviour, the cause is still located internally. This finding is also consistent with that of Markham and Trower (2003). Future research should examine this more carefully, developing case studies with a more detailed description of a challenging behaviour and the environment within which it occurs.

Although not a main focus of this research, this study also gathered participants' ratings for globality and stability and compared them between the three groups. Global attributions are when the cause of the behaviour is regarded as being broad and having an influence on other events. Causal attributions of stability are evaluations regarding whether the cause of the behaviour is stable over time. Sharrock et al. (1990) examined the role of stability with the expectation that attributions to stable causes such as 'mental handicap' would result in pessimism regarding the benefits of helping, while attributions to unstable causes would be associated with greater optimism. With regard to labelling it was unclear what the effect might be. Both schizophrenia and ASPD can cause challenging behaviour in a wide range of

contexts. This could lead to global attributions in both conditions. With regard to stability, both conditions can vary. Antisocial behaviour in childhood persists into adulthood and is pervasive (Eme, 2010) therefore ASPD may be conceptualised as a stable disorder which might lead to stable attributions of challenging behaviour. Evidence for the efficacy of psychological interventions is also limited (Gibbon, Duggan, Stoffers, Huband, Völlm , Ferriter et al. 2010) suggesting that not only is it a stable disorder but also persistent. Schizophrenia in contrast has been found to have a more variable course and recovery has been well documented (Harding, Brooks, Ashikaga, Strauss & Breier, 1987). This could lead to attributions to unstable causes. Markham & Trower (2002) had anticipated that because there is evidence that staff are less optimistic about change in patients with the BPD label (Dawson, 1996, Gabbard, 1989, Linehan, 1993) this could be associated with more stable and global attributions. In line with their prediction they found that stability ratings were higher for the BPD group. It is possible that stability attributions are higher in this group than in the schizophrenia group because they are regarded as more treatment resistant and therefore the cause of their challenging behaviour is more stable. Despite findings that psychological therapies are effective in individuals with BPD (Binks, Fenton, McCarthy, Adams and Duggan, 2006; Duggan, Hubband, Smailagic, Ferriter & Adams, 2007) and that BPD gets better over time (Zanarini, Frankenburg, Reich, Fitzmaurice, Weinberg and Gunderson, 2008) it would appear that staff in the Markham and Trower (2002) study still viewed the cause of challenging behaviour as being more stable than that of schizophrenia. However this study found no group differences on this variable. The participants in this study rated the causes of the challenging behaviour equally in terms of stability and globality across the three conditions. This contrasts with the findings of Markham and Trower (2003). Their study used a within subjects design and during the pilot phase of their study, participants had said that they had tried to give consistent ratings across each diagnostic label condition which

should have lead to more conservative findings than a between subjects design. The label ASPD was used in this study as it is a more relevant diagnosis in forensic settings and perhaps challenging behaviour in individuals with ASPD is causally attributed differently from the label BPD. However it is also possible that the methodology employed in this study did not pick up on subtle differences between the groups. There was a tendency for participants to rate globality and stability midway and this may indicate that participants were unable to rate causal attributions in terms of stability and globality due to limited information in the case vignette.

Causal attributions, emotional responding, optimism and help giving

Previous literature has found that attributions of controllability lead to increasing anger and less sympathy, less optimism and less help giving (Sharrock et al. 1990; Dagnan et al. 1998). Whereas Weiner (1980) emphasised the link between causal attributions of control, emotional responding and helping behaviour, both Sharrock et al. (1990) and Dagnan et al. (1998) found there to be a mediating role of optimism between emotional responding and helping behaviour. This study found that causal attributions of internality and controllability were significantly correlated indicating that those who rated the person as being more in control of the cause were also rated with causal attributions of internality. However it was attributions of controllability that correlated with emotional responding and helping. This is consistent with Weiner's (1980) findings that attributions of controllability are the primary determinants of emotional responding. The more control a person is regarded to have over their challenging behaviour, the more observers react with increasing anger, decreasing sympathy and are less likely to invest help. Sympathy was most strongly correlated with helping behaviour with staff experiencing high levels of sympathy reporting a willingness to invest extra help. Anger was not correlated with helping behaviour which contrasts with Weiner's

(1980) findings where anger reduced propensity to help. This study was carried out in a clinical setting with staff who work with the patient group under investigation every day. In Weiner's (1980) study, the participants were university students rating artificial helping scenarios. The findings here are more likely to have better ecological validity. Staff are paid to help others and are therefore less likely to allow emotions such as anger to reduce their tendency to help.

Optimism was also significantly correlated with helping. Those who are optimistic about behaviour change and treatment were also more willing to invest extra help. In contrast to the findings of Dagnan et al. (1998) and Sharrock et al. (1990) optimism was not correlated with attributions of stability however it was correlated with attributions of globality. It has been argued that these two types of attributions are measuring the same construct and Weiner (1980) argued that there was no empirical justification for a separate globality scale. However, if this were the case these two variables should be highly correlated but they are not. Of interest too is the direction of the relationship between globality and optimism; the more the cause of the behaviour is seen as being pervasive the higher the optimism scores. It is unclear why this finding contrasts with that of Sharrock et al. (1990) and Dagnan et al. (1998). Similarly to the Sharrock et al. (1990) study, this study was conducted with staff working in secure settings and who work with patients with psychosis and personality disorders. However, in contrast to the study by Sharrock et al. (1990) this present study created a fictional character for the case study. Sharrock et al. (1990) had participants think of a target patient who had been resident in the secure unit. Attributions were measured by asking participants to write down the major cause of 14 negative institutionally relevant behaviours each with reference to the target person. Causal attributions were then rated on scales similar to those used in the present study. It is possible that the high correlation

between globality and stability found in Sharrock et al's (1990) study reflects attributes of this target patient and his behaviour. Dagnan et al (1998) did not find these two variables to be correlated, but they did find a significant correlation between ratings of stability and optimism with attributions to unstable causes being associated with increasing optimism. Dagnan et al (1998) were examining causal attributions about challenging behaviour in those with learning difficulties. In this patient group the stability of the cause may be more transparent than it is in patients with mental health disorders and more closely linked with expectancy of change which relates to optimism. If the cause of the behaviour is attributed to the stable learning disability then optimism would be low because the learning disability can not readily change. However in the case of mental illness, behaviour cannot be so easily attributed to stable causes given the changing nature of both ASPD and schizophrenia. ASPD is possibly more persistent in a young adult and could be seen as stable however attributions to this apparently *stable* cause may not result in pessimism because patients may get better over time and change from day to day.

The relative impact of attributions of control, sympathy and optimism were examined by examining partial correlations where one variable is held constant. Although all other correlations were calculated using the nonparametric Spearman's test it was necessary to use a parametric test to analyse this, as there is not a non parametric equivalent within SPSS. It was found that sympathy was significantly correlated with helping behaviour even when attributions of controllability are held constant however when sympathy ratings were held constant attributions of control were no longer correlated with helping behaviour. This indicates that it is emotional responding, specifically sympathy, that is predicting helping behaviour over and above the influence of causal attributions. This is consistent with Weiner (1980) who found that affect was the main predictor of helping behaviour. The same

procedure was used to examine the influence of optimism on helping behaviour. It was found that when optimism scores are held constant, sympathy is significantly correlated with helping however when sympathy is held constant, optimism is no longer correlated with helping behaviour. Unlike previous studies (Sharrock et al. 1990; Dagnan et al. 1998), this study has not found a mediating role of optimism between causal attributions of control and helping behaviour and the findings reported here are more consistent with Weiner (1980) where the mediating variable is sympathy. Optimism and anger were significantly correlated with those experiencing high levels of anger reporting less optimism about treatment and behaviour change. As discussed previously, nursing and care staff may not respond to feelings of anger as they are professionals paid to help those in their care. This could also apply to feelings of optimism. Although staff may feel that behaviour change is unlikely and treatment might be ineffective, they will still help those in their care as it is their duty.

The impact of diagnostic label on emotional responses, optimism and helping behaviour

It was anticipated that as a result of the hypothesised attributional process, participants given the vignette with the ASPD label, would respond with more anger, less sympathy, less optimism and a lower propensity to help whereas those given the label schizophrenia in the vignette would have higher ratings of sympathy, lower ratings of anger, higher levels of optimism and an increased propensity to help. The no label condition would have the highest anger scores, lowest sympathy and optimism scores and the least propensity to help. There was a difference in ratings of anger between the three groups. It was found that participants had higher ratings of anger in the no label condition compared to participants in the schizophrenia label condition but the difference between the other comparisons were not significant. As described, previous research has demonstrated that causal attributions of control are associated with increasing anger and this study has also demonstrated a

correlation between these variables, however despite the ASPD group giving the highest ratings of controllability, they did not respond with the highest ratings of anger. It would appear that the diagnostic label does decrease feelings of anger however the cognitive process that mediates this emotional reaction is unclear.

The impact of burnout on causal attributions, emotional responses, optimism and propensity to help.

Consistent with previous literature is the finding that causal attributions impact upon emotional responding and propensity to help and that emotional responses can impact upon optimism about treatment and behavioural change. However this study also examined the impact of burnout on these variables. Three aspects of burnout were measured; emotional exhaustion, depersonalisation and diminished personal accomplishment. It was expected that emotional exhaustion and depersonalisation would be associated with internal and controllable causal attributions and that diminished personal accomplishment would be associated with optimism scores. As expected, emotional exhaustion was significantly correlated with both internal and controllable attributions. Those experiencing high levels of emotional exhaustion are more likely to evaluate a person as being in personal control of their challenging behaviour. Depersonalisation was also correlated with internal attributions but not with attributions of control. This would support the two stage attribution process proposed by Gilbert and Osbourne (1989). This model proposes that when attributing the causes of behaviour an observer reflexively believes the cause of the behaviour is intrinsic to the person and then looks for external factors to explain behaviour. However when an observer is preoccupied with feelings of stress, they do not reach the second stage of causal attributions.

Looking at the issue of diminished personal accomplishment, it was found that those with high scores in this area also had higher scores for optimism about treatment. When an individual is evaluating their work negatively they are less likely to feel optimistic about treatment and behavioural change. Diminished personal accomplishment accounted for more of the variance in optimism than did anger.

It is important to consider these factors when examining helping behaviour. Stress could have a significant impact on propensity to help because it interferes with attributions of controllability. This could lead to stressed care staff feeling less sympathy, more anger, less optimism and being less willing to engage in helping behaviour. It also suggests that burn-out could be self-perpetuating due to the effect it has on attributional style. An individual feels stressed and this causes them to make internal and controllable attributions. This causes a reduction in sympathy and optimism and an increase in anger which could add to feelings of burnout.

The effect of qualification level

An unexpected finding in this study was that qualified nursing staff had made attributions to unstable causes and had higher levels of optimism about treatment. Within the qualified nursing group, these two variables were correlated. This association was lost when looking at the sample as a whole. Qualified nursing staff should have a greater knowledge of mental illness and its course over time. They are perhaps more aware of recovery and change in symptomotology over time. Such knowledge would lead to unstable attributions and optimism about treatment. It was also found that qualified nursing staff had higher levels of emotional exhaustion. This could be due to their dual role of caring for patients but also supervising nursing assistants. Given the impact of emotional exhaustion on internal and

controllable attributions it is important that interventions are available to help qualified staff manage feelings of stress.

Clinical Implications

Diagnostic labels impact upon causal attributions of control, with those with ASPD being more likely to be regarded as in control of their challenging behaviour than those with a diagnosis of schizophrenia. This diagnostic label could be harmful because attributions to controllable causes increase anger and decrease sympathy. Sympathy is strongly associated with helping behaviour therefore there is risk that staff may be less inclined to invest extra help in this group. However, there were no between group differences on sympathy, optimism or helping behaviour. It was found that those who were not given a diagnostic label in the case vignette reported responding with more anger than those who were given the 'schizophrenia label'. This would suggest that diagnostic labels reduce anger regarding challenging behaviour, however this is not related to causal attributions.

It is possible that services will see an increase in patients with the diagnosis of ASPD as it should no longer be a diagnosis of exclusion following the changes described earlier in the mental health act. It is therefore important that staff are trained in not only the presentation of those with ASPD but also in the aetiology of this disorder. A clearer understanding of its development may influence beliefs and attitudes among staff. There is also increasing evidence of the neural correlates of aggressive behaviour (e.g. Bohnke, Bertsch, Kruk & Naumann, 2010) and this may help staff conceptualise the disorder in a way that leads to more sympathetic responses and this is important given the finding of the close association between feelings of sympathy and helping behaviour.

Stress impacts upon the attributional process. Those experiencing emotional exhaustion are more likely to make internal and controllable attributions. Individuals experiencing depersonalisation are also more likely to make controllable attributions. This may cause them to feel more anger which is associated with lower levels of optimism. They may also feel less sympathetic about their patients which could impact upon helping behaviour. Feelings of diminished personal accomplishment were associated with lower levels of optimism about treatment and behaviour change. Although diminished personal accomplishment was not correlated with propensity to help, pessimism about treatment may impact upon how patients and other team members feel about recovery.

This finding of a relationship between stress and attributional styles emphasises the importance of the development of interventions for preventing stress at work in healthcare workers. This is particularly the case for qualified nursing staff who appear to be most at risk of experiencing stress, specifically emotional exhaustion. On the basis of the findings here, staff interventions that can facilitate helping behaviour need to cover three areas;

- *Stress management*. Stress affects how staff evaluate their patients and how optimistic they feel about treatment and behavioural change therefore it is important that this is a primary target for intervention.

- *Psychoeducation about ASPD and mental illness*. This study has demonstrated labelling effects in relation to causal attributions of control and anger. Although it is important that we do not conceptualise people with mental illnesses as having no control over their behaviour, it would be beneficial for staff to have an understanding of the development of patients' disorders or illnesses, to facilitate an understanding of why, at times they lack control over their behaviour. Such an intervention should also aim to develop empathy as sympathy is a primary determinant of helping behaviour.

- *Cognitive interventions addressing causal attributions*. This would follow on from psychoeducation about ASPD and mental illness. Targeting dysfunctional causal attributions should facilitate empathy, optimism and helping behaviour.

Study Limitations

This study utilised a quantitative questionnaire methodology and this has limitations when drawing conclusions. Participants are responding to how they think they would feel and behave however this may not reflect actual feelings and behaviours that would occur if the vignette were real. In real world setting other factors have a role to play and influence helping behaviour such as social support and other patients' needs. However this methodology allows for some insight into the cognitive and emotional processes of staff that an observational study would not have accessed.

Unlike previous studies, only one case study vignette was given to participants. This was to reduce participant time demands when completing the questionnaires and increase participant responsivity. However a drawback of this was that it reduced the averaging effect on the dependent variables and the data collected was quite variable. In addition, some of the data collected was skewed. This was particularly true when looking at scores on helping behaviour. Many participants reported a willingness to invest as much extra help as possible. This could have been caused by participants completing the questionnaire in their workplace where they are expected to help. It is also possible that participants were responding in the way they thought they should. It would be unusual for care staff to claim that they would be most unwilling to invest extra help. Future studies may want to develop new ways of assessing helping behaviour. A seven point bipolar rating scale is too simplistic.

Conclusions

This study has demonstrated that diagnostic labels can have an effect on causal attributions of control and that those with ASPD are regarded as having more control over their challenging behaviour than individuals with schizophrenia. It was found that attributions of control were correlated with anger, sympathy, and helping behaviour. When an individual is evaluated as having control over the causes of their challenging behaviour they are responded to with more anger, less sympathy and are less likely to receive help. However anger is not correlated with judgements of help suggesting that health care staff do not allow negative affect to influence their helping behaviour. Although optimism is associated with helping behaviour, feelings of sympathy were most strongly associated with helping behaviour. It was also found that diagnostic labels may reduce feelings of anger in observers however the cognitive process underlying this is not clear. When considering causal attributions it is important to consider the impact of stress. This study has found that emotional exhaustion and depersonalisation impact on the attributional process and that diminished personal accomplishment is associated with pessimism. Qualified staff are most at risk of experiencing emotional exhaustion. A clear understanding of these factors is important as it helps develop evidence based interventions that can target burnout and promotes helping behaviour among staff.

References

American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR).* Washington, DC: Author.

Bateman, A. & Tyrer, P. (2003). Effective Management of Personality Disorder: www.dh.gov.uk/prod_consum_dh/idcplg?IdcService=GET_FILE&dID=7770&Rendition=Web –

Binks, C. A., Fenton, M., McCarthy, L., Lee, T., Adams, C. E., & Duggan, C. (2006). Psychological therapies for people with borderline personality disorder. *Cochrane Database of Systematic Reviews,* (1), 005652.

Bohnke, R., Bertsch, K., Kruk, M.R., Naumann, E. (2010). The relationship between basal and acute HPA axis activity and aggressive behaviour in adults. *Journal of Neural Transmission, 117*(5), 627-637

Bowers, L., Alexander, J., Simpson, A., Ryan, C., Carr-Walker, P. (2007). Student psychiatric nurses' approval of containment measures: Relationship to perception of aggression and attitudes to personality disorder. *International Journal of Nursing Studies, 44,* 349-356.

Bowers, L., Carr-Walker, P., Allan, T., Callaghan, P., Nijman, H., & Paton, J. (2006). Attitude to personality disorder among prison officers working in a dangerous and severe personality disorder unit. *International Journal of Law and Psychiatry, 29,* 333-342.

Casey, P. (2000). The epidemiology of personality disorders. *In Personality disorders: Diagnosis, management and course.* Oxford: Butterworth Heinemann.

Dagnan, D., Trower, P., & Smith, R. (1998). Care staff responses to people with learning disabilities and challenging behaviour: A cognitive-emotional analysis. *British Journal of Clinical Psychology*, 37, 59-68.

Dawson, D.F. (1996). The therapeutic relationship. In P.S. Links (Ed.), *Clinical assessment and management of severe personality disorders* (pp. 161-174). Washington DC: American Psychiatric Press.

Derksen, J. (1995). Personality Disorders. Clinical and Social Perspectives. John Wiley & Sons Ltd.

Duggan, C., Huband, N., Smailagic, N., Ferriter, M. & Adams, C. (2007). The use of psychological treatments for people with personality disorder: A systemtic review of randomized controlled trials. *Personality and Mental Health, 1,* 95-125

Elig, T. W. & Frieze, I. H. (1979). Measuring Causal Attributions for Success and Failure. *Journal of Personality and Social Psychology*, 37 (4), 621-634.

Eme, R. (2010). Male Life-Course-Persistent Antisocial Behavior; The Most Important Pediatric Mental Health Problem. *Archives of Pediatric Adolescent Medicine, 164*(5), 486-487.

Fiske, S.T., & Neuberg, S.L. (1990). A continuum model of impression formation from category-based to individuating processes: Influences of information and motivation on attention and interaction. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol.3, pp. 1-74). San Diego, CA: Academic Press.

Fraser, K. & Gallop, R. (1993). Nurses' confirming/disconfirming responses to patients diagnosed with borderline personality disorder. *Archives of Psychiatric Nursing, 7,* 336-341.

Gabbard, G.O. (1989). Patients who hate. *Psychiatry, 52,* 96-106.

Gibbon S, Duggan C, Stoffers J, Huband N, Völlm BA, Ferriter M, Lieb K. Psychological interventions for antisocial personality disorder. Cochrane Database of Systematic Reviews 2010, Issue 6. Art. No.: CD007668. DOI: 10.1002/14651858.CD007668.pub2

Gilbert, D. T., & Osbourne, R. E. (1989). Thinking backward: some curable and incurable consequences of cognitive busyness. *Journal of Personality and Social Psychology,* 57, 940-949.

Grant, B.F., Hasin, D,S. Stinson, F.S., Dawson, D.A.,Chou, P.S., Ruan, W.J. (2004). Prevalence, correlates, and disability of personality disorders in the United States: results from the national epidemiologic survey on alcohol and related conditions. Jourtnal of Clinical Psychiatry, *65*(7):948-958

Gunn, J. & Robertson, G. (1976). Psychopathic personality: a conceptual problem. *Psychological Medicine,* 6, 631-634.

Hastings, R. P., & Remington, B. (1994a). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *British Journal of Clinical Psychology,* 33, 423-438.

Harding, C.M., Brooks, G.W., Ashikaga, T., Stayss, J.S. & Breier, A. (1987). The Vermont Longitudinal Study of Persons with Severe Mental Illness, I: Methodology, Study Sample, and Overall Status 32 Years Later. *American Journal of Psychiatry, 144*(6), 718-726

Huguenard, T., Sager, E. B., & Ferguson, L. W. (1970). Interview time, interview set and interview outcome. *Perceptual and Motor Skills,* 31, 831-836.

Kreiman, N., Sainsbury, P., Morrisey, J., Towers & Scrivener, J. (1961). The Reliability of Psychiatric Assessment: An Analysis. *Journal of Mental Science,* 107, 887-908.

Kurtz, A. & Turner, K. (2007) 'An exploratory study of the needs of staff who care for offenders with a diagnosis of personality disorder'. Psychology and Psychotherapy 80(3): 421-435

Langer, E, J., & Abelson, R., A. (1974). A Patient by any other name…Clinician group differences in labelling bias. *Journal of Consulting and Clinical Psychology,* 42 (1), 4-9.

Lewis, G., & Appleby, L. (1988). Personality Disorder: The Patient Psychiatrists Dislike. *British Journal of Psychiatry,* 153, 44-49.

Linehan, M.M. (1993). *Cognitive-behavior treatment for borderline personality disorder.* New York: Guilford Press.

Markham, D. & Trower, P. (2003). The effects of the psychiatric label 'borderline personality disorder' on nursing staff's perceptions and causal attributions for challenging behaviours. *British Journal of Clinical Psychology,* 42, 243-256.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory.* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press. In Zalaquett, C., P., & Wood, R. (1997) Evaluating Stress. *A Book of Resources.* The Scarecrow Press, Inc. Lanham, Md., & London.

Mental Health (Care and Treatment) (Scotland) Act 2003

Mischel., W. (1968). *Personality and Assessment.* New York. Wiley.

Nathan, R. (1999). Scientific attitudes to 'difficult' patients. *British Journal of Psychiatry,* 175, 87.

Piko, B. (2006). Burnout, role conflict, job satisfaction and psychosocial health among Hungarian health care staff: A questionnaire survey. *International Journal of Nursing Studies, 43,* 311-318.

Rabkin, J.C. (1974). Public attitudes towards mental illness. A review of the literature. *Schizophrenia Bulletin, 10,* 9-33

Rockett, J., L., Murrie, D., C., & Boccacini, M., T. (2007). Diagnostic Labelling in Juvenile Justice Settings: Do Psychopathy and Conduct Disorder Findings Influence Clinicians? *Psychological Services,* 4(2), 107-122.

Ryan, W. (1971). *Blaming the Victim.* New York: Pantheon.

Sharrock, R., Day, A., Qazi, F., & Brewin, C., R. (1990). Explanations by professional care staff, optimism and helping behaviour: an application of attribution theory. *Psychological Medicine,* 20, 849-855.

Singleton, N., Meltzer, H., Gatward, R., Coid, J., Deasy, D. (1998) *Psychiatric Morbidity Among Prisoners in England & Wales*. London: The Stationery Office.

Stanley, B. & Standen, P. (2000). Carers' attributions for challenging behaviour. *British Journal of Clinical Psychology, 39,* 157-168

Tylar, P. & Cushway, D. (1995). Stress in Nursing: The effects of coping and social support. *Stress Medicine,* 11, 243-251.

Weiner, B. (1974). Achievement motivation as conceptualised by an attribution theorist. In *Achievement Motivation and Attribution Theory.* B. Weiner (Ed), Morristown, N.J: General Learning Press.

Weiner, B. (1980). A Cognitive (Attribution)-Emotion-Action Model of Motivated Behaviour: An Analysis of Judgements of Help-Giving. *Journal of Personality and Social Psychology, 39 (2),* 186-200.

Zanarini, M.C., Frankenburg, F.G., Dubo, E.D., Sickel, A.E., Trikha, A., Levin A. & Reynolds, V. (1998). Axis I comorbidity of borderline personality disorder. *American Journal of Psychiatry, 155*, 1733-1739

Table 1.

Sample characteristics of 3 groups describing differences in years of experience, gender, qualification level and age.

	Group				
	No Label (N)	Schizophrenia Label (N)	APD Label (N)	Total (N)	Asymp. Sig (2-sided)
Yrs of Exp					
0-5 years	9	9	13	31	
5-10 years	3	3	3	9	
11-15 years	2	2	1	5	
16+ years	6	6	4	16	*P*=.93*
Sex					
Female	9	11	12	32	
Male	11	9	10	30	*P*=.77*
Qualification					
Qualified	9	12	13	34	
Non Qualified	11	8	7	26	*P*=.41*
Mean Age, N and Standard Deviation	38.75 N=20 SD 11.58	36.65 N=20 SD 10.27	39.65 N=22 SD 9.50	38.29 N=62 SD 10.34	*P*=.68**

*CHI Square

**Oneway ANOVA

Table 2.

Differences between qualified and non qualified staff on attribution of stability, ratings of optimism and emotional exhaustion scores

		Dependent Variables		
Qualification Level		**Attribution of stability**	**Optimism**	**Emotional exhaustion**
Qualified	**Mean**	3.62	53.56	16.97
	N	34	34	34
	SD	1.02	8.54	9.37
	Median	4.00	56.50	16.50
	IQ range	1	13	12
NonQual	**Mean**	4.38	48.72	11.97
	N	26	25	25
	SD	1.27	7.14	10.57
	Median	4.00	50.00	9.00
	IQ range	3	10	18
Asymp. Sig (Mann-Whitney)		*P*=.03	*P*=.02	*P*=.04

Table 3.

Between group differences for causal attribution ratings

Group		Internal/external attributions	Stable/unstable attributions	Global/specific attributions	Controllable/uncontrollable attributions
No Label	N	20	20	20	20
	Mean	4.45	4.05	4.00	3.32
	SD	1.15	1.19	1.69	1.57
	Median	4.00	4.00	4.00	4.00
	IQ	2	2	2	2
Schiz Label	N	20	20	20	20
	Mean	4.30	3.70	4.30	3.00
	SD	1.30	1.30	1.70	1.49
	Median	4.00	4.00	4.50	3.00
	IQ	1	2	3	2
APD Label	N	21	21	21	21
	Mean	4.39	4.10	4.29	4.38
	SD	1.12	1.04	1.49	1.47
	Median	4.00	4.00	4.00	4.00
	IQ	2	2	3	1
Kuskal Wallis Test	Asymp. Sig. (1 sided)	*p*=.43	*P*=.29	*P*=.40	*P*=.003

Table 4.

Means, Standard Deviation, Median and Interquartile range, for each group on attributions of controllability and between group difference significance level measured with Mann Whitney test

Group		**Attributions of Control**
No Label	Mean	3.35
	N	20
	SD	1.57
	Median	3.50
	IQ range	2
Schizophrenia Label	Mean	3.00
	N	20
	SD	1.49
	Median	3.00
	IQ range	2
ASPD Label	Mean	4.38
	N	21
	SD	.97
	Median	4.00
	IQ range	1
Group Comparisons		Asymp Sig. 1 tailed (Mann Whitney)
No Label and Schizophrenia Label		*P*=.22
No Label and ASPD Label		*P*=.009
ASPD Label and Schizophrenia Label		*P*=.002

Table 5. Spearman's correlations between causal attributions, emotional responses, optimism and propensity to help.

		Controllability	Globality	Stability	Anger	Sympathy	Optimism	Helping
Internality	Correlation Coefficient	.259*	.088	.183	-.117	.088	-.046	.045
	Sig. (1 tailed)	.022	.251	.079	.185	.250	.365	.366
	N	61	61	61	61	61	60	61
Controllability	Correlation Coefficient		-.053	.083	.245*	-.492**	-.186	-.320**
	Sig. (1 tailed)		.344	.263	.028	.000	.077	.006
	N		61	61	61	61	60	61
Globality	Correlation Coefficient			.128	-.062	.014	.245*	.088
	Sig. (1 tailed)			.163	.319	.456	.029	.250
	N			61	61	61	60	61
Stability	Correlation Coefficient				-.106	.037	-.128	.137
	Sig. (1 tailed)				.209	.388	.165	.146
	N				61	61	60	61
Anger	Correlation Coefficient					-.418**	-.312**	-.158
	Sig. (1 tailed)					.000	.008	.113
	N					61	60	61
Sympathy	Correlation Coefficient						.167	.535**
	Sig. (1 tailed)						.101	.000
	N						60	61
Optimism	Correlation							.236*

Coefficient Sig. (1 tailed) N							.035 60

Table 6. Between Group Differences for emotional responses, optimism and propensity to help.

		Anger	Sympathy	Optimism	Helping Behaviour
Group					
No Label	N	20	20	19	20
	Mean	2.60	4.85	50.32	6.30
	SD	1.19	1.04	6.99	1.22
	Median	2.00	5.00	49.00	1.00
	IQ	2	2	10	1
Schiz Label	N	20	20	20	20
	Mean	1.75	5.40	52.75	6.50
	SD	0.97	1.19	9.02	1.19
	Median	1.00	5.50	53.50	1.00
	IQ	2	2	14	1
APD Label	N	21	21	21	21
	Mean	2.29	4.81	51.05	5.95
	SD	1.19	1.40	8.77	1.47
	Median	2.00	5.00	53.00	2.00
	IQ	2	2	14	2
Kruskal Wallis Test	Asymp Sig (1 sided)	p=.03	p=.13	p=.30	p=.09

Table 7.

Means, Standard Deviation, Median and Interquartile range, for each group on anger responses and between group difference significance level measured with Mann Whitney test

Group		**Anger**
No Label	Mean	2.60
	N	20
	SD	1.19
	Median	2.00
	IQ range	2
Schizophrenia Label	Mean	1.75
	N	20
	SD	.97
	Median	1.00
	IQ range	2
ASPD Label	Mean	2.29
	N	21
	SD	1.19
	Median	2.00
	IQ range	2
Group Comparisons		Asymp Sig. 1 tailed (Mann Whitney)
No Label and Schizophrenia Label		*p*=.009
No Label and ASPD Label		*p*=.19
ASPD Label and Schizophrenia Label		*p*=.06

Chapter Three

Advanced Clinical Practice I

Reflective Critical Account (Abstract)

Balancing a Therapeutic Relationship with the Risk of Causing Self-incrimination in a Forensic Community Mental Health Team: An ethical dilemma

Gwen Keenan[1]

University of Glasgow

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

Tel: 0141 211 3920

Fax: 0141 211 0356

gkeenan@nhs.net

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

[1]Author for correspondence

Abstract

This reflective account describes the difficulties I faced balancing the promotion of my client's well-being and our therapeutic relationship with the risk of leading him into disclosing self-incriminating evidence. The implications of a self-incriminating disclosure are discussed within The Codes of Ethics and Conduct (2009) and the Good Practice Guidelines (1995). This account will begin with a description of various practice guidelines and their implications to my case are highlighted. The account is guided by Gibbs' model of reflection (1998) and also differentiates between Schons' (1991) distinction of reflecting 'in action' and reflecting 'on action'. Gibbs' model of reflection provides a description of the situation, a reflective account of my feelings, an evaluation and analysis of the situation which guides a conclusion and action plan for future practice. The utility of this reflective account is then described.

Chapter Four

Advanced Clinical Practice II

Reflective Critical Account

Developing Confidence Within my Role in Multi-Disciplinary and Multi-Agency Working: A reflective account

Gwen Keenan[1]

University of Glasgow

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

Tel: 0141 211 3920

Fax: 0141 211 0356

gkeenan@nhs.net

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

[1]Author for correspondence

Abstract

This reflective account describes my development working within multi-disciplinary teams and in multi-agency working. Particular reference is made to my developing competency in relation to *communication* and *management* (generic key roles 4 and 6, National Occupational Standards for Psychology, 2006). To facilitate reflection, this account draws on two reflective models; Rolfe's framework for reflective practice (2001) and Schon's (1991) reflective model which makes the distinction between reflection 'in-action' and reflection 'on-action'. This account aims to draw out my reflections and what I have learned from them, as well as outlining how I can use these reflections to develop future working practices.

Appendices

Appendix 1 Guidance for Submission to the 'Journal of Personality Disorder'

Journal of Personality Disorders

Official Journal of the International Society for the Study of Personality Disorders

Edited by Paul S. Links, MD, MSc, FRCPC
University of Toronto

Instructions To Authors

Types of Articles

Regular Articles: Reports of original work should not exceed 20 pages (typed, double lined spaces and with standard margins, including tables, figures, and references).

Invited Essays and Special Articles: These articles provide an overview of broad ranging areas of research and conceptual formulations dealing with substantive theoretical issues. Reports of large scale definitive empirical studies may also be submitted. Articles should not exceed 30 pages including tables, figures, and references. Authors contemplating such an article are advised to contact the editor in advance to see whether the topic is appropriate and whether other articles in this topic are planned.

Brief Reports: Short descriptions of empirical studies not exceeding 10 pages in length including tables, figures, and references.

Manuscript Preparation and Submission: Manuscripts must be typewritten, double spaced, prepared for blind review, and submitted along with a cover letter to the Journal's Editor via email to the Editorial Office at ezardd@smh.toronto.on.ca. All articles should be prepared in accordance with the Publication Manual of the American Psychological Association (5th. Ed.), (e.g., they must be preceded by an abstract of 100-150 words and adhere to APA referencing format).

Appendix 2. Systematic Literature Review

2.1 Database Search Strategy

The Cochrane Library (Title, Abstract, Keywords or MeSH)

1. ((cognitive or behavior* or behaviour or aversive or aversion or group or relaxation or narrative or solution focus?ed) NEAR/2 therap*)

2. (CBT or BT or DBT or CAT or counselling or psychotherap* or psychoanalytic* or psychodynamic*)

3. (assertive* training or cognitive behavior* or cognitive behaviour* or biofeedback or sensory feedback or meditation or crisis intervention* or psychological feedback)

4. 1 or 2 or 3

5. (suicid* or overdos* or parasuicid* or self?injur* or self?harm* or self?mutilat*)

6. personality disorder*

7. ("accident and emergency" or "emergency room*" or admitted or admission*)

8. 4 and 5 and 6 and 7

9. exp Self-Injurious Behavior/

10. Emergency Service, Hospital/ or exp Hospitalization/

11. exp Personality Disorders/

12. psychotherapy/ or behavior therapy/ or aversive therapy/ or biofeedback, psychology/ or feedback, sensory/ or cognitive therapy/ or relaxation therapy/ or meditation/ or crisis intervention/ or exp feedback, psychological/ or exp psychoanalytic therapy/ or psychotherapy, brief/ or psychotherapy, multiple/

13. 9 and 10 and 11 and 12

14. 8 or 13

Web of Knowledge Search Strategy

Topic=(self-injur* or self-harm* or self-mutilat* or selfinjur* or selfharm* or selfmutilat* or self injur* or self harm* or self mutilat*) OR Topic=((overdos* or parasuicid*)) OR Topic=(((suicid*) same (attempt*)))

(("accident and emergency" or "emergency room*" or admitted or admission*))

(personality disorder*)

(((cognitive or behavio?r* or aversive or aversion or group or relaxation or narrative or solution focus?ed) same (therap*))) OR Topic=((CBT or BT or DBT or CAT or counselling or psychotherap* or psychoanalytic* or psychodynamic*)) OR Topic=((assertive* training or cognitive behavio?r*)) OR Topic=((Biofeedback or sensory feedback or meditation or crisis intervention* or psychological feedback))

Ovid Search Terms. Medline, Embase & Eric

((cognitive or behavio?r* or aversive or aversion or group or relaxation or narrative or solution focus?ed) adj2 therap*)

(CBT or BT or DBT or CAT or counselling or psychotherap* or psychoanalytic* or psychodynamic*)

(assertive* training or cognitive behavio?r*)

(Biofeedback or sensory feedback or meditation or crisis intervention* or psychological feedback)

1 or 2 or 3 or 4

(overdos* or parasuicid* or self?injur* or self?harm* or self?mutilat*)

suicid*.mp.

6 or 7

personality disorder*.

("accident and emergency" or "emergency room*" or admitted or admission*)

5 and 8 and 9 and 10

exp Self-Injurious Behavior/

Emergency Service, Hospital/

exp Hospitalization/

13 or 14

exp Personality Disorders/

psychotherapy/ or behavior therapy/ or aversive therapy/ or biofeedback, psychology/ or feedback, sensory/ or cognitive therapy/ or relaxation therapy/ or meditation/ or crisis intervention/ or exp feedback, psychological/ or exp psychoanalytic therapy/ or psychotherapy, brief/ or psychotherapy, multiple/

12 and 15 and 16 and 17

18 not 11

EBSCO Search Terms. PsycINFO, PsycARTICLES, Psychology & Behavioral Sciences Collection

1. ((cognitive or behavio?r* or aversive or aversion or group or relaxation or narrative or solution focus?ed) N2 therap*)

2. (CBT or BT or DBT or CAT or counselling or psychotherap* or psychoanalytic* or psychodynamic*)

3. (assertive* training or cognitive behavio?r*)

4. (biofeedback or sensory feedback or meditation or crisis intervention* or psychological feedback)

5. 1 or 2 or 3 or 4

6. (overdos* or parasuicid* or self?injur* or self?harm* or self?mutilat*)

7. suicid*.mp.

8. 6 or 7

9. personality disorder*.

10. ("accident and emergency" or "emergency room*" or admitted or admission*).

11. 5 and 8 and 9 and 10

12. self destructive behavior/ or attempted suicide/ or self inflicted wounds/ or self injurious behavior/ or self mutilation/ or suicide/ or assisted suicide/ or suicidal ideation/

13. exp personality disorders/ or antisocial personality disorder/ or avoidant personality disorder/ or borderline personality disorder/ or dependent personality disorder/ or histrionic personality disorder/ or narcissistic personality disorder/ or obsessive compulsive personality disorder/ or paranoid personality disorder/ or passive aggressive personality disorder/ or schizoid personality disorder/ or schizotypal personality disorder/

14. emergency services/ or hospitalization/ or hospital admission/

15. psychotherapy/ or analytical psychotherapy/ or behavior therapy/ or brief psychotherapy/ or cognitive behavior therapy/ or interpersonal psychotherapy/ or narrative therapy/ or psychodynamic psychotherapy/ or psychotherapeutic counseling/ or solution focused therapy/ or cognitive therapy/ or psychotherapeutic processes/ or psychotherapeutic techniques/

16. 12 and 13 and 14 and 15

17. 11 or 16

Appendix 2.2

Systematic Review: Quality Rating Criteria

Reviewer:

Article Title:

Quality Item	Coding
A: Research Question	
1. Does the study address a clearly focussed and appropriate research question/hypothesis?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
B: Sampling	
2. Baseline demographic and clinical characteristics of the groups are specified to allow comparisons	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
3. Both groups assessed using a standardised assessment measure of Personality Disorder (e.g. SCID or IPDE). (This should be scored as inadequate if diagnosis is made retrospectively on basis of case notes)	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
4. Are the inclusion and exclusion criteria described and applied to both groups?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
5. Was the control group matched to the intervention group?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
6. Is the sample size based on adequate power calculations?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
7. Are attrition rates reported for both groups and comparisons made between full participants and those lost over course of study?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
C: Design	
8. Is this study a Randomised Controlled Trial (RCT), quasi-experimental (Q-E) or a controlled observational (CO) study?	RCT= 3 Q-E= 2 CO= 1
9. Is randomisation adequately described?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
10. Is the study design appropriate to the research question?	Adequate= 2 Partial= 1

	Inadequate= 0 Not Applicable
D. Assessment	
11. Are the primary and secondary outcome measures clearly described?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
12. Are the primary and secondary outcome measures assessed using reliable and valid methods?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
13. Are the primary and secondary outcome measures assessed at baseline and during treatment the same as those measured during follow up?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
14. Are the periods of time between assessments during baseline, treatment and follow-up clearly described?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
15. Are the assessors of outcome measures blind to treatment allocation?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
16. Was the control group also assessed during the follow up period?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
E. Intervention	
17. Is the intervention and 'treatment as usual' adequately described	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
18. Was therapist competence and adherence to the treatment model measured?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
F. Analysis	
19. The analysis is appropriate to the design and type of outcome measure?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
20. Were the groups equal in the amount of 'treatment as usual' therapy they may have had between treatment termination and follow-up?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
21. Is the flow of participants described through each stage of the study (diagram desirable)?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
22. Did the analysis include all the randomised	Adequate= 2

participants (intention-to-treat) or provide a complete description of withdrawals to allow such an analysis?	Partial= 1 Inadequate= 0 Not Applicable
23. Have effect sizes and confidence intervals been reported?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
G. Discussion	
24. Do the findings relate to the research questions/ hypotheses?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
25. Are the results described in relation to clinical practice for this patient group?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable
26. Are the limitations of the study recognised?	Adequate= 2 Partial= 1 Inadequate= 0 Not Applicable

Total Score:

___/53

___ %

Overall Rating:

Excellent (80%-100%)

Good (60%-79%)

Adequate (50%-59%)

Poor (Below 49%)

Appendix 3. Major Research Project

Appendix 3.1 Ethical Approval

WoSRES

West of Scotland Research Ethics Service

West of Scotland REC 5

Ground Floor,

Tennent Institute,

Western Infirmary,

38 Church Street,

Glasgow G11 6NT

Telephone: 0141-211-6270

Facsimile: 0141-211-1847

22 October 2009

Miss Gwen Keenan

Trainee Clinical Psychologist

Dept of Clinical Psychology

Dykebar Hospital

Grahamston Rd,

Paisley

PA2 7AD

Dear Miss Keenan

Study Title: **An examination of how the label 'anti-social personality disorder' affects staffs causal attributions of challenging behaviour and how stress interacts with this process.**

REC reference number: **09/S1001/62**

Protocol number: **Version 1**

The Research Ethics Committee reviewed the above application at the meeting held on 21 October 2009 in your absence.

Ethical opinion

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

Ethical review of research sites

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

Conditions of the favourable opinion

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

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

For NHS research sites only, management permission for research ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk. Where the only involvement of the NHS organisation is as a Participant Identification Centre, management permission for research is not required but the R&D office should be notified of the study. Guidance should be sought from the R&D office where necessary.

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

The Committee had no issues with the Study Design but require amendments/clarifications to the Participant Information Sheet

Participant Information Sheet

a. The Committee are seeking clarification as to why the 3rd vignette the second sentence "he began to believe that the staff and other patients were controlling him" has not been added to the first and second vignette.

b. The title of the study to be added to the Participant Information Sheet and the Consent Form

c. The second question on the Consent Form - delete "without my medical care or legal rights being affected".

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

Approved documents

The documents reviewed and approved at the meeting were:

Document	*Version*	*Date*
REC application	2.5	08 October 2009
Protocol	Version 1	08 October 2009
Investigator CV		15 September 2009
Participant Information Sheet	Version 1	08 September 2009
Participant Consent Form	Version 1	08 September 2009
Questionnaire: Validated	Version 1	08 October 2009
Questionnaire: Non validated	Version 1	
Supervisor's CV		
Letter from funder		08 October 2009
Collaborator's CV		

Membership of the Committee

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

Statement of compliance

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

After ethical review

Now that you have completed the application process please visit the National Research Ethics Service website > After Review

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

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

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

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

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

09/S1001/62	**Please quote this number on all correspondence**

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

Yours sincerely

Miss L Tregonning

Vice Chair

Email: sharon.jenner@ggc.scot.nhs.uk

Enclosures: *List of names and professions of members who were present at the meeting and those who submitted written comments*

"After ethical review – guidance for researchers" [SL-AR1 for CTIMPs, SL-AR2 for other studies]

West of Scotland REC 5

Attendance at Committee meeting on 21 October 2009

Committee Members:

Name	*Profession*	*Present*	*Notes*
Dr R Carelton	Consultant Psychiatrist	Yes	
Dr J Curran	GP	No	
Dr B Ellis	Head of Radiography	Yes	
Miss M MacCallum	Nurse Advisor	Yes	
Prof E McKenzie	Statistician	Yes	
Ms T McMichael	Health Promotion	No	
Mr A Morton	Lay member	Yes	
Dr G Ofili	Chair/Consultant Gynaecologist	No	
Dr A Rasul	Lay member	No	
Mrs J Russell	Lay member	Yes	
Dr W Smith	Renal Consultant	Yes	
Mrs L Tregonning	Vice Chair/Lay member	Yes	
Mrs E Griggs	Vice Chair/ Lay member	Yes	
Mrs C R Hogg	Lay member	Yes	

Also in attendance:

Name	*Position (or reason for attending)*

Miss S Jenner	Co-Ordinator
Dr J Godden	Scientific Officer

Written comments received from:

Name	*Position*
Dr J Curran	GP

WoSRES

West of Scotland Research Ethics Service

West of Scotland REC 5

Ground Floor,

Tennent Institute,

Western Infirmary,

38 Church Street,

Glasgow G11 6NT

Telephone: 0141-211-6270

Facsimile: 0141-211-1847

17 November 2009

Miss Gwen Keenan

Trainee Clinical Psychologist

Dept of Clinical Psychology

Dykebar Hospital

Grahamston Rd,

Paisley

PA2 7AD

Dear Miss Keenan

Full title of study:	**An examination of how the label 'anti-social personality disorder' affects staffs causal attributions of challenging behaviour and how stress interacts with this process.**
REC reference number:	**09/S1001/62**
Protocol number:	**Version 1**

Thank you for your letter of 6th November 2009. I can confirm the REC has received the documents listed below as evidence of compliance with the approval conditions detailed in our letter dated 21

October 2009. Please note these documents are for information only and have not been reviewed by the committee.

Documents received

The documents received were as follows:

Document	*Version*	*Date*
vignette 1	amended	
Covering Letter		06 November 2009
Participant Information Sheet	amended	
Participant Consent Form	amended	
vignette 2	amended	
vignette 3	amended	

An amendment to the Consent Form item 2 “without my medical care or legal rights being affected has still to be deleted.

A copy of the amendment to be returned to the Coordinator to be checked and filed

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

09/S1001/62 **Please quote this number on all correspondence**

Yours sincerely

Sharon Jenner

Committee Co-ordinator

E-mail: sharon.jenner@ggc.scot.nhs.uk

Appendix 3.2 Information Sheet

Participant Information Sheet

Thank you for reading this information sheet. I would like to invite you to take part in a research study. My name is Gwen Keenan and I am undertaking research investigating how nursing and care staff evaluate challenging behaviour in a secure mental health setting. I would very much appreciate if you would take the time to read this information sheet and consider taking part in this study.

What the study is about

Nursing and care staff, working in a secure mental health setting are often met with patients displaying challenging behaviour. I am interested in studying how staff evaluate challenging behaviour and what factors influence staffs evaluations. Of particular interest is how staff evaluate the cause of challenging behaviour. This study will examine different types of causal judgements observers can make to evaluate challenging behaviour and will also examine how this affects emotional responses to challenging behaviour, optimism about treatment and propensity to help the person demonstrating challenging behaviour.

Why you are being asked to participate

Working in a secure mental health setting, you are faced with challenging behaviour and I would like to develop an understanding of how you evaluate such behaviour. As you have

experience in this field and have daily patient contact you are an invaluable source of information. You are eligible to participate in this study if you:

- Are nursing or care staff with daily patient contact.
- Have over 1 year of experience in your current role or in a similar capacity
- Work over 20 hours per week.
- Have English as a first language

Do I have to take part?

You do not have to take part in this study. It is up to you whether or not you wish to participate in the study. If you decide to take part you will be given this information sheet and be asked to sign a consent form. The consent form is a way of making sure that you know what you have agreed to. If you decide to take part you are still free to withdraw from the study at any point in time.

Taking part in the study – what will I have to do?

I will be attending your work place to discuss this study with people who are interested in taking part. I will advise you of these dates via your ward manager. This will provide you with an opportunity to ask any questions about the study. If you are interested in taking part I would ask you to sign a consent form agreeing to take part. Following this I would ask you for some information about your job. This information is confidential and only the researcher will have access to this information. On this first visit, that is all that I will be asking you to do. I will then return once I have a larger number of participants to ask you to read a short vignette and then complete a questionnaire. This will be followed by a second questionnaire. Again, all the information gathered is kept confidential with only the researcher having access to this information. I would like to emphasise that these questionnaires are not tests and there are no correct answers. It should take approximately 10 minutes to complete these questionnaires.

What are the possible advantages of taking part?

There are no direct benefits to you in taking part in this study. However, the information that we learn from the study will help us to plan future research and develop methods to help nursing and care staff manage challenging behaviour.

Will my taking part in this study be kept confidential?

All aspects of this study will be confidential. I will ask for some personal details such as your name and age however this information will be made anonymous. Each participant will be given a code. Only the researcher an her supervisor will have access to the identifiable information. This is necessary in case any participant decides to withdraw from the study and I need to remove their data. This identifiable information will be kept in a locked filing cabinet within the Department of Psychological Medicine, Gartnavel Hospital. No identifiable information will be included in the publication of this research.

What will happen to the results of the research study?

I will provide you with a summary of the results of the study. The final results and conclusions of the study may be published in a scientific journal and will form part of my qualification in Clinical Psychology. As stated above, your identification will not be included in any publication.

Who is organising and funding the research?

The University of Glasgow.

Who has reviewed the study?

The study has been reviewed by the department of Psychological Medicine to ensure that it meets important standards of scientific conduct and has been reviewed by NHS Greater Glasgow and Clyde Primary Care Division research ethics Committee to ensure that it meets important standards of ethical conduct.

If you have any further questions?

We will give you a copy of the information sheet and signed consent form to keep. If you would like more information about the study and wish to speak to someone **not** closely linked to the study, please contact Professor Andrew Gumley, Dept of Psychological Medicine, Garnavel Hospital.

Contacts:

Gwen Keenan, Tel: 07806609864

Professor Andrew Gumley, Tel: 0141 211 3930

If you have a complaint about any aspect of the study?

If you are unhappy about any aspect of the study and wish to make a complaint, please contact the researcher in the first instance but the normal NHS complaint mechanisms is also available to you.

Thank you very much for reading this and for any further involvement you may have with the study.

Appendix 3.3 Consent Form

Participant Consent Form

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions

☐

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason, without my medical care or legal rights being affected

☐

I understand that all information will be kept confidential and that only the researcher and her academic supervisor will have access to that information

☐

I agree to take part in the above study ☐

Name of Participant Date Signature

_____

Researcher Date Signature

_____

Thank you for taking part in this study
(1 copy for participant and 1 for researcher)

Appendix 3.4 Occupation Details

Age: **Gender: F/M**

What is your job title?

Please state any qualifications pertaining to your job role?

How long have you been in your current job?

For how long have you worked in this, or a similar capacity?

How often do you receive supervision?

Appendix 3.5 Instruction Sheet

Please take time to read the short case study. Once you have read this please complete the questionnaire relating to the case study. You are to complete a series of rating scales. These are on a seven point scale. To help you fill this in here is an example of question number one:

1.Was this due to the person, or due to other people or circumstances? Circle one number.

It is totally due to others	1	2	3	4	5	6	7	It is totally due to the person

If you believe that the person described is absolutely responsible for the behaviour described in the case study, circle number 7. However if you felt the behaviour is entirely due to other circumstances circle number 1 and if you feel the behaviour is due to a mixture, pin point on the scale where you think would be most appropriate.

Please answer every item. There is no correct answer. Although you may feel there is not enough information please give an answer based on the information you have.

Do not discuss the case study or your opinions with anyone else.

Once you have completed that questionnaire please complete the second one. There are instructions on the front of the document and an example and the questionnaire is on the back.

Once you have completed these questionnaires please place them in the envelope and seal it.

If you have any questions regarding this please phone Gwen Keenan on 07806 609864.

I would like to remind you that all information gathered for this study is confidential and your name does not appear on the study documents. I would like to thank you again for taking part in this study. Your contribution is very much appreciated. Once I have finished collecting every participants questionnaires I will send you some additional information about the study.

Appendix 3.6 Case Studies

Mr Y is a 28 year old patient who has been transferred from prison to a psychiatric unit as a result of a suicide attempt. Mr Y has a history of 3 suicide attempts and of various offences.

Current hospitalisation

During the early part of Mr Y's hospitalisation he appeared to be getting better straight away. He was helpful to both staff and patients. More recently he has been at the centre of many disputes with staff and patients. For the past week he has locked himself in his room and is refusing contact with anyone. He is on suicide watch.

Mr Y is a 28 year old patient with a diagnosis of 'anti-social personality disorder' who has been transferred from prison to a psychiatric unit as a result of a suicide attempt. Mr Y has a history of 3 suicide attempts and of various offences.

Current hospitalisation

During the early part of Mr Y's hospitalisation he appeared to be getting better straight away. He was helpful to both staff and patients. More recently he has been at the centre of many disputes with staff and patients. For the past week he has locked himself in his room and is refusing contact with anyone. He is on suicide watch.

Mr Y has a diagnosis of schizophrenia. He is a 28 year old patient who has been transferred from prison to a psychiatric unit as a result of a suicide attempt. Mr Y has a history of 3 suicide attempts and of various offences.

Current Hospitalisation

During the early part of Mr Y's hospitalisation he appeared to be getting better straight away. He was helpful to both staff and patients. More recently he has been at the centre of many disputes with staff and patients. For the past week he has locked himself in his room and is refusing contact with anyone. He is on suicide watch.

Appendix 3.7 Causal Attributions, Emotional Responses, Optimism and Propensity to help questionnaire

Participant Number:

Thinking about the case study you have just read, please write down the possible reasons for this behaviour:

Underline what you think is the most likely reason; thinking of this reason please show your agreement to the following statements by circling one number

1.Was this due to the person, or due to other people or circumstances? Circle one number.

It is totally due to others	1	2	3	4	5	6	7	It is totally due to the person

2. If this behaviour happens over a long period of time will be for the same reason? Circle one number.

Never for the same reason	1	2	3	4	5	6	7	Always for the same reason

3. Does this reason apply to just this situation or all situations in the person's life? Circle one number.

Just this situation	1	2	3	4	5	6	7	All situations

4. Is the reason under the person's control? Circle one number.

Not under his control	1	2	3	4	5	6	7	Totally under his control

How would this type of behaviour make you feel? Circle one number.

Not angry at all	1	2	3	4	5	6	7	Extremely angry
Not sympathetic at all	1	2	3	4	5	6	7	Extremely sympathetic

Given your experience with this type of problem, how much do you agree with the following statements?

All one can do for a person with this behaviour is keep them safe and look after their physical needs

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

There is little point in any interventions for a person who behaves like this

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

Problems such as this are usually so ingrained that the person will not be responsive to treatment or intervention

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

This type of behaviour will usually get worse

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

A person will always have this type of behaviour once they have developed it

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

I can always find a solution to this type of behaviour

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

I am confident I could deal efficiently with this type of behaviour

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

I can deal with this type of behaviour if I invest the necessary effort

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

When this type of behaviour happens I can usually think of something to do

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

I can remain calm when this type of behaviour happens because I can rely on my training and abilities

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

Given your experience with this type of behaviour how much extra effort would you be prepared to put in to help the person?

As much extra effort as possible 1 2 3 4 5 6 7 No extra effort at all

Appendix 3.9 Debriefing Sheet

Debriefing Sheet

I would like to thank you for your recent participation in a research study. This study was interested in how staff in secure mental health settings evaluate the causes of challenging behaviour in patients.

Research has found that the way in which we respond emotionally and the likelihood of offering help to someone depends on how we evaluate the causes of challenging behaviour. Weiner (1980) proposed that the causes of behaviour are evaluated over 3 dimensions:

- Internal versus external causes: the extent to which the cause of a behaviour is attributed to the person or the environment.
- Stable versus unstable: the extent to which it is believed that the cause of the behaviour is likely to be the same each time it occurs
- Controllable versus uncontrollable: the extent to which it is believed that the person has control over the cause of their behaviour.

Of particular interest was how staff stress and diagnostic labels might affect how behaviour is evaluated across these dimensions. This is important because the way in which we make causal evaluations about behaviour can impact upon our emotional responses and helping behaviour. Weiner (1980) argued that is a person is regarded as having control over their behaviour then observers will feel increased anger, reduced sympathy and it is this emotional reaction that determines helping. Anger will reduce a tendency to help and sympathy increases it. Of further interest was the effect of causal evaluations on feelings of optimism about treatment and helping. Sharrock et al. (1990) and Dagnan et al (1998) found that when the cause of a behaviour is attributed to a stable cause then people feel pessimism about treatment effectiveness however if the behaviour is attributed to an unstable cause (eg. a transient emotion) then optimism about treatment increases.

In the study you participated in every participant read a case vignette describing the same challenging behaviour. For some, the case vignette described a challenging behaviour and the patient was not given a diagnostic label. Others were given an identical case vignette except the patient was described as having Schizophrenia and for the remaining participants the case vignette described the patient as having a diagnosis of Antisocial Personality Disorder. It has been found that when a person is viewed as being unwell, the person is seen

as being in less control of their behaviour. This leads to increased feelings of sympathy and more willingness to help. However, if a person is regarded as being in control of their behaviour then they are more likely to be responded to with anger which decreases the propensity to help. I was interested in how these labels would influence causal attributions, emotional responding, optimism and propensity to help.

You also completed a questionnaire examining occupational burnout. Burnout is a persistent negative work-related state of mind which causes exhaustion, distress, a sense of reduced effectiveness, decreased motivation and dysfunctional attitudes and behaviours. It was expected that staff experiencing burnout symptoms may evaluate challenging behaviour differently.

It is important that we consider the thought processes and emotional reactions of healthcare staff in order to help develop interventions that can reduce stress and facilitate helping behaviour.

Your participation in this study was much appreciated and a summary of the findings from this result will be distributed shortly.

Thank you,

Gwen Keenan

Trainee Clinical Psychologist.

Appendix 3.10

Table 1. Tests of normality for all of the dependent variables.

	Kolmogorov-Smirnov		
Dependent Variables	Statistic	df	Significance
Attributions of internality	.299	60	.000
Attributions of controllability	.201	60	.000
Attributions of stability	.227	60	.000
Attributions of globality	.144	60	.003
Sympathy	.182	60	.000
Anger	.230	60	.000
Optimism	.102	60	.196
Propensity to help	.321	60	.000
Emotional exhaustion	.081	60	.200
Depersonalisation	.111	60	.064
Diminished personal accomplishment	.110	60	.067

Appendix 3.11.

Table 2.

Kruskal-Wallis Test comparing differences on the dependent variables between the sample grouped by years of experience	
Variable	Asymp. Sig (2-tailed)
Internal/ External Attributions	*P*=.903
Stable/Unstable	*P*=831
Global/Specific	*P*=204
Controllable/Uncontrollable	*P*=155
Anger	*P*=281
Sympathy	*P*=937
Optimism	*P*=695
Propensity to Help	*P*=.371
Emotional Exhaustion	*P*=.888
Depersonalisation	*P*=.854
Diminished Personal Accomplishment	*P*=.143

Appendix 3.12 Major Research Project Proposal

Abstract

Diagnostic labels have been found to impact upon clinicians' evaluations of patient behaviour, often leading to negative attitudes. Those working with people with a diagnosis of 'personality disorder' have been found to demonstrate negative attitudes. It is possible that 'personality disorder' is not understood as a mental disorder and this affects staff attitudes. Although mental illness labels can negatively affect subsequent evaluations, they cause observers to attribute the causes of their behaviour to external and uncontrollable factors. However if 'personality disorder' is not conceptualised in this way, observers may attribute the causes of their behaviour to internal and controllable factors. Weiner's Attribution Model (1974), proposes causal attributions of behaviour impact upon emotional responses which in turn affect helping behaviour. There is controversy in the literature regarding the role of emotional responses in relation to helping behaviour with others arguing that levels of optimism, is the mediating variable between causal attributions and helping behaviour. It has also been argued that other factors, other than causal attributions may influence emotional responses, such as mood.

This study aims to examine how diagnostic labels affect staffs' causal attributions of challenging behaviour, emotional responses, optimism and helping behaviour. The impact of stress will also be examined. This study will employ a between subjects design with 3 groups, utilising a quantitative questionnaire methodology. Each group will be presented with a vignette describing a challenging behaviour. In each vignette the diagnostic label ('anti-social personality disorder', 'schizophrenia' and 'no label') will be manipulated. After reading the vignette participants will complete rating scales assessing causal attributions, emotional responses, ratings of optimism regarding recovery and ratings of propensity to help. In addition participants will be administered the Maslach Burnout Inventory.

In order to improve the care and treatment of this patient group it is necessary to understand what the cognitions are of the health care professionals working with this group. An understanding of this could provide a cognitive-behavioural framework from which staff interventions could be based.

This study will examine the effect of the diagnostic label, 'anti-social personality disorder' on causal attributions made by staff in a secure mental health setting. Of further interest is how these causal attributions relate to emotional responses, pessimism, propensity to help and burnout.

The effect of labelling on subsequent perception and evaluation of the environment has been extensively studied and the effects established. Labels provide a useful way of categorising our environment and adapting subsequent judgements and behaviour. The social environment is too complex to accurately represent and it is necessary to categorise information into groups, groups that we have generalised knowledge about (Fiske and Neuberg, 1990). Whilst labelling is a useful and necessary strategy, the effect of labels on subsequent information processing is pervasive and not easily adapted (Huguenard, Sagar & Ferguson, 1970). This is concerning, particularly if that label has negative connotations, as the label will get in the way of making an objective evaluation. As diagnostic labels are important and extensively used in clinical settings many studies have examined the effects of mental illness labels on clinicians subsequent judgements (e.g. Langer & Abelson, 1974; Lewis & Appleby, 1988; Rocket, Murrie & Boccaccina, 2007;) and behaviour (Fraser & Gallop, 1993). Langer and Abelson (1974) found that providing clinicians with the label 'patient' caused an increase in negative evaluations about an individual compared to the label 'interviewee'. If this effect is found for the label 'patient' by experienced clinicians, the effects of the label 'personality disorder' could be even greater given the negative attitudes found in staff who work with this patient group (Bowers, 2006)

The labelling effects of 'Personality Disorder' (PD) warrant considerable attention due to high prevalence rates of PD both in general and clinical populations. Ten percent of the general population meet diagnostic criteria for a PD. In Mental Health Services, it is estimated that 30-40% of outpatients and 40-50% of inpatients have a PD although this is not always the presenting problem (Casey, 2000). In prison populations it is estimated that as many as 78% have a PD (Singleton et al, 1998). Many studies have indicated that there is a general disliking of patients with PD by health care professionals, and several studies have demonstrated that the treatment of such patients is surrounded by pessimism, rejection and hostility (Bowers et al., 2006). Within services there is also ambiguity regarding how to treat PD and whether or not treatment is effective (Bateman & Tyrer 2003). This combination of both lack of skills and knowledge, and dislike of patients with a PD diagnosis impacts upon

patient care. In order to improve the care and treatment of this patient group it is necessary to understand what the cognitions are of the health care professionals working with this group. In addition it could provide a cognitive-behavioural framework from which staff interventions could be based.

The diagnosis of PD is controversial, with some disputing its reliability as a diagnosis (e.g. Kreitman et al, 1961) and its conceptual foundations (e.g. Mischel, 1968). However it is a label that is widely used today both in clinical and forensic settings. It has been argued that PD is a derogatory label that results in poor care (Gunn & Robertson, 1976). Lewis and Appeby (1988) found that clinicians judged patients with the PD label as difficult, less deserving of care, manipulative, attention-seeking, annoying, in control of their suicidal urges and debts compared to controls. They go as far as arguing that PD is not a clinical diagnosis but an enduring pejorative judgement. The finding that PD patients are judged to be more in control of their symptoms is interesting. Those viewed as ill are seen as less responsible and less in control of their actions and this applies to 'mental illness' also. Although PD is now recognised as a mental disorder in the 'Mental Health (Care and Treatment) (Scotland) Act 2003', it was not always recognised as such, rather it was conceptualised as a disturbance in interpersonal relationship (Walton, 1978). This could effect how observers' make judgements regarding the person's level of responsibility and controllability. The consequence of this will impact upon the care of patients with PD as judgements of responsibility and controllability are linked to subsequent emotional responses and helping behaviour (Weiner, 1980).

Weiner's Attribution Model (1974) could provide a useful framework for investigating the effects of labels on subsequent evaluative processes and will be utilised in this study. Weiner (1980) argues that humans seek out causal attributions in order to explain behaviour. He asserts that all causal attributions can be characterised across three dimensions; locus (behaviour caused by internal or external factors), stability (behaviour the same or out of character) and controllability (behaviour either under control or uncontrollable). These causal attributions invoke an emotional reaction (e.g. sympathy) which determines subsequent behaviour. Thus it is how behaviour is causally attributed and not the behaviour itself that determines subsequent reactions. In relation to negative behaviour, Weiner's model predicts that if behaviour is evaluated as being under deliberate control, this will invoke anger, however if that behaviour is seen as being uncontrollable then feelings of

sympathy will ensue. It is this emotional response that will determine helping behaviour: feelings of anger will result in rejection and feelings of sympathy will result in help.

This theoretical framework could be illuminating of the cognitive processes involved in those caring for PD. Research has indicated that staff working with PD experience negative emotions and that there is a general disliking of patients with PD by health care professionals (Bowers, 2006). If PD is not recognised as a mental illness, then staff are more likely to attribute the causes of their behaviour to internal, controllable factors causing negative affective reactions and a decreased propensity to help. In order to investigate whether this is the case, this study will compare staff responses to the label 'anti-social PD' with 'schizophrenia', an established mental illness label. It is expected that the 'schizophrenia' label will give rise to external and uncontrollable attributions which will cause feelings of sympathy and an increase in helping behaviour. However the PD label will not have this effect. Markham & Trower (2003) demonstrated that patients with a label of 'Borderline PD' (BPD) attracted more negative responses from staff than those with a label of 'schizophrenia' or 'depression'. Staff regarded patients with a BPD diagnosis to be more in control of negative behaviour. Markham & Trower (2003) did not compare the effects of diagnostic labels with a 'no label' condition. The addition of this condition also allows an examination of how labels in general influence staff attributions of challenging behaviour and how challenging behaviours are causally attributed without a diagnostic label to organise information.

There is controversy in the attribution literature as to what is it that predicts helping behaviour; emotional responses (Weiner, 1980) or optimism (Sharrock et al., 1990). Central to Weiner's model of helping behaviour is the mediating role of emotional responses. It is argued that the behaviour elicits a causal search strategy in the observer. The attributional style then causes an emotional response (anger versus sympathy) and this affects the observer's propensity to help. Weiner found that even when controlling for the effects of causal attributions, emotional responses were still significantly correlated with judgements of helping. However when emotional responses were held constant, attributional style was no longer correlated with judgements of helping (Weiner, 1980). A criticism of this study is that it was carried out using university students as participants who had to rate artificial scenario's. Several studies have tried to replicate this model of helping in clinical settings (Sharrock et al, 1990; Dagnan, Trower & Smith, 1998; Stanley & Standen, 2000). These

studies have produced mixed findings regarding the role of emotional responses. Sharrock et al (1990) investigated the application of this model in a secure mental health setting. This study found that staff ratings of optimism was most clearly associated with helping behaviour and that optimism was negatively correlated with stable, internal and controllable attributions: when staff attributed a challenging behaviour to stable, internal and controllable causes, they were less optimistic about recovery and had lower ratings on propensity to help. Dagnan et al (1998) investigated this model in care staff working in learning disabilities and found that attributions of controllability predicted negative affect which decreased optimism and this impacted upon helping behaviour. This study intends to explore this issue further, examining the impact of labels on staff's causal attributions, emotional responses, optimism and ratings of propensity to help. It is expected that the label 'anti-social PD' will cause internal and controllable attributions. This will cause negative affect (anger), decreased optimism and lower ratings of propensity help. The label 'schizophrenia' will cause external and uncontrollable attributions, positive affect (sympathy), increased optimism and higher ratings of propensity to help. If diagnostic labels do affect attributions then the group given a vignette without a diagnostic label should demonstrate the most internal and controllable attributions, the most negative affect, lowest optimism scores and the lowest ratings of propensity to help.

It is possible that other factors affect causal attributions about challenging behaviour, emotional responses, optimism regarding patient recovery and propensity to help. It is possible that staff stress levels will have an impact upon the processes outlined above. Health care staff have been identified as being an occupational group at high risk for stress and burnout (Tyler & Cushway, 1995). Burnout is a condition causing emotional exhaustion, depersonalisation and diminished personal accomplishment and is recognised as being an occupational hazard Burnout is caused by prolonged exposure to chronic job-related stress (Maslach et al., 1996). Those working with patients with a personality disorder may be particularly at risk due to this patient group's complex, demanding and challenging behaviour (Kurtz & Turner, 2007).

With Weiner's attribution model in mind, it could be hypothesised that staff stress will have an impact upon their propensity to help. As already outlined the construct of burnout has 3 aspects; emotional exhaustion, depersonalisation and diminished personal accomplishment. Emotional exhaustion is caused by the depletion of emotional resources, inhibiting staff from

being able to give to others on a psychological level. This should affect attributions. Gilbert & Osbourne (1989) propose a two stage attribution process. When attributing a person's behaviour one immediately believes the behaviour is intrinsic to the person. Then external clues are looked for to explain behaviour. They argue that stress interferes with this two stage process. Those who are experiencing high levels of stress are too preoccupied to reach the second stage of attributing behaviour and are therefore more likely to make internal, controllable attributions. Emotional exhaustion could be the mechanism interfering with this 2 stage process. Depersonalisation refers to negative and cynical attitudes and feelings about clients. Ryan (1971) argues that this can cause staff to perceive their clients as more deserving of their troubles. This is likely to give rise to internal controllable attributions of their challenging behaviour. Diminished personal accomplishment refers to staff evaluating their work negatively, particularly regarding their work with patients (Maslach, Jackson & Leiter, 1996). This is likely to impact upon optimism ratings, perhaps over and above attributional style.

Specifically, this study will ask; is there a relationship between attribution ratings and emotional exhaustion, depersonalisation and diminished personal accomplishment scores, which attributions (internal-external, stable-unstable, controllable-uncontrollable) are most closely related, and how does this impact upon emotional responses, optimism and propensity to help? It is also of interest if the effect of stress is a more powerful predictor on these dependent variables than diagnostic label.

It is important to develop our understanding of the cognitive and emotional responses of staff working with PD. Hastings and Remington (1994) suggest that inappropriate care staff attributions about challenging behaviour in learning disabilities will result in inappropriate interventions. Bowers (2007) demonstrated how staff attitudes to PD affect the type of interventions utilised. Understanding the causal attributions made by care staff working with PD will help identify such inappropriate beliefs and allow the development of training programmes which promote a better understanding of PD and how to manage it. This is especially important given recent changes to The Mental Health Act (2003). The criteria for compulsory detention in the new act are assessment of mental disorder combined with a set of conditions that are intended to establish the unavoidable need for treatment in order to prevent harm to self or others. In contrast to the Mental Health Act (1983), the definition of mental disorder places an emphasis on resulting psychological dysfunction rather than on the

classification of an underlying mental illness, impairment or psychopathic disorder. Due to such changes secondary health services should see an increase in patients with a PD. It is therefore important that staff cognitions and emotions are examined and considered.

Aims and Hypotheses.

This study aims to:

- Examine the effect diagnostic labels have on care staff's causal attributions of challenging behaviour, care staffs emotional responses to the challenging behaviour, their ratings of optimism regarding treatment and their ratings of propensity to help.

- Examine the relationship between care staff's causal attributions, emotional responses, optimism, and helping behaviour.

- Examine the 3 aspects of burnout measured by the Maslach Burnout Inventory, and examine how these are related to care staff's causal attributions, emotional responses, optimism, helping behaviour
- Examine the relative impact of diagnostic labels, burnout measures and causal attributions on care staff's emotional responses, optimism and helping behaviour.

There are 4 hypotheses.

- The 'anti-social PD' label will be associated internal and controllable attributions. The label 'schizophrenia' will be associated external and uncontrollable attributions. No label will be associated with the most internal and controllable attributions.

- Attributions to internal, controllable and stable causes will increase negative emotional responses and be associated with lower levels of optimism and a decreased propensity to help. Attributions to external, uncontrollable and unstable causes will be associated with more positive emotional responses and in higher levels of optimism and an increased propensity to help.

- Stress levels will impact upon the attribution process. Emotional exhaustion will be associated with internal and controllable causal attributions. Depersonalisation will be associated with emotional responses and diminished personal accomplishment will be associated with optimism scores.

Plan of Investigation

Design

This study will have a between subjects design comprising of 3 groups and will employ a quantitative questionnaire methodology.

Participants

The sample will be recruited from both medium and low secure mental health setting. Participants will be nurses and carers in frequent contact with patients with personality disorder. Staff working in the Elm ward and Larch ward in Rowanbank clinic, Glasgow and staff working in ward 5 and the Boulevard ward in Leverndale hospital, Glasgow will be recruited.

Inclusion Criteria

Nursing and care staff with daily patient contact.

Over 1 year experience and working over 20 hours per week.

English as a first language

Recruitment procedures

Contact will be made with those who manage the low and medium secure unit sector in Greater Glasgow and Clyde. The studies aims, procedure and utility will be described and permission sought to contact ward managers. This will be done via e-mail, telephone and officially documented by letter. This will be followed up by a meeting with ward managers on site. Here the study and procedure would be described along with a proposed time-scale. Information sheets will be given to the ward managers which will be distributed to all relevant staff. The information sheet will contain several dates where I will attend their work place to answer questions regarding the study and to gain consent. Of those who consent, demographic data will be sought. Participants will then be grouped according to 'length of time in current or similar capacity'. These groups will then be randomly allocated into the 3 groups using an online random number generator. This method is chosen as years of experience in the job may impact upon the types of causal attributions participants make.

Measures

To assess the effect of labels on causal attributions 3 vignettes have been created for the study. Vignette 1 describes a challenging behaviour. Vignette 2 describes the same challenging behaviour and a diagnosis of 'anti-social personality disorder' is provided. Vignette 3 describes the same challenging behaviour and a diagnosis of 'schizophrenia is provided (see appendix 1, pp 1-3).

Participants will be randomly allocated into 3 groups with each group receiving a different vignette (no diagnostic label, 'schizophrenia' label or 'anti-social personality disorder' label). After reading the vignettes the participants will be asked to complete a series of rating scales which will tap into care staff's causal attributions of challenging behaviour, their emotional responses to that challenging behaviour, their level of optimism regarding patient recovery and their propensity to help. Rating scales have been found to be the method of choice when studying causal attributions (Elig & Frieze, 1979). Professor Dagnan has provided the scales developed from previous research and these are described below and can be found in appendix 2.

- To assess causal attributions a seven-point bipolar scale for locus of control, stability and controllability will be used. Higher scores on these scales indicate greater internality, stability and controllability.

- Emotional responses will be assessed by obtaining ratings of 'anger' and 'sympathy' on a seven-point bipolar rating scale. These 2 emotions have been found to be the most important in predicting subsequent helping behaviour (Weiner 1980).

- To assess optimism, several seven-point bipolar rating scale will be used. This scale is derived from the optimism-pessimism scale developed by Sharrock et al (1990) and also used by Dagnan, Trower & Smith (1998).

- Willingness to help will be assessed on a seven-point bipolar rating scale with 'as much extra help as possible', to 'no extra help at all'.

Staff burnout will be assessed using the Maslach Burnout Inventory (1996). This is a 22-item inventory designed to measure three aspects of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. The reliability and validity of this scale have been studied. Internal consistency was estimated by Cronbach's coefficient alpha (n=1316). The reliability coefficients for the subscales were: .90 for emotional exhaustion,

.79 for depersonalisation and .71 for reduced personal accomplishment. Data on test-retest reliability has also been gathered and the reliability coefficients for the subscales were: .82 for emotional exhaustion, .60 for depersonalisation and .80 for reduced personal accomplishment. Although these coefficients range from low, medium to high are all significant at the .001 level. Convergent and discriminant validity has also been demonstrated (Maslach, Jackson & Leiter, 1996).

Research Procedures

The researcher will meet possible participants in their work place at various allocated times. They will then be informed of the nature of the study both verbally and on an information sheet. Following this consent will be requested. Following consent, demographic data will be sought. Participants will be given a questionnaire gathering the following information: job title, qualifications obtained, length of time in job, length of time working in current or similar capacity and hours of supervision (appendix 3). Participants will then be divided into groups according to 'length of time in current or similar capacity'. These groups will then be randomly allocated into the 3 groups using an online random number generator.

The researcher will then meet the participants in their workplace at allocated times. Participants will read the vignettes and fill in the rating scales using paper and pencil.

Participants will then complete the MASLACH inventory.

Participants will then be thanked and debriefed. All data will then be made anonymous.

Justification of sample size

To calculate sample size a power calculator was used (G*Power 3. 0. 10). In line with convention, alpha of 0.05 (two-tailed) and power of 0.8 was set. Mean and standard deviations for the groups were obtained for causal attributions reported in a study by Markham & Trower (2003). The values used were those relating to attributions of 'control of event' following being presented with the label 'borderline personality disorder' (Mean 25.5, S.D. 5.1) and 'schizophrenia' (Mean 18.0, S.D. 7.6). Using these values a sample size of 42 was obtained.

Settings and Equipment

The study will be carried out in the participants work environment, in a room which is comfortable and ensures both participant and researcher safety. This study will require pen and paper and formal assessments. Equipment is available from the Department of Psychological Medicine.

Data Analysis

To ensure there are no significant differences between the groups for age, qualifications obtained (this data will be converted into numerical data) and hours of supervision a series of one-way between subjects ANOVAs will be carried out.

The data will be analysed for normality and if this is assumed the analysis will be as follows: Each dependent variable score, causal attribution of internality, controllability and stability, emotional response ratings, optimism ratings, and propensity to help will be summed. A series of one-way between-subject ANOVA's will be undertaken to assess whether diagnostic label had an effect on the relevant dependent variables. Where the results are significant , independent samples t-tests will be carried out to assess differences between ratings for the 'anti-social PD label' condition, the 'schizophrenia label' condition and the 'no label' condition.

Within each group, Pearsons correlation tests will be carried out to assess the association between the dependent variables.

Pearsons correlation tests will be used to examine the relationship between stress and the dependent variables. This will be followed by a step-wise multiple regression to examine the relative impact of stress, labels and attributional style on emotional responses, optimism and propensity to help.

Health and Saftey Issues

Research Safety Issues

The study will be carried out in a safe environment approved by the manager of the centre I will be interviewing in. Signing in and signing out procedures will always be followed. I will familiarise myself with fire safety procedures.

Participant Safety Issues

Participants will be given an information sheet outlining the study and they will have an opportunity to ask questions before consent in obtained. They will also be debriefed. This interview will be carried out in their work place.

Ethical Issues

Informed consent will be obtained.

Participants may feel slight anxiety regarding answering the questionnaire however they will be reassured that confidentiality will be maintained.

Participants will be debriefed once they have completed the questionnaire.

All raw data will be made anonymous and stored in a locked cabinet in the researchers work office. Only the researcher and research field and academic supervisors will have access to this data.

Financial Issues

Details of this are outlined on the Costing Form.

Timetable

January 2009: submit draft proposal

January to April: Develop and revise draft proposal

June: Submit major research project proposal

July: Submit application for ethical approval

September: Obtain ethical approval

October to January: Collect data

February to April: Data analysis

May to July: Write up

Practical Applications

Following changes in the mental health act, where the criteria of treatability has been removed and the definition of mental disorder, placing an emphasis on resulting psychological dysfunction rather than on the classification of an underlying mental illness, impairment or psychopathic disorder, secondary health services should see an increase in patients with a PD. It is therefore an important time to gather information regarding staff perceptions and attributions in regards to this patient group in order to create cognitive and emotional interventions for staff. Due to the unpredictable nature of this patient group it is possible that we will see an increase in burnout, particularly if this disorder continues to be misunderstood and negatively evaluated. This is a prime time to identify lack in knowledge and develop teaching.

Ethical and Management Approval Submissions

This proposal will be submitted to Greater Glasgow and Clyde NHS Trust Ethics Committee and R&D approval sought.

References

Bateman, A. & Tyrer, P. (2003). Effective Management of Personality Disorder: www.dh.gov.uk/prod_consum_dh/idcplg?IdcService=GET_FILE&dID=7770&Rendition=Web –

Bowers, L., Alexander, J., Simpson, A., Ryan, C., Carr-Walker, P. (2007). Student psychiatric nurses' approval of containment measures: Relationship to perception of aggression and attitudes to personality disorder. *International Journal of Nursing Studies, 44,* 349-356.

Bowers, L., Carr-Walker, P., Allan, T., Callaghan, P., Nijman, H., & Paton, J. (2006). Attitude to personality disorder among prison officers working in a dangerous and severe personality disorder unit. *International Journal of Law and Psychiatry, 29,* 333-342.

Casey, P. (2000). The epidemiology of personality disorders. *In Personality disorders: Diagnosis, management and course.* Oxford: Butterworth Heinemann.

Dagnan, D., Trower, P., & Smith, R. (1998). Care staff responses to people with learning disabilities and challenging behaviour: A cognitive-emotional analysis. *British Journal of Clinical Psychology,* 37, 59-68.

Derksen, J. (1995). Personality Disorders. Clinical and Social Perspectives. John Wiley & Sons Ltd.

Elig, T. W. & Frieze, I. H. (1979). Measuring Causal Attributions for Success and Failure. *Journal of Personality and Social Psychology,* 37 (4), 621-634.

Fiske, S.T., & Neuberg, S.L. (1990). A continuum model of impression formation from category-based to individuating processes: Influences of information and motivation on attention and interaction. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol.3, pp. 1-74). San Diego, CA: Academic Press.

Gilbert, D. T., & Osbourne, R. E. (1989). Thinking backward: some curable and incurable consequences of cognitive busyness. *Journal of Personality and Social Psychology,* 57, 940-949.

Gunn, J. & Robertson, G. (1976). Psychopathic personality: a conceptual problem. *Psychological Medicine*, 6, 631-634.

Hastings, R. P., & Remington, B. (1994a). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *British Journal of Clinical Psychology*, 33, 423-438.

Huguenard, T., Sager, E. B., & Ferguson, L. W. (1970). Interview time, interview set and interview outcome. *Perceptual and Motor Skills*, 31, 831-836.

Kreiman, N., Sainsbury, P., Morrisey, J., Towers & Scrivener, J. (1961). The Reliability of Psychiatric Assessment: An Analysis. *Journal of Mental Science*, 107, 887-908.

Langer, E, J., & Abelson, R., A. (1974). A Patient by any other name…Clinician group differences in labelling bias. *Journal of Consulting and Clinical Psychology*, 42 (1), 4-9.

Lewis, G., & Appleby, L. (1988). Personality Disorder: The Patient Psychiatrists Dislike. *British Journal of Psychiatry*, 153, 44-49.

Markham, D. & Trower, P. (2003). The effects of the psychiatric label 'borderline personality disorder' on nursing staff's perceptions and causal attributions for challenging behaviours. *British Journal of Clinical Psychology*, 42, 243-256.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory.* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press. In Zalaquett, C., P., & Wood, R. (1997) Evaluating Stress. *A Book of Resources.* The Scarecrow Press, Inc. Lanham, Md., & London.

Mental Health (Care and Treatment) (Scotland) Act 2003

Mischel., W. (1968). *Personality and Assessment.* New York. Wiley.

Rockett, J., L., Murrie, D., C., & Boccacini, M., T. (2007). Diagnostic Labelling in Juvenile Justice Settings: Do Psychopathy and Conduct Disorder Findings Influence Clinicians? *Psychological Services*, 4(2), 107-122.

Ryan, W. (1971). *Blaming the Victim.* New York: Pantheon.

Sharrock, R., Day, A., Qazi, F., & Brewin, C., R. (1990). Explanations by professional care staff, optimism and helping behaviour: an application of attribution theory. *Psychological Medicine,* 20, 849-855.

Singleton, N., Meltzer, H., Gatward, R., *et al* (1998) *Psychiatric Morbidity Among Prisoners in England & Wales*. London: The Stationery Office.

Stanley, B. & Standen, P. (2000). Carers' attributions for challenging behaviour. *British Journal of Clinical Psychology, 39,* 157-168

Tylar, P. & Cushway, D. (1995). Stress in Nursing: The effects of coping and social support. *Stress Medicine,* 11, 243-251.

Walton**,** H. J. (1978) The *psychoneuroses***.** In Companion to, Psychiatric Studies (2nd edn) (eds A. Forrest, J. Affleck & A. Zealley). Edinburgh: Churchill Livingstone.

Weiner, B. (1974). Achievement motivation as conceptualised by an attribution theorist. In *Achievement Motivation and Attribution Theory.* B. Weiner (Ed), Morristown, N.J: General Learning Press.

Weiner, B. (1980). A Cognitive (Attribution)-Emotion-Action Model of Motivated Behaviour: An Analysis of Judgements of Help-Giving. *Journal of Personality and Social Psychology, 39 (2),* 186-200.