**UNIVERSITY OF SOUTHAMPTON**

FACULTY OF MEDICINE, HEALTH AND LIFE SCIENCES

School of Psychology

**Understanding and Ameliorating Stigma towards Clients with a Personality Disorder: An Acceptance and Commitment Therapy-based Approach**

by

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<u>ABSTRACT</u>


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**UNDERSTANDING AND AMELIORATING STIGMA TOWARDS CLIENTS WITH A PERSONALITY DISORDER: AN ACCEPTANCE AND COMMITMENT THERAPY-BASED APPROACH**

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It is regrettably common for mental health staff to act without sufficient compassion towards the people they serve. Professionals' judgmental attitudes and stigmatising actions harm not only their clients but also the staff themselves. This thesis aimed (a) to model the relationships between stigma and client and staff outcomes, and (b) to evaluate the effectiveness of a new form of self-management training, based on the principles of Acceptance and Commitment Therapy, in reducing levels of staff stigma towards individuals with personality disorder (PDs), a particularly complex and intransigent mental health problem.

Five studies examined the theoretical underpinnings and application of ACT-based training (ACTr) for staff working with PDs. Studies 1 and 2 determined that two key ACT processes, thought believability and psychological inflexibility, underpinned the relationships between staff stigma and both negative client and staff outcomes. Study 3 provided a novel, comparative evaluation of ACTr and Dialectical Behaviour Therapy based client-management training (DBTr) for 100 mental health staff working with PDs. Both interventions produced positive and sustained changes in staff attitudes and client outcomes but no differential group effects emerged. Based on these findings, extensive refinements were made to the original ACT training protocol and evaluated in Study 4, in preparation for the final comparative study. Study 5 incorporated these changes, comparing the revised ACTr protocol with psycho-educational training (PETr) for 95 non-specialist staff. Results indicated positive and sustained changes in staff attitudes and client outcomes but no differential group effects or sustained changes in process variables were found. Potential problems and pitfalls in applying ACT-based training with clinical staff are considered.

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## Declaration of Authorship

I, **Georgina Taylor,**

declare that the thesis entitled

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and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research.

I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the source of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on my own work done by myself or jointly by others, I have made clear exactly what was done by others and what I have contributed myself;
- none of this work has been published before submission

**Signed**………………………………………………………………………………………

**Date:** 1st April 2010

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**CHAPTER I**

**Overcoming the challenges faced by healthcare staff working with difficult clients: Is education based training enough?**

### 1.1 The 'Difficult client' in Mental Health Care

The 'difficult client' is not a category within the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, 2000); hence no formal definition for this term exists. Nevertheless, the frequent use of the term seems to suggest a familiar and clearly distinguished group of clients. This is not, however, the case; the term remains undefined and consequently has been used to describe a number of different client groups including individuals with psychotic disorders, personality disorders (PDs), and substance misuse problems (Colson et al., 1985; Gafoor & Rassool, 1998; Koekkoek, Van Meijel and Hutschemaekers, 2006).

The concept of the difficult client has arisen as a result of the implicit and explicit judgments that healthcare professionals form about certain clients or client groups (Koekkoek et al., 2006). These same individuals have also been labelled as 'heart-sink' or 'hateful', indicating the extent to which they can elicit negative responses in others (see Campion-Smith, Cumming & Tracy, 2004 for a review). In an attempt to define the difficult client, Koekkoek et al. (2006) conducted an extensive literature review of 94 articles published between 1979 and 2004. The words 'difficult patient' or 'problem patient' were combined with keywords such as 'mental health services' and 'therapeutic alliance'. Their search identified that a client diagnosis of PD – endorsed in 46% of all studies – was the most common mental disorder encountered. This recent finding indicates a common view that difficult clients have character pathology.  The other two, frequently rated mental health problems included psychotic and mood disorders (but it should be noted that DSM-IV recognises a high comorbidity between PDs and psychotic or mood disorders). These findings suggest that the concept of PD is critical to understanding 'the difficult client'.

*1.1.1 Personality Disorders*

The DSM-IV-TR (1994) describes PD as "an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment" (p.685). By exploring the terminology used by masters-level students to describe individuals with PDs, a recent study by Wright, Haigh and McKeown (2007) confirmed that individuals diagnosed with PD epitomize the concept of the difficult client. They were described in such terms as *manipulating, abusive, bad, dependent-clingy, attention seeking, difficult, uncooperative, saboteurs (of care and the care of others), unappreciative, inconsistent, disinhibited, disrespectful, unreliable* and *liars*.

The general definition of PD broadly encompasses 11 specific PDs and, although the basis of the disorder is the same, each of the specific PDs vary from one another quite considerably. Of the 11 PDs identified, Borderline Personality Disorder (BPD) is reported to be the most commonly occurring, the most complex, and one of the most severely impairing (Gunderson & Berkowitz, 2003).

*1.1.2 Borderline Personality Disorder*

Koekkoek et al. (2006) indicated that when asked about characteristics of difficult clients, psychiatrists specifically mentioned the diagnosis of BPD up to four times more often than any other mental health diagnoses. This is not, however, a new phenomenon; a body of literature dating back to the 1970s indicates that individuals with BPD[1] have long posed problems for healthcare professionals (see Koekkoek et al, 2006, for a review). BPD is the most commonly encountered PD in mental health and clinical settings; indeed, this problem is perceived to be inundating mental health and clinical practitioners' offices (American Psychiatric Association, 2000; Linehan, 1993). Prevalence rates indicate that 2% of the general population has a clinical diagnosis of BPD but BPD clients account for 10% of individuals seen in outpatient mental health clinics and about 20% among psychiatric inpatient units (DSM-IV). In fact, the prevalence of BPD ranges from 30 – 60% among clinical populations with PDs, further indicating the effect BPD has on mental health services. BPD is

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[1] Throughout this review, the term 'Borderline Person' (BP) will be used to refer to individuals with a diagnosis of BPD

a predominantly female disorder, with estimates that approximately two-thirds to three-quarters of those diagnosed with BPD are women (see Johnson et al., 2003 for a review). In addition, BPD frequently co-occurs with other complex DSM disorders such as Mood Disorders, Substance-Related Disorders, Eating Disorders (notably Bulimia), Post-traumatic Stress Disorder, and Attention-Deficit/Hyperactivity Disorder. Given the high-rates of co-occurrence with disorders such as these, individuals with BPD symptomatology will present for treatment in a wide range of healthcare settings for help with other disorders. As a consequence, they will come into contact with a broad range of healthcare professionals, including many with little or no specific skills relating to the disorder.

A recently published article by Lakasing (2006) entitled '*How to define and manage difficult patients*' focused solely on individuals with PD: no other client group was discussed. In addition, no justification was provided as to why this client group was the focus of the review, suggesting that there is a common, almost unspoken, consensus among professionals that individuals with PDs are perceived as difficult. Hinshelwood (1999) posits that the '*difficult client group*' is an evaluation made by professionals as a way of describing the disagreeable feelings that are evoked in them during interactions with these clients. In accordance with this, a body of literature indicates that individuals with PDs are responsible for evoking strong negative emotional responses in staff, owing to their inherently unpredictable and challenging behaviour. Moreover, individuals with PD are disproportionately high users of health-care resources, especially professional time, which suggests that staff members will frequently experience their challenging and unpredictable behaviour (Lakasing, 2006). Although other client groups are perceived as difficult and problematic, there appears to be a consensus that the individual with PD is the epitome of the challenging client. Indeed, Zanarini et al. (1998) speculated that healthcare professionals willing to work with this client group require an *'iron constitution'*. Furthermore, a mass of literature spanning the past 30 years highlights the fact that BPD is a highly stigmatised mental health disorder.

In view of this evidence, it is apparent that individuals with a PD are perceived as a highly difficult client group by a range of healthcare professionals. Of the 11 different types of PD, BPD is the most commonly encountered in mental health and clinical settings (Linehan,

1993). Thus, in order to provide a foundation for this review, BPs will be the 'difficult' client group referred to.

*1.1.3 The Diagnosis and Aetiology of Borderline Personality Disorder*

"BPD is a pervasive pattern of instability of interpersonal relationships, self-image, and affect, and marked impulsivity that begins by early adulthood and is present in a variety of contexts" (DSM-IV, p.706). In general, a diagnosis of BPD is made when five or more of the symptoms shown in Table 1[2] are present for a year or more. Because only five of the nine symptoms are needed to make a diagnosis of BPD, some BPs will only overlap on one of the nine symptoms. Furthermore, because the diagnosis of BPD is based on polythetic criterion sets, up to 151 different combinations of BPD exist (Skodol, Gunderson et al., 2002). The multidimensional problems that BPs are likely to experience can be organized into four areas; affective, cognitive, interpersonal and behavioural (Lieb, Zanarini, Schmahl, Linehan & Bohus, 2004). These areas, along with the challenges they pose to the healthcare professional will be discussed in more detail in Section 1.2.

Research indicates that early environmental origins of BPD could include a high incidence of parental loss, prolonged parental separation and feelings of neglect during childhood, all of which are believed to contribute towards the BPs' later fears of abandonment (criterion 1 of BPD, see Table 1.1; Barone, 2003). Gunderson and Berkowitz (2003) indicate that these abandonment fears could be based on actual physical abandonment or a perception of emotional abandonment where a BP believes that they are different, disconnected or misunderstood by their families.

Currently, the Biosocial Theory is one leading model of BPD (Linehan, 1993). It posits that the disorder is a dysfunction of the emotion regulation system, which results from a transaction of biological irregularities and invalidating environments over time. The biological components are hypothesised to consist of heightened sensitivity to emotional stimuli, strong emotional reactivity, and slow return to emotional baseline (Linehan, 1993). Invalidating environments, which can take many forms, are any circumstances that punish, trivialise, or disregard an individual's emotional experiences. An extreme form of invalidation is sexual or physical child abuse, and this is reported by up to 70% of individuals with a diagnosis of BPD

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[2] When relevant, specific symptoms that make up the diagnosis of BPD will be referred to directly

(Gunderson & Berkowitz, 2003). Furthermore, the severity of the abuse has been connected to the severity of the borderline condition found in adulthood (Gunderson & Berkowitz, 2003).

Table 1.1

*Diagnostic Criteria for Borderline Personality Disorder (DSM-IV-TR, 2000)*

| Symptom | Definition |
| --- | --- |
| 1 | Frantic efforts to avoid real or imagined abandonment. Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5 |
| 2 | A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation |
| 3 | Identity disturbance: markedly and persistently unstable self-image or sense of self |
| 4 | Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5 |
| 5 | Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour |
| 6 | Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days) |
| 7 | Chronic feelings of emptiness |
| 8 | Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights) |
| 9 | Transient, stress-related paranoid ideation or severe dissociative symptoms |

*Note*. BPD is a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the symptoms listed above

*1.1.4 Risk Factors associated with BPD*

The rate of suicide for BPs is similar to that of patients with Schizophrenia and Bipolar Affective Disorder (about 10%; Krawitz & Watson, 2003). In addition, BPs with a co-occurring Mood Disorder or Substance-Related Disorder are at an increased risk of suicide (DSM-IV). Data indicate that between 50-70% of hospitalized BPs have co-morbid substance misuse problems (Gunderson & Berkowitz, 2003). These figures highlight the fact that BPs are a high risk group, struggling with multiple problems and, as a consequence, that they are susceptible to suicide. They require effective professional help to overcome their problems. In fact, Miller and Davenport (1996) argue that BPs may be the clinical group with the greatest need for skilful care.

*1.1.5 Summary*

To recap, Section 1.1 has shown that BPs are seen by clinical services to be the most difficult of 'difficult clients', and the use of the term 'difficult' has arisen because staff members make negative evaluations of their professional relationships with BPs. In order to understand the process by which these relationships become characterized as difficult, the impact of the behaviour traits of BPs will now be considered in section 1.2.

**1.2 The Challenges Faced by Staff working with BPs**

As discussed previously, BPs seek treatment from a wide range of clinical services. Their diagnosis is complex and they present with a variety of challenging behaviours that are potentially problematic for treatment staff. Previously, such clients were considered a challenge primarily for doctors but, with more recent initiatives in the UK, a broader range of healthcare staff including nurses and their assistants have acquired greater autonomy in managing clients with acute and chronic illness (Lakasing, 2007). Thus, the challenges of working with BPs are now encountered by individuals with varying degrees of professional knowledge and experience. In this section, the challenges staff face will be discussed in relation to the four psychological domains reflected in the nine diagnostic criteria of BPD; Affective, Behavioural, Interpersonal and Cognitive. Later in the review, I shall draw some parallels between the challenges faced by staff working with BPs and those working with individuals with learning disabilities and challenging behaviours (CB). This comparison arises

because certain behaviours of people with severe learning disabilities have similar functions and impacts as those displayed by BPs. The comparison is useful because research on CB has a more fully developed literature base that may lend itself to a more psychologically informed understanding of staff behaviour in relation to BPD.

*1.2.1 Affective Features of BPD*

The affective domain includes chronic feelings of emptiness/boredom, emotional instability due to a marked reactivity of mood that may include intense episodic dysphoria, irritability or anxiety which can last for a few hours or a few days, and inappropriate anger or difficulty controlling anger, which presents as frequent displays of verbal abuse, and frequent physical conflicts (DSM-IV). Foster, Bowers and Nijman (2007) found that in the space of one year, 245 incidents of aggression were recorded in one acute psychiatric hospital in the UK. Of these, staff members were targeted in 57% of the attacks. Bland and Rossen (2005) explain that, when the BP displays intense anger, staff may feel personally attacked, angry, helpless, frustrated, or fearful for their safety and the safety of their other clients. Inevitably, affective features of BPD, such as intense, inappropriate anger, and marked shifts in moods, make it difficult for staff to interact with, and provide therapeutic care for, clients with this disorder. As discussed previously, in accordance with a DBT perspective, an inability to regulate emotions is the core component of BPD (Linehan, 1993).

*1.2.2 Interpersonal Features of BPD*

Interpersonal criteria include frantic efforts to avoid real or imagined abandonment along with a pattern of intense and unstable interpersonal relationships, characterized by alternation between extremes of idealization and devaluation. By definition, these criteria directly relate to interpersonal relationships; therefore it is unsurprising that they have a negative impact on therapeutic relations. For example, treatment staff can be seen in terms of absolutes; thus, 'good' nurses are idealized and 'bad' nurses denigrated (Bland, Tudor & McNeil Whitehouse, 2007). Moreover, the same person can be viewed as good or bad at different times and, because these categorical judgments can fluctuate several times a day, the development of stable, professional relationships can be significantly impeded. Unsurprisingly, given the characteristic instability shown by these individuals, the majority

terminate open-ended treatment within a few months (Gunderson, Frank, Ronningstam, Wahter, Lynch, & Wolf, 1989). These drop-out rates are likely to put pressure on staff to try and provide effective care quickly.

*1.2.3 Cognitive Features of BPD*

Cognitive aspects include transient stress-related paranoid ideation or severe dissociative symptoms, as well as identity disturbance, a clear and persistent unstable self-image or sense of self. Mason and Kreger (1998) speculate that as part of their identity dilemma, it is common for BPs to see themselves as helpless victims of other people or circumstances – even when their own behaviour has affected the outcome of a particular situation. Interpersonal theorists argue that a BP's historic experience of childhood trauma is likely to contribute to their sense of being a victim (Ryle, 2005). Although, this explanation accounts for why a BP has difficulty in recognising their responsibilities, it inevitably, complicates the process of therapy.

During dissociative episodes, in an attempt to terminate feelings of numbness, BPs are known to engage in DSH or other reckless acts (Smith, Cox & Saradjian, 1998) which pose a number of challenges to staff (see *behavioural features,* Section 1.2.4, for further information). Furthermore, communications with BPs during periods of paranoid ideation can be vague, tangential and over-personalised, and this can stifle therapeutic progress (Bland, 2003). In conclusion, cognitive symptoms can make therapeutic relations immensely problematic for staff.

*1.2.4 Behavioural Features of BPD*

Behavioural features include marked levels of impulsivity, including recurrent suicidal behaviour (e.g., ideation[3], attempts and threats), or deliberate self-harm (DSH), along with impulsivity in at least two areas that are potentially self-damaging (e.g., unsafe sex, binge drinking, reckless driving and spending; Criterion 5). Research suggests that more than 70% of BPs have made suicide attempts (Zanarini et al. 1998) and that up to 85% engage in acts of DSH (Smith, Cox & Saradjian, 1998). Psychological explanations view DSH as a functional activity in that, despite its obviously unpleasant features, may achieve various desirable

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[3] Suicidal ideation is not a behavioural feature of BPD; however, it is a clear precursor to behavioural acts.

outcomes for those who engage in it (e.g., coping with emotional tension, ending a dissociative state, deserved self-punishment etc.; see Smith et al., 1998, for a review). Despite these short-term 'benefits', DSH  is maladaptive in terms of social functioning and consequently contributes to relationship problems, including professional relations with staff (Bland & Rossen, 2005). For example, staff treating individuals who self-harm have reported feeling emotionally and physically exhausted and frustrated with them (Bland & Rossen, 2005; see section 4.2 for more extensive information) and this is related to poor treatment success (Bland & Rossen, 2005).  Furthermore, the 'threat' of suicidal behaviour is included in Criterion 5 of the DSM diagnosis of BPD. Therefore, healthcare professionals will often be in situations where individuals threaten to engage in self-destructive behaviours, although these behaviours may not actually occur. Furthermore, clients with BPD are not only notorious for lodging complaints against treatment staff but for *threatening* to make such complaints (APA, 2000; Nehls, 2000). This means that staff members must face the reality of coping with negative feelings associated with emotionally difficult acts, even in their absence (Bland et al., 2007). In sum, treatment staff are required to deal with the direct effects of a broad range of maladaptive behaviours (e.g. intoxication, self-harm) which can be particularly demanding, both physically and emotionally.

*1.2.5 Summary*

In summary, professional encounters with BPs are problematic and are likely to involve disturbing and frightening behaviour – or the threat of such behaviours – including intense anger (verbal and physical abuse), chronic suicidal ideation, DSH and suicide attempts. Owing to the nature of the disorder and the associated risk of suicide, BPs are particularly vulnerable and in need of effective professional help. However, BPs' level of functioning often fluctuates, making progress in therapy very slow (Aviram, Brodsky & Stanley, 2006). The combination of slow progress and difficult client interactions creates major professional challenges for staff members.

Regardless of the extent to which BPs are affected by their condition, most borderline behaviour reflects attempts to cope with severe emotional anguish such as fears of abandonment, intense feelings of emptiness, loneliness and despair. Often these behaviours are inherently maladaptive (despite some short-term functionality) and consequently bring about

additional problems for both BPs and for those close to them (refer to section 1.3 of this review).

Thus far, this review has focused on defining BPD and the challenges that this disorder presents to healthcare staff. The next section will review how staff members respond to the challenges presented by BPs and clients with other complex needs.

## 1.3 Stigmatising Attitudes and Personality Disorders

Stigma has been defined as 'the perception of a negative attribute that becomes associated with a global devaluation of the person' (Aviram, 2006, p.249). Thus stigma connotes the negative effects of a label placed on any group, such as a social or racial minority, or in many cases, those who have been diagnosed as mentally ill (Corrigan et al. 2001; Corrigan, 2004a; Hayward & Bright, 1997; Link, 1987). The stigmatising treatment of people who suffer from mental health problems is a widespread and concerning problem. Indeed, within the last year, 'Time to Change' – a partnership of mental health charities, including *Mind* and *Rethink*, has been formed to combat the stigma and discrimination that surrounds mental health (Time to Change, 2009). More specifically, negative stigmatising attitudes towards individuals with PDs have been apparent for some time. For example, a critical judgment about people with PDs was made by the World Health Organization, which characterised their behaviour as 'a weak inadequate response to the demands of daily life' (as cited in Andrews, Kiloh & Kehoe, 1978, p.95).

Unfortunately, stigma towards people with mental health problems is not only common in the general population but is also prevalent amongst mental health professionals (Maslach et al., 1996). Moreover, the stigmatising attitudes of mental health staff are particularly evident towards individuals with PDs (Lewis & Appleby, 1988). For example, Lewis and Appleby asked a sample of 173 British psychiatrists to read a single case vignette depicting the behaviour of a fictitious character with a mental health problem. The vignettes either described the individual as suffering from depression, a personality disorder, or no diagnostic information was given. The psychiatrists were then required to complete a series of semantic-differential scales designed to determine their management styles and attitudes towards the characters depicted. The results showed that when a diagnosis of PD was present, clinicians formed pejorative, judgmental and rejecting attitudes. For example, in contrast to the other

clients described, individuals with PD were more likely to be described as 'manipulative, difficult to manage, unlikely to arouse sympathy, annoying and not deserving of resources, non-compliant, not accepting of advice and having a poor prognosis' (Lewis & Appleby, 1988, p.47). Furthermore, they were perceived to have control over their behaviour (Lewis & Appleby, 1988). The authors speculated that this prejudice originates from an assumption by clinicians that, despite the inclusion of PDs within the DSM, PD is not regarded as a clinical disorder. As a result, PD clients are not regarded as ill and are thus are believed to be capable of controlling their emotional instability. Dagnan and Cairns (2005) determined that internality – the extent to which the cause of behaviour is attributed to the person – was a significant independent predictor of sympathy, and that the emotion of sympathy was the single best predictor of helping behaviour. These results are consistent with Weiner's (1980) model of attribution and have been shown in a number of other studies investigating other client populations (e.g., Dagnan, Trower & Smith, 1998; Sharrock, Day, Qazi & Brewin, 1990). Therefore, these findings indicate that judgments made by staff are likely to impact on their willingness to help clients with PDs and this in turn could result in these clients failing to receive the clinical intervention they require. Dagnan and Cairns did not focus specifically on BPD, although they postulated that different types of PD may evoke different levels of condemnation in mental health professionals.

*1.3.1 Stigmatising Attitudes and Borderline Personality Disorder*

The majority of recent studies investigating stigma towards PDs have focused on clients with BPD and all show levels of disapproval towards this group to be high. BPs have been described by a range of mental health professionals as difficult (Gallop & Wynn, 1987), treatment resistant (Nehls, 1998), manipulative, demanding and attention seeking (Stone & Hurt, 1987). In fact, several studies using nurse samples (Bland, 2003; Cleary, Siegfried & Walter, 2002; Deans & Meocevic, 2006; Greene & Ugarriza, 1995; James & Cowman, 2007; Markham & Trower, 2003) have reported them to be among the most challenging clients encountered in their practice.

Cleary et al., (2002) obtained a sample of 229 mental health staff working in community and inpatient settings. They completed a 23-item questionnaire designed to measure professional experience, knowledge and attitudes regarding clients with BPD. A large

majority of staff (85%) reported having contact with BPs at least once a month or more, while 32% reported daily contact. Most respondents (80%) reported finding working with them moderately to very difficult with 84% stating that encounters with them were more difficult than with other clients. Unfortunately, participants were not required to define their conceptualizations of what formed a difficult working relationship.

A more recent study by James and Cowman (2007), investigated psychiatric nurses' attitudes, knowledge and experience of clients with a diagnosis of BPD. Sixty-five nurses completed an adapted version of the questionnaire designed by Cleary et al. (2002, discussed above) but in contrast, only 3% of nurses reported having received any specific training on BPD outside their undergraduate course, and such training only consisted of a single workshop or lecture (James & Cowman, 2007). Furthermore, inexperienced nurses were more likely to be working in inpatient settings (32% of inpatient-based nurses were under 5 years qualified) than in community settings (15%). Thus, although BPD is most prevalent in inpatient units, approximately one third of nurses working there are likely to be newly qualified and lacking specialist skills. It is therefore possible, that stigmatising attitudes towards clients may occur as a result of staff lacking specialist knowledge and skills. This would also account for why Lewis and Appleby's (1988) sample of psychiatrists held negative, stigmatising attitudes towards PD clients because, despite being highly trained in psycho-pharmacology, they will have experienced very little training about *psychological* models of pathology and treatment. Finally, James and Cowman (2007) found that 81% of staff members believed the quality of client care for BPs to be inadequate. Encouragingly, they identified that 90% of nurses in their sample stated that they would engage in future training if it was offered to them.

Markham and Trower (2003) investigated how the psychiatric label of BPD affected staff's perceptions and causal attributions about clients' behaviours. Forty-eight registered mental health nurses with an average of 13 years experience completed three versions of a questionnaire designed to measure their attitudes towards an imagined client with a specific diagnosis of either BPD, Depression or Schizophrenia. They were then presented with six examples of challenging behaviours commonly exhibited by these clients (e.g. acting violently, refusing to follow a request). In addition, staff rated their level of sympathy with the client in each scenario. Respondents perceived the borderline character to be significantly more in control of both the negative events depicted and their causes. These results indicate

that healthcare professionals regard clients with a BPD label to be more in control of negative behaviour than clients with a label of schizophrenia or depression.

Moreover, Markham and Trower (2003) found that in general, staff rated the borderline character negatively but rated the schizophrenic and depressive characters positively. Negative staff ratings were associated with lower levels of optimism; thus, staff members were more likely to report a belief in the possibility of change in clients' negative behaviours when diagnosed with schizophrenia or depression than with BPD. This finding has strong clinical implications because it suggests that staff may regard therapeutic interventions with BPs as pointless. Indeed, healthcare professionals often describe BPs as 'treatment resistant' (see Aviram et al., 2006). As a result of such attitudes BPs are less likely to receive the therapeutic care they require. Finally, staff expressed significantly less sympathy towards the borderline character than they did towards the schizophrenic or depressive characters. In fact, the mean sympathy ratings indicated that staff members were *not* sympathetic. In contrast, ratings indicated extreme sympathy towards individuals with schizophrenia or depression. These findings are consistent with the findings produced by Lewis & Appleby (1988) which indicate that behavioural control is associated with negative intent on the part of the client, which in turn elicits negative judgments in staff. Dryden (1990) asserts that by failing to separate the evaluation of a client's behaviour from the evaluation of the client themselves is likely to lead to negative therapeutic relationships, which in turn could be counter-therapeutic for the client.

An investigation by Deans and Meocevic (2006) showed that a high proportion of psychiatric nurses experienced negative emotional reactions and attitudes towards BPs. For example, the majority perceived them to be manipulative, with one third reporting that BPs made them feel angry. In view of the findings produced by Lewis and Appleby (1988) and Markham and Trower (2003), the fact that BPs were regarded as manipulative suggests that nurses judge them to be in control of their behaviour. This would explain why nurses experience feelings of anger – a strong emotional response including feelings of annoyance, displeasure and hostility – towards these clients. Therefore, impulsive behaviours such as binge drinking and promiscuity (consistent with criterion 4 of the BPD diagnostic criteria) displayed by BPs are likely to be judged as morally wrong and consequently responded to in unsympathetic and non-therapeutic ways (e.g. Markham & Trower, 2003).

*1.3.2 Summary*

In summary, the evidence reviewed indicates that healthcare staff can form strong, prejudicial judgments about the behaviours shown by BPs. Such judgments have been shown to reduce staff members' sympathy and willingness to help. Furthermore, because they view BPs' behaviours as volitional, staff can experience strong, negative emotional reactions in response to the behaviours shown by them. Critically, this information indicates that staff associate control with negative intent, such as manipulation. These findings suggest a lack of understanding about BPD on the part of the healthcare professionals. Indeed, only a small minority of healthcare staff typically receive specific training about BPD. Thus far, this review may indicate that providing education to staff about the nature of BPD and the functionality of symptomatic behaviours may help to improve their attitudes towards BPs, which in turn should increase their willingness to help them.

*1.3.3 Stigmatising Attitudes and Deliberate Self-Harm*

DSH is a key element of BPD and a collection of research has focused specifically on this (e.g. Arnold, 1994; 1995; Chowdhury et al., 2000; Crawford, Geraghty, Street & Simonoff, 2003; Fish, 2000; McAllister, Creedy, Moyle & Farrugia, 2002; Warm, Murray & Fox, 2002). This research indicates that self-harming behaviour is highly stigmatised by many clinical professionals. Furthermore, reports show that staff members working with individuals who self-harm often feel frustrated, fail to empathize, distance themselves or display signs of anger, fear and disgust towards them (Childs, Thomas & Tibbles, 1994; Johnstone, 1997). For example, McAllister et al. (2002) indicated that a sample of clients who presented to Accident and Emergency (A&E) departments for help with their DSH experienced judgmental comments from staff, were often ignored and made to wait for treatment. This suggests that staff need to be trained to understand the nature and functionality of self-harm. However, research in the area of learning disabilities and CBs –behaviours that can have similar functions and impacts as those displayed by BPs – has found that providing staff with knowledge may not be enough to ensure effective action (Hastings, 1996).

*1.3.4 A Functional Approach to BPD Symptomatology*

CB is defined as 'culturally abnormal behaviour of such an intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or result in the person being denied access to, ordinary community facilities' (Emerson, 1998, p.127). Self-injurious behaviour (SIB) is characterized by repeated and intentional self-directed behaviour that produces physical injury (Hastings, 1996). Extensive investigation into CB indicates that staff members' responses to SIB are under the control of contingencies relating to the aversive nature of the client's behaviour (e.g., Hastings, 1996). In fact, reports indicate that because healthcare professionals are highly motivated to prevent or terminate any occurrence of SIB, they may inadvertently behave in counter-therapeutic ways that are believed to maintain or increase these behaviours in the long-term (see Hastings, 1995 & Whittington & Burns, 2005 for a review). Therefore, despite having rules for effective action (e.g. "stop attending to the client's negative behaviour and in time this behaviour will diminish") staff can revert back to familiar responses (e.g. providing social attention; Hastings 1996). This is believed to occur because the termination of client aversive behaviours and the difficult emotions that they elicit in staff eases the latter's distress in the short term (Hastings, 1995). This temporary relief, however, is likely to bring additional problems to the forefront; staff will realize that, despite having knowledge and skills, they are not delivering the quality of care required, which in turn could lead to concerns about their professional capability.

If features of CB resemble those of DSH, the literature on staff behaviour in relation to CB could lend itself to the understanding staff behaviour in relation to DSH and consequently BPD. In fact, there are some strong similarities. For example, the reported emotional reactions of staff towards clients who engage in CBs such as aggression and self-injury are comparable to those reported by staff in response to DSH (e.g. feelings of anger, fear, disgust; Bromley & Emerson, 1995; Dagnan et al., 1998; Hastings, 1995; Hastings, Tombs, Monzani & Boulton, 2003; Mitchell & Hastings, 1998; Mossman, Hastings & Brown, 2002). Given the literature on staff responses to CB, it is likely that professionals working with BPs may also act in ways to eliminate their distress as a result of difficult client interactions (e.g., distancing themselves from clients). Therefore, providing staff with knowledge and skills may not be enough to

overcome stigmatising behaviours. Indeed, they may require some additional self-management skills to help them cope with their work-related distress.

### 1.3.5 Summary

In summary, the evidence reviewed in section 1.3 indicates that staff can experience strong, negative emotions in response to behaviours symptomatic of BPD. Some evidence suggests that these negative reactions might be overcome following suitable educational training, however, data from the area of CBs suggest that education based training alone might not be sufficient to modify negative attitudes and improve staff-client relationships. This suggests that training interventions designed to reduce stigmatising attitudes and improve therapeutic relations may need to address the emotional needs of healthcare professionals, in addition to their knowledge and skills. This will be discussed further in sections 1.5 and 1.6 of this review. Before that, however, the effects of stigmatising attitudes and negative emotions on both clients and healthcare staff will be considered.

### 1.4 The Effects of Stigma

The previous section indicated that a range of healthcare professionals hold negative, stigmatising attitudes and beliefs towards individuals with BPD and other types of PDs. Aviram et al. (2006) predicts that because of the prevalence of stigmatising attitudes towards BPD, healthcare professionals may form a priori negative expectations about such clients and the likely impact/outcome of treatment before coming into contact with them. Thus, they are more likely to fail to see the client as a person. The healthcare professional's negative preconceptions are likely to be evident to the client through his or her behaviour (i.e. psychological distancing as a means of protecting themselves from unpleasant or uncomfortable emotions). These reactions could in turn, trigger further, negatively evaluated behaviours in the client that confirm pre-existing, stigmatising notions about BPD to the professional. The effects of professional stigma on both the client and staff member will be discussed in the following sections.

*1.4.1 The Impact of Professional Stigma on the Borderline Client*

Literature concerning the effects of staff-stigma on clients with BPD, from the client's perspective, is sparse. Such evidence as there is, however, indicates that client care suffers as a result of negative staff attitudes and behaviours (Nehls, 1999; Fallon, 2003). Aviram et al. (2006) speculates that the process by which stigmatising attitudes and the resulting distancing behaviours of staff (such as becoming less personal and less approachable in interpersonal situations) can actually worsen the level of functioning of clients with BPD because of their sensitivity to, and fear of, rejection (see Figure 1.1). These perceived 'attention-seeking' responses will in turn, only serve to confirm the staff member's original, negative judgments about such clients. This model is functionally consistent with similar models in the area of learning disabilities and CB (Hastings, 1999; Section 1.3.4), which also show that staff members often act in ways that are counter-therapeutic to the client. In support of these assertions, Krawitz and Batcheler (2006) reported that 85% of a sample of 29 clinicians working with individuals with BPD, stated that, in the preceding year, they had acted in a manner that they believed was not in the best interests of their clients.
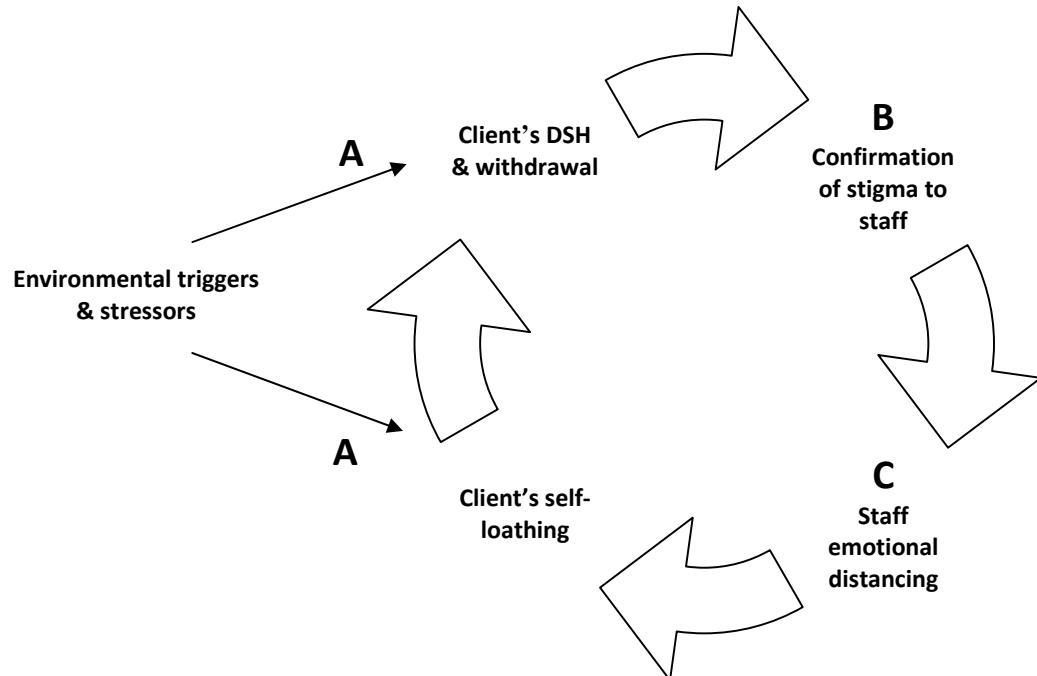


*Figure 1.1*. Cycle of Stigma Confirmation and Behavioural Dysregulation in BPD (Aviram et al., 2006)

Nehls (1999) used an interpretative phenomenological approach[4] to explore the treatment experiences of 30 female individuals with a diagnosis of BPD. Participants were recruited from both inpatient and outpatient units. Interviewees were asked 'What does the diagnosis of BPD mean to you?' (Nehls, 1999, p.286) and prompted to extend their responses. Consistent with Aviram et al's (2006) assertion, BPs' responses indicated that healthcare staff held preconceived and unfavourable opinions about them; *"I have felt the negative feelings that people [healthcare providers] have felt towards me, of having that diagnosis, like I felt pre-labelled…wasn't given a chance…I felt blamed for having this diagnosis and I felt that I wasn't deserving of treatment"* (Nehls, 1999, p. 288). In addition, they stated that staff viewed treatment for BPs as *"hopeless"* (Nehls, 1999, p. 288). They also believed that if they had a more conventional diagnosis, such as depression, they would be treated in a more sympathetic and caring manner (see Markham & Trower, section 1.3.1). For example, one interviewee commented *"to have the diagnosis means that you are just screwed. Once you have that on a piece of paper in a medical file, it's over. It's just over. No one will touch me with a ten-foot pole. It's like you got the plague"* (Nehls, 1999, p. 287). Additionally, interviewees stated that negative professional attitudes not only affected the quality of mental health care but more general care, such as visiting a General Practitioner. In sum, these findings are in accordance with a statement made by Gunn and Robertson (1976) indicating that PD is a derogatory label which could result in therapeutic neglect.

Nehls (1999) also found that interviewees reported having been made to feel responsible for their condition, undeserving of treatment, stupid, and useless by a broad range of healthcare professionals. Additionally, they reported feeling upset and frustrated in response to the unsympathetic and uncaring nature of staff. Because sympathy is the single most important predictor of helping behaviour (e.g. Dagnan & Cairns, 2005; section 1.3.1), the reported judgments of staff towards BPs would be expected to impact negatively on the quality of care delivered to clients.

Nehls (1999) additionally found that interviewees believed mental health professionals to be more interested in preventing behaviours such as DSH than determining the cause/s of such behaviours. This finding is consistent with Hastings & Remington's (1994) and Hastings

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[4] Lopez and Willis (2004) explain that phenomenological approaches provide individuals with the opportunity to understand the lived, contextual realities and concerns of recipients of care. Interpretive phenomenology does not just focus on individuals' descriptions of experiences, but looks for meanings embedded within them.

(1995) work on CB, which indicates that staff members are more focused on the immediate termination of maladaptive behaviours than they are in identifying the function (see section 1.3.4). Hastings (1995) argues that this is because staff members find CB aversive and consequently behave in ways that minimize the time they are exposed to it. Unfortunately, however, in the area of CB, these self-protective strategies have been shown to increase the occurrence of these behaviours and to maintain such behaviours in the long-term (Hastings, 1999). Similarly, treatment delays and judgmental comments from staff impact on feelings of worthlessness in people who self-harm. For example, a transcript taken from a qualitative investigation by Smith et al. (1998) identified: *"Going to A & E became another form of self-harm where the staffs' judgments confirmed for me that I was the lowest form of life and reinforced every negative feeling I ever had about myself'* (p.48). This transcript again suggests that negative staff attitudes may not only prevent clients from receiving the care they need, but may also further exacerbate their problems. For example, confirming feelings of self-worth may trigger additional self-harming behaviour (see paths C, D & A in Figure 1.1) (Aviram et al., 2006).

Finally, all interviewees stated that the negative attitudes and interactions they had previously encountered with healthcare professionals formed a significant barrier to their willingness to seek additional professional help (Nehls, 1999). This indicates that staff's self-protective strategies (e.g. psychological distancing from BPs as a way of protecting themselves from difficult interactions) could inadvertently prevent clients from seeking the care they need.

Fallon (2003) conducted unstructured interviews[5] with seven individuals with a diagnosis of BPD, four of whom were female. Participants were recruited via their consultant psychiatrist from a variety of settings within a mental health trust. The author utilized a grounded theory approach (Strauss & Corbin, 1990) to identify the perspectives of the BPs involved in mental health services, to document the problems they faced, and to describe the strategies they developed to deal with them.

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[5] Unstructured interviewing does not offer a limited, pre-set range of questions for an interviewee to respond to, instead this method enables the interviewer to ask further questions beyond what they had planned or seen as relevant. This approach enables the researcher to obtain rich and detailed information; however, it is subject to a number of criticisms such as subjectivity (see Chapter 3, Section 1.4).

The majority of interviewees reported to having experienced negative attitudes and judgmental comments from healthcare professionals. They indicated that accessibility of services often equated to the approachability of healthcare staff in both inpatient and outpatient units. They reported feelings of isolation, despite high staffing numbers, as a result of staff members' perceived inapproachability. Furthermore, clients reported feeling sensitive to the negative judgments and attitudes of such staff members. Notably, participants indicated that mental health nurses often only distribute medication and dress wounds, when presented with deeply distressing and emotional problems of clients. In fact, Fallon (2003) stated that on such occasions, nurses on psychiatric wards had been known to advise clients to seek out expert advice, such as talking to a psychologist. Additionally, Fallon (2003) stated that often clients were not in need of formal therapy and simply wanted to be listened to, given time and emotional support to help with their intense emotional anguish. Reasons for the nurse's reticence seem complex however it is possible that they adopt a medical role (i.e. offering medication or treating wounds) as a way of avoiding the challenges inherent in more meaningful contact with BPs. These findings are consistent with those produced by Nehls (1999), and whilst they do not add more to the story, they further highlight the occurrence of, and negative implications of professional stigma for the client.

The findings produced by Nehls (1999) and Fallon (2003) indicate that staffs' stigmatising attitudes, negatively impact the quality of therapeutic relationships. A meta-analysis of 15 studies relating to staff-client relations in mental health (MH) settings showed the therapeutic relationship to be a significant predictor of short and long term outcomes for clients (Priebe, 2004). Critically, these findings indicate that mental health stigma is likely to act as a significant barrier to treatment adherence, and thus the client's recovery.

Nehls (1999) and Fallon (2003) utilised a qualitative approach in order to understand BPs' treatment experiences. Qualitative methodologies are used for hypothesis generation rather than hypothesis testing and therefore permit the researchers to gather data in a way that is less theory driven than in many quantitative designs. These approaches are often favoured when researching sensitive issues such as attitudes because they are unlikely to bias participants' responses. In addition, unlike quantitative methods, a qualitative approach can provide researchers with clues about how and why things occur rather than to what extent. One important criticism of qualitative studies, however, is that they rely on small samples,

consequently limiting the generalisability of findings. Nehls (1999), however, used a large sample and the findings produced were also supported by Fallon when researching a different sample of BPs. In sum, the findings appear to be indicative of the stigma experienced by BPs.

Essentially, the results indicate that negative attitudes and an unwillingness to help on the part of the healthcare professional, is apparent to the client. Furthermore, by bringing their treatment concerns to the forefront, the findings indicate that clients would like these issues to be addressed.

### 1.4.2 Summary

In summary, the evidence discussed indicates that BPs are aware that healthcare professionals often hold negative and judgmental attitudes towards them. In addition, the evidence shows that, from the BP's perspective, the negative attitudes of staff can be reflected in the quality of care they deliver. As a consequence, BPs can feel dissatisfied with the treatment they receive and can feel reluctant to seek further help. In mental healthcare, the quality of the therapeutic relationship is a significant predictor of client outcomes but this relationship is typically poor in the case of BPD. Moreover, evidence indicates that the stigmatising behaviour of staff can in fact increase the occurrence of clients' challenging behaviour.

As a result of possessing negative feelings about clients and identifying that they could be letting their clients down, staff could struggle with issues relating to their professional competency. Indeed, evidence in section 1.3.1 indicated that the vast majority of healthcare professionals judged that the quality of care for BPs to be inadequate. Moreover, the majority of these professionals stated that they would be keen to undergo specific training in relation to BPD. These findings indicate that despite possessing negative attitudes, and acting in non-advantageous way towards BPs, staff members would like to be doing a good job. However, possessing negative attitudes towards clients and experiencing difficult emotions in relation to their work is likely, over time, to have a negative effect on staff. This next step in the cycle will be discussed in the following section.

*1.4.3 The Impact of Professional Stigma on the Healthcare Professional*

Evidence suggests that healthcare staff working with BPs are at risk of experiencing high levels of stress (Bowers et al., 2003; Burnard et al., 2000; Loughrey, Jackson, Molla & Wobbleton, 1997; Melchior, Bours, Schmitz, & Wittich, 1997; Perseius, Kaver, Ekdahl, Asberg & Samuelsson, 2007). Stress can be defined as an 'adverse reaction people have to excessive pressure or other types of demand placed on them' (Health and Safety Executive, 2001, p.2). Burnard et al. (2000) administered stress questionnaire booklets to 301 community based mental health nurses working in Wales. The reported causes of prolonged stress included, concerns about safety, feelings of concern for other colleagues during home visits, coping with disturbances during home visits and dealing with suicidal behaviours. All of these issues evoke strong feelings such as fear, worry and concern. Furthermore, these emotional feelings may be aroused even in the absence of direct contact with the problems; they can be elicited as a result of anticipatory thought. To further assess sources of stress for mental health professionals working in the UK, Edwards and Burnard (2003) conducted a systematic review of 70 papers published during the period of 1966-2000. This confirmed that client-related issues were a leading source of stress.

Research suggests that experiencing high levels of occupational stress is associated with high risk for professional burnout (Arnetz, Arnetz & Petterson, 1996; Edwards et al., 2000; Edwards & Burnard, 2003; Jenkins & Elliot, 2000; Samuelsson et al., 1997; Thomsen et al., 1999). Maslach and Jackson (1981) have characterized burnout as a syndrome of emotional exhaustion, depersonalization/cynicism and reduced personal accomplishment/efficacy. Emotional exhaustion refers to feelings of being over-extended and worn down by the demands of one's work; Depersonalization/cynicism is characterized by a detached and impersonal response towards clients. Personal accomplishment/efficacy is the self-evaluated feeling that one is no longer effective in one's work (Maslach & Jackson, 1981, Maslach & Leiter, 1997). Maslach and Jackson (1981) state that burnout is common among individuals who do *"people-work"* (p.99). Undoubtedly then, healthcare workers are at risk of burnout. Indeed, Ree and Cooper (1990) identified that mental health workers are the professional group with the highest sources of stress. Sutherland and Cooper (1990) claim that high levels of professional stress and burnout are related to poor physical and mental health, increased levels of absenteeism, job dissatisfaction, and high levels of job turnover. Indeed, a

recent interim report by 'NHS Health and Wellbeing' (August, 09) for the DH indicated that NHS absenteeism levels are 50% higher than for the private sector and that nearly 80% of a sample of 11,000 NHS staff felt that their personal health and wellbeing issues were negatively affecting client care.

Using a questionnaire design, Nathan, Brown, Redhead, Holt and Hill (2007) examined whether 28 staff working in a medium-secure psychiatric unit, an environment characterized by frequent emotionally-charged interactions, had a higher risk of burnout. Staff members working on a female ward reported experiencing a significantly greater increase in the emotional exhaustion component of burnout, 18 months after starting work, than their colleagues working on a male ward. The difference may be explained on the basis that BPD is a predominately female disorder (see section 1.1.2). Nathan et al. (2007) support the assertion that working with individuals with complex disorders such as BPD is likely to lead to professional burnout. Unfortunately for the stigma-burnout hypothesis, however, this study did not measure healthcare workers' attitudes towards their clients.

Research in the area of CBs has produced evidence indicating that the negative emotional reactions of care staff are associated with increased levels of professional burnout. Indeed, Mitchell & Hastings (2001) reported that care staff's feelings of depression/anger were significant predictors of both the emotional exhaustion and depersonalisation aspects of burnout. Thus, Hastings (2002) posited that care staff's negative emotional reactions are likely to accumulate over time, eventually affecting their well-being and mental health.  Further evidence of this relationship was produced in two additional studies reported by Rose and colleagues (Rose, Horne, Rose & Hastings, 2004; Rose & Rose, 2005).

More recent evidence indicates that the psychological resources of care staff (e.g., coping strategies), significantly affect the extent to which care staff experience burnout as a result of challenging behaviour. For example, Hastings and Brown (2002) reported that maladaptive coping increased the impact of exposure to challenging behaviour on both the emotional exhaustion and depersonalisation aspects of burnout. Furthermore, wishful thinking – attempts to cope with emotions evoked by stressful situations, rather than with efforts to change the stressful situation itself (Hatton & Emerson, 1995) – has been reported to partially mediate the relationship between work demands (including challenging behaviour) and emotional exhaustion (Devereux, Hastings, Noone, Firth & Totsika, 2009). Devereux and

colleagues propose that coping mediates the relationship between staff's emotional responses to CB and levels of stress and burnout, however, no research to date has tested this model. Nonetheless, preliminary evidence suggests that the strategies utilised by staff to help cope with the emotional reactions experienced as a result of a client's CB are likely to be important in understanding the occurrence of professional stress and burnout in the longer term. Given that staff working with BP clients experience equivocal emotional responses, it is likely that they will use similar psychological resources to cope with these difficulties which are likely to lead to stress and burnout.

A recent study by Masuda, Price, Anderson, Schmertz and Calamaras (2009), suggests that the stigmatisation of others by a sample of undergraduate students is positively related to the stigmatiser's own level of psychological distress. Furthermore, the relationship between stigmatising beliefs and negative outcomes for the stigmatiser is to some extent accounted for by *lower* levels of psychological flexibility – a process of engaging with internal events (e.g., thoughts, feelings) without trying to alter their form or frequency (Masuda et al., 2009). This provides further support for the assertion that the psychological strategies used by individuals to help cope with unwanted internal experiences may be important for understanding the relation between stigmatising attitudes and psychological distress.

Psychological flexibility includes processes of acceptance, mindfulness, contact with values, committed action towards valued ends, self as context and cognitive defusion. In contrast, psychological *inflexibility* includes processes of experiential avoidance, the absence of mindfulness, a lack of contact with values, inaction towards valued ends, attachment to the conceptualised self and cognitive fusion (Hayes et al. 2006; see Chapter 2 for more inclusive definitions). Studies investigating the wellbeing of media and customer service staff, have shown that experiential avoidance – an escape process that occurs when an individual is unwilling to remain in contact with private experiences or the external contexts that occasion them (Hayes, Wilson, Gifford, Follette & Strosahl, 1996) – is related to lower levels of affective well-being (Bond & Bunce, 2000, 2003). Moreover, the reported coping strategies of staff who work with clients with intellectual disabilities, such as wishful thinking – imagining a better time or place, or having fantasies about how things might turn out – also include experiential avoidance (Devereux et al., 2009; Hayes et al., 1996; Hatton & Emerson, 1995).

Thus, experiential avoidance – an important facet of psychological flexibility – appears to be a key process in the understanding of professional ill-health.

Finally, Hayes et al. (2004) found a relationship between negative stigmatising attitudes and burnout when researching the attitudes of substance misuse counsellors towards their clients. Furthermore, they indicated that the believability of stigmatising thoughts/cognitive fusion mediated the relationship between negative stigmatising attitudes and burnout. This finding suggests that if staff take the meaning of their stigmatising beliefs about clients literally, that they could, over time, become professionally burned out. Thus, this evidence indicates the negative effects of stigmatisation on the stigmatiser.

*1.4.4 Summary*

In sum, the findings reviewed in the present section indicate that individuals who experience difficult emotions as a result of their client work, or those who stigmatise others, are at risk of experiencing burnout and/or psychological ill-health. More specifically, the stigma findings suggest the importance of process-based understanding of stigmatisation. Thus, if anti-stigma interventions are to be successful, they should address psychological processes rather than the topographical features of stigma such as the *content* of thoughts (Masuda et al., 2009). This view is consistent with the work of Link and Phelan (2001, 2006) who identify stigma as a multifaceted dynamic process. Nonetheless, despite parallels between a couple of the occupational groups (e.g., substance misuse counsellors and care staff), these findings have not been investigated in the context of mental health professionals working with clients with a PD, highlighting the need for further investigation. Still, in view of the prevalence of staff's negative stigmatising attitudes towards BPs, these results may have serious, negative implications for them.

As determined in section 1.4.1, the quality of care received by clients is likely to suffer as a result of staff stigma (see Figure 1.1). Therefore, addressing the role of staff stigma to BPs is likely to benefit both staff and clients alike. However, in light of the evidence reviewed in section 1.4.3, Aviram et al's (2006) model fails to take into account the negative effects of stigma (i.e. stress and burnout) on the healthcare professional (stigmatiser). In addition, the model indicates that, despite the stigmatising behaviour of staff, clients continue to remain in therapeutic relationships. The evidence reviewed in section 1.4.1, however, indicates that as a

result of stigma, clients terminate and/or fail to seek out additional treatment. This indicates the need for the model to be developed further. In sum, the evidence indicates that the emotional and psychological needs of healthcare staff may need to be addressed if psychological ill-health and burnout are to be avoided.

Thus far, the evidence reviewed indicates that training interventions designed to reduce stigmatising attitudes and improve therapeutic relations may need to address the emotional needs of, and coping strategies used by, healthcare professionals, in addition to their knowledge of BPD. Therefore, training interventions currently available for staff working with BPs will be considered in the following sections.

### 1.5 BPD Training for Healthcare Professionals

Thus far, this review has identified that the negative attitudes and behaviours of healthcare professionals towards BPs can impact negatively the quality of care received by clients and the physical and psychological wellbeing of staff. In 2003, the National Institute for Mental Health in England (NIMHE) published detailed guidance on the treatment of individuals with PDs. Their policy title 'Breaking the Cycle of Rejection: The Personality Disorder Capabilities Framework', indicates that stigma towards this client group needs to be addressed. The guidelines suggest that *"staff with greater awareness of PD and capabilities to identify, refer, support and treat in inclusive and non-judgmental ways are the key to better outcomes for (those) people"* (NIMHE, 2003, p.20).  This policy highlights the need for the development of successful interventions designed to address stigmatising attitudes towards individuals with PDs. Furthermore, the guidelines suggest that the approach favoured by NIMHE is based on Psycho-Educational (PE) training. In general, PE methods educate staff about the aetiology, symptoms and treatment of disorders, whilst providing specific client-management skills. A modest number of studies have provided PE based training to staff working with BPs. The effectiveness of this approach will be reviewed in the following section.

*1.5.1 Psycho-Educational Training Approaches*

Miller and Davenport (1996) tested the prediction that providing staff with more knowledge about BPD would decrease negative attitudes towards this client group. The hypothesis was based on Ajzen and Fishbein's (1980) theory of reasoned action (TRA), according to which, behaviour is determined by behavioural intentions, which in turn are determined by attitudes to behaviour and subjective norms. Participants were qualified psychiatric nurses working in one of four acute inpatient hospitals that provided treatment for individuals with BPD. An experimental group (N=19) received a self-paced educational programme in the form of a workbook. Topics included the aetiology of BPD, the behaviour of clients, staffs' responses and treatment strategies. The control condition (N=13) received no intervention. Opportunistic sampling was used and participants were assigned to conditions based on their workplace. A non-standardised questionnaire was used to test staff knowledge, attitudes and behavioural intentions towards BP before and after the intervention (approximately four weeks apart).

The main analysis showed that after controlling for pre-test scores, the experimental group experienced significant improvements in both their level of knowledge about BPD and their attitude scores. Owing to poor internal consistency, the behavioural intention subscale of the measure could not be analysed. Correlational analyses showed that knowledge and attitudes were related at pre and post-test. Although indicative, these findings should be interpreted cautiously. First, the non-random assignment of participants reduced the internal validity of the study; second, the questionnaire was non-standardised; third, no follow-up assessment was carried out, so the long-term effects of this intervention remain unknown and fourth, the effectiveness of this training was not evaluated against another type of training method (i.e., an active control). Therefore, education based training is better than no training at all, but is there a better approach?

In a recent study, Krawitz (2004) evaluated whether skills training would impact positively on their attitudes towards working with BPs. Krawitz (2004) delivered a 2-day psycho-educational (PE) workshop designed to inform participants about the diagnosis, aetiology, prognosis, and treatment of BPD. A single sample of 910 nurses, psychologists, social workers, occupational therapists and doctors, attended one of 44 training workshops over an 18 month period. The results from 418 participants showed that attitudes and

perceptions of knowledge and skills significantly improved from pre to post intervention and the benefits were maintained at 6 month follow-up. Although these findings are promising, given the absence of a control group, the effectiveness of this approach compared to other training types can not be determined.

In an attempt to challenge staff stigma towards BPs directly, Krawitz and Watson (2007) investigated the effectiveness of joint, consumer-clinician co-taught BPD training. This involved having a 'consumer-presenter' – a trainer who met diagnostic criteria for BPD for which she had previously received clinical treatment – and a 'clinician-presenter' – a psychiatrist specializing in and providing clinical services in the area of BPD. The researchers proposed that using a consumer-presenter would reduce negative stereotypes, and increase hopefulness towards BPs.

A single sample of 73 healthcare professionals working in New Zealand attended one of three, 2-day PE training workshops which were designed to educate trainees about the nature of BPD (e.g. the aetiology, diagnosis, and treatment structure of the disorder). Additionally, participants reviewed information on skills-training, client and clinician responsibility, and clinician emotions. Immediately following training, participants were required to evaluate the effectiveness of the intervention by rating its relevance, and whether they would recommend it to others but their attitudes towards BPs were not assessed. Thus, although participants rated the training positively, its effectiveness remains unknown. Participants attending the last of the workshops (N=23) were also asked to rate the consumer-presenter's contribution. All ratings were positive, indicating to the researchers that future training workshops should include a consumer-presenter. Prior to the workshop, these participants were also asked to rate the concept of clinician-only, consumer-only, and consumer-clinician, co-presented training. Before the training, participants rated the concept of clinician-only training more highly than the other options but after it they rated the concept of co-taught training highest. Krawitz and Watson (2004) stated that by having a consumer-presenter demonstrate their recovery explicitly by their personal narrative and implicitly by their competent training delivery, instilled a sense of hopefulness in trainees and countered negative stereotypes towards BPs. However, owing to the fact that participants' feelings and attitudes in relation to BPs were not assessed systematically, this assumption can not be supported. Furthermore, statistical analyses on the participants' scores were not carried out;

therefore participants' pre to post scores may not significantly differ. Moreover, as a result of the selective attrition (approximately seventy percent), it is likely that the results are not representative of the original sample. In sum, despite trainees valuing the content of the training workshops, no evaluation of their attitudes and feelings in relation to their work with BPs were assessed. Therefore, the effectiveness of this training in relation to others remains unknown. In conclusion, the idea seems promising but the evidence is profoundly weak.

*1.5.2 Dialectical Behaviour Therapy based Skills Training*

Perseius, Ojehagen, Ekdahl, Asberg and Samuelsson (2003) investigated therapists' and clients' perceptions of giving and receiving Dialectical Behaviour Therapy[6] (DBT; Linehan & Dimeff, 2001). Ten individuals with a diagnosis of BPD and a history of DSH and four, active DBT-trained therapists[7] were interviewed. At the time of the study all BPs had been in DBT treatment for a minimum of 12 months. Content analyses of the interview transcripts showed that before entering DBT, clients felt *"betrayed"* by their therapists (Perseius et al., 2003, p. 220). Their experience of DBT was, however, much more positive. They viewed the therapy as *"life saving"* and reported feeling supported by their therapists (Perseius et al., 2003, p.221).

The therapists reported that working with DBT positively changed their perceptions and understanding of clients. They explained that they no longer saw the challenges presented to them by clients (e.g. DSH and anti-social behaviour) as a deliberate manipulation; instead they viewed an inability on the part of the client, to act otherwise due to symptoms of their disorder and insufficient coping skills. This evidence, although gathered from a small sample, suggests that providing clients with specialist care is associated with positive changes in both parties which can be sustained over a 12 month period. This study indicates that trained healthcare workers do well professionally and that the benefits of training positively impact participants' perceptions of client care.

In a further study, Perseius et al. (2007) used both quantitative and qualitative methods to assess the levels of stress and burnout in a sample of 22 Swedish healthcare professionals

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[6] DBT is a skills-based training that was developed specifically to treat individuals with BPD (Linehan, 1993). It is based on Linehan's Biosocial theory of BPD (refer to Section 1.1.4).
[7] Unfortunately, the authors failed to specify the therapists' experiences of using DBT and whether they had undergone intensive or brief DBT-training.

embarking on and providing DBT to borderline clients. The Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) was used to measure therapists' levels of professional burnout across three separate factors; emotional exhaustion, depersonalization and personal accomplishment. The quantitative results showed no significant changes in burnout scores between pre-intervention and 6, 12 and 18 months post training. A non-significant trend in the data however, indicated that participant's burnout levels increased between baseline and 6 months into the training. This was reflected in several of the participants' interviews and was attributed to the demands of learning new techniques[8].

The qualitative data, however, produced some findings that were not reflected in changes in burnout scores. For example, participants reported feeling a reduction in their levels of occupational stress in direct work with clients. In addition, they reported feeling more secure and confident in their occupational role, more hopeful and satisfied over being able to help, and that their work had become more fun and inspiring. These findings relate to the personal accomplishment component of professional burnout so it is interesting that no decline in burnout scores were detected. Examination of the MBI indicates that participants are required to respond in relation to how they have been feeling over the past 12 months. This might explain why no significant changes were detected at 6 months post training. In particular, professionals rated mindfulness techniques and supervision to be particularly helpful in reducing levels of stress. The results also show that staff members felt more positive as a result of receiving skills about how to work with BPs. However, no control group was used so the effectiveness of the training remains unknown.

Hazelton, Rossiter and Milner (2006) provided 2-day introductory DBT training workshops to mental health professionals designed to introduce them to the theoretical constructs and practical skills underpinning DBT. Twenty of these 94 participants with an interest in working as DBT therapists also undertook a 2-day advanced workshop. No control groups were used. Survey and focus group data were collected on participants' attitudes, knowledge and experience of working with BPs, prior to, and at 1 and 6 months following

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[8] It should however be noted, that at the 6-month point of training, the therapists had not started to use their DBT skills with clients. The training lasted for 24 months but therapists only started to use their skills with clients after 6 months.

completion of, the training workshop[9]. Twenty-four of the 69 participants who completed the non-standardised survey at the pre-training stage were invited to take part in focus-group interviews. The authors did not, however, indicate whether these participants had been chosen at random. Although this is not a prerequisite for focus groups, it would have been informative to know if these participants were chosen based on their survey responses. One month following the training, 38 participants completed the same survey and 20 attended focus-group interviews. Six months post training, 24 participants completed the survey and 18 attended focus-group interviews.

Discourse analyses of the focus groups with staff post training[10] showed a positive shift away from staff seeing clients with BPD as difficult, manipulative, attention-seeking and intimidating and judging treatments as ineffective. However, the survey data conflicted with these findings and indicated that at six months post training, staff continued to doubt their ability to be able to provide care, manage and deal with these clients effectively. Owing to the fact that the survey was non-standardised, the measure may not have been sensitive enough to pick up the positive changes expressed in the focus groups. Additionally, as a result of high attrition rates, the statistical analyses were likely to have been underpowered. Alternatively, there may have been a self-selecting bias, in that participants who agreed to take part in the focus groups may have been those who responded more positively to the training. In any case, this study was not controlled.

Considering the prevalence of negative staff attitudes and work-related experiences with BPs, it would have been useful for the researchers to have examined participants' experiences of the self-reflective components of the workshops. This information would have identified whether staff were willing to accept and discuss their negative attitudes towards BPs openly within a training setting. Finally, it would have been beneficial to have evaluated the effectiveness of the training against a more conventional PE approach.

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[9] The authors did not indicate whether participants who attended both workshops completed the post and f/up questionnaire after the basic or advanced training. In addition, they failed to specify whether the data for these participants were included in the analyses. This can not be determined by looking at how many participants provided baseline data because not all participants opted to take part in the research evaluation. The study, therefore, has serious methodological weaknesses and needs to be interpreted cautiously.
[10] The authors did not specify whether these reports occurred during the focus-group interviews carried out at 1 month or 6 months post-training.

*1.5.3 Summary*

Although these studies offer some insight into how to address the issue of staff-stigma towards BPs, they have serious methodological limitations. For example, despite Miller and Davenport (1996), Krawitz (2004) and Krawitz and Watson (2007) indicating that providing staff with PE based training could help undermine the negative attitudes of staff towards clients, their research was not systematically controlled. As a result, the effectiveness of these PE based training approaches remains unclear. Furthermore, Perseius et al. (2007) and Hazleton et al. (2006) indicated that in addition to improving staffs' attitudes towards clients, DBT-based skills-training improved their perceptions of treatment interventions and their confidence in relation to their work. These studies, however, were not controlled and failed to determine whether the 'reported' improvements were in fact reflected in their practice. These weaknesses highlight the need for randomized controlled trials (RCTs), designed to systematically compare and evaluate the effectiveness of these skills-based approaches, to be conducted. Although the effectiveness of skills-based training remains unknown, providing staff with knowledge and client management skills is likely to help staff intervene with difficult clients. Can these approaches, however, prepare staff for the stigmatising judgments and strong emotions that may be elicited in them by the extreme behaviour shown in clients with BPD? Indeed, Hastings (1995) and Hastings and Remington (1994) have shown that providing staff with knowledge and skills relating to clients with CB is not enough to bring about long-term changes because these methods fail to address the importance of staff members' emotions in relation to their work. Owing to the fact that staff working with BPs experience equivocal emotional reactions in response to their clients, it is probable that training packages for staff working with BPs would need to take the emotional nature of their work into account if they are to produce long-term, positive change. This will be addressed in the following section.

*1.5.4 Self-Reflective Training*

Rigby and Longford (2004) posited that educational training alone is of little use to staff working with clients with PDs because it can not prepare them for how to be with clients and how to manage their emotions in relation to difficult staff-client interactions. Indeed, literature indicates that clinical supervision that includes attention to the emotional demands of

a healthcare professional's role decreases their distress and burnout and is thus linked with increasing the quality of client care (see Cameron, 1997; Cutliffe & Epling, 1997; Robertson, Gilloran, McKee, McKinley & Wight, 1995). Rigby and Longford (2004), however, indicated that on occasion, staff were unwilling to be self-reflective. In addition, they noted that, despite the benefits of ongoing clinical supervision, few clinical settings provide supervision for frontline staff (see Bland & Rossen, 2005, for a review). Therefore, training in an independent setting, designed to provide staff with methods to help them cope with difficult feelings in relation to their clients could be beneficial. Research in this area, however, is very limited. Moreover, the two studies that have been conducted have severe methodological weaknesses. However, because of the importance of addressing staff emotions in relation to working with BPs these studies are considered below.

To establish the effectiveness of experiential training, Rigby and Longford (2004) conducted group-based, self-reflective training workshops for a range of healthcare staff working with individuals with PDs in the UK. The 13 participants attended 15, 3-hour training sessions. For the first 1.5 hours, participants attended either an interactive seminar, a talk by a guest speaker or watched a video presentation. The second half of the session involved group work, in which they were required to explore their feelings about their difficult clients and work situations, with other healthcare professionals. Over the course of the sessions, the researchers reported that all participants progressed to a position of open and honest discourse about their difficult feelings in relation to their clients. In addition, the researchers stated that in the absence of prompting, attendees described how their clients would benefit as a result of them looking after their own emotional needs. It should, however, be noted that these findings are speculative on the part of the researchers because no formal assessment of the group discussions was undertaken.

Participant reports taken after the final training session indicated that they had intentions to change their practice in ways that would positively impact clients, such as *'considering the patient's history and its impact on current presentation'* (Rigby & Longford, 2004, p.340). In addition, brief, survey data taken after the final workshop showed that despite being required to reflect on their practice and discuss difficult emotions, they were highly satisfied with the training they had received. Furthermore, they reported positive changes in their responses to clients. Again, however, it should be noted that these ratings were provided

in response to seven, *positively worded* statements (e.g. the groups were helpful and met my expectations) and could therefore reflect an acquiescence bias. Although this evidence suggests that by addressing staff member's feelings and emotions in response to their work, their attitudes towards clients improved, it is mainly anecdotal. Furthermore, participants were not required to rate the self-reflective components of the workshops separately from the educational aspects (e.g. the first half of the training sessions provided staff with education). Therefore, it is impossible to determine conclusively, participants' views of the self-reflective components. Furthermore, no evidence was provided about the long-term effects of these self-reflective groups on attendees' attitudes. The findings do however indicate that staff are willing to address personal difficulties in relation to their client work within group training. Furthermore, it provides tentative support for the assertion that healthcare professional's feelings about challenging clients should be addressed in order to address stigmatising attitudes and behaviours. Nonetheless, before firm conclusions can be drawn, these findings should be assessed by more rigorous evaluations.

Like Rigby and Longford (2004), Wright et al. (2007) viewed training without an experiential component to be of little use on its own, and consequently developed a series of self-awareness groups for post-graduate students studying on the University of Central Lancashire's PD courses. Wright et al. (2007) stated that the self-reflective groups helped participants reformulate well-established stigmatising beliefs about clients and raised awareness into the reality of their difficult working relationships. However, no formal evaluations of the workshops were carried out so the findings are merely anecdotal. In conclusion, the findings indicate the critical need for experiential training workshops to be formally evaluated.

*1.5.5 Summary*

Rigby and Longford (2004) and Wright et al. (2007) indicate that by being self-reflective about their professional experiences (e.g. their emotional responses towards clients) staff members were able to identify that changing their practice could have a positive impact on both their own and their client's wellbeing. The studies, however, have serious methodological weaknesses and as a consequence, firm conclusions can not be drawn. What becomes clear, however, is the need for training interventions for staff working with difficult

clients to be systematically controlled and evaluated. This research will determine which approach/approaches are most beneficial in reducing staff stigma and bringing about long-term change. In addition, it is crucial to determine whether any positive, self-reported changes in the attitudes of staff are in fact detected by their clients.

Finally, despite the preliminary evidence to suggest that the internal experiences of staff should be considered, self-reflective groups alone are unlikely to provide staff with the self-management skills they would need to increase their psychological hardiness – the capacity to deal with the affecting and disturbing consequences of working with challenging clients. For example, the groups would enable staff to reflect on their negative judgments and strong emotions towards BPs, however, such discussions are unlikely to provide them with the skills they would need to help cope with the experience of such difficult events. On account of the fact that staff members often experience these difficulties in relation to their work with BPs (refer to section 1.3), it seems important to provide them with self-management skills. Acceptance and Commitment Therapy (ACT; Hayes, Strosahl & Wilson, 1999), a new self-management oriented treatment for clients with long-lasted psychological problems such as BPD, could therefore be a useful basis for a staff intervention designed to reduce stigma. This proposal will be considered in Chapter 2.

## CHAPTER II

### The Role of Acceptance and Commitment Therapy

### 2.1 Acceptance and Commitment Therapy

Acceptance and Commitment Therapy (ACT) is a new behavioural intervention that has been shown to reduce the suffering experienced as a result of negative thoughts and feelings and avoidant, self-protective strategies that follow these, both in the treatment of clients with psychological difficulties (e.g., Hayes, Masuda et al. 2004) and in staff training interventions (e.g., Bond & Bunce, 2000, 2003; Hayes et al., 2004). Because evidence indicates that the behaviour of staff towards BPs overtly reflects their negative thoughts and feelings towards them, ACT would seem like a useful basis for a staff intervention in this area. In fact, preliminary evidence suggests that brief ACT training interventions can have positive effects in reducing levels of stigma and more specifically, healthcare workers' stigmatising attitudes towards clients (e.g., Hayes et al. 2004). These findings will be discussed in section 2.2. Before that, however, the theory and processes underpinning ACT and, ACT and human suffering will be considered.

*2.1.1 The Basis of ACT*

ACT is based on an experimental analysis of human language and cognition called Relational Frame Theory (RFT; Hayes, Barnes-Holmes & Roche, 2001). Although the features of RFT go beyond the scope of this thesis, its basic principles will be discussed. RFT indicates that human behaviour is governed through networks of mutual relations referred to as relational frames (Hayes & Smith, 2005). Such relations are not explicitly taught, simply derived in the presence of relevant contextual cues on the basis of relationships that have been taught. By thinking relationally, humans are able to arbitrarily relate items such as thoughts, feelings, sensations etc., to other such items (thoughts, feelings etc.,) in a large number of ways (e.g., same as, better than, part of etc.; Hayes & Smith, 2005). These relations are not only believed to form the basis of human language and cognition, but permit humans to learn in the absence of direct experience (Hayes, Barnes-Holmes & Roche, 2001).

It is believed that we think relationally in order to make sense of our environment. Thus, once we have learned how to derive arbitrary relationships, we will do so constantly as long as we are able to make sense of our situation by doing so (Hayes, Strosahl & Wilson,

2003).The ability of being able to derive unobvious relationships in the absence of experience differentiates humans from any other species and has many advantages. For example, a human child need never touch boiling water to be taught verbally that it can burn. On the contrary, an animal will not touch boiling water twice but will have to touch it once to learn to avoid it. Despite its many advantages, however, this same ability is believed to underpin psychological suffering.

*2.1.2 ACT and Psychological Suffering*

It is a core assumption of ACT that people's problems are driven by what they say to themselves (i.e. their internal dialogues), and are therefore, a product of having language. For example, by having names for events and their attributes, a human is very adept at being able to remember and think about such occasions. As a consequence, one can remember and describe in detail a past bereavement and become distressed as a result. Furthermore, because of temporal relations such as 'if…then', we are able to imagine and become worried at the *thought* of an undesirable event that may never occur (Hayes & Smith, 2005). As a result of these symbolic relations, people can often live in the 'verbally remembered past' and the 'verbally imagined future' rather than in the present moment (Hayes & Smith, 2005). As a consequence, a person's thoughts and accompanying behavioural responses can be out of context with their current situation. Finally, language enables us to make comparisons between ourselves and others which can result in us feeling dissatisfied and inadequate, even though we might be quite privileged and successful. In sum, these temporal, symbolic and comparative verbal relations often create distress for the individual. Nonetheless, they are too essential and valuable to human functioning to stop operating. Therefore, ACT theorists view suffering as an unavoidable part of the human condition (Hayes, Strosahl & Wilson, 1999).

The idea that people's problems are driven by what they say to themselves is not a new idea; indeed it forms the basis of other more established therapeutic interventions such as Cognitive Behaviour Therapy (CBT; Beck, 1976). The distinction between interventions such as traditional CBT and ACT is that ACT does not try and *change the content* of a person's thoughts. The goal of ACT is to help people identify what is important to them (i.e. valued goals) and make commitments to moving towards such goals, irrespective of any internal experiences (e.g. thoughts, beliefs etc.,) to the contrary. ACT considers a person's history and theorizes that the associations they have formed are impossible to unlearn or forget, even with direct training methods such as contradictory training (Wilson & Hayes, 1996). Thus, ACT

provides ways for individuals to see that they can not directly change their thoughts but at the same time challenges the assertion that thoughts have to determine their actions. The identification of, and commitment to, personal values is predicted to lead to behaviour change processes that increase psychological flexibility – the ability to contact the present moment more fully as a conscious human being, and to change or persist in behaviour when doing so serves valued ends (Hayes, Strosahl, Bunting, Twohig, & Wilson, 2004). Essentially what ACT requires, is a vital shift in the way that individuals relate to their internal experiences (Hayes & Smith, 2005).

The core ACT processes believed to contribute towards psychological inflexibility and thus, human suffering, will be considered in the following section. Following this, the ACT processes that are used to promote its alternative, psychological flexibility, will be considered.

*2.1.3 ACT Processes that Contribute Towards Psychological Suffering*

From an ACT perspective, the occurrence of negative thoughts is not directly problematic. Instead, a thought becomes troublesome when an individual becomes entangled with its literal content ("this client is manipulative") and treats the thought as a literal representation of what it refers to, rather than as a thought ("I am having the thought that this client is manipulative"). This process relates to cognitive fusion, which refers to the excessive regulation of behaviour by verbal processes. As a result of fusion, the behaviour of individuals becomes governed by rigid verbal networks instead of by direct environmental contingencies. Fusion may lead staff to act in stigmatising ways towards clients even in the absence of encountering difficult client behaviour. For example, a staff member could distance themselves from a client because of engaging with the thought "this client is unresponsive to care".

Experiential avoidance (EA) – a response class that includes any type of behaviour that functions to control or provide escape from any unwanted or feared private event (e.g. thought suppression, cognitive distraction etc; Nelson, 1988, as cited in Chapman, Gratz & Brown, 2006) – occurs effortlessly from a state of cognitive fusion and becomes a maladaptive process when it is applied rigidly and inflexibly, such that a person spends considerable time, effort and energy in controlling, modifying or avoiding unwanted internal experiences or the situations that occasion them (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996).

In the short term, EA produces immediate negative reinforcement through the termination or prevention of the targeted unwanted experiences. In time, the association

between negative experiences and engaging in EA will strengthen to the point that it becomes an automatic escape response (Chapman, Gratz & Brown, 2006). This relief, however, is likely only to be temporary because a large body of research indicates that, over time, inhibiting thoughts and actions may have the paradoxical effect of inducing preoccupation with them (e.g. Wegner & Zanakos, 1994). Therefore, despite the useful short-term effects of EA, evidence indicates that avoidant methods of coping are likely to lead to a high level of psychological distress and are predictive of poorer long term outcomes (see; Cooper, Russell, Skinner, Frone & Mudar, 1992; Hayes et al., 1996; Chapman, Gratz, & Brown, 2006).

The process of EA may contribute significantly to the distress of staff working with BPs. To protect themselves from unpleasant or uncomfortable emotions, staff may increase the psychological distance between them and their clients by stigmatising them, despite the fact that their valued goals include the provision of high quality client care. Avoidant behaviours are, however, unlikely to be effective over time, resulting in the preoccupation with negative internal experiences (i.e. cognitive fusion) and psychological distress. In addition, by not acting towards clients in value driven ways, staff are likely to experience additional unpleasant emotions, such as feelings of professional incompetence. These feelings may again have to be avoided, setting up a cycle of psychological distress for healthcare staff that results in high levels of professional stress and burnout (see section 1.4.3). In sum, fusion and avoidance are processes which contribute towards psychological inflexibility, which in turn is linked to psychological suffering. The processes used to counteract psychological inflexibility in favour of its alternative, psychological flexibility, are considered below.

*2.1.4 ACT Processes used to reduce Psychological Suffering*

ACT uses mindfulness and acceptance processes, in conjunction with commitment and behaviour change processes, in order to establish psychological flexibility. The essence of ACT work is to get the individual to live a more meaningful life based on chosen values and direct experiences. Psychological flexibility is established through six ACT processes (see Figure 2.1).

Contact with the
Present Moment

Acceptance

Values

Psychological
Flexibility

Defusion

Committed
Action

Self as Context
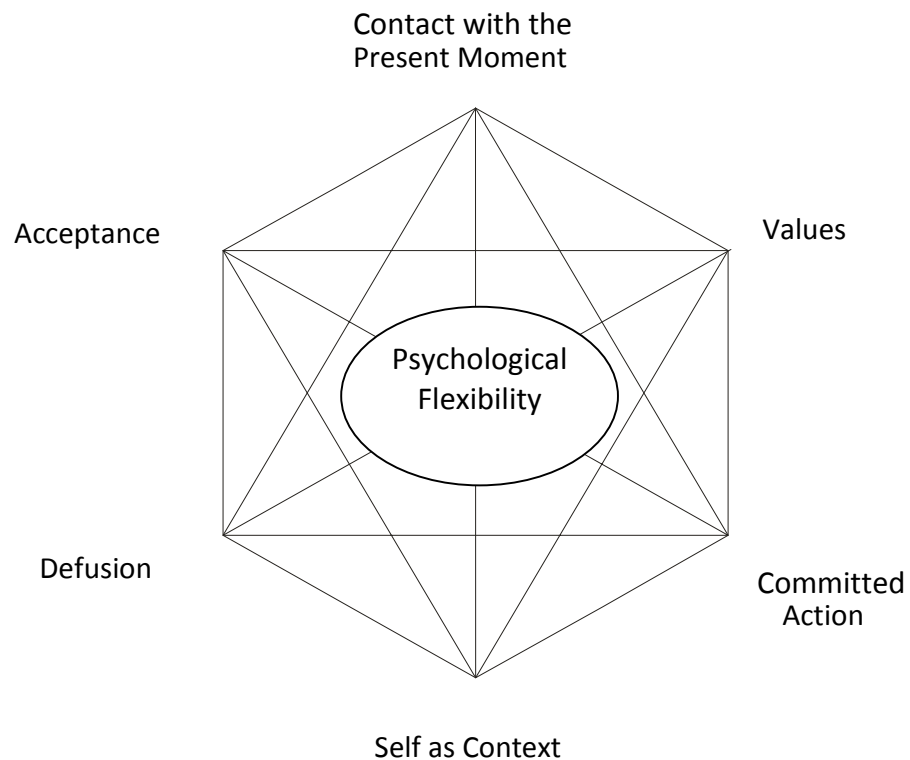
*Figure 2.1*. An ACT model of the processes that underpin psychological flexibility (Hayes et al., 2006)

    *Defusion* is an alternative strategy to cognitive fusion. This process is used to alter the relationship a person has with their thoughts, making them aware of the distinction between the literal meaning of the thought and what it is directly experienced to be. Defusion is achieved through exercises that are designed to reduce the literal quality of thought such as, getting a person to repeat a word out loud until it loses its semantic content and only its sound remains. The outcome of defusion is a reduction in the believability, or connection to private events rather than a decrease in the frequency of these experiences (Hayes et al. 2006). By undermining the context of literal language, an individual will be less inclined to control uncomfortable internal events which should give them the flexibility to behave as they choose.

    *Acceptance*, an experiential technique taught as an alternative to EA, is facilitated by defusion because internal events are more likely to be accepted if their content is not taken literally (Hayes et al., 2006). Acceptance requires a person to be willing to experience internal events, such as thoughts and feelings for what they are, without taking action to control or get rid of them. Thus, an individual is encouraged to operate from the perspective that an internal

experience (e.g., a thought) is just an experience that has been given a verbal label (e.g., "failure") and should not define who they are. By not taking the thought's attributed label literally (e.g., "I am a failure"), the individual is less likely to behave in a way that is consistent with this thought, or engage in avoidance techniques that could provide temporary relief from this *feeling* state (Hayes & Smith, 2005).

Enhancing a *self as context* is used to promote both defusion and acceptance. It is the alternative for self as content, where a person defines themselves on the basis of their internal experiences (e.g., feeling hopeless as a result of thinking "I am an ineffective nurse"). Self as content can be described as a person's life story – the stories they tell themselves about who they are and how they came to be that way – but in addition to actual events or facts, they are likely to contain judgments and interpretations about how these experiences affected them (Wilson & DuFrene, 2008). Unfortunately, attachment to a life story often results in a person responding habitually to events rather than in a flexible and valued way. Conversely, self as context, or the observing self, enables a person to notice internal events, in non-judgmental ways, as they come and go. From this perspective, it is possible for an individual to experience directly that they are not the sum of their internal experiences but the context in which they occur (Hayes et al., 2006). This is achieved through exercises like the 'chess metaphor', where an individual is encouraged to view themselves as the arena (e.g., chessboard) where different internal events (e.g., chess pieces), are fighting a battle that they have no investment in (Hayes & Smith, 2005). Exercises such as these illustrate how an individual can be in close contact with a number of internal events but not participate in the dispute. Thus, from the position of the observing self, no internal experience is experienced to be threatening or controlling. Thus, self as context is not only viewed as a way of promoting acceptance and defusion but is seen as a defusion strategy in itself (Hayes et al., 2006).

For acceptance and defusion to be promoted, it is essential for the individual to bring his or her awareness back to the *present moment*. By doing this, a person can notice their private events which will enable them to see them in non-judgmental ways. Being present is achieved through experiential techniques such as mindfulness exercises. These techniques would seem to be appropriate for healthcare professionals who, based on previous work related experiences, reported high levels of concern about the threat of certain client behaviours (see section 1.2.4). From an ACT perspective, it is likely that staff members are living in the 'verbally remembered' past or 'verbally constructed' future and as a consequence, will fail to interact in the present moment with clients (i.e. responses based on past

experiences with the client, rather than on the present situation; Hayes & Smith, 2005). As a result of these evaluations, it is likely that even in the absence of challenging client behaviour, staff will inadvertently respond to clients in stigmatising ways as a self-protective strategy. Inevitably, by remaining present focused, individuals will experience discomfort in relation to internal events. However, they are encouraged to experience these events for what they are (e.g., a thought as a thought that has been given a verbal label), in order to achieve what they perceive as important life goals. As such, present moment focus is another form of cognitive defusion.

*Values* are freely chosen, dynamically evolving, qualities of intentional action (Wilson & DuFrene, 2008). Put simply, values clarify what is important and meaningful to a person, what kind of person they want to be and what they want to stand for in their life. ACT advocates the experience of uncomfortable private events (e.g., through acceptance, defusion, present moment focus), *if* it is in the service of something that is valued. For example, a healthcare professional would be encouraged to accommodate any uncomfortable emotions that might emerge whilst working with a difficult client if it meant they were able to engage with their client in a valued way (e.g., as a committed professional). Values can never be achieved; instead, they are used to guide a person through a chosen life of meaningful living. Thus, acceptance and mindfulness processes pave the way for a more satisfying life by enabling a person to connect with their core values (Wilson & DuFrene, 2008). ACT uses imaginal exercises, such as thinking about what you'd like to be said in your eulogy, to help individuals distinguish between genuine valued directions (e.g. family, career) and values that verbally dominate (e.g. "I *should* value X" or "A good person *would* value Y").

*Committed action* is a behaviour change process that involves setting and moving towards concrete goals consistent with a person's chosen values. This behaviour change effort can, however, lead to psychological barriers (e.g., verbal processes that might result in behaviour based on avoidance). Such barriers can be overcome using acceptance and defusion processes. In sum, self as context, defusion, acceptance, present moment focus and connection with values are all processes which help to facilitate behaviour change.

### 2.1.5 ACT and Stigma

ACT theorists view stigmatisation as the "process of objectification and dehumanisation of other individuals by the use of ordinary human verbal practices, such as categorisation and evaluation" (Masuda et al. 2007, p.2770). Based on the principles of RFT, a

negative verbal label, such as "manipulative", would automatically be related to a number of other negative evaluative labels, such as "deviant", "calculating" etc. This can result in an individual being viewed as the sum of such evaluations and all their other unique features being lost. As such, stigmatisation can be defined as a form of cognitive fusion. Once a person has been evaluated in a negative way, they are likely to be avoided or treated badly by those who hold the stigmatising beliefs. Thus, through the use of defusion and acceptance techniques, ACT would aim to undermine the literality of verbal relations and promote the acceptance of unwanted negative thoughts and feelings, in order to behave consistently with chosen values. An ACT model of stigma is illustrated below (Figure 2.2).
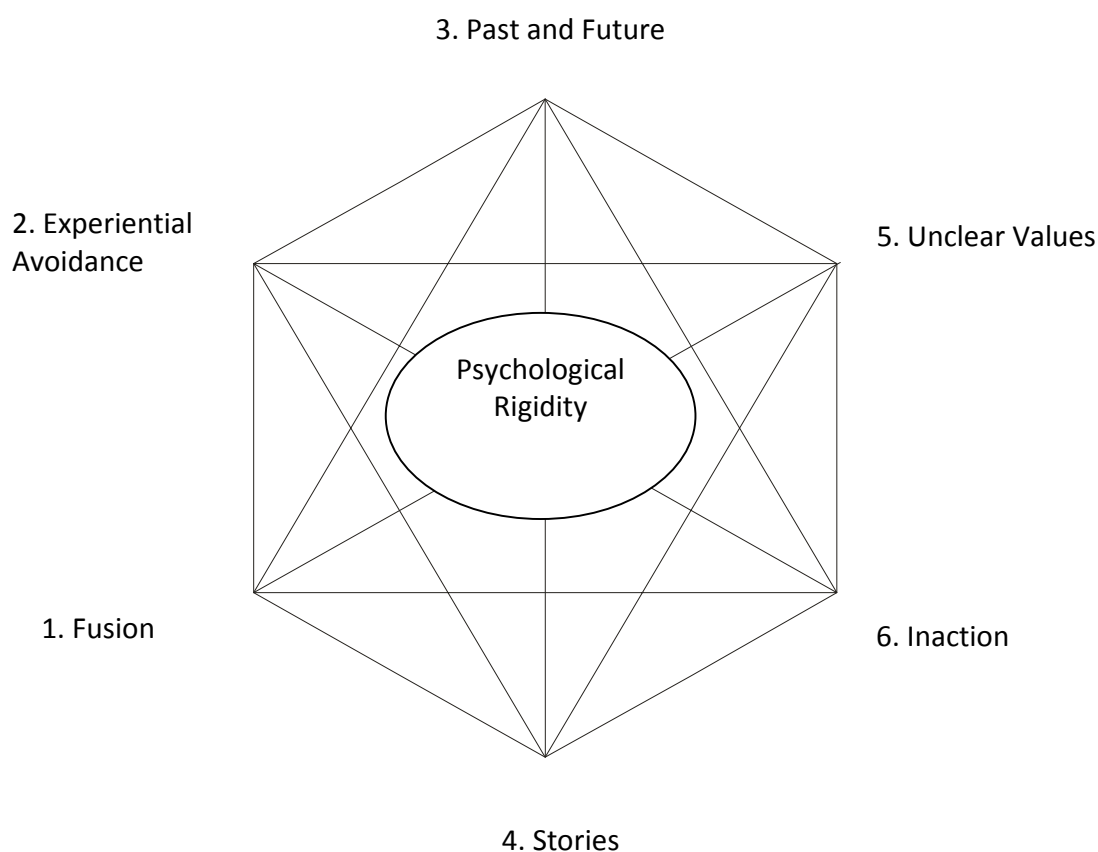


Note. 1 = Entanglement with categorical, judgmental thought, 2 = Running away from our own emotions, 3 = Losing flexible contact with the present moment, 4 = Stories of who we are and who others are dominate, 5 = Losing contact with what we really want our lives to be about and 6 = Settling into inaction, impulsivity or avoidance.

*Figure 2.2.* An ACT model of the processes that contribute towards psychological rigidity (e.g., stigma) (Hayes, 2008)

*2.1.6 Summary*

In summary, ACT is a psychological intervention that applies mindfulness and acceptance processes, in conjunction with commitment and behaviour change processes, to help individuals work towards the goal of achieving psychological flexibility. Its alternative, psychological inflexibility appears to be indicative of the stigmatising ways in which staff think about, and behave towards their clients with a PD (e.g., having the thought "this client is manipulating me" and consequently withdrawing care). Therefore, ACT based interventions designed to promote flexibility in staff, could be equally beneficial for staff and clients alike. Indeed, preliminary evidence suggests that brief ACT training interventions can have positive effects in reducing levels of stigma and more specifically healthcare workers' stigmatising attitudes towards clients. These findings will be considered below.

## 2.2 Breaking down Stigma using ACT

Lillis and Hayes (2007) developed a training workshop based on ACT, designed to reduce racial and ethnic prejudice. The intervention was tailored for non-therapy interventions and renamed, Acceptance and Commitment Training (ACTr). Lillis and Hayes (2007) used a student sample to compare a class session based on ACT with an educational lecture (both 75 minutes) taken from a textbook on the psychology of racial and ethnic differences. The study included a sample of 32 students who were enrolled in two separate undergraduate courses on racial differences. An education and ACT approach to cultural diversity were contrasted using a counterbalanced within-group design. A non-standardised measure was created by the researchers to assess participant's willingness to be around/involved with different ethnic groups, processes of change suggested by both ACT and educational models and processes of change only relevant to ACT. Participants were assessed prior to the first class presentation (A), after the first class presentation (B or C – indicating ACT or Education), 4 days later and prior to the second presentation (A), after the second presentation (B or C), and at 1 week-follow-up (A). Therefore, the design was an A/B/A/C/A in one class and an A/C/A/B/A design in the other class. Through discussions and group exercises, participants in the ACT training were encouraged to mindfully acknowledge the presence of prejudicial thoughts and emotional reactions without trying to alter them. They were also required to focus on the importance of behaving in ways consistent with their values. Participants in the educational condition were educated about different ethnic minorities and were required to appreciate the

importance in recognising and correcting their biases, to be more accepting of other races and to identify the uniqueness of each individual. They were also required to consider how their prejudicial thoughts may affect how they treat people from different ethnic backgrounds. The interventions were delivered by the same workshop leader and each lasted for 75 minutes.

The results showed that ACT training was successful in significantly reducing prejudice on relevant questionnaire items compared to the education condition alone and that these effects were either maintained or improved at 1-week follow-up. These findings indicate that very brief ACT interventions may be successful in moderating stigmatising attitudes. However, the study does have some methodological limitations. First, the questionnaire used had not been used or validated prior to its use in this study; second, unlike the educational training, the nature of the ACT training was novel due to its mainly experiential approach. This may have been more engaging to students than a traditional educational approach. Third, the same trainer taught both classes. Although this could have the benefit of a more consistent teaching skill, it raises possible issues of bias. Fourth, the sample size was limited and fifth, the follow-up interval was very short, thus the long term effects of this training remain unknown.

In a second stigma study, Masuda et al. (2007) compared ACT to an education intervention for reducing stigma towards people with psychological disorders. Ninety-five college students were randomly assigned to either a one off 150-minute ACT or educational workshop. The focus of the ACT training was to encourage participants to notice how judgmental processes are automatic, prevalent and related to mental health stigma. In addition the nature and importance of acting in value consistent ways was explained to participants. Participants in the education intervention were required to engage in activities and discussions designed to replace stigmatising and biased thoughts with new ones. The workshop also provided knowledge about stigma, including information about its identification and prevalence. A standardised questionnaire designed to measure stigmatising attitudes towards the mentally ill (Community Attitudes Towards the Mentally Ill Scale II; CAMI) and a standardised measure designed to measure several ACT processes that convey psychological flexibility (The Acceptance and Action Questionnaire II; AAQ-II, Bond et al., submitted manuscript) were administered at the beginning of the workshop, at the end of the workshop and one month following the training workshop. Preliminary results showed that both ACT and educational training were successful in reducing stigma and that these changes were maintained at 1-month after the intervention. However, further analysis showed that these

results were actually dependent on the psychological characteristics of the sample. Specifically, educational training did not reduce levels of stigma in psychologically inflexible participants, as measured by the AAQ whereas ACT was successful in reducing stigma regardless of the degree of psychological inflexibility shown by participants.

A limitation of this study however, is the small sample size, particularly for those with low levels of psychological flexibility (ACT, n = 14, Education, n = 10). However, these findings indicate that acceptance and mindfulness interventions are helpful in alleviating stigma and prejudice. Critically, they support ACT theory by indicating that psychological inflexibility may in fact maintain stigmatising processes.

More recently, Masuda, Price, Anderson, Schmertz and Calamaras (2009) investigated the impact of stigmatisation on individuals who report having such stigmatising attitudes. Two hundred and ninety-seven university psychology students completed a number of self-report questionnaires. Their results indicated that stigmatising attitudes towards individuals with a mental illness and the extent to which individuals believed their stigmatising thoughts to be true, were both significantly related to higher levels of personal distress and psychological inflexibility. Furthermore, hierarchical regression analysis indicated that the relationship between stigmatising attitudes and interpersonal distress weakened after covarying psychological flexibility. These results suggest that stigmatising beliefs are related to personal distress and that to some extent, the relationship is accounted for by psychological flexibility. In addition to the findings of the previous studies, these results indicate that stigmatising attitudes have significant costs for the stigmatiser. In sum, these findings offer further support for the role of psychological flexibility in the conceptualisation and treatment of mental health stigma. It is, however, vital to determine whether ACT interventions would be successful at reducing stigmatising attitudes in a clinical setting.

*2.2.1 Breaking down Professional Stigma using ACT*

Hayes et al. (2004) developed an ACTr workshop designed to target mental health stigma towards clients with substance misuse and alcohol problems, with a view of decreasing the risk of professional burnout. The researchers recruited 90 drug and alcohol counsellors that were currently working with individuals with addiction problems. These counsellors were randomly assigned to one of three types of a 1-day training workshop; ACTr, multicultural, or educational training. Participants attending the ACTr were taught methods of reducing the impact and believability of negative thoughts, even if they continue to occur, through the use

of acceptance, mindfulness and defusion techniques. In addition, several exercises were designed to raise difficult thoughts and emotions about clients and participants practiced experiencing these internal events without believing, disbelieving or avoiding them. Participants were also required to connect with their values and to reflect on the importance of valued living. The education group was introduced to a biological model of substance misuse. The didactic lecture focused on scientific and biological information about drugs, the history of drugs and addiction. The cultural diversity training was designed to sensitise participants to the stigmatising effects of cultural bias. For example, participants were required to think about cultural diversity, their own values and biases whilst working with clients, and culturally appropriate intervention strategies. The importance of treating clients in non-stigmatising ways but as human beings with their own unique background was emphasized. This approach was used because the counsellors' clients were from a diverse range of ethnic groups.

Questionnaires designed to measure levels of stigmatising attitudes towards substance misusers, and the believability of negative thoughts towards clients, were created by the researchers for use in this study. A standardised questionnaire was used to measure levels of professional burnout. Questionnaires were administered at the beginning of the workshop (pre), at the end of the workshop (post) and 3-months after the workshop (follow-up). The results showed that compared to the educational condition, the multicultural and ACTr workshops were successful in significantly reducing stigmatising attitudes and levels of burnout post-intervention. These changes were, however, only maintained at follow-up for the ACTr condition. Participants in the ACTr and multicultural conditions showed significantly lower levels of believability of stigmatising thoughts post-intervention. These changes were only maintained for the ACTr condition at follow-up. No changes in believability were found for the education condition. Finally, regression analyses found the believability of stigmatising attitudes to be a mediator of ACTr's impact, but not multicultural's, on stigma and burnout.

These findings indicate that compared to the other conditions, ACTr produced sustained effects in the reduction of stigmatising attitudes, the believability of stigmatising attitudes and professional burnout. Importantly, participants did not lose the ability to remember previous stigmatising thoughts but they no longer viewed them as basis for action, thus confirming the role of acceptance and defusion in breaking down the literality of stigmatising thoughts. These findings evidence that by providing staff with self-management skills, ACT interventions can have powerful effects on the attitudes of healthcare staff. However, the study is not without methodological weaknesses. First, two of the measures used

were non-standardised and as a consequence lacked psychometric reliability and validity; second, non-parametric mediation analyses were conducted as a result of the small sample size and the study's limited power and third, the workshop leaders varied across groups.

*2.2.2 Summary*

In summary, Hayes et al. (2004), Lillis and Hayes (2007) and Masuda et al. (2007) have produced evidence to show that acceptance and mindfulness interventions are helpful in ameliorating stigma and prejudice. In addition, Hayes et al. (2004) indicated that an ACT approach was successful in reducing levels of professional burnout in a group of staff working with substance misuse clients. Critically, they support ACT theory by indicating the role of psychological flexibility in the construction and conceptualisation of stigma. These findings support the assertion that staff should be provided with self-management skills (e.g. mindfulness strategies, value identification etc) if stigmatising attitudes are to be undermined.

## 2.3 Review Conclusions

Chapter 1 identified the need for effective staff training interventions for healthcare professionals working with clients with complex needs such as PDs. The evidence presented indicates that staff members possess negative, stigmatising attitudes towards clients. Furthermore, reports indicate that staff can experience difficult emotions in response to client's symptomatic behaviours. In addition to having negative attitudes about, and experiencing difficult emotions in response to BPs, staff members are reported to distance themselves from clients. Such self-protective strategies however, are reported to reinforce the BPs' challenging behaviours, which in turn, is likely to increase the occurrence of such behaviours. As a result, staff members' judgments about the borderline client are confirmed which results in further stigmatising behaviours. As a result of the unfavourable attitudes of staff towards BPs, clients fail to receive the therapeutic care they require and healthcare workers become susceptible to professional stress and burnout.

Interventions designed to address the problem of staff stigma towards BPs have shown that staff benefit from PE based training. In addition, they have identified that staff feel more confident about their professional role as a result of receiving client-management skills. Although these findings seem to offer some insight into how to address the issue of staff stigma towards BPs, the studies have very serious methodological limitations. Therefore, in

order to determine the effectiveness of PE based training for staff working with BPs, it is essential for these methods to be evaluated in systematic and controlled ways.

Evidence reviewed indicates that because of the difficult emotions elicited in staff as a result of BPs' challenging behaviours, education based training may not be sufficient in bringing about long term change in their attitudes and willingness to help such clients. Offering support for the assertion that education based training alone is not sufficient in reducing negative attitudes in the long term, evidence indicates that by being self-reflective about their professional experiences, staff members were able to identify that changing their practice could have a positive impact on their own and their clients' wellbeing. Despite these findings, no studies had identified or evaluated a training approach that could provide healthcare professionals with the self-management skills required as a result of working with such a difficult client group.

Evidence reviewed in the current chapter, indicates that ACT based training interventions can have powerful effects at reducing an individuals' entanglement with stigmatising attitudes. Critically, this approach has been shown to reduce healthcare professionals' stigmatising attitudes towards substance misuse clients. Furthermore, ACT training has been shown to significantly reduce healthcare workers' levels of professional burnout. This approach indicates that providing staff with self-management skills helps reduce the impact and effects of, negative attitudes held about difficult clients. Moreover, there is initial support to suggest that ACT based training is more effective at reducing levels of stigma than the alternative, PE based training. However, additional evaluations are required in order to establish the effectiveness of this approach. Furthermore, despite the relevance of ACT based training for staff working with BPs, its application has not been explored. Additionally, an ACT model of professional stigma towards individuals with a PD has not yet been determined. Thus, the overarching aim of this thesis is twofold; to develop an ACT consistent model of the processes that underlie and accompany healthcare professional's stigma in relation to clients with a PD and; to investigate the relevance and application of ACT based training interventions for staff working with clients with a PD. The following chapter considers what study designs, measurement procedures and types of analysis are most suitable to tackle these goals.

# CHAPTER III

## Research Procedures, Measurement and Analyses

Chapter 1 identified the need for the development of effective staff training interventions for healthcare professionals working with clients with a PD. Evidence presented in Chapter 2 indicated that training based on the principles of ACT is likely to be a strong contender. To date, the application of ACT-based training for staff working with PD clients has not been explored, thus studies are required to investigate the relevance and application of this approach. In addition, evidence relating to the processes shown to underlie/influence change observed in ACT-based stigma outcome studies is in its infancy. Therefore, an ACT consistent model of the processes predicted to underlie (and accompany) healthcare professionals' attitudes towards clients with a PD is required.

The next stage is to consider what research designs, measurement procedures and types of analysis are most suitable to tackle these goals. Thus, the following chapter has four main objectives. First, I shall critique a variety of research procedures that are suitable for research of this kind. Second, consideration will be given to the ways in which these procedures can be measured. Third, types of analyses that may be appropriate to answer the proposed research questions will be considered and fourth, a justification for the procedures employed at each stage of this project will be provided.

### 3.1 Clinical Research

Clinical research into the effectiveness of any therapy based intervention, typically progresses through a sequence of steps designed to produce evidence that will lead to improved client care (White & Ernst, 2001). An essential step is the clinical trial. The clinical trial is an *experimental design* that evaluates the effect of a new intervention, drug or device on human volunteers (Wang & Bakhai, 2006). Experimental designs are carried out in contrived settings where researchers manipulate a variable (the independent variable [IV], e.g., staff training) and measure the effects of the manipulation on another variable (the dependent variable [DV], e.g., levels of stigma). The primary aim of most clinical trials is to provide an unbiased evaluation of the merits of using one or more intervention type, for a given area of interest. Ideally, clinical trials should be conducted in a way that isolates the effect of treatment on the study outcome and provides results that are free from bias. Thus,

experimental research is designed to maximise internal validity; the extent to which observed changes can be attributed to the treatment under investigation rather than other, extraneous variables.

For some time, a phased approach to the development and evaluation of a novel clinical intervention has been recommended to researchers, which typically includes a four phase sequential process (Campbell et al., 2000; Medical Research Council [MRC]) These stages, displayed in Figure 3.1, include, phase I – Modelling, phase II – Exploratory trial, phase III – Definitive randomised control trial (RCT) and phase IV – Long term implementation. Progression from one phase to the next does not, however, have to be linear; an iterative process can also be employed (Campbell et al., 2000). This approach is usually adopted when an unexpected finding is uncovered, thus prompting the researcher to re-examine the components, or the theoretical basis of the investigation (Campbell et al., 2000). Each of the fours stages of the phased approach will be considered below.
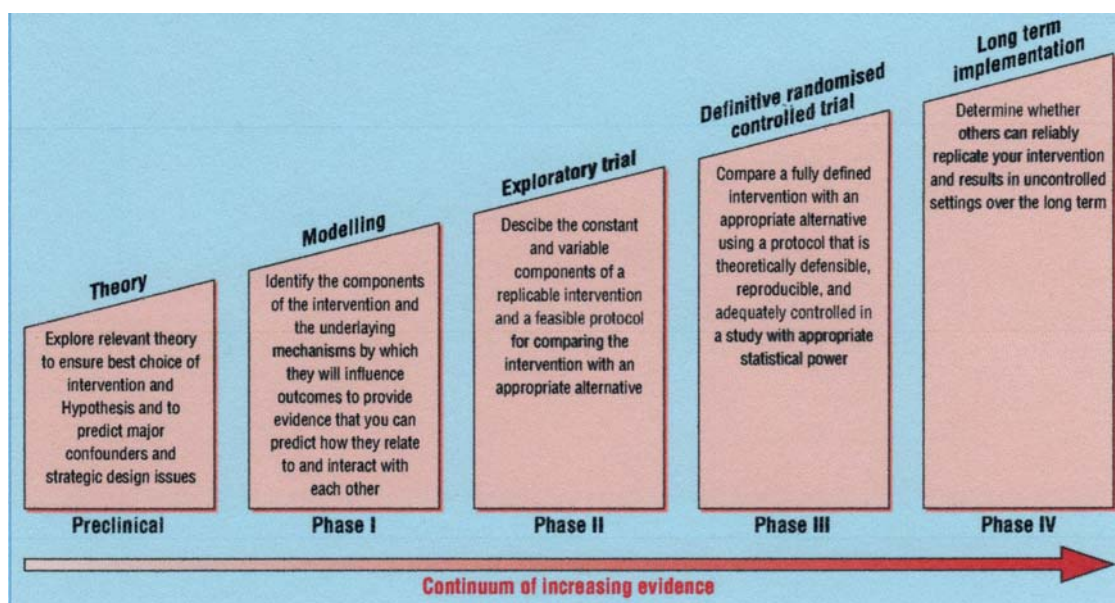


*Figure 3.1.* Sequential phases of developing randomised controlled trials of complex interventions (Campbell et al., 2000)

*3.1.1 Phase I – Modelling*

Once the theoretical basis for an intervention has been established (e.g., Chapters 1 & 2), the components of the proposed trial should be explored during phase I of the investigation. During this phase, it is common for *non-experimental* research designs to be employed (Campbell et al., 2000). In contrast to experimental designs, which involve an active intervention by the researcher, such as giving one type of training to one group of participants and a second type to another, non-experimental designs involve measurement in the absence of experimental manipulation and are therefore, more concerned with variation between participants (Barker, Pistrang & Elliott, 2006). A common non-experimental design used in psychological research is the *correlational design*. In correlation studies, researchers measure a number of variables for each participant, with the aim of identifying their structural or functional relationships. As such, this approach is commonly used to test the theoretical model underpinning an intervention (e.g., the relationships between stigma, core ACT processes and staff and client outcomes) and is therefore, conducted during this early stage of the research process. Correlational designs are typically *cross-sectional*, in which all observations are made at the same point in time. Despite the fact that the data is collected simultaneously, it is usual for one or more variables to be assigned antecedent status (i.e., it has predictive status). For example, based on a firm theoretical understanding, cross-sectional research can be used to test whether levels of one variable (e.g., psychological flexibility) predict current levels of another variable (e.g., personal distress; Masuda et al., 2009; Chapter 2.2). Correlational designs can, however, be used to obtain data from the same sample on two or more occasions. This method permits the examination of lagged correlations, which enables the researcher to determine the predictive power of certain variables over time. The major weakness of correlational studies is that they typically use cross-sectional data and can not, therefore, be used to make *causal* inferences. Nonetheless, the discovery of association indicates the possibility of causal relationship, thus correlational designs are often a useful first step in determining causation.

Another type of non-experimental design recommended during the modelling phase of a clinical intervention, is the *qualitative approach*. This approach comprises of a range of empirical techniques that do not base systematic observations on experimentally controlled conditions and variables (Silverman, 2000). Qualitative researchers are opposed to the averaging out of individual differences by the use of statistics and the idea that objective

measurement alone can generate a complete understanding of psychological processes (Todd, Nerlich, McKeown & Clarke, 2004). Instead, they focus on how they or their participants describe their experience. Verbal data can be obtained in a number of ways; for example, they may be the description of a participant's thoughts obtained during an interview, words transcribed from a conversation or from a researcher's field notes written down after an observation session (Barker, Pistrang & Elliott, 2006). Such verbal data can provide researchers with rich and detailed information which can be interpreted to understand the complexity of peoples' experiences.

The main advantages of using qualitative methods are as follows; first, as opposed to quantitative designs, they permit more complex aspects of experience to be studied by imposing fewer restrictions on the data. This enables researchers to study participants in more depth by addressing research questions that may not be quantifiable, such as the nature of individual experiences. Second, qualitative methods give more freedom to participants because open-ended questions permit them to respond in their own words, rather than using a set of pre-defined responses (see section 3.2.2). Finally, because qualitative designs are not constrained by pre-existing hypotheses, researchers often gather information that they were not expecting. Thus, the qualitative approach offers a valuable tool for hypothesis generation, which makes it very suitable for phase I of an intervention. Nonetheless, qualitative designs are subject to a number of criticisms. For example, interviewers may bias responses, the interpretation of the data is considered to be subjective, they are costly in terms of time, and they do not permit meaningful group comparisons and the small samples may not be representative (Silverman, 2000).

The sequential phased approach suggests that correlational and qualitative designs are well suited to the exploratory stages of an investigation. In the early stages of some research projects, however, exploratory designs may not be employed because previous research may have already been conducted by other researchers. In any case, once the relationships between key variables, and how they might interrelate, have been established, the researchers can then start to test their predictions using exploratory and definitive trials.

### 3.1.2 Phase II – Exploratory trial

In view of the information collected in phase I, the second phase of the investigation involves the development of the clinical intervention and the study design. Thus, the protocol for a novel intervention is developed and typically tested through an uncontrolled trial – a

clinical study where new treatments are studied in the absence of a control group. Hence, they aim to evaluate the effect of a treatment in a group of participants who are all offered the *same* intervention and focus on within-group comparisons. The uncontrolled trial is considered to serve a number of important purposes, which include; establishing that there is a clinical effect worth investigating, identifying the most suitable participants and the most appropriate treatments, identifying reliable outcome measures, providing information on how large the effect may be and for generating new hypotheses (Barker, Pistrang & Elliott, 2006; Campbell et al., 2000; White & Ernst, 2001). In cases where previous research has already adequately addressed these topics (e.g., ACT-based interventions can produce positive outcomes for both clinical professionals and their clients; Hayes et al. 2004) this stage of the research programme can be missed.

Uncontrolled trials routinely evaluate the effects of an intervention over time. A common example is the *pre-test-post-test design*. In this design, participants are evaluated before and after they receive treatment in order to establish its effectiveness. The absence of a control/comparison group is considered to be both a strength and weakness of uncontrolled designs (Wang & Bakhai, 2006). For example, although uncontrolled studies are less informative than controlled studies (see Section 3.1.3); they are considered to be faster, more convenient and less expensive to carry out. The major limitation of uncontrolled trials, however, is that they *lack internal validity*. Nonetheless, uncontrolled trials play a fundamental part in the evaluation of new treatments/interventions in the early stages of research, which then help to justify and contribute to larger scale, controlled trials.

*3.1.3 Phase III – Definitive randomised controlled trial*

The RCT is considered to be the "gold standard" experimental design used in clinical research (Niebuhr, 2000, p.1). The most common RCT used in outcome research is the *parallel-group design* whereby participants are randomised to separate groups to receive different treatments simultaneously. By selecting a *homogenous sample* – individuals who share certain characteristics, such as healthcare professionals who work with clients with a PD – and allocating them randomly, the characteristics of the participants are likely to be similar across groups at the start of the comparison (baseline). By keeping the groups as similar as possible at baseline, the researchers are more able to isolate and assess the impact of the interventions they are studying with minimal effects from other factors that could influence the outcome. Between-group comparisons are conducted to determine which treatment had a

greater effect on the DV. An RCT has a *prospective design*, thus it measures the DV at a number of different time points (e.g., Hayes et al. 2004; Chapter 2.2.1) For example, levels of staff stigma towards clients with a PD would be assessed before and after they attended a training intervention designed to improve staff-client relationships.

The standard design of a RCT is to compare a new treatment against a *no-treatment control* (Parker, Pistrang & Elliott, 2003). In this case, the control group receives no treatment at all, thus providing maximum contrast with the treatment under investigation. This method, however, has ethical issues because it involves withholding treatment from individuals who could potentially benefit from it (Sim, 1989). Similarly, a *placebo-control design,* which involves comparing the treatment under investigation with a treatment believed to have no therapeutic value, is also viewed as unethical when known effective treatment is available. This design does, however, provide a sufficient comparison for the treatment under investigation. An alternative and more ethical approach to these, however, is the *wait-list control* (Parker, Pistrang & Elliott, 2003). In this design, the participants who are randomly assigned to the wait-list condition are assessed and then placed on a waiting list to receive the treatment once the experimental group has completed it (Parker, Pistrang & Elliott, 2003). Comparisons are made between the experimental group and the group waiting to receive treatment. This design enables the researchers to control for *non-specific factors* such as the instillation of hope, reactivity to the initial assessment and/or spontaneous recovery (Parker, Pistrang & Elliott, 2003). A wait-list design is not, however, suitable if participants are in need of immediate treatment.

A method considered to be an ethical way of conducting research is the *comparative treatment* groups design. Instead of comparing a new treatment with a control, this design uses an established comparison treatment that might be expected to benefit participants (Parloff, 1986). Therefore, participants in all groups receive treatment that is either known to be, or predicted to be of benefit. This design was adopted by Hayes et al. (2004) through which a sample of substance misuse counsellors were randomly assigned to receive either ACT, multicultural or psycho-educational training. By adopting this approach, they determined that the benefits of ACT training exceeded those of the comparison groups. This design does not, however, permit the researchers to determine whether the treatments administered are more beneficial than no treatment alone.

Similarly to parallel designs, *crossover trials* are a common type of randomised design used in clinical research (Wang & Bakhai, 2006). Crossover trials are designed so that

participants receive both the new and the control treatment in a specified order (e.g., Lillis & Hayes, 2007; Chapter 2.2). More specifically, once a participant has completed one type of treatment, they receive the other. Therefore, each participant acts as their own control. A *washout period* is introduced between the completion of one treatment and the administration of the second. Essentially, participants are given a break between treatments so that the effects from the first can wear off. Unlike the parallel design, *within-group* comparisons can be made because participants act as their own controls. As a result, fewer participants are needed to detect a significant treatment difference. Disadvantages of this design, however, include the *carryover* and *period effect*. Carryover occurs when, in spite of a washout period, an effect from the previous treatment is still influencing the participant when the next treatment is administered. Previous stigma studies indicate that interventions such as ACT can still have a significant effect on staff up to 3-months later (e.g., Hayes et al., 2004). Therefore, when evaluating the effects of training interventions such as ACT, which are anticipated to produce permanent or long term change, this approach is not ideal a substantial washout period would need to be introduced in order to minimise the risk of carryover effects. In addition to this, *period effects* – the order in which the interventions are administered – may bias results. Thus, during the evaluation of interventions like ACT, which are anticipated to produce long term or permanent change, crossover trials are not appropriate.

Although randomised trials are considered to be of scientific value, there are a number of factors that can threaten their reliability and validity. First, because it is a chance process, randomisation to experimental groups does not ensure that the groups will be equivalent. Furthermore, there is no guarantee that they will stay equivalent. For example, many studies suffer from *attrition;* that is, participants may drop-out of the study before the treatment has started, finished or the evaluation has been conducted (Flick, 1988). Attrition can bias an estimate of the true benefit of treatment, particularly if more participants are removed from one group than another. Furthermore, attrition rates are often observed to be higher for the control group compared to the new intervention group. The effects of non-equivalence and attrition can to some extent be controlled for when conducting the analyses (see section 3.3.1), but, large drop-out rates reduce the *statistical power* of the study (Cohen, 1988). Statistical power refers to the probability that a research design will detect an effect that is actually present (e.g., a real difference between the effectiveness of two staff training interventions). If a study does not have enough power, the presence of important effects may be overlooked. Randomised trials are costly and time consuming, and are therefore used when there is prior

evidence that the experimental treatment is beneficial. Another limitation to randomised trials is that they fail to take participant choice into account (Brewin & Bradley, 1989). As a result, participants may be allocated to receive a treatment that they are not interested in which increases the risk of attrition.

This leads to the three main ethical dilemmas involved with randomised trials. First, unless an *active* comparison is used; standard treatment is withheld from participants in the control group during the trial period. Second, a new treatment is also withheld from participants in the control group and third, there is a risk that participants in the experimental group will incur risk as a result of the new treatment (Sim, 1989). In spite of these concerns, however, well conducted RCTs are still considered to be the most valued experimental design for outcome research (Chambless & Hollon, 1998).

### 3.1.4 Phase IV – Long term implementation

The aim of the final phase of the intervention is to observe the efficacy of the intervention into practice (Campbell et al., 2000). More specifically, it determines the applicability, generalisability and applied impact of an intervention in real life settings (Strosahl, Hayes, Bergan & Romano, 1998). As such, these investigations typically follow definitive RCTs. An example of this approach is provided by Strosahl et al., who examined the effectiveness of ACT training for a sample of trainee clinicians working in an applied clinical setting. Clinicians who volunteered to take part in the training were compared with those who chose not to participate. Prior to the training, clients seen by both clinician groups completed a baseline measure of therapy effectiveness. Once ACT volunteers had received 1-year of ACT training, these assessments were repeated by clients seen by both groups of clinicians. Pre-intervention comparisons indicated that there were no significant differences in self-reported coping or problem severity. Following the intervention, clients of ACT-trained clinicians reported significantly better coping than the clients of untrained clinicians, referred clients significantly less for medication assessments and were more likely to have completed therapy 5-months after initiating treatment. Despite several methodological weaknesses, this study was successful in showing that ACT can work effectively in an applied setting.

### 3.1.5 Research Design Considerations

The information considered above suggests that different methods are more suitable for certain research questions and stages of the investigation compared to others. Nonetheless,

it is recognised that all research methods have limitations and/or weaknesses, and for this reason, some researchers recommend using multiple methods when measuring important variables – a process known as *triangulation* (e.g., Patton, 2002, cited in Barker, Pistrang & Elliott). The main advantage of this approach is that it can increase the validity of the findings (Todd et al., 2004). For example, if the same results are produced using different methods with different strengths and weaknesses, it increases our confidence that the results are legitimate. In addition to triangulation, it is recognised that research can combine *both* quantitative and qualitative approaches. This complementary mixed-method approach can be used in a number of ways, for example, qualitative data can also be collected in a follow-up investigation, further to explore quantitative findings found in the initial study (Patton, 2002). This mixed method approach would enable the researcher to gain more detailed information from participants than was possible using multiple choice questionnaires. This iterative approach is particularly useful as a follow-up when the results of a study are not what were expected or are theoretically difficult to interpret (Todd et al., 2004 et al.). Indeed, a flexible approach to research is believed to result in improved study design, execution and generalisability of results (Campbell et al., 2000).

## 3.2 Measurement

When choosing a research design, the researcher must also consider both the type of measurement procedure and method of analysis that they are going to use. This section will focus on measurement procedures; methods of analysis will be covered in section 3.3.

Measurement procedures rely on either *self-report* or *observation,* and quantitative or qualitative methods may be used to collect data of either type (see Table 3.1). Self-report methods require participants to provide information about themselves, whereas observational methods involve evaluation of the participant by someone else or through a certain procedure. Table 3.1 shows the different types of procedures available within these groups. Self-report measures – in particular questionnaires and interviews – are commonly used in psychology as a whole, and particularly within the clinical domain (Barker, Pistrang & Elliott, 2006). In addition, self-report measures have been used exclusively in the area of staff training and stigma research (see Chapters 1 & 2). For these reasons, these methods will be the focus of this section.

Table 3.1. *Examples of measures classified by source and approach*

|  | *Self-report* | *Observational* |
| --- | --- | --- |
| *Quantitative* | Attitude questionnaires | Behavioural observation |
|  | Symptom checklists | Psychological tests of ability |
|  |  | Physiological measures |
| *Qualitative* | Qualitative interviews | Participant observation |
|  | Diaries, journals etc. | Projective tests |

Source: Barker, Pistrang & Elliott (2006).

*3.2.1 Self-report Measures*

Through the use of self-report measures, the researcher is able to examine the participant's own perspective *directly*. The most common methods of obtaining self-report data are through the use of questionnaires or by conducting interviews. Questionnaires are a *quantitative* self-report method which comprise of structured sets of written items that typically produce written responses. Interviews, however, are a self-report *qualitative* method which can be characterised as a type of conversation aimed at gathering information about the interviewee through the use of careful questioning. These methods will be discussed separately below.

*3.2.2 Self-report Quantitative Measures*

Psychometrics is the area of study concerned with the theory underlying psychological measurement (Todd et al., 2004). More specifically, psychometrics is concerned with the study of measurement instruments such as questionnaires that are designed to measure constructs such as knowledge, abilities, attitudes, and personality traits. Self-report questionnaires consist of a number of questions which participants rate according to how they view themselves. Responses are made using *nominal, ordinal* or *interval* rating scales. Psychometric theory is the core framework for interpreting and evaluating the properties of quantitative measures. The central concepts are *reliability* and *validity*, both of which will be considered below.

The primary subtypes of reliability for quantitative measures are *internal consistency* and *test-retest* reliability. Internal consistency is a type of reliability test used to evaluate the precision of a measure. More specifically, internal consistency is a way of assessing the extent

to which items within a questionnaire are measuring the same construct. The internal reliability of a measure is determined using *Item analysis*, a statistical procedure which calculates the extent to which items interrelate (as measured by Cronbach's alpha). Once these analyses have been conducted, inconsistent items can be excluded and the item analysis repeated to confirm that this has increased the overall consistency of the measure. Therefore, item analysis is a procedure that is conducted repeatedly during the development of a new measure.

*Exploratory Factor Analysis (EFA)* is an additional data reduction technique regularly used alongside item analysis during the development of a new questionnaire. Essentially, it is a data driven approach, used to identify a smaller number of underlying factors in a set of observed items. Unlike item analysis, however, EFA can also be used to determine the underlying factor structure of a measure (Tabachnik & Fidell, 2001). Essentially, the analysis explains the associations (e.g., correlations, variation, and covariation) among the items (e.g., the observed variables) in a measure. EFA is based on the *common factor model*, where each questionnaire item is a linear function of one or more common factors (e.g., the underlying latent variables) and one unique factor (e.g., error or item specific information) (Harrington, 2009). Thus, latent variables are the underlying, unobserved constructs of interest (e.g., Stigma) and the observed variables are the questions designed to represent this construct (e.g., Do you believe that a person with a PD should be avoided?). EFA divides item variance into the following two components; common variance, which is accounted for by the latent factors, and unique variance, which is a combination of random error and item specific reliable variance. The two most commonly used methods for extracting factors in EFA are *Principal Components Analysis (PCA)* and *Principal Axis Factoring (PAF)*. PCA and PAF use the same procedure for extracting factors from the correlation matrix but they vary in how they estimate the shared variance between each measured variable and the other measured variables (e.g., communalities; Russell, 2002). Put simply, a PCA analyses a correlation matrix (i.e., factors are extracted based on the correlations between the measures), whereas a PAF analyses a covariance matrix (i.e., factors are extracted based on the shared variance between measures). EFA is frequently used as an exploratory first step during the development of a new measure. However, once a factor structure has been identified using EFA, *Confirmatory Factor Analysis (CFA)* should be employed to determine whether the factor structure is supported in a new sample. CFA is a method that can be used to assess aspects of the validity of measures and will be considered later in this section.

To examine the consistency of a measure over time an assessment of its *test-retest reliability* is conducted. For example, scores on a questionnaire designed to measure healthcare professionals' attitudes towards their clients with a PD, would not be expected to change over time, in the absence of attending a staff training intervention. To determine test re-test reliability, a participant would be asked to complete a single measure at two different times (e.g., 2-months apart). The strength of the relationship between their two scores would be determined using Pearson's *r* correlation coefficient. A high level of agreement would indicate that the questionnaire is reliable over time. Once the reliability and the factor structure of a newly designed questionnaire have been established, the researcher should establish its validity in ways that are considered below.

Validity can be assessed against a number of different criteria using either qualitative or quantitative methods. *Face validity* reflects the extent to which items in a questionnaire look suitable to measure the intended construct; *content validity* indicates whether the measure covers the different aspects of the construct specified in its definition (e.g., a burnout measure may lack content validity if it only takes into account the affective aspects of the construct and not the behavioural). Both of these indices are qualitative concepts that are measured subjectively. Both *criterion* and *construct* validity, however, are assessed using statistical procedures. Criterion validity assesses the extent to which the measure correlates with an established criterion or indicator of the construct it has been designed to measure. This assessment can be conducted using either a current criterion (*concurrent validity)* or a future criterion (*predictive validity*). To establish concurrent validity, the measure is correlated with a similar measure of the current criterion and in order to determine predictive validity the measure is correlated with a future criterion. For example, a staff stigma measure could be correlated with a measure of professional burnout obtained a year later (e.g., a construct to which it should be related).

*Factorial, convergent* and *discriminant* validity are subtypes of construct validity. CFA is frequently used to examine factorial or structural validity. Specifically, it is used to determine whether a construct (e.g., stigma) is unidimensional or multidimensional and how the constructs and their sub-components relate to each other. Furthermore, CFA is designed to examine the extent to which a hypothesised or preliminary factor structure 'fits' the observed data (Russell, 2002). For example, if a measure of 18 items is divided into two subscales with nine questions in each, CFA can be used to test whether the items are related to the hypothesised latent variables. If the items are related in the expected way, this indicates

factorial/structural validity. The acceptability of the model fit can be determined using a number of goodness-of-fit indices. CFA and EFA are mathematically related procedures because they are both derived from the common factor model. Thus, CFA is often used to confirm the factor structure identified in the EFA. The PCA extraction method used in factor analysis, however, does not use the common factor model. As a consequence, CFA is said not to work well when trying to replicate structures identified by a PCA (Harrington, 2009). For this reason, EFA using PAF is believed to provide a stronger foundation for CFA than results derived from a PCA.

Discriminant validity is indicated when measures of what are assumed to be different concepts or constructs do not correlate. Brown (2006) indicates that correlations between constructs of .85 or below suggest good discriminant validity. In contrast, convergent validity is demonstrated when different measures of the same construct are highly correlated.

In sum, self-report measures with good psychometric properties have many advantages. For example, they are easy to administer (especially with a prospective design), they can be administered to groups, they can be coded to protect anonymity, the scoring is objective and the responses come directly from the person being assessed. Potential limitations, however, may be that participants do not have good insight about themselves, they may try to present themselves in a socially acceptable way, they may try and present themselves according to what they think the researchers are interested in, they may not complete the measures accurately, and they may be forced into providing an irrelevant response as a result of limited, pre-defined categories (Barker, Pistrang & Elliott, 2006; Rust & Golombok, 2000; Wilkinson, Joffe and Yardley, 2004). To some extent, however, the risk of these limitations can be reduced or controlled for. For example, a questionnaire measuring social desirability (e.g., Marlowe-Crowne, 1964) can be administered alongside the other measure/s.

*3.2.3 Self-report Qualitative Measures*

Self-report qualitative data can be obtained in a number of ways, such as through the use of an interview, focus groups, administering open ended questionnaires, and using pre-existing written documents such as diaries (Silverman, 2000). The most common approach, however, is the qualitative interview (Barker, Pistrang & Elliott, 2006). Different interview types include the semi-structured, unstructured and the standardised open-ended interview. The most common in clinical research, however, is the semi-structured interview (Silverman,

2000). This method is typically based on an interview schedule which lists the major questions to be asked. Semi-structured interviews, unlike structured interviews which have fixed choice answers, ask open ended questions. This type of questioning has the advantage of allowing participants to give their personal responses to the questions rather than forcing them to choose between predefined options (Wilkinson, Joffe & Yardley, 2004). It also prevents the participants' thinking from being forced into consistency. People's attitudes tend to be complex and contain contradictory views, however, an interpersonal motive to be consistent means that when presented with closed questions people will generally constrain their thinking and give consistent answers (Wilkinson, Joffe and Yardley, 2004). Open-ended questions, however, allow researchers to tap into genuinely ambiguous attitudes. In addition to the main questions, follow-up probes are added by the interviewer to draw out further information from interviewees. Semi-structured interviews vary in length, from a few minutes to several hours, and can take place on one occasion or over many.

Critics of qualitative methodology question the objectivity of the results generated from narrative data. Inter-rater reliability, however, is a process qualitative researchers use in order to check the accuracy of the categories/themes they have identified in the data. For example, the primary researcher will categorise the data and produce a coding manual defining each of the categories. At least one other person will then use the manual to code the same data. The intra-rater reliability, as measured by Cronbach's alpha ($\alpha$), is the extent to which their ratings agree or covary with each other. High levels of agreement indicate that the categories assigned by the researcher are identifiable and therefore, valid.

The most common type of measurement procedure used in clinical research is the self-report method which can yield either quantitative or qualitative data. The following section will focus on the different types of analysis suitable for these data.

### 3.3 Quantitative and Qualitative Analyses used in Clinical Research

This section will focus on the methods of analyses frequently used in clinical research to understand and interpret both quantitative and qualitative data. I have established that RCTs are a popular design used in clinical research and that between-group comparisons are made in order to determine whether any differences exist between the experimental groups. Common types of statistical techniques used to determine between-group differences are T-tests and Analysis of Variance (ANOVA). These statistical techniques are not, however, limited to between-group designs; they can also be used for within-group designs such as the

uncontrolled clinical trial. Further to measuring change, clinical research is also interested in determining the processes that *underlie* change and mapping the relationships between test variables. Regression analyses, including *mediation* and *moderation* techniques, are useful for these purposes. All of these statistical techniques use numerical data, however, qualitative data is not numerical in nature and therefore requires alternative methods of analysis. These methods will be considered in section 3.3.3, but before this, group comparisons and regression analyses will be discussed.

*3.3.1 Group Comparisons*

ANOVA forms part of a group of statistical techniques which test whether the means of a minimum of two groups significantly differ from one another. Instead of using the means, this is achieved by assessing whether the *variances* of the groups are different from each other. Essentially, the ANOVA compares the spread of scores within the sample (error variance) to the variance between the means of the sample (individual differences). If the between-group variation is significantly greater than the within-group variance, one would conclude that some of the means differ from each other. A similar test to the ANOVA is the t-test which examines the mean scores of two conditions or groups of participants on a single variable. Unlike ANOVA, however, t-tests are limited to situations in which there are only two levels of the independent variable (i.e., two groups).

Both ANOVA and t-tests are *parametric* tests based on the *normal distribution*. For this reason they assume; data are from normally distributed populations, data are measured at the interval level, variances in these populations are roughly equal (homogeneity of variance) and scores are independent. It is common in clinical trials, however, to assess participants on a number of occasions. In these situations, participant's scores are not independent and alternative techniques need to be used. Depending on the number of conditions, these include either the repeated-measures ANOVA or the paired-samples t-test. These related-sample techniques (i.e., repeated/correlated/paired/within-group designs) adjust error scores by removing the contribution made by individual differences. These techniques can also be used for designs that incorporate both within and between-group factors. For example, by using a repeated-measures ANOVA, Hayes et al. (2004) compared the effects of different types

of training (between-group factor) on participant's attitudes on three different occasions (within-group factors, e.g., before, immediately following and three months post training).

In related subjects or repeated measures designs, complications can arise as a result of selective attrition because it is necessary to have equal numbers of scores in each group. These statistical techniques enable the researcher to conduct *efficacy subset analysis,* whereby only the data for the subset of participants who *completed* treatment, regardless of randomisation, are analysed. This method is, however, problematic because between-group equivalence at baseline is likely to have been violated, and the risk of a type II error is inflated (i.e., the clinical effectiveness of the treatment may be underestimated). Intention-to-treat (ITT) analysis is an alternative procedure which maintains randomisation by ignoring non compliance. For example, ITT analysis uses the data for all participant's who were assigned to the study, regardless of whether they then continue to complete the treatment. Although ITT analysis maintains group equivalence, participants who discontinue treatment often fail to complete evaluation questionnaires, therefore this procedure can not overcome the issue of unequal group sizes. An alternative method of analysis – *last observation carried forward* (LOCF) – can overcome the problem of unbalanced groups whilst maintaining randomisation. For each individual, missing values are replaced by the last observed value of that variable. This method ignores whether the participant was improving or declining prior to the value observed before drop-put and assumes that scores would have remained stable from the point of drop out, which is often unlikely to be the case. Furthermore, this method artificially increased the degrees of freedom which increases the risk of a type I error (i.e., the clinical effectiveness of the trial may be overestimated).

An alternative approach is the Linear Mixed Model (LMM). LMM extends repeated measures analysis using the General Linear Model (GLM) by allowing unequal numbers of participants at each time point to be compared. Unlike GLM repeated measures models which use listwise deletion, the LMM uses all available data and yields asymptotically sufficient estimators for missing data, thus optimising power. Therefore, unlike GLM repeated measures models, the LMM can uphold randomisation. This approach permitted MacKinnon, Griffiths and Christensen (2008) to examine the long term effects of a RCT designed to compare the efficacy of an online CBT intervention

for clients with depression with an information website and a placebo control, despite having unbalanced numbers per condition at both stages of follow-up. A criticism of this model, however, is that the inclusion of estimated values inflates the degrees of freedom, thus increasing the risk of a Type I error.

Selective attrition is thus a problematic and often unavoidable dilemma when evaluating clinical trials. Critically, attrition can result in the clinical effectiveness of the trial being underestimated. Remedying techniques, however, can have the opposite effect by overestimating the trial's effectiveness. For these reasons, the method of analysis and the procedures employed to compensate for attrition warrant careful consideration.

### 3.3.2 Regression Analyses

Clinical research is often interested in drawing relationships between test variables and identifying the processes that *underlie* or *influence* change observed during intervention. This is commonly achieved by conducting regression analysis. In regression analysis, a predictive model is fitted to the data and used to predict the values of a DV from one or more IVs. Simple linear regression seeks to predict whether a direct relationship exists between a single IV (predictor variable) and a DV (outcome variable), whereas multiple linear regression can determine the relationships of several predictors on an outcome variable.

A development of this method is the mediation model which seeks to explain the relationship between the IV and the DV via the operation of a third variable – the mediator (Figure 3.2). The mediator variable is referred to as the 'intervening' or 'process' variable (Baron & Kenny, 1986). Figure 3.2B indicates how variable X's (IV) causal effect can be split into its *indirect effect* on Y (DV) through M (mediator) and its *direct effect* on Y (path *c'*). Path *a* represents the effect of X on the proposed mediator, whereas path *b* is the effect of M on Y after the effect of X has been partialled out. Thus, mediation analysis is conducted to further understand the mechanism through which the predictor variable affects the outcome variable (e.g., experiential avoidance may determine the relationship between stigmatising attitudes and professional burnout). Mediation analysis, however, should only be conducted if the causal order of X, M, Y can be established on either theoretical or procedural grounds (Preacher & Hayes, 2004).

**A**



**B**
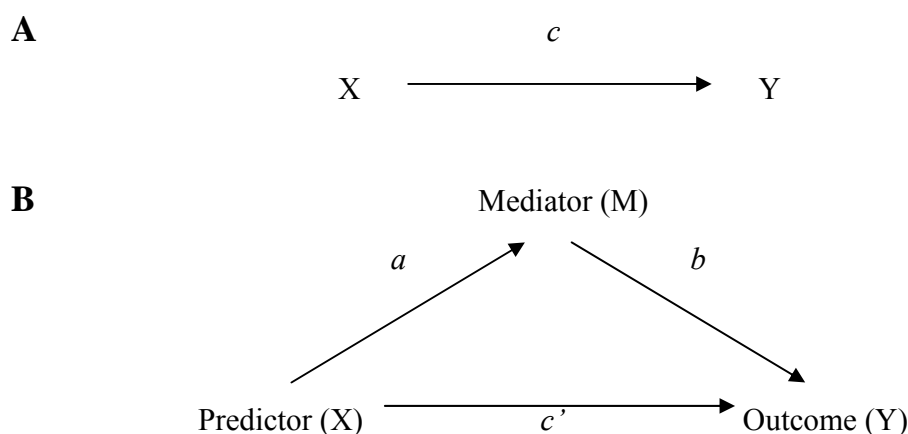


*Figure 3.2.* The mediation model (Baron and Kenny, 1986) (A = the direct effect; X affects Y. B = the mediation design; X is predicted to exert an indirect effect on Y through M)

Although there are a number of different strategies for testing mediation, the most commonly used method is the *causal steps strategy* (Baron and Kenny, 1986), according to which, mediation analysis can be conducted using a series of regressions if the following three conditions are satisfied; Y predicts X (path c), Y predicts M (path a) and M predicts X (path b). The amount of mediation (e.g., the indirect effect) is defined as the reduction of the effect of X on Y (path c'). For full mediation, X no longer affects Y after M has been controlled (path c' = 0). For partial mediation, path c' is reduced in absolute size but is still different from zero when M is included in the model. Once this has been established, the next stage is to determine whether the indirect effect of the predictor variable on the outcome variable through the mediator is statistically significant (path c'). This can be achieved using the Sobel test (1982), whereby the a/b path is divided by the standard error of the indirect effect and the ratio is compared to the critical value (p = .05). A significant restriction of Baron and Kenny's method for testing mediation, however, is that it requires paths a, b and c to be significant and for *c'* to be smaller than *c* by a sizeable amount. Conversely, other researchers have argued that a significant total effect of X on Y is not needed for mediation to occur (see Preacher & Hayes, 2004). Additional criticisms indicate that their model lacks statistical power (MacKinnon, Lockwood, Hoffman, West & Sheets, 2002), and is only suitable for parametric data despite distributions of indirect effects typically violating these assumptions (Bollen & Stine, 1990). For these reasons, authors recommend *bootstrapping* as an alternative method for testing mediation (Preacher & Hayes, 2004). Bootstrapping is a non-parametric sampling

procedure that does not rely on normally distributed data. This computationally intensive method tests the indirect effects by drawing thousands of bootstrap samples (e.g., 2000), from the data and calculating the indirect effect in each one. This iterative process constructs an empirical approximation of the sampling distribution of a/b which is then used to create confidence intervals for the indirect effect. A confidence interval for the size of the effect is judged to be significant if it does not include zero.

The effects of a third variable may alternatively be to moderate - rather than mediate - a relationship between two variables. In this case, the relationship between the predictor and the outcome variable differs according to the *values* of a third variable – the moderator (Figure 3.3). Essentially, the moderator determines the impact of the predictor on the outcome variable (e.g., experiential avoidance may increase the impact of stigmatising attitudes on professional burnout). Essentially, the moderator variable is one that influences the strength of a relationship between two other variables, whereas the mediator variable is one that explains the relationship between the two other variables. Therefore, both mediator and moderator variables serve to further clarify the nature of the relationship between the predictor and outcome variables. In sum, these approaches are all useful for evaluating how well conceptual models generated from previous research or theory fit the data and for determining the processes that might underlie or influence change observed in outcome data.
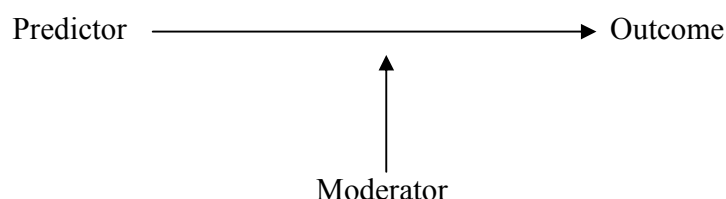


*Figure 3.3.* The Moderated Model

### 3.3.3 Mediation in Outcome Research

Mediation analysis in outcome research identifies mechanisms through which a treatment is believed to achieve its effects. An understanding of the mechanisms through which a treatment operates is likely to assist the development of an innovative treatment, which in turn should result in a more powerful and efficient intervention (Kraemer, Wilson, Fairburn & Agras, 2002). Furthermore, the identification of mediators will also advance understanding of the nature of disorders by indicating how the disorder is maintained. Although statistical tests for mediation in cross-sectional studies has been clear for some time

(e.g., Baron & Kenny, 1986; Preacher & Hayes, 2004), mediation of treatment change is in its preliminary stages (Hoffman, 2007). Suggested criteria to study mediation of change include; structural equation modelling procedures for longitudinal tests (Cole & Maxwell, 2003), multilevel models (Kenny, Korchmaros & Bolger, 2003) and linear regression models for RCTs (Kraemer, Wilson, Fairburn & Agras, 2002). The latter criteria provided by Kraemer et al. are often used in component analysis studies and will be considered in more detail below (see Longmore & Worrell, 2007 for a review).

According to Kraemer et al., (2002), a mediational relationship exists if: a) the proposed mediator correlates with treatment assignment; b) the mediator has either a direct or interactive effect in the outcome; and c) changes in the mediator variable precede changes in the outcome variable. To date, very few studies have addressed all these criteria for the study of mediation, which can be attributed largely to methodological limitations. For example, assessments are not conducted at times when changes in the proposed mediator are thought to causally affect the changes in the outcome variable (Hoffman, 2007). In such cases, an alternative procedure is often used, whereby the pre-post difference score for the proposed mediator is correlated or regressed with the follow-up outcome variables to determine whether changes in treatment are associated with, or predictive of follow-up outcomes (e.g., Hollon, Evans & DeRubis, 1990). Although this exploratory approach can provide some evidence of mediating effects, it only provides a vague estimate of the temporal precedence criterion of mediation (Kraemer et al. 2002). Thus, study designs that aim to investigate the processes through which an intervention is thought to operate should include the necessary assessment periods to make the formal mediation method achievable.

The mechanisms of change through which ACT-based interventions are believed to operate are of key interest to ACT theorists. To the best of my knowledge, no ACT mediation studies with specialist populations have been conducted using more recent and rigorous methodological guidelines (e.g., Kraemer et al., 2002). Thus, in order to accurately determine the processes through which ACT is thought to operate, further research using these formal criteria are recommended[11].

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[11] Where relevant, formal mediation testing (e.g., Kraemer et al., 2002) will be carried out in the current research programme. However, if the criteria for this method are not met, exploratory mediation analyses will be conducted instead (e.g. Nollon et al., 1990). Therefore, an absence of results for exploratory mediation in the relevant chapters will indicate that no significant results were established.

*3.3.4 Qualitative Analysis*

Interviews generate rich descriptive narratives which results in a lengthy analysis procedure. The initial step in qualitative analysis is to prepare the data which in interview studies involves transcribing the recordings. Transcribing is considered to be an analysis procedure in itself because the process requires the researcher to become immersed in the narrative, resulting in the generation of ideas (Riessman, 1993). Systematic understanding of the narrative occurs at the end of this immersion as a result of a more formal analysis. In qualitative research, the data may be analysed either within or across cases. Formal qualitative analysis involves three distinct sets of processes; identifying meaning, categorising and integrating (Barker, Pistrang & Elliott, 2003). The researcher begins the formal analysis by going through the data in order to gain a clear understanding of the ideas that are being expressed. There are, however, a number of different ways in which the data can be translated to reveal their meaning. For example, some researchers derive meaning directly from the manifest content of the narrative (e.g., thematic, narrative and content analysis), whereas others may focus on the latent content (i.e., 'reading between the lines' using discourse analysis etc.). Thematic analysis, however, enables the researchers to examine both the manifest and latent content of the data. As such, this method of analysis will be the focus of this section.

Thematic analysis is a systematic procedure which permits the researcher to explore meanings within the context of the interviewees' experiences (Joffe and Yardley, 2004). During the 'identifying meaning' stage, provisional themes within either the manifest or latent content of the data are identified *across* the transcripts and a tentative set of labels corresponding to the ideas are applied. Using thematic analysis, a combination of inductive (from data) and deductive (from theory) themes can be generated. Next, in the categorization stage, the themes are organised conceptually and the provisional labels are replaced with more encompassing terms. This process is repeated until either all the data has been classified into themes or until they require no further elaboration. During this process, the researcher will produce a coding manual in which they will define each of the themes and provide an example of relevant text taken from the interview transcripts. At least one other person will then use this manual to code the transcripts in order to determine the reliability of the identified themes. Finally, during the 'integrating' stage, the researcher seeks to make connections between the themes.

### 3.4 Overview of the Present Research

Based on the information considered in the past three chapters, the empirical work of this thesis was designed to determine the efficacy of ACT-based training for staff working with clients with a PD. Before pursuing the novel application of ACT for PD staff, it was essential to collect empirical data based on ACT theory that supported such an application. Thus, the overarching aims of this thesis were twofold; (a) to model the relationships between stigma and client and staff outcomes, and (b) to evaluate the effectiveness of a new form of self-management training, based on the principles of ACT, in reducing levels of staff stigma towards individuals with personality disorder (PD), a particularly complex and intransigent mental health problem.

Owing to a lack of standardised ACT process questionnaires, **Study 1 (Chapter 4)** determined the psychometric properties of a questionnaire designed to measure a key ACT process – the '*believability* of stigmatising thoughts' (BSTQ) – towards clients with a PD. This was an iterative process which included the use of both EFA and CFA. This unique, psychometrically robust measure was used throughout the research programme.

An ACT consistent model based on empirical data was specified in **Study 2 (Chapter 5).** This novel model described the relationship between stigma in mental health staff and two psychological ACT processes, thought believability and experiential avoidance. Critically, it also specified the negative implications of staff stigma for both the staff themselves (e.g., professional burnout) and their clients (e.g., poor therapeutic relationships). These relationships were established using bootstrapping (Preacher & Hayes, 2004). In conjunction with previous ACT outcome research (e.g., Hayes et al., 2004; Lillis & Hayes, 2007; Masuda et al., 2007), these results supported the application of novel ACT-based interventions for PD staff in reducing levels of stigma and improving both client and staff outcomes.

Through the use of a RCT, **Study 3 (Chapter 6)** provided a novel, comparative evaluation of ACT-based self-management training (ACTr) and Dialectical Behaviour Therapy skills-based client management training (DBTr) for non-specialist mental health staff working with clients with a PD[12]. Based on the results from Study 3 and the information gathered from the follow-up qualitative interviews (Appendix L), extensive refinements were

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[12] Follow-up qualitative interviews with 14 staff who attended these workshops were conducted (see Appendix L)**.** This study sought to explore participants' experiences of the workshop they attended and to produce detailed information about aspects of each workshop they experienced as particularly effective/ineffective. Furthermore, it aimed to obtain richer, more detailed information about the changes that were reported to occur following the RCT, than was possible using self-report questionnaires.

made to the original ACTr protocol. Through the use of an uncontrolled trial, **Study 4 (Chapter 8)** explored these changes in preparation for the final RCT (Study 5). **Study 5 (Chapter 9)** incorporated and extended these changes, and compared the revised ACTr protocol with psycho-educational training based on DH recommendations (PETr). This study determined the effectiveness of ACTr and PETr in reducing levels of staff stigma and improving the quality of therapeutic relationships. Finally, Chapter 10 provides an overview of the entire research programme. More specifically, it discusses the suitability of ACT-based training for staff working with clients with a PD.

**CHAPTER IV**

**Study 1: The Validation of the Believability of Stigmatising Thoughts Questionnaire**

Chapter 2 identified ACT-based training as a promising intervention for addressing staff stigma towards clients with a PD. To recap, ACT interventions promote processes such as acceptance, mindfulness and cognitive defusion in an attempt to reduce the impact of negative thoughts and feelings. ACT theorists propose that certain ways of engaging with negative internal events (e.g., *believing* their content to be literally true) are likely to result in behavioural responses that are inconsistent with an individual's core values. Given that the content of such negative internal experiences will be distressing, it is likely that the individual concerned will use avoidance techniques to manage them. Although this might be a useful coping strategy in the short term, evidence indicates that suppressing thoughts and feelings over time can paradoxically produce preoccupation with a feared event. Such preoccupation is likely to result in psychological distress for the individual.

In light of this, *cognitive fusion* (i.e., the ACT term for entanglement with negative thoughts and feelings; Hayes et al., 2004) is a process primarily targeted by ACT interventions. For example, Bach and Hayes (2002) randomly assigned a sample of 80 individuals with psychotic symptoms, hospitalised in an inpatient unit, to receive either treatment as usual (TAU) or ACT and TAU. In addition to TAU (medication, the minimum of three psycho-educational sessions and individual psychotherapy), participants in the ACT condition received four, 45-50 minute ACT sessions. These were designed to undermine the literality of positive symptoms, to promote symptom acceptance, and to assist with the identification of, and commitment to, valued goals. Results indicated that at 4-month follow-up (4-F-up; four months following discharge), participants in the ACT group were re-hospitalised at a significantly lower rate than participants in the TAU group (20% and 40% respectively). Despite this, at 4-F/up the *frequency* of participants' symptoms did not differ significantly between groups, but participants in the ACT group were twice as likely as TAU participants to *report* having positive symptoms. The authors theorised that higher levels of symptom reporting in the ACT condition could be an indirect measure of acceptance (i.e., if participants were more accepting of their symptoms, they would be more likely to acknowledge them rather than deny them). Furthermore, the extent to which participants believed in the content of their delusional beliefs reduced significantly more for participants in

the ACT condition compared to those in the TAU condition. These findings highlight that when negative internal events are not treated as frightening, their content can be observed more objectively. Critically, the results indicate that reduced believability of psychotic symptoms, as opposed to a decrease in their occurrence or frequency, played a key role in the impact of ACT on re-hospitalisation. The authors concluded that reductions in rehospitalisation for the ACT group were, therefore, the result of a greater acceptance of symptoms and a decreased tendency to treat symptom content as real (*defusion*). Given that cognitive fusion is believed to facilitate experiential avoidance, it is unsurprising that both these processes were shown to contribute to the development and maintenance of the sample's psychological problems (Hayes, Strosahl & Wilson, 1999; refer to Chapter 2).

Despite being in its infancy, the ACT-stigma literature also indicates the importance of targeting cognitive fusion (e.g., Hayes et al., 2004; Masuda et al., 2009). For example, Hayes et al., (2004) indicated that a 1-day ACT training intervention designed to target fusion, significantly reduced the extent to which a sample of substance misuse counsellors believed their stigmatising thoughts about clients. Furthermore, believability was shown to *mediate* the relationship between stigmatising thoughts and professional burnout (see Chapter 2). Critically, these findings indicate that in order to promote staff wellbeing, training interventions need to address the role of fusion.

In a recent study, Masuda et al., (2009) indicated that higher levels of believability of stigmatising thoughts were significantly positively associated with psychological distress and negatively associated with psychological flexibility. These results are not only consistent with ACT theory (e.g., fusion is a key process underpinning psychological inflexibility; see Chapter 2 for additional information), but offer further support for the findings produced by Hayes et al., (2004).

Taken together, the studies considered above indicate that cognitive fusion plays a key role in the development and maintenance of human suffering (e.g., psychological disorders, distress and physical ill-health; Hayes & Strosahl, 2005). For this reason, it is a process primarily targeted by ACT interventions. To determine the effectiveness of such interventions in reducing levels of fusion, researchers in previous studies have measured changes in the believability of cognitions (e.g., Hayes et al., 2004). For example, Bach and Hayes (2002) asked their sample of clients with a psychotic disorder to rate the extent to which they *believed* a number of cognitions such as, *gang members are stalking you*, on a scale from zero to 100 (*certainly not real or true* to *absolutely certain that it is real or true*). Additionally, both

Hayes et al., (2004) and Masuda et al., (2007), asked participants to rate the extent to which they *believed* a number of negative cognitions about a specific population (e.g., *clients with a substance misuse or mental health problem are dangerous to others*), on a scale from one to seven (*not at all believable* to *completely believable*). The researchers in each of these studies designed their own, population specific, measure of fusion. Although the psychometrics of a questionnaire are critical to its use (see Chapter 3), these researchers failed to determine, or adequately report, the properties of their measures. For example, Bach and Hayes (2002) provided no information relating to either the reliability or validity of their measure, and both Hayes et al., (2004) and Masuda et al., (2007), reported only that their measure had an adequate level of internal consistency ($\alpha = .78$),. Given that cognitive fusion/defusion is considered to be such an important ACT construct and that it is a process primarily targeted by ACT interventions, it is surprising that the statistical properties of these measures were not established. To some extent, the absence of this research could be attributed to the fact that the focus of most ACT research has been on the development of protocols for ACT interventions. Nonetheless, it calls the validity of the reported results into question.

### 4.1.1 The Present Study

The aim of the present study was to develop and test the reliability, construct validity and criterion validity of a novel, sample specific measure designed to assess the believability (i.e., cognitive fusion) of staff's cognitions, towards clients with a PD. This was achieved in two parts. Part 1 of the present chapter specifies an exploratory factor analysis (EFA) and Part 2, a confirmatory factor analysis (CFA).

### 4.2 Method

### 4.2.1 Participants

A total of 171 participants were recruited to take part in this study[13] One hundred and thirty participants (76%) were mental health professionals working for either Dorset Healthcare NHS Foundation Trust (DHFT; N= 105) or Royal Devon and Exeter NHS Foundation Trust (RDEFT; n = 25). A further 41 participants (24%) were members of the

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[13] MacCallum et al. (1999) investigated the size of the sample needed to reproduce population factor loadings in exploratory factor analysis (EFA). They concluded that in cases where communalities were high (i.e., .60 or above), as few as 60 participants were needed, however, in cases where they were low (e.g., .50), 100-200 participants would be required. There was no a priori way to estimate the communalities of items for the present measure, so a conservative decision was made to recruit a minimum of 150 participants.

general public with experience of working with clients with a PD, who were recruited through two internet research sites. The sample consisted of 135 females (80%) and 22 males (13%), 14 participants (7%) failed to disclose their gender. Participants ranged in age from 19 to 67 years, with a mean of 38.01 years (SD = 11.52). Participants' experience of working directly with PD clients ranged from 0 to 36 years, with a mean of 5.63 years (SD = 6.46). At the time of this study, 112 participants (65%) were working with PD clients, 49 were not (29%), seven were unsure (4%) and three (2%) failed to disclose this information.

*4.2.2 Procedure*

*Item Development.* All items were worded to capture the thoughts that service providers commonly experience towards clients with a PD (see Appendix A). Twenty-three items were taken with permission, from the 'Stigmatising Attitudes – Believability Questionnaire' (SA-B) which measures the extent to which substance misuse counsellors believe negative thoughts about their clients (Hayes et al,. 2004). Examples included: *My client is not going to change no matter what I do* and *These clients behave in extreme ways to gain attention.* In order to make the questions appropriate for a PD sample, modifications to the questions were made by replacing the term 'substance misuse' with 'personality disorder' (e.g., *If 'personality disordered' clients are ready to change, they'll change on their own, without my help*). Of these 23 negative worded statements, six were reversed to represent positive feelings towards PD clients (e.g., *Personality disordered clients are **not** manipulative*).

A further 17 items were compiled by three clinical psychologists from a list of common, therapy interfering thoughts, reported to emerge whilst working with PD clients. Sixteen of these statements were worded negatively (e.g., *Personality disordered clients are draining to work with*) and three positively (e.g., *These clients are rewarding to work with*). Overall, a total of 40 items were generated for this measure, termed the 'Believability of Stigmatising Thoughts – Personality Disorder Questionnaire' (BST-PDQ)[14]. Thirty-three items were worded to address 'Cognitive Fusion' (i.e., entanglement with negative

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[14] Previous ACT studies researching the role of cognitive fusion have designed measures to assess one aspect of this construct, 'believability of cognitions' (e.g., Hayes et al., 2004). Therefore, references to cognitive fusion in previous empirical studies, largely relate to believability of cognitions. As per previous studies, the questionnaire designed in the present study will also be considered to represent cognitive fusion.

stigmatising cognitions) and nine to address 'Cognitive Defusion'[15] (to be reverse-coded). Item responses were summed to produce an overall total score ranging from 40-240. Higher scores represent a higher level of fusion with stigmatising thoughts. Instructions were designed to ask participants to *imagine that the following thoughts occurred to you right now*, and *if they occurred how strongly, if at all, you'd believe these thoughts* on a 6-point Likert scale (from 1 – strongly disagree to 6 – strongly agree).

This draft version of the BST-PDQ was distributed to 15 mental health professionals working with PD clients to obtain feedback about the item wording, response scale and instructions. This was positive so no alterations to the questionnaire were made at this stage (data from these participants were not included in the factor analysis).

*Main Study.* This study was conducted in two parts. Part A was approved by the School of Psychology Ethics Committee (Appendix B). An online version of the BST-PDQ was created and placed on the School of Psychology's intranet. A link to this site was placed on two websites, 'Psychological Research on the Net' and 'Online Psychology Research UK', which advertise psychology related studies on the internet. These websites attract individuals who are interested in taking part in research, thus participation is entirely voluntary. Prospective participants were informed that participation in the study was dependent on having some professional experience of working with PD clients. They did not, however, have to be working with PD clients at the time. Participants were required to read an 'Information Sheet' prior to being asked to provide consent. Those consenting then completed a brief demographic questionnaire followed by the BST-PDQ itself. A debriefing sheet providing the rationale for the study and the researcher's contact details were displayed at the end of the questionnaire.

Part B of the study formed a part of two larger pieces of research (see Chapters 6 and 8), that were approved by both the School of Psychology Ethics Committee (Appendix B) and the Dorset Local Research Ethics Committee (Appendices C & D). Healthcare professionals working for both Dorset Healthcare NHS Foundation Trust and Royal Devon and Exeter NHS Foundation Trust were recruited to take part in a 2-day training intervention designed to improve their working relationships with PD clients[16] (see Chapters 6 and 8 for more detailed

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[15] The ACT literature views cognitive fusion and defusion as the opposite ends of the same continuum (e.g., Blackledge, 2007).

[16] Five participants – mental health professionals working for DHFT – volunteered to complete the BST-PDQ without being entered into the training workshops.

information). Participation was entirely voluntary. Participants were assessed before the training (pre-intervention), immediately following the end of the training (post-intervention) and at 3 and 6-month follow-up, using a number of self-report questionnaires, including the BST-PDQ. The BST-PDQ pre-intervention data was used in the present study.

## 4.3 Results

### 4.3.1. Data Screening

Frequency distributions indicated that 18 items (2, 4, 5, 6, 10, 12, 14, 16, 18, 20, 22, 24, 25, 26, 35, 37, 39, 40) needed to be excluded because of having significantly skewed response distributions, p <.001.

Item-total statistics revealed six items (3, 27, 31, 7, 11 and 17) with a corrected item-correlation of less than .3. Based on the recommendations of Field (2005) and Wicksell et al. (2008), these items were removed from subsequent analyses. Following the removal of these 24 items, only one positively worded item remained (item 29). Therefore, a decision was made to remove this statement from the analyses. In total, 15 items were retained for factor analysis (Appendix E).

### 4.3.2. Preliminary Analysis

The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO; .91), indicated exceptional factorability of the correlation matrix (Hutcheson & Sofroniou, 1999). Furthermore, Bartlett's test of sphericity was significant, approximate Chi-Square (105) = 1189.68, p. < .001. In sum, these tests confirmed that factor analysis was suitable for these data.

The 15-item measure was shown to have a good/excellent level of internal consistency: Cronbach's alpha = .92,

Scores on the BST-PDQ (15) ranged from 17 - 80, with a mean of 45.45 and a standard deviation of 13.17. Mann-Whitney tests indicated that there were no significant group differences based on gender or current working environment (with or working without PD clients) on BST-PDQ (15) scores. The analysis of recruitment type (internet or trial), however, indicated that the internet sample scored significantly lower on the scale than the NHS sample, $U = 1421.00$, p <.001, indicating that NHS participants have a higher level of fusion with their work-related thoughts.

*4.3.3. Exploratory Factor Analysis*

Exploratory factor analysis (EFA) was conducted to determine the underlying factorial structure of the BST-PDQ (15). Principal Axis Factoring (PAF) – factor extraction using a covariance matrix – was conducted because of its compatibility with Confirmatory Factor Analysis (CFA; see Chapter 3 for further information). Factor extraction was determined using the Scree test (Cattell, 1966). This indicated a clear break of slope between the first and second factor, indicating that one factor should be extracted (Figure 4.1; Cattell, 1966).
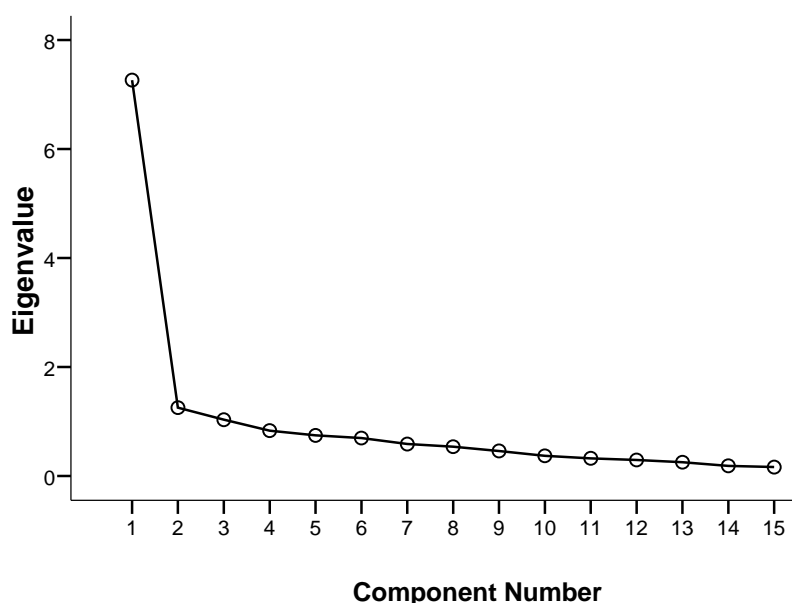


*Figure 4.1*. Scree Plot BST-PDQ (15)

The PAF was repeated, this time specifying a one factor solution. Table 4.1 indicates that the extracted factor accounted for 48.43% of the total variance. Analysis of the factor matrix indicated that item 36 did not have a factor loading greater than .45 (Table 4.2). Thus, in order to reduce the risk of factor interpretation problems, this item was removed (Wicksell et al. 2008).

Following removal of item 36, the KMO was repeated, resulting in a statistic of .90. Additionally, Bartlett's test of sphericity was significant, approximate Chi-Square (91) = 1152.99, p. < .001. Thus, EFA was repeated using the 14-item version of the BST-PDQ (14; Appendix F). The extracted factor accounted for 50.45% of the total variance (see Table 4.3). The rotated factor loadings, all greater than .50, are displayed in Table 4.4. The BST-PDQ (14) indicated a good/excellent level of internal consistency ($\alpha$ = .92). However, to determine

the appropriateness of this factor structure, CFA is required to determine the goodness-of-fit of this model (see Part II of the present study).

Table 4.1
*EFA of BST-PDQ (15) - total variance explained*

| | Eigenvalues | | |
|---|---|---|---|
| Factor | Total | % Variance | Cumulative % |
| **1** | **7.264** | **48.425** | **48.425** |
| 2 | 1.255 | 8.369 | 56.794 |
| 3 | 1.033 | 6.885 | 63.678 |
| 4 | .833 | 5.554 | 69.232 |
| 5 | .745 | 4.965 | 74.197 |
| 6 | .695 | 4.636 | 78.833 |
| 7 | .587 | 3.910 | 82.744 |
| 8 | .537 | 3.583 | 86.326 |
| 9 | .459 | 3.059 | 89.386 |
| 10 | .370 | 2.466 | 91.852 |
| 11 | .324 | 2.162 | 94.014 |
| 12 | .294 | 1.960 | 95.974 |
| 13 | .254 | 1.690 | 97.664 |
| 14 | .187 | 1.247 | 98.911 |
| 15 | .163 | 1.089 | 100.000 |

Table 4.2
*Factor matrix for BST-PDQ (15)*

| Item | | Factor 1 |
|---|---|---|
| 1. | These clients are not going to change no matter what I do | **.500** |
| 8. | These clients live such chaotic lives, it's impossible to help them | **.724** |
| 9. | These clients complain, no matter what I do | **.694** |
| 13. | These clients will never be able to improve their lives because they can't control their thoughts or emotions | **.637** |
| 15. | These clients will sabotage any efforts to help them | **.664** |
| 19. | These clients never really improve, in the sense that they are always just one step away from a crisis | **.708** |
| 21. | These clients have a vested interest in not getting better | **.594** |
| 23. | The best you can do for personality disordered clients is to keep them from harming themselves or others | **.602** |
| 28. | These clients will exploit any care that's offered to them | **.787** |
| 30. | Personality disordered clients are demanding, you can never do enough | **.696** |
| 32. | Personality disordered clients are too frightening to work with | **.576** |
| 33. | Personality disordered clients are too aggravating to work with | **.720** |
| 34. | Personality disordered clients are too unpredictable to work with | **.791** |
| 36. | These clients cause splitting amongst staff | **.438** |
| 38. | These clients will spoil any efforts to help them | **.812** |

Table 4.3
*EFA of BST-PDQ (14) - total variance explained*

| Factor | Eigenvalues | | |
|---|---|---|---|
| | Total | % Variance | Cumulative % |
| **1** | **7.063** | **50.452** | **50.452** |
| 2 | 1.248 | 8.917 | 59.369 |
| **3** | .965 | 6.893 | 66.262 |
| 4 | .801 | 5.722 | 71.985 |
| 5 | .703 | 5.023 | 77.008 |
| 6 | .597 | 4.267 | 81.275 |
| 7 | .538 | 3.842 | 85.117 |
| 8 | .466 | 3.332 | 88.449 |
| 9 | .374 | 2.675 | 91.124 |
| 10 | .325 | 2.324 | 93.448 |
| 11 | .303 | 2.164 | 95.612 |
| 12 | .262 | 1.872 | 97.483 |
| 13 | .189 | 1.348 | 98.832 |
| 14 | .164 | 1.168 | 100.000 |

Table 4.4
*Factor Matrix for BST-PDQ (14)*

| Item | | Factor 1 |
|---|---|---|
| 1. | These clients are not going to change no matter what I do | **.507** |
| 8. | These clients live such chaotic lives, it's impossible to help them | **.725** |
| 9. | These clients complain, no matter what I do | **.693** |
| 13. | These clients will never be able to improve their lives because they can't control their thoughts or emotions | **.645** |
| 15. | These clients will sabotage any efforts to help them | **.660** |
| 19. | These clients never really improve, in the sense that they are always just one step away from a crisis | **.707** |
| 21. | These clients have a vested interest in not getting better | **.592** |
| 23. | The best you can do for personality disordered clients is to keep them from harming themselves or others | **.602** |
| 28. | These clients will exploit any care that's offered to them | **.792** |
| 30. | Personality disordered clients are demanding, you can never do enough | **.697** |
| 32. | Personality disordered clients are too frightening to work with | **.576** |
| 33. | Personality disordered clients are too aggravating to work with | **.718** |
| 34. | Personality disordered clients are too unpredictable to work with | **.788** |
| 38. | These clients will spoil any efforts to help them | **.805** |

Scores on the BST-PDQ (14) ranged from 15 - 74, with a mean of 41.54 and a standard deviation of 12.57. Mann-Whitney tests indicated that there were no significant group differences based on gender or current working environment (working with or without PD clients) on BST-PDQ (14) scores. The analysis of recruitment type (internet or trial), however, indicated that the internet sample continued to score significantly lower on the scale compared to the NHS sample, $U = 1380.00$, p <.001. This consistency suggests that the remaining 14 item scale is representative of the initial 40 item version. This group difference, however, indicates that the NHS sample is significantly more entangled with negative thoughts about their clients compared to the internet group. As such, acceptance based interventions designed to reduce the literal quality of thoughts (i.e. weakening the likelihood of treating the thought as what it refers too), would be an appropriate course of action for these professionals.

## PART II

The aim of Part II of the present study is to determine whether the factor structure of the BST-PDQ (14) identified using EFA in Part I of the present study is supported in a new staff sample.

## 4.4 Method

### 4.4.1 Participants

One hundred and forty mental health professionals were recruited to take part in this study. In the previous study, the average communality level of the BST-PDQ (14) was .60, indicating that a minimum of 60 participants would be required to accurately reproduce the population loadings (Russell 2002; see section 4.1.1). For this reason, a sample size of 140 was deemed sufficient. Fifty-seven participants (41%) were working for Hampshire Partnership NHS Foundation Trust (HPFT), 38 (27%) for DHFT and 45 (32%) for Coventry and Warwickshire NHS Foundation Trust (CWFT). The sample consisted of 96 females (69%) and 33 males (24%), 11 participants (8%) failed to disclose this information. Participants ranged in age from 22 to 63 years, with a mean of 40.09 years (SD = 9.24). Participant's experience of working directly with PD clients ranged from 0 to 35 years, with a mean of 9.00 years (SD = 7.43).

*4.4.2 Measures*

*The Believability of Stigmatising Thoughts – Personality Disorder Questionnaire 14 (BST-PDQ (14).* As in part one.

*The Attitude to Personality Disorder Questionnaire (APDQ).* The APDQ (Bowers & Allan, 2006) is a 37 item self-report questionnaire designed to measure the attitudes of staff to personality disordered clients on a Likert scale (0 – Never to 6 – Always). Participants are instructed to report how *frequently* they experience certain feelings towards clients with a PD. The measure has a five factor structure; Enjoyment/Loathing, Security/Vulnerability, Acceptance/Rejection, Purpose/Futility and Enthusiasm/Exhaustion. An overall attitude score is obtained by combining items in all five factors. Lower scores represent high levels of stigmatising attitudes. The APDQ has been shown to have good test-retest reliability and good/excellent internal consistency (.84 and .94 respectively). The APDQ was included as a measure of convergent validity.

*The Acceptance and Action Question II (AAQ-II).* The AAQ-II (Bond et al. submitted manuscript) is a 10 item self-report questionnaire designed to measure levels of *psychological inflexibility* with 7 point Likert responses (1 – never true to 7 – always true). Participants are asked to rate how true a series of statements are (e.g. *I'm afraid of my feelings*). A total score is obtained by summing the items together. A high score is positive, indicating greater psychological flexibility. The AAQ-II is reported to have good internal consistency (.85) and acceptable/good test-retest reliability (.79) (Bond et al., submitted manuscript). In addition to this, the AAQ-II is shown to have a good level of convergent validity ($r = -.60$, $p < .01$), with the White Bear Suppression Inventory (a measure designed to measure thought suppression; Wegner & Zanakos, 1994). The AAQ was administered as a measure of divergent validity.

*Maslach Burnout Inventory (MBI).* The MBI (Maslach, Jackson & Leiter, 1996) is designed to measure levels of burnout in health professionals. It is reported to be the most commonly used burnout inventory and its factor structure, reliability and validity have received good support across behavioural health professions (Hayes et al., 2004). The 22 item self-report questionnaire is rated on a Likert scale (0 – Never to 6 – Every day). Participants are instructed to rate how frequently they have experienced certain job-related feelings in relation to their work over the past 6-months. The measure has a three factor structure; Emotional Exhaustion (EE), Depersonalization (DP) and Personal Accomplishment (PA). The EE subscale assesses feelings of being emotionally over-extended and exhausted by work, DP assesses impersonal attitudes towards recipients of care and PA assesses feelings of

professional competence. For the purpose of this investigation, the EE and DP subscales were of interest to the researchers and were summed to produce a total burnout score[17] (see Hayes et al., 2004). Higher scores are undesirable, representing higher levels of professional burnout. In the present sample, the combined burnout scale was shown to have a good level of internal consistency (.85). The MBI was administered as a measure of divergent validity.

*4.4.3 Procedure*

The current study formed part of a larger piece of research (see Chapter 9), approved by both the School of Psychology Ethics Committee (Appendix G) and Southampton and South West Hampshire Research Ethics Committee (B; Appendix H). Healthcare professionals working for DHFT, HPFT and CWFT[18] were recruited to take part in a 2-day training intervention designed to improve their working relationships with PD clients (see Chapters 9 for more detailed information). Participation was entirely voluntary. Participants were assessed before the training (pre-intervention), immediately following the end of the training (post-intervention) and at 3 and 6-month follow-up, using a number of self-report questionnaires, including the BST-PDQ (14), APDQ, AAQ & MBI. Pre-intervention data for these measures were used in the present study. Additionally, 10% of this sample (n = 14), were selected at random to complete the BST-PDQ (14) for a second time 2-weeks subsequent to the first completion.

**4.5 Results**

*4.5.1 Confirmatory Factor Analysis*

The one-factor model of the BST-PDQ obtained in part I was tested using Amos 7.0. The indices used to assess the fit of the model are presented in column one of Table 4.5. The $\chi^2$ statistic, which is highly sensitive to sample size, can be considered to be acceptable when the ratio of $\chi^2$ to *df* is 2.0 or less (Bollen, 1989); Comparative and incremental fit indices (e.g., CFI and IFI, respectively) greater than "roughly .90" show a reasonably good fit of the model (Kline, 2005, p.140); and MacCallum et al. (1996, as cited in Brown, 2006) assert that root-mean-square error approximation (RMSEA) values in the range of .80 - .10 indicate tolerable

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[17] Despite summing the DP and EE subscales of the MBI to produce a total 'burnout' scale, individual analyses of the subscales were conducted throughout the investigation. These results were not reported because they yielded the same results as the combined 'burnout' scale.

[18] The intervention data collected from participants working for CWFT were not analysed in Chapter 9. This was because their 6-month follow-up data could not be collected in time for the write-up of this thesis.

fit. In sum, the fit indices displayed in Table 4.5, indicate that the original one factor model established in Part 1 did not fit the data well and requires modification.

Examination of the question wording of the 14 items of the BST-PQ indicated that the wording of items 32, 33, & 34 was almost identical and different to the format of the other 11 items (see Table 4.2). Indeed, inter-item correlations indicated that these three items correlated with each other to a greater degree (e.g., .62, .67 and .71) than they did with the other 11 items (correlations ranging from .21 to .59). This indicated that the data might be better suited to a two-factor solution. However, given that there was no strong conceptual basis for a two-factor solution and that the EFA in Part 1 clearly specified a one factor model; this consideration was not taken further. Instead, a decision was made to re-run the one factor solution with error covariances added between the three similarly worded items (e.g., between 32 and 33, 33 and 34 and 32 and 34). This modification controlled for the shared error variance between the three items as a result of their wording (Harrington, 2009).

The modified one factor model provided a significantly improved fit over the original one factor model, $\Delta\chi^2(3) = 105.62$, $p < .001$. The $\chi^2$ statistic for the modified one-factor model was shown to fit the data passably, $\chi^2(2.78) = 208.56$, $p < .001$, the CFI and the IFI showed a reasonably good model fit and the RMSEA value fell slightly above the range of .80 - .10 indicating a less than average fit (see Column 2 of Table 4.5). Nonetheless, in cases when the sample size is relatively small and other types of fit indices are respectable, higher RMSEA values are considered to be less of a concern (Harrington, 2009). In view of this and the fact that the fit indices for the modified one factor model were superior to those specified for the original one-factor model, this model was regarded as acceptable. The standardised regression weights for the BST-PDQ ranged from .63 - .83.

Table 4.5
*Fit indices for CFA comparing the original one factor solution with the adjusted one factor solution for the BST-PDQ (14)*

| Fit index | Models | |
| --- | --- | --- |
| | one-factor (original) | one-factor (modified) |
| CFI | .79 | .88 |
| IFI | .80 | .89 |
| RMSEA | .15 | .11 |
| $\chi^2$ | 314.18 (78) | 208.56 (75) |

Note: CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation.

*4.5.2 Intercorrelations and Convergent and Divergent Validity*

   Table 4.6 presents the intercorrelations between the BST-PDQ, APDQ, AAQ and MBI. The BST-PDQ was shown to correlate highly with the APDQ but not highly enough to suggest measurement of the same trait (e.g., > .85), thus indicating good convergent validity. A small but significant correlation was found between the BST-PDQ and the AAQ. Thus, the BST-PDQ was assessed to have a good level of divergent validity with the AAQ. Contrary to previous findings (e.g., Hayes et al., 2004), no significant relationship was found between the BST-PDQ and the MBI, indicating that in the present sample, fusion would not be a significant predictor of professional burnout[19].

Table 4.6
*Intercorrelations between BST-PDQ (14), APDQ, AAQ and MBI*

|  | BST-PDQ |
| --- | --- |
| APDQ (n = 137) | .62** |
| AAQ (n = 139) | -.21* |
| MBI (n = 138) | .09 |

Note: *** = $p < .001$; * = p<.01

*4.5.3 Reliability and Sample Characteristics of the 2-Factor BST-PDQ (14)*

   The BST-PDQ was shown to have a good/excellent level of internal consistency (.93), as measured by Cronbach's alpha. Additionally, it was shown to have an excellent level of test re-test reliability ($r = .91$) Correlations indicated no significant relationship between participants' age and their level of fusion with their negative thoughts about PD clients. Furthermore, there was no significant relationship between the number of hours spent working with PD clients a week and fusion with negative thoughts. However, a significant negative correlation between the length of experience working with PD clients and the BST-PDQ was established ($r = .20$, $p = .02$). This indicates that staff members with less experience of working with PD clients are more likely to be fused with their negative thoughts about them. A Mann-Whitney test indicated no significant gender differences for the BST-PDQ.

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[19] Analyses were also conducted independently on each of the three subscales of the MBI. However, no significant correlations between the BST-PDQ and these subscales were found.

**4.6 Discussion**

The purpose of the present study was to develop and test the reliability and construct and criterion related validities of a novel, sample-specific measure designed to assess the believability (i.e., cognitive fusion)  of staff's thoughts about clients with a PD. Although other measures have been used in ACT research (e.g., Bach & Hayes, 2002; Hayes et al., 2004; Masuda et al., 2007), this is the first time the psychometric properties of this construct have been thoroughly assessed. The data supported the reliability and validity of a one factor solution of the believability of stigmatising thoughts about clients with a PD. This finding is consistent with Blackledge's (2007) assertion that cognitive fusion/defusion form opposite ends of the same continuum. The reliability and the validity of the factor structure are considered below.

*4.6.1 Factor Structure, reliability and validity*

The BST-PDQ originated from an initial pool of 40-items but an iterative data reduction process led to the removal of 26 statements. Items were removed if they had an asymmetrical distribution or a poor factor loading. Given that measures with more than 30-items are anticipated to produce fatigue effects, which can result in inattention and pattern responding (Brace, 2004), this reduction probably increased the reliability of the measure. As a result of the reduction process, however, only one negatively worded question remained. The reverse questions were not generated to test a specific theoretical question, simply as a way of checking the accuracy of participant's responses. On reflection, however, it seemed likely that a participant's level of entanglement with specific work related cognitions would vary depending on whether the thoughts were positive or negative. Given that this investigation was not concerned with the extent to which positive or negative cognitions may differentially affect levels of fusion, it was considered appropriate for the BST-PDQ to exclude positively worded statements. Therefore, to minimise the risk of completion errors, the one remaining, positively-worded item was removed. Thus, the final format of the BST-PDQ consisted of 14 negative work-related statements about clients with a PD. Consequently, this format reflects the believability measures used in previous research (e.g., Bach & Hayes, 2002; Hayes et al., 2004; Masuda et al., 2009). The resulting BST-PDQ had a good/excellent level of internal consistency (.93), indicating that the item scores are highly related but each contributing some

unique information to the construct of believability/fusion (Field, 2005). Furthermore, the BST-PDQ had excellent level test-retest reliability (.91).

The modifications made to the original model specified in the CFA resulted in a significantly better fitting model. Given that these changes were primarily data driven, it is however, recommended that this model be tested further using an independent sample (Harrington, 2009). Furthermore, although the second model was an advance on the first, it had a slightly less than average fit. Given the limited sample size and scope of the present study, however, the goodness-of-fit was deemed sufficient. Moreover, the BST-PDQ converged with the APDQ, a standardised questionnaire designed to measure stigmatising attitudes towards clients with a PD (Bowers & Allan, 2006). As both these measures include negative work-related statements about clients with a PD, a strong relationship was anticipated. The correlation was, however, low enough to suggest that the BST-PDQ was measuring something unique (Field, 2005). Given that the APDQ measures the *frequency* of staffs' stigmatising thoughts and the BST-PDQ measures the *believability* of such thoughts, these results were as expected. Furthermore, a small negative correlation was found between the BST-PDQ and the AAQ, a standardised measure of psychological flexibility (Bond et al., submitted manuscript). As discussed in Chapter 2, fusion is a process that can lead to psychological inflexibility (the alternative to psychological flexibility), thus a negative relationship was expected. The low correlation supports theoretical assumptions that fusion and inflexibility are distinct constructs, thus providing further support for the construct validity of the BST-PDQ.

Contrary to previous research (Hayes et al., 2004), the BST-PDQ was not related to the MBI, a standardised measure of professional burnout (Maslach, Jackson & Leiter, 1996). To recap, Hayes et al. (2004) found that *believability* mediated the relationship between the stigmatising attitudes of substance misuse counsellors towards their clients and burnout. It is, however, possible that the relationship found by Hayes et al. was population specific. Alternatively, given that the believability measure used by Hayes et al. was unstandardised, and its correlation with the MBI was relatively small ($r = .22, p < .05$) it is possible that, with scale refinement, this relationship may not have been upheld. Moreover Hayes et al.'s findings have not been replicated and the measure used has not been validated. In contrast, the BST-PDQ has undergone preliminary validation and is therefore superior to the measure used in their investigation. For this reason, the existence of a relationship between the believability of staff's cognitions about clients with a PD and professional burnout is questionable and will be

explored further in the current research programme. In sum, these results confirm the importance of having designed a psychometrically robust measure designed to assess the believability of staffs' cognitions about PD clients.

Analyses revealed a significant negative correlation between higher levels of believability with work related thoughts and length of experience working with PD clients. This indicates that staff with less experience of working with clients with a PD, are more likely to become entangled with their negative cognitions about clients. This finding not only evidences that staff working with this client group would benefit from self-management based interventions, but indicates that they should receive this training early in their career. However, these data are correlational and do not imply causation (e.g., is limited work experience with PD clients predictive of fusion?). Alternatively, it might be that there are no longer standing staff with high levels of fusion working with this client group because they have become distressed and changed job. Thus, future studies are required to unpack this relationship further. Additionally, NHS staff were shown to have a significantly higher level of fusion with their negative work-related thoughts about clients than an internet-based staff sample. Owing to a lack of demographic information about the internet sample, however, these differences can not be explained accurately. Nonetheless, these results do offer support for the suitability of ACT-based training for staff working with clients with a PD, particularly those working in the public sector.

In sum, the BST-PDQ was shown to have a good/excellent level of internal consistency, exceeding the statistics reported for other believability measures (e.g., Hayes et al., 2004 & Masuda et al., 2007). Furthermore, it was shown to have a high level of test-retest reliability, thus confirming the statistical properties of the measure over time. Through CFA, a modified one-factor model of the BST-PDQ was assessed as adequately fitting the data. Moreover, the measure showed convergent validity with a standardised stigma scale and divergent validity with a standardised measure of psychological flexibility. Overall, the present study has provided evidence supporting the reliability and validity of the BST-PDQ.

*4.6.2 Limitations*

Despite its merits, the present study has several methodological shortcomings that warrant consideration. First, to establish criterion validity, the BST-PDQ was correlated with the MBI. This has two negative implications; first, the results revealed no significant correlation between the two variables and second, even if they had, no causal relationship

could have been inferred. For these reasons, future studies need to explore the predictive ability of BST-PDQ with other, theoretically relevant constructs. Second, the convergent and divergent validity of the BST-PDQ were assessed using self-report measures. Objective data in the form of observations, interviews etc., would boost the validity of this measure. Third, the correlation between higher levels of believability with work-related thoughts and length of experience working with PD clients suggests differences between subgroups of staff working with PD clients. Thus, replicating the study with a different sample of mental health professionals would test the generalisability of these findings. Lastly, in order to promote the validity of the BST-PDQ, it would be beneficial to administer it to a broader range of professionals, thus permitting a more rigorous examination of staff characteristics.

### 4.6.3 Future Research

Given that the ACT-stigma literature is in its infancy, future studies are required to determine the relationships between key ACT variables, such as believability of negative cognitions and flexibility, and their relationship with other theoretically relevant constructs. The validation of the BST-PDQ has provided the means to do this in a statistically sound way. To this end, an ACT consistent model describing the processes predicted to underlie and accompany healthcare professionals' stigmatisation of clients with a PD is specified in Chapter 5.

Future research is also required to assess both the BST-PDQ's predictive ability and its sensitivity to change in outcome trials. Critically, if the BST-PDQ could be shown to predict theoretically relevant constructs and was sensitive to change following an ACT intervention designed to target fusion, this would reinforce its validity. Given the overarching aim of this thesis – to determine the effectiveness of ACT-based self-management training in reducing levels of stigma towards clients with a PD – the validity of the BST-PDQ will be examined further, throughout the current research programme.

### 4.6.4 Conclusions

In conclusion, data from the present study indicates satisfactory psychometric properties for a one factor, 14-item Believability in Stigmatising Thoughts – Personality Disorder Questionnaire (BST-PDQ). Thus a promising start has been made in the construction of a measure designed to assess the believability of staff's cognitions (i.e., cognitive fusion) towards clients with a PD. Although more data are needed to further test the factor structure

and external validity of the questionnaire, these results enable future studies further to explore this process in staff/client populations, and to examine the mechanisms of change in ACT staff training trials.

**CHAPTER V**

**Study 2: An ACT Model of Professional Stigma in Relation to Clients with a Personality Disorder**

ACT is an example of a third wave Cognitive Behaviour Therapy (CBT) intervention, with other types including DBT (Linehan, 1993), Mindfulness Based Stress Reduction (MBSR; Segal, Williams & Teasdale, 2001) and Meta-Cognitive approaches (Wells, 2000; Hayes et al., 2006). Unlike other behavioural interventions that seek to change psychological events directly, these approaches attempt to change the function of events and the individual's relationship to them through strategies such as acceptance, cognitive defusion or mindfulness (Teasdale, 2003). For this reason, ACT research is committed to the investigation of its key processes (e.g., acceptance, defusion, values, perspective taking, present moment focus and commitment) to determine whether each is psychologically active and works in a theoretically meaningful way (Hayes et al. 2006). To date, the majority of ACT research has focused on the role of avoidance, largely because of the existence of the Acceptance and Action Questionnaires[20] (Hayes, Strosahl et al., 2004; Bond et al., submitted manuscript). More recent studies, however, have begun to investigate the role of other ACT processes, such as fusion and values. Although some have used self-constructed, non-standardised measures, coherent measures are required to refine the tests of the ACT model reliably.

In the area of stigma research, several ACT-based studies have explored the relationships between fusion[21] or inflexibility and stigma (Hayes et al., 2004; Lillis & Hayes, 2007; Masuda et al., 2007), but none so far have been tested using a PD staff sample. Because ACT interventions target processes, not direct change, an ACT consistent model of staff stigma would be a useful preliminary in tackling the primary aim of this thesis.

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[20] A number of ACT studies report investigating the role of experiential avoidance using the AAQ (Hayes, Strosahl et al., 2004). As such, the AAQ is regularly referred to as a generic measure of avoidance. However, the authors of this measure state that it is in fact a more general measure of several ACT processes (e.g., avoidance, fusion and inaction), that bear on psychological flexibility (Hayes et al., 2006). More recently, the wide use of the AAQ has been surpassed by the AAQ-II (Bond et al., submitted manuscript), which similarly to the AAQ, has been defined by its authors as measuring processes that underpin psychological flexibility. Thus, for ease of interpretation, from this point forward, studies that have used either version of the AAQ will be defined as having measured psychological flexibility/inflexibility rather than acceptance/avoidance.

[21] To recap, previous empirical studies have used measures of 'believability' to represent the construct of cognitive fusion (e.g., Hayes et al., 2004). Therefore, summaries of empirical data that refer to fusion will have been assessed using a measure of believability. Similarly, the BST-PDQ (Chapter 4) is a measure of believability but like other studies is considered to represent the construct of fusion. Nonetheless, within the current investigation, the construct measured by the BST-PDQ will be referred to as 'believability'.

Therefore, the aim of the present study was to determine the relationships between key ACT processes, staff stigma, and the associated outcomes for both clients and staff. Given that the ACT/stigma literature is in its infancy, other research will also be considered in hypothesising how these variables interrelate.

*5.1.1 Cognitive Fusion and Stigma*

Chapter 1 identified that clients with a PD are aware that healthcare professionals often hold negative and judgmental attitudes towards them which, from their perspective, impact on the quality of care they receive (Fallon, 2003; Nehls, 1999). In mental healthcare, the quality of the therapeutic relationship is a significant predictor of client outcomes (Priebe, 2004), but given that this relationship is sometimes poor in the case of BPD, it is probable that these clients often fail to receive the quality of care they need. Evidence reviewed in Chapter 1 indicates that as a result of difficult client behaviour, staff may become entangled with their negative thoughts and feelings about PD clients. ACT theory proposes that taking the content of internal events literally often results in a tendency to treat them as a literal representation of what they refer to (i.e., distancing yourself from a client because you believe the thought that "they are manipulating you"; e.g., Hayes et al., 2006). Thus, fusion with negative thoughts about clients is likely to result in staff failing to behave in ways that are consistent with their values (e.g., providing a high level of care to clients). If so, fusion should have a key role to play in the relationship between staffs' stigmatising thoughts/attitudes about clients and their stigmatising behaviour towards them (e.g., social distancing, psychological disengagement etc.). Although this has not been investigated using a PD-staff sample, previous research has shown fusion to be associated with a number of negative outcomes, such as psychosis related distress, burnout and depression severity (Bach & Hayes, 2002; Gaudiano & Herbert, 2005; Hayes et al., 2004 and Zettle & Hayes, 1986 respectively). These studies specifically targeted fusion to determine whether changes in this core process would determine changes in outcome (e.g., burnout). Results indicated that by targeting fusion, levels of believability and its associated outcome (e.g., psychosis related distress, burnout or depression) were significantly reduced. Critically, they identified fusion as a mediator in these relationships. Thus, these results support the use of defusion procedures because their impact corresponds with the ACT model (Hayes, Strosahl & Wilson, 1999).

Of the aforementioned studies, one showed fusion to mediate the relationship between substance misuse counsellors' levels of stigma towards their clients and professional burnout

(Hayes et al., 2004). This evidence concords with research underlining healthcare staff's susceptibility to burnout (Nathan et al., 2007), however, it indicates a link to it through the process of fusion and its relationship with stigma. Thus, this finding indicates that becoming fused with the content of stigmatising thoughts about clients has costs for the clinical professional (e.g., the stigmatiser). An additional three studies that did not investigate the role of fusion as a mediator, also established a relationship between fusion and stigmatising attitudes (e.g., Lillis & Hayes, 2007; Masuda et al., 2007, 2009). In light of these findings, it is probable that the stigmatising attitudes of staff working with PD clients will be related to cognitive fusion. Furthermore, they suggest that fusion may mediate the relationship between stigma and negative outcomes for staff and/or clients. These relationships, therefore, warrant investigation and will be explored in the present study.

*5.1.2 Psychological Inflexibility and Stigma*

The general ACT model specifies that fusion and avoidance facilitate each other (Hayes et al., 2006). More specifically, if an individual (e.g., a mental health professional) believes the content of their negative thoughts to be true, they are more likely to try and avoid these experiences (e.g., psychologically disengage with clients; see Chapter 2). Given that previous stigma research indicates that healthcare staff can become fused with their thoughts about PD clients (e.g., Hayes et al., 2004), it is likely that they will become avoidant. As stated in Chapter 2, a body of literature indicates that experiential avoidance, as measured by the AAQ, has various, negative, quality of life outcomes including psychopathology (e.g., Roemer et al., 2005; Strosahl et al., 1998; Tull et al., 2004), stress (Bond & Bunce, 2000, 2003; Donaldson-Fielder & Bond, 2004), pain (McCracken, 1998; McCracken & Eccleston, 2003), poor job performance/burnout (Bond & Bunce, 2000; 2003) and psychological distress (Masuda et al., 2009). As such, interventions designed to target inflexibility have shown this process to mediate positive outcome changes in a number of areas such as physical (Gifford et al., 2004; Gregg, 2004; Lundgren & Dahl, 2005) and psychological health (Bond & Bunce, 2000, 2003; Branstetter at al., 2004; Kashdan, 2005).

Importantly, ACT stigma research has shown flexibility to be related to the stigmatising attitudes of college undergraduate students towards racial minorities (Masuda et al., 2007) and individuals with mental health problems (Masuda et al, 2009). Critically, Masuda et al. (2009) found that the stigmatising attitudes of college students towards individuals with mental health problems was related to psychological distress for the

stigmatiser and that this relationship was somewhat accounted for by psychological inflexibility. These findings not only suggest a relationship between stigma and distress for the stigmatiser, but indicate that this relationship may be accounted for by a core ACT process - psychological inflexibility.

*5.1.3 A Model of Professional Stigma towards Clients with a PD*

Evidence considered in the previous sections indicates that both cognitive fusion and psychological inflexibility are likely to be related to staff stigma towards PD clients. Additional evidence suggests that the combination of these processes with stigmatising attitudes may be indicative of poor outcomes for both clients and professionals. However, given that inflexibility and fusion are related, it is difficult to predict whether these processes will contribute independently to specific outcomes (e.g., social distancing).

Data from Study 1 showed that believability was not related to professional burnout in a sample of PD staff. Because a high correlation between burnout and psychological distress has been reported elsewhere (Bond et al., submitted manuscript), it is possible that neither burnout nor distress will be related to believability in a PD-staff population. This possibility contradicts findings produced by Hayes et al. (2004) but they researched a different staff population and produced findings using a non-standardised measure of believability (see Chapter 4). In fact, relationships between inflexibility and psychological distress have been reported in other studies (e.g., Bond & Bunce, 2000, 2003). Thus, it is possible that in a PD staff population, inflexibility may be predictive of poor outcomes for the professional (e.g., psychological distress and burnout), and that believability may be predictive of poor client outcomes (e.g., social distancing and poor therapeutic relationships).

Thus, interventions aimed at defusion (reducing believability) and acceptance (increasing psychological flexibility), could be usefully explored as methods of reducing stigma and the associated intrapersonal (e.g., psychological distress and burnout) and interpersonal (e.g., social distancing and poor therapeutic relationships) outcomes for staff and clients respectively. Given that, ideally, these relationships should be determined using a PD staff population prior to intervention research, they have been addressed in the present study.

*5.1.4 The Present Study*

        This exploratory investigation tested believability and inflexibility as mediators of the links between staff stigma towards PD clients and staff burnout, psychological distress, social distancing and the therapeutic relationship (see Figure 5.1). Given the predicted relationship between believability and inflexibility, the mediating effects of these processes were assessed together (see Chapter 4). However, the data analysed in the present study were cross-sectional so the direction of these relationships could not be determined. Thus, the analysis was conducted to explore functionally important paths consistent with ACT theory that could be tested later in the current research programme using longitudinal data. Therefore, the use of the term 'mediation' in the present study does not imply causality.

        In light of the findings established in Chapter 4, it was predicted that (a) inflexibility would mediate the relationship between stigma and burnout and stigma and psychological distress, and (b) that believability would mediate the relationship between stigma and social distancing from clients and stigma and the quality of the therapeutic relationship. These relationships were determined using standardised, self-report questionnaires.
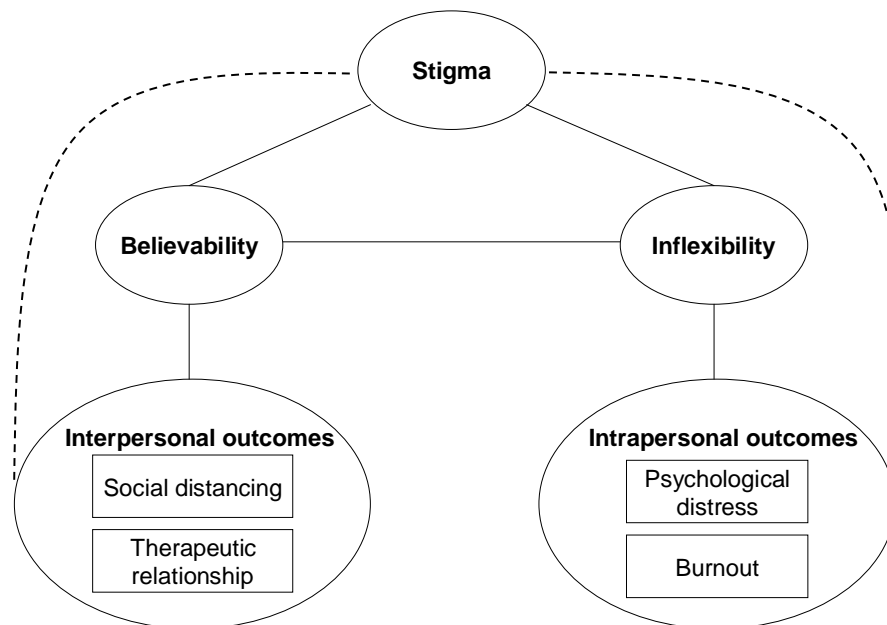


*Figure 5.1*. An ACT model of professional stigma towards clients with a personality disorder. *Note*. Curved dotted lines show a relationship that is only present in mediated form; straight solid lines show causally unspecified correlations.

## 5.2 Method

### 5.2.1. Participants

Data for Study 2 were collected at the same time as those for Part II of Study 1 (Chapter 4). Therefore, the sample, recruitment and the procedure were the same for both studies.

### 5.2.2. Measures

*Stigmatising Attitudes.* Stigmatising attitudes towards PD clients were assessed using the APDQ as in Chapter 4.

*Psychological Flexibility.* Psychological Flexibility was assessed using the AAQ-II as in Chapter 4.

*Believability of Stigmatising Thoughts.* The believability of stigmatising thoughts towards PD clients was assessed using the BST-PDQ (14) as in Chapter 4. .

*Professional Burnout.* Professional burnout was assessed using the MBI, as in Chapter 4.

*Psychological Wellbeing.* Psychological well-being was assessed using the General Health Questionnaire (GHQ; Goldberg, 1997). The GHQ is a 28 item self-report questionnaire designed to measure psychological well-being using a 4 point Likert scale (e.g. 1 – *not at all* to 4 – *much more than usual*). Participants are required to answer the questions in relation to how they have been feeling over the previous few weeks. The GHQ has a four item structure: somatic symptoms, anxiety-insomnia, social dysfunction and severe depression. All items are summed to produce a total well-being score, the *higher* the score the *poorer* the psychological well-being of the individual. With the present sample, this scale was shown to have excellent internal consistency ($\alpha = .94$).

*Social Distancing.* The extent of participant's willingness to be in contact with individuals with a PD was assessed using a modified version of the Social Distancing Scale (SDS; Link, 1987). The original version of this measure was adapted by replacing the term 'mental illness' with the term 'Personality Disorder'. Thus, the modified, 7 item SDS assesses individual's willingness to be in contact with PDs using a 4 point Likert Scale (0 – *definitely willing* to 3 – *definitely unwilling*). A total score is produced by summing all items together and high scores represent higher levels of stigma/social distancing. With the present sample, this scale was shown to have good internal consistency ($\alpha = .83$).

*Helping Alliance.* The Helping Alliance Questionnaire – Therapist version (HAQ-II; Luborsky et al, 1996) is a 19-item self-report questionnaire designed to measure the quality of the relationship a healthcare worker has with their client using a 6 point Likert scale (1 – strongly disagree to 6 – strongly agree). All items are summed to produce a total alliance score and higher scores reflect a stronger therapeutic relationship. Luborsky et al (1996), reported good/excellent internal consistency and good test-retest reliability ($\alpha$ = .90; .78 respectively).

### 5.2.3 Procedure

To recap, Data for Study 2 were collected at the same time as those for Part II of Study 1 (Chapter 4). Therefore, the procedure was the same for both studies.

## 5.3 Results

### 5.3.1 Preliminary Analysis

*Normality.* To determine whether the distribution of the test variables deviated from normal, Kolmogorov-Smirnov tests were conducted. Results revealed significantly skewed distributions for; burnout, $D(130) = .09$, $p < .05$, psychological distress, $D(130) = .18$, $p < .001$, social distancing, $D(130) = .09$, $p < .01$, and the therapeutic relationship, $D(130) = .10$, $p < .01$. These results were consistent with the histograms and the skew and kurtosis values. Given that bootstrapping procedures (see main analysis) do not impose the assumption of normality for the sampling distribution, it was reasonable not to transform these data (e.g., Preacher & Hayes, 2004; see Chapter 3).

*Sample Statistics.* A Kruskal-Wallis test indicated that the NHS Trust in which participants were employed by had a significant effect on their burnout and psychological distress scores; $\chi^2(139, 2) = 6.54$, $p < .05$ and, $\chi^2(140, 2) = 10.17$, $p < .01$, respectively. Median scores for each dependent variable indicate that participants working for CWFT had the highest levels of burnout and psychological distress, followed by participants working for DHFT and HPFT respectively (see Table 5.1).

A Mann-Whitney test showed that participant gender had no significant effect on their burnout, psychological distress, social distancing or therapeutic relationship scores. Table 10 shows no significant correlations between participant demographics and the dependent variables.

*Reliability Analysis.* Table 5.2 indicates that all test variables, apart from psychological flexibility, had good to excellent levels of internal consistency. Psychological flexibility – as measured by the AAQ-II – was, however, shown to have an adequate level of consistency. This statistic comports with previous research (Bond et al., submitted manuscript).

Table 5.1
*Median Scores for Dependent Variables Split by NHS trust*

| Trust | **GHQ** | HAQ | SDS | **MBI** |
|---|---|---|---|---|
| Coventry (CWFT) | **18.00 (45)** | 81.50 (44) | 11.00 (45) | **21.00 (45)** |
| Dorset (DHFT) | **14.50 (38)** | 80.00 (38) | 12.00 (38) | **17.50 (38)** |
| Hampshire (HPFT) | **13.00 (57)** | 82.00 (57) | 10.00 (57) | **16.00 (56)** |

*Note.* Numbers in brackets refer to sample sizes. High scores on GHQ are *negative* = distressed, high scores on HAQ are *positive* = better therapeutic relationships, high scores on SDS are *negative* = distancing and high scores on MBI are *negative* = burned out.

Table 5.2
*Descriptive Statistics and Zero-order Correlations for Study 2 Variables*

| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** |
|---|---|---|---|---|---|---|---|
| Age | -.05 | .08 | .08 | -.06 | .11 | .01 | -.12 |
| Duration present job (yrs) | .01 | -.01 | -.03 | .12 | -.04 | .08 | -.07 |
| Experience MH work (yrs) | .08 | .06 | -.12 | .17 | .09 | .04 | -.03 |
| No. hrs PD client (p/w) | .13 | .10 | .04 | -.18 | .04 | -.06 | -.05 |
| PD client experience (yrs) | .04 | .00 | -.17 | .16 | .04 | .07 | -.02 |
| **1. Stigma** | 1 | .30** | -.62** | .41** | -.46** | -.18* | -.01 |
| **2. Psychological flexibility** | | 1 | -.21* | .08 | -.04 | -.32** | -.34** |
| **3. Believability** | | | 1 | -.40** | .51** | .10 | .02 |
| **4. Helping alliance** | | | | 1 | -.27** | .11 | .04 |
| **5. Social distancing** | | | | | 1 | -.05 | -.14 |
| **6. Burnout** | | | | | | 1 | .45** |
| **7. Psychological distress** | | | | | | | 1 |
| Mean | 141.84 | 53.62 | 33.95 | 79.75 | 11.10 | 33.95 | 17.66 |
| SD | 23.46 | 7.62 | 12.68 | 11.82 | 3.83 | 12.68 | 10.63 |
| Cronbach's α | .93 | .77 | .93 | .89 | .83 | .87 | .94 |

*Note.* Sample sizes range from 102 – 140 due to missing data; * $p < .05$, ** $p < .01$, *** $p < .001$

*5.3.2 Multiple Mediation*

*Intrapersonal Variables. Burnout.* Table 5.2 shows significant intercorrelations between burnout, flexibility, stigmatising attitudes and psychological distress. As expected, no significant correlations were found between burnout and the interpersonal variables and burnout and fusion. Because a significant correlation was found between the two process variables (e.g., believability and flexibility; Table 5.2), a decision was made to enter them both into the bootstrapping model as mediators (this method was repeated for all other mediation tests). Thus, the indirect effects of stigmatising attitudes on burnout via flexibility and believability were tested by drawing 1,000 bootstrap samples from the data and calculating the indirect effects in each one (Figure 5.2). Given its significant effect on burnout scores, Trust (e.g., CWFT, DHFT and HPFT) was entered as a covariate. Table 5.3 indicates that flexibility, but not believability, mediated the relationship between staffs' stigmatising attitudes towards PD clients and their personal level of burnout.

*Psychological distress.* Table 5.2 shows significant intercorrelations between psychological distress, flexibility and burnout but no significant correlation between stigmatising attitudes and distress was found. Nonetheless, because bootstrapping permits the exploration of the indirect effect in the absence of a significant relationship between the IV and the DV, mediation tests were conducted (Preacher & Hayes, 2004; see Chapter 3). As predicted, no significant relationships were found between psychological distress and the interpersonal variables. Thus, the mediating effects of stigmatising attitudes on psychological distress via flexibility and believability were tested, whilst controlling for the effects of NHS Trust (Figure 5.2). Table 5.3 indicates that flexibility, but not believability, mediated the relationship between staffs' stigmatising attitudes towards PD clients and their personal level of psychological distress.
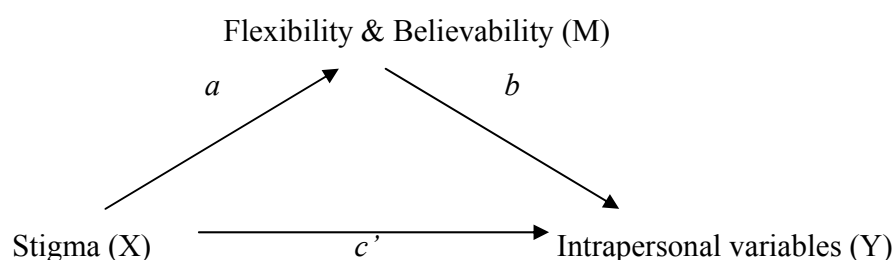


*Figure 5.2.* The Mediation Model: Flexibility and Believability as mediators of the relationship between stigma and intrapersonal variables (burnout or psychological distress)

Table 5.3

*Tests of Flexibility and Believability as Mediators of Significant Associations between Intrapersonal and Interpersonal Variables*

| | Indirect Effects | | |
|---|---|---|---|
| | Point Estimate | SE | Confidence Interval |
| *Burnout* | | | |
| Flexibility | -.1128 | .0556 | [-.3027, -.0120]** |
| Believability | .0427 | .087 | [-.1660, +.2839] |
| Total | -.0702 | .0935 | [-.3174, +.1889] |
| *Distress* | | | |
| Flexibility | -.0530 | .0255 | [-.1676,  -.0059]** |
| Believability | .0008 | .0399 | [-.0973, +.1372] |
| Total | -.0522 | .0416 | [-.1687, +.0513] |
| *Relationship* | | | |
| Flexibility | -.0243 | .0252 | [-.0978, +.0151] |
| Believability | .1538 | .0801 | [+.0918,+.3255]* |
| Total | .1295 | .0828 | [-.0215, +.2984] |
| *Distancing* | | | |
| Flexibility | .0314 | .0236 | [-.0184,+.1008] |
| Believability | -.2049 | .0587 | [-.3772, -.0678]** |
| Total | -.1735 | .0583 | [-.3379, -.0272]** |

*Note.* *p < . 01, **p < .001. Confidence intervals that do not include zero are indicated by *(95% interval) or **(99% interval). Confidence intervals are bias-corrected estimates derived from 1,000 bootstrap samples of the data. Point estimates of the indirect effect are the differences between the total and direct effects. Displayed are the point estimates for the total (flexibility and believability) and the specific indirect effects (e.g., flexibility or believability).

*Interpersonal Variables. Therapeutic relationship.* Table 5.2 shows significant intercorrelations between the therapeutic relationship, believability, stigmatising attitudes and social distancing. As expected, no significant correlations were found between burnout and the intrapersonal variables and the therapeutic relationship and flexibility. Thus, the mediating effects of stigmatising attitudes on the therapeutic relationship via believability and flexibility were tested (Figure 5.3). Table 5.3 indicates that believability, but not flexibility, mediated the

relationship between staffs' stigmatising attitudes towards PD clients and the quality of their therapeutic relationships with clients. However, examination of the direct effect of stigma on the therapeutic relationship indicated that this relationship remained significant after controlling for the effects of the mediators (.3962, $p < .001$). This finding indicates that believability of cognitions partially mediates the relationship between stigma and the quality of the therapeutic relationship.

*Social distancing.* Table 5.2 shows significant intercorrelations between social distancing, believability, stigmatising attitudes and the therapeutic relationship. As expected, no significant correlations were found between social distancing and the intrapersonal variables and social distancing and flexibility. Thus, the mediating effects of stigmatising attitudes on social distancing via believability and flexibility were tested (Figure 5.3). Table 5.3 indicates that believability, but not flexibility, mediated the relationship between staffs' stigmatising attitudes towards PD clients and their willingness to be in contact with individuals with a PD. As above, examination of the direct effect of stigma on the therapeutic relationship indicated that this relationship remained significant after controlling for the effects of the mediators (-.4186, $p < .001$). This finding indicates that believability of cognitions partially mediates the relationship between stigma and social distancing.
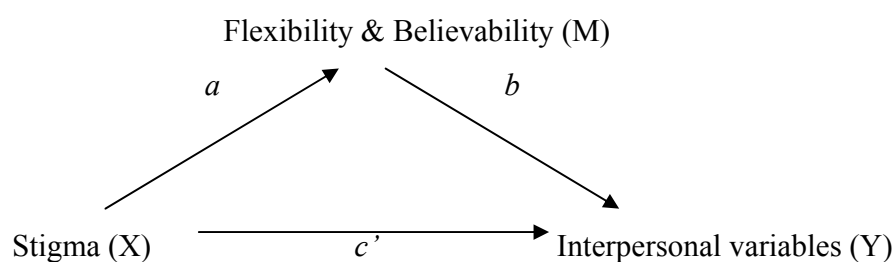


*Figure 5.3*. The Mediation Model: Flexibility and Believability as mediators of the relationship between stigma and interpersonal variables (therapeutic relationship or distancing)

*5.3.3 Simple Mediation*

Bootstrapping tests were repeated for both the intrapersonal and interpersonal variables using a single mediator, as determined by the previous analyses. This allowed determination of the independent effect of each mediating variable (psychological flexibility or believability)

on burnout, psychological distress, the therapeutic relationship and social distancing. Thus, the indirect effects of stigma on both burnout and psychological distress via psychological flexibility were estimated, whilst controlling for the effect of NHS Trust (Figure 5.4). Results indicated that flexibility fully mediated the relationship between stigma and burnout and stigma and psychological distress (see Table 5.4). This process was repeated for the interpersonal variables specifying believability as the mediator (Figure 5.5). Results indicated that believability partially mediated the relationship between stigma and the therapeutic relationship and stigma and social distancing. These results are consistent with the results determined in the previous section.

Flexibility (M)

*a*                    *b*

Stigma (X)        *c'*        Intrapersonal variables (Y)
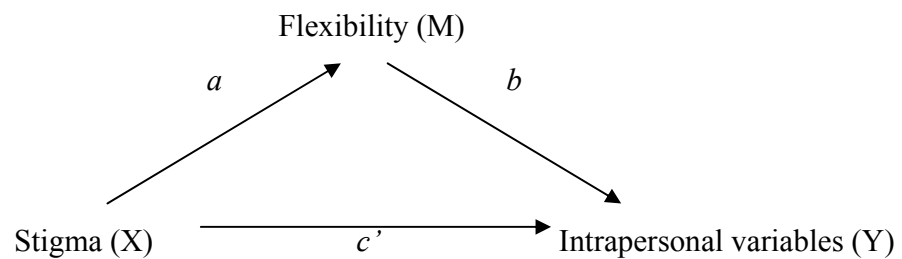
*Figure 5.4*. The Mediation Model: Flexibility as a mediator of the relationship between stigma and intrapersonal variables (burnout or psychological distress)

Believability (M)

*a*                    *b*

Stigma (X)        *c'*        Interpersonal variables (Y)
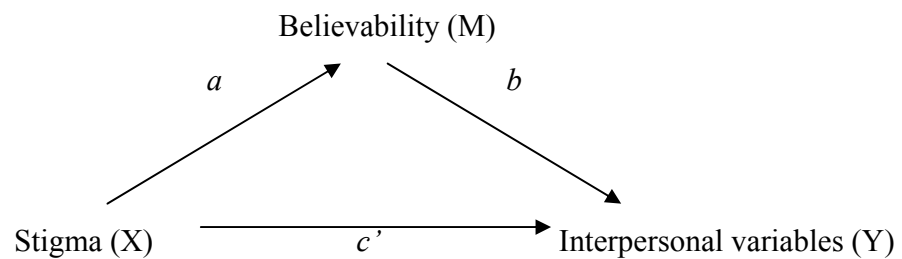
*Figure 5.5*. The Mediation Model: Believability as a mediator of the relationship between stigma and interpersonal variables (therapeutic relationship or distancing)

Table 5.4

*Tests of Flexibility or Fusion as Mediators of Significant Associations between Intrapersonal and Interpersonal Variables*

| | Indirect Effects | | |
|---|---|---|---|
| | Point Estimate | SE | Confidence Interval |
| *Burnout* | | | |
| Flexibility | -.1074 | .0538 | -.2916, -.0008** |
| *Distress* | | | |
| Flexibility | -.0528 | .0247 | -.1523, -.0024** |
| *Relationship* | | | |
| Believability | .1477 | .0768 | +.0135, +.3114* |
| *Distancing* | | | |
| Believability | -.1985 | .0546 | -.3595, -.0742** |

*Note.* *p < . 01, **p < .001. Confidence intervals that do not include zero are indicated by *(95% interval) or **(99% interval). Confidence intervals are bias-corrected estimates derived from 1,000 bootstrap samples of the data. Displayed are the point estimates for the specific indirect effects (e.g., flexibility or believability).

## 5.4 Discussion

The present study indicated that the stigmatisation of clients with a PD is related to negative intrapersonal outcomes for the mental health professional possessing the stigmatising attitudes, and to negative interpersonal outcomes for the client (i.e., the stigmatised). Additional analyses indicated that psychological flexibility accounted for the relationships between stigma and the intrapersonal outcomes (e.g., professional burnout and psychological distress). Furthermore, the relationships between stigma and the interpersonal outcomes (i.e., social distancing and the therapeutic relationship) were shown to be partly accounted for by believability.

The results from the present study are among the first to indicate that stigmatisation directed towards others can have negative consequences for the stigmatiser (Hayes et al., 2004; Masuda et al., 2009). In fact, they are unique in showing that stigmatisation directed towards clients with a PD has negative effects for the mental health professional. More specifically, the results implicate the role of psychological inflexibility in understanding the relationships between stigma and negative intrapersonal outcomes. This finding coincides with

evidence taken from the area of learning disabilities and CB, which indicates that the strategies used by staff to help cope with the emotional reactions experienced as a result of a client's CB (e.g., wishful thinking), are important in understanding the occurrence of professional stress and burnout (Devereux et al., 2009). Indeed, ACT theory, supported by a wealth of empirical evidence, indicates that attempts to control negatively evaluated internal experiences can often result in psychological distress for the individual (see Hayes et al., 2006 for a review). Thus, interventions designed to address the paradoxical effects of emotional control are likely to improve the psychological wellbeing of mental health staff (Hayes et al., 2004; Masuda et al., 2007, 2009).

Furthermore, the present study revealed an additional, functionally important path of mental health stigma: believability of negative cognitions about clients (i.e., cognitive fusion) partly accounts for the relationship between stigma and negative implications for clients. These findings are consistent with ACT theory, which asserts that fusion can lead to patterns of behavioural action that are detached from long term desired qualities of living (i.e., providing high quality care to clients). Thus, the overall results of the present study confirm that stigma and its related intrapsychic processes have negative consequences for both the client and the professional.

The findings of the present study concur with previous research advocating a process based conceptualisation of stigma (e.g., Hayes et al., 2004; Lillis & Hayes, 2006; Masuda et al., 2007, 2009). If stigma interventions are to be successful, it is crucial for them to target psychological inflexibility and the processes that underlie it, such as fusion. Thus, these findings lend support to third wave CBT interventions, which seek to change the function of events and the individual's relationship to them, rather than targeting direct change (e.g., Hayes, Strosahl & Wilson, 1999; Linehan, 1993; Segal, Williams & Teasdale, 2001; Teasdale, 2003; Wells, 2000). Indeed, preliminary evidence indicates that more recent stigma interventions, which specifically promoted processes such as acceptance and defusion, have produced beneficial outcomes (e.g., Hayes et al., 2004; Lillis & Hayes, 2006; Masuda et al. 2007, 2009). However, the effectiveness of such meta-cognitive based training for staff working with clients with a PD has yet to be explored. Nevertheless, the present findings indicate that more conventional approaches such as psycho-educational and skills-based training (see Chapter 1) are unlikely to ameliorate the problem of staff stigma towards clients with a PD because they fail to take the intrapsychic processes of staff into account.

*5.4.1 Limitations and Future Research*

Despite its novel contribution to the ACT-stigma literature, the present study has a couple of weaknesses. The first and most notable limitation was the study's cross-sectional design, which meant that causal inferences could not be drawn. Thus, in spite of the formulation of a theoretically meaningful model of staff stigma towards clients with a PD, the direction of these relationships could not be determined. Therefore, in order to establish the causal links between these variables, longitudinal studies using outcome data would need to be conducted. Nonetheless, the theoretically meaningful model tested in the present study can be used to predict how these variables may interrelate in future outcome research. Second, the dataset used in the present study was also used to validate the factor structure of the BST-PDQ (see Chapter 4, part II). As a result, generalisations beyond this sample can not be made for either the present, or part II of the previous study. Additionally, further investigation of the psychometric properties of the BST-PDQ could not be conducted.

*5.4.2 Conclusions*

Irrespective of these limitations, the present study provides new insight into staff stigma towards PD clients, suggesting that the stigmatising attitudes of mental health staff can have negative implications for both the client and the professional. Moreover, the study confirms that both psychological inflexibility and believability are key processes in understanding the workings of the relationship between stigma and negative outcomes. Thus, interventions aimed at defusion (reducing believability) and acceptance (increasing psychological flexibility) rather than direct change might be usefully explored as methods of reducing the impact of stigma and improving both client and staff outcomes. These findings, in conjunction with existing research (Hayes et al., 2004; Lillis & Hayes, 2007; Masuda et al., 2007, 2008) provide sufficiently compelling evidence to embark on the novel application of ACT-based training for staff working with clients with a PD. Thus, the following chapter provides a comparative evaluation of ACT-based self-management training with a more traditional, skills-based training approach for this staff group.

**CHAPTER VI**

**Study 3: A Comparative Evaluation of ACT-based Self-management Training with**

**DBT-based Client-management Training for Staff Caring for Clients with a PD**

People with PDs, in particular those with borderline symptoms, are recognised to be a difficult client group for mental health professionals (see Koekkoek, Van Meijel & Hutschemaekers, 2006, for a review) and, as a consequence, are often stigmatised by them (e.g. Lewis & Appleby, 1988; Markham & Trower, 2003). Reports taken from PD clients indicate that staff stigma has a negative effect on the quality of their therapeutic relationships and the standard of treatment they receive (see Fallon, 2003; Nehls, 1999). Critically, Priebe (2002) identified the therapeutic relationship to be a significant predictor of client outcome in psychiatric care. For example, a more positive relationship between the client and mental health professional was predictive of better short and long term outcomes for them. In sum, staff's negative attitudes about difficult clients are reflected in their behaviour towards them, which could result in clients failing to receive the standard of care they deserve.

Additional evidence indicates that staff, as well as clients, experience negative effects as a result of their stigmatising attitudes. For example, Hayes et al. (2004) found preliminary evidence to indicate that healthcare workers' negative stigmatising beliefs about their substance misuse clients were predictive of professional burnout. Furthermore, Masuda et al. (2009) indicated that stigma is related to higher levels of psychological distress for the stigmatiser. Thus, interventions designed to undermine staff's stigmatising attitudes towards clients could benefit both parties alike.

In order to address issues of professional stigma to PD clients, NIMHE (2003) stated a need for educational skills-based training for staff. In light of recent UK initiatives, which have resulted in a range of staff with little or no specialist skills working with PD clients, this training would appear essential. Indeed, a number of studies have indicated that education and skills based training for staff working with PD clients is an effective approach in reducing stigma (Hazelton et al., 2006; Krawitz, 2004; Krawitz & Jackson, 2007; Perseius et al., 2003; Perseius et al., 2007 & see chapter 1, section 5 for additional information). Although these studies offer some support for the use of education and skills based interventions in tackling staff-stigma, they all had serious methodological limitations (see chapter 1, section 5 for a review). Critically, none of the studies were systematically controlled and very little

information relating to the effectiveness of these interventions over time was provided. Given these limitations, there is clear need for controlled interventions in this area to be conducted if the effectiveness of such training is to be determined.

Furthermore, preliminary evidence has indicated that providing healthcare professionals with knowledge and client-management skills may not be sufficient to undermine stigma in the long term because these methods fail to address the importance of staffs' difficult private experiences (i.e. beliefs, thoughts, feelings, memories etc.,) and the processes that can accompany them (e.g., fusion, avoidance etc.,) in relation to their work (e.g., Hayes et al., 2004). As such, provisional evidence indicates that interventions designed to target these processes have been effective in reducing stigma and improving staff wellbeing (e.g., Hayes et al., 2004; Lillis & Hayes, 2007; Masuda et al., 2007, 2009; see Chapter 2).  In light of this, self-management training designed to target process-based, rather than direct change would seem to be a useful approach for undermining stigma towards PD clients and improving both client and staff outcomes. To date, however, the effectiveness of this approach has not been investigated using a sample of staff working with clients with a PD.

*6. 1. 1 The Present Study*

This novel investigation aimed to evaluate whether a 2-day ACT-based self-management training intervention (ACTr) was more effective than a 2-day DBT-based client-management training intervention (DBTr) at undermining negative stigmatising attitudes in non-specialised mental health staff working with PD clients, and improving both staff and client outcomes. Furthermore, it sought to determine whether changes in ACT-based processes (e.g., flexibility and defusion) would facilitate change in stigmatising attitudes, social distancing, the quality of the therapeutic relationship and levels of burnout and psychological distress for the professional (see Chapter 5). This was achieved by comparing the two training interventions using a RCT. DBTr was chosen as the active control because DBT is the leading psychological intervention used to treat clients with BPD (Bohus et al., 2000), and because provisional evidence indicates that it is a beneficial intervention for this staff group (see Chapter 1). However, the focus of previous DBT staff training (e.g., Perseius et al., 2003) has been to provide staff with sufficient theory to deliver DBT to clients, whereas the focus of DBTr in the present study was to provide staff with a DBT perspective/understanding of BPD. As such, the DBTr delivered in the present study was also considered to be a novel staff training approach. There were three key distinctions between these two training approaches.

First, ACTr was almost entirely focused on self-processes such as fusion and avoidance, whereas DBTr focused more on client-processes. Second, ACTr was more experiential and DBTr more didactic. Finally, ACTr was more exposing and emotionally evocative and DBTr was more conceptual.

Because ACT directly targets self processes, it was predicted that positive self-reported changes[22] in psychological flexibility and the believability of stigmatising beliefs (i.e., fusion), would be significantly greater for staff in the ACTr than for staff in the DBTr. Furthermore, it was predicted that improvements in flexibility and believability would facilitate a greater reduction in stigmatising attitudes for staff attending the ACTr than for staff in the DBTr, again because these processes are specifically targeted by ACT. Based on the findings of Chapter 5, it was predicted that improvements in flexibility would lead to positive changes in staff outcomes (e.g., a reduction in psychological distress and burnout) for staff in the ACTr compared to those in the DBTr. Additionally, it was predicted that reductions in believability would lead to positive client outcomes (e.g., improvements in the quality of the therapeutic relationship and a reduction in social distancing), for staff in the ACTr compared to those in the DBTr.

## 6. 2 Method

### 6.2.1 Participants

Participants were mental healthcare staff with no specific clinical training, that came into contact with clients with PDs or other complex needs during the course of their work[23]. One hundred participants volunteered to attend the workshops; 53 were randomly assigned to the ACT intervention and 47 to the PE intervention (see Figure 6.1). Their demographic details are shown in Table 6.1.

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[22] Comparisons will be made using self-report questionnaires because they offer an objective means of collecting information about attitudes, beliefs, knowledge and behaviours (Sapsford, 1999; see Chapter 3).

[23] As discussed in chapter 1, BPD is the most commonly occurring PD in mental health settings. In addition, it also frequently co-occurs with other disorders, such as substance misuse and depression. For these reasons, it is likely that this sample will be in frequent contact with BPs even if they are not aware of this.

Self-selecting sample
**(n = 100)**

*Enrolment*

Random assignment

*Allocation*

Allocated to ACTr **(n = 53)**
Received ACTr **(n = 53)**

Allocated to DBTr **(n = 47)**
Received DBTr **(n = 47)**

*Follow-up*

Lost to post f/up **(n = 0)**
Lost to 3-month f/up **(n = 16)**
Lost to 6-month f/up **(n = 21)**

Lost to post f/up **(n = 0)**
Lost to 3-month f/up **(n = 16)**
Lost to 6-month f/up **(n = 24)**

*Analysis*

Analysed (all available data)

Analysed (all available data)
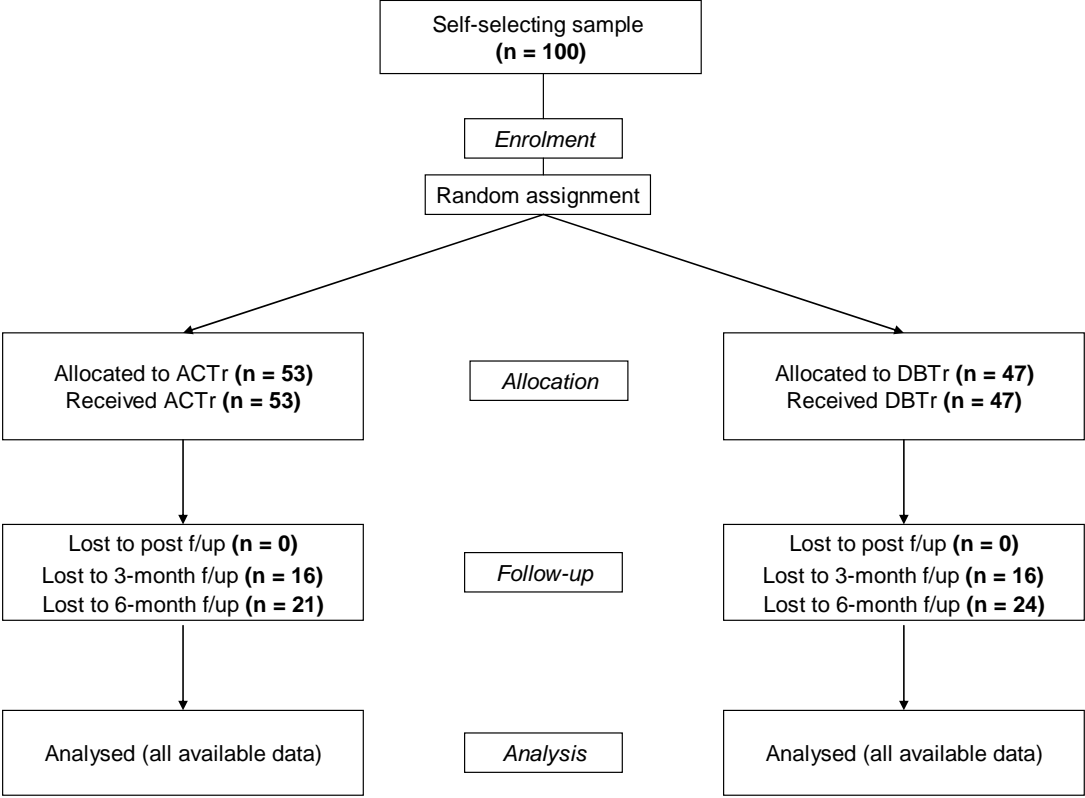
*Note.* F/up = follow-up.

*Figure 6.1.* Number of Participants Randomised to Each Training Type and Selective Attrition at Each Stage of the Investigation

Table 6.1

*Demographic Characteristics of Staff by Training Group*

| Demographic | ACTr (n = 53) | | | DBTr (n = 47) | | |
|---|---|---|---|---|---|---|
| | n/ Mean | %/SD | Range | Mean | %/SD | Range |
| **Age (yrs)** | 42 | 10.96 | 23 - 59 | 42 | 12.26 | 21 - 67 |
| **Gender** | | | | | | |
| Male | 5 | 9 | | 8 | 17 | |
| Female | 42 | 79 | | 36 | 77 | |
| Undisclosed | 6 | 12 | | 3 | 6 | |
| **Relevant work experience (yrs)** | | | | | | |
| Mental Health | 9.51 | 7.5 | 0 - 25 | 10.11 | 7.74 | 0 - 36 |
| Personality Disorder | 6.06 | 6.52 | 0 - 25 | 6.54 | 6.88 | 0 – 36 |
| **Number PD clients** | 3.04 | 2.38 | 1 - 10 | 3.53 | 2.26 | 1 – 10 |
| **Service** | | | | | | |
| Inpatient Psychiatric | 8 | 15 | | 4 | 9 | |
| Outpatient Psychiatric | 14 | 26 | | 12 | 25 | |
| A & E | 1 | 2 | | 1 | 2 | |
| Social Services | 3 | 6 | | 2 | 4 | |
| Management | 8 | 15 | | 4 | 9 | |
| Volunteer | 5 | 10 | | 5 | 11 | |
| Other | 7 | 13 | | 14 | 29 | |
| Undisclosed | 7 | 13 | | 5 | 11 | |

*Note*.  Number of PD clients = Number of PD working with at the time of this study.

*6.2.2 Interventions*

     *Acceptance and Commitment Training (ACTr)* The content of the 2-day stigma focussed workshop was designed based on previous research using ACTr to challenge stigma (e.g. Hayes et al. 2004, Lillis & Hayes, 2006 – see Chapter 2). The current programme, however, was tailored by the research team – with support from a leading researcher in the ACT field (Dr Kelly Wilson, University of Mississippi, who was one of the originators of ACT; Hayes et al., 1998) – to address PD specific issues. The ACTr component was reviewed

by a small group of clinical professionals and their feedback was used to adjust the final content of the training workshop. The ACTr was designed to expose participants to their work related feelings about their clients with PD, and to encourage them not to act on them. Training was also designed to prompt staff to act on the basis of their work related values, whilst accepting any discomfort that this process may bring. The focus of this intervention was to provide participants with self-management skills. Although the workshop included taught elements, it was largely experiential, consisting of both individual and group exercises (refer to Appendix I for ACT training protocol).

Participants were provided with an ACT analysis of stigma which explained how thoughts, judgments and evaluations occur as a natural result of using language, and why they are difficult to eliminate. Exercises enabled participants to notice how their automatic processes of evaluation occurred in daily living. For example, they were asked to think about which of three members of the group they had just met they would most like to have a drink with, be friends with, work with, etc., before receiving more meaningful information about these people. This exercise illustrated the human tendency to evaluate situations superficially and thus make unwise decisions, based on limited information. A large part of the training, however, consisted of experiential exercises designed to raise participants' awareness of their stigmatising thoughts, beliefs and difficult emotions specifically towards their clients with a PD.

The paradox of experiential avoidance was explained to participants and illustrated through exercises. For example, they were instructed *not* to have a certain thought or asked to imagine *not* feeling nervous in a situation that was likely to produce anxiety. Participants then discussed whether their internal control strategies were successful and how much effort they had required. They were taught methods of reducing the impact and believability of thoughts through ACT processes such as, acceptance, mindfulness and cognitive defusion (see chapter 2). For example, participants repeated a word until it lost its semantic functions and only the sound remained. In addition, exercises focused on difficult work related thoughts and feelings so that participants could practice experiencing them without believing them, disbelieving them, or avoiding them. Finally, participants were asked to connect with their work related values (e.g., what kind of professional they wanted to be), and to focus on behaving in ways consistent with them, despite the inevitability of thoughts to the contrary.

In sum, the goal of the stigma focussed workshop was to convey that, because stigma is built into their normal use of language, it is more likely to be overcome through acceptance

and connection with personal values than through changing cognitive content. As much of the training was focussed on experiencing uncomfortable thoughts and feelings about clients, it was emphasised that participation in each exercise was on a voluntary basis.

*DBT Skills Training (DBTr).* DBT seeks to achieve behavioural change (i.e. replacing maladaptive behaviours with healthy alternatives) in the context of acceptance (i.e. validating the person's history). The content of the 2-day workshop was based on a globally used DBT skills training package (Behavioural Tech, LLC). The current programme, however, was tailored by the research team to include only educationally essential material. The DBTr training aimed to relieve healthcare professionals' anxiety and discomfort about difficult clients by providing them with client-management skills and a DBT-based understanding of BPD. The training was delivered via presentation, group exercises and discussions (refer to Appendix J for DBTr training protocol).

The diagnostic criteria for BPD and its prevalence were explained to participants. Following this, they were introduced to the biosocial theory of DBT (Linehan, 1993). This theory aims to promote compassion in professionals by explaining that a PD client's emotional instability occurs as a result of being raised in an emotionally invalidating environment (i.e., one in which others considered their emotional experiences to be inappropriate or unjustified by others). To consolidate learning, participants were required to jointly formulate a client with BPD using the skills they had learned. To understand why clients behave in problematic ways, they were taught to think functionally about their own behaviours (i.e., to identify their antecedents and consequences). The use of the technique of validation was taught; this involves looking for truth in both sides of an argument and validating each person's perspective (e.g., validating both the client's reasons for taking an overdose and their own perspective—-that this behaviour is potentially fatal). Participants were taught the central dialectic of DBT – the tension between striving for change and accepting what can not be changed (e.g., for a client – recognising that they can change their self-harming behaviour in pursuit of a happier life but accepting that they can not change their history). In pairs or small groups, they were then encouraged to identify dialectical tensions in their work life and find a dialectical synthesis. Finally, participants were introduced to change oriented or acceptance-based skills that would help clients manage their disorder. These included emotion regulation skills, interpersonal skills, distress tolerance skills and mindfulness skills. Examples and role play facilitated learning.

*6.2.3 Measures*[24]

Consistent with previous chapters, stigmatising attitudes were assessed by the **APDQ**, social distancing by the **SDS**, the therapeutic relationship by the **HAQ**, burnout by the **MBI**, psychological distress by the **GHQ**, psychological flexibility by the **AAQ-II** and believability by the **BST-PDQ (14)**[25]**.** Novel measures are detailed below:

*Demographic Questionnaire.* Participants were required to complete a demographic questionnaire developed by the research team, assessing age, gender, place of work, job description, time spent in current position, time spent working with PD clients, and the number of PD clients with whom they were currently working (Appendix K).

*Thought Suppression.* The White Bear Suppression Inventory (WBI; Wegner & Zanakos, 1994) is a 15 item self-report questionnaire designed to measure an individual's tendency to engage in thought suppression. Participants are required to respond to questions about their thoughts (e.g. There are things I prefer not to think about) on a 5 point Likert scale (1- strongly disagree to 5 – strongly agree). A total thought suppression score is calculated by summing the items together; high scores indicate high levels of thought suppression. The WBSI is reported to have good-excellent internal consistency ($\alpha$ = .89) and acceptable test-retest reliability (.69) (Wegner & Zanakos, 1994). Previous research has indicated a good level of convergent validity with the AAQ-II ($r$ = -.60, $p$ < .01; Bond et al., submitted manuscript). Given that the AAQ-II is unpublished, this measure was administered to check its reliability.

*6.2.4 Procedure*

The study was approved by Dorset Local Research Ethics Committee (Appendix C). Participants were recruited with the help of Dorset Healthcare NHS Foundation Trust's training department. Staff members in these target groups were approached through directed

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[24] This study formed part of a larger investigation funded by the Health Foundation. For this reason, an additional three measures, the Knowledge and Skills Questionnaire (KSQ – DHFT), The frequency of stigmatising attitudes towards PD clients (DHFT), and the Quality of Life Questionnaire (WHOQOL Group, 1998) were administered to participants at the same time as those used in the present study. Analyses were not conducted on these measures because they were superfluous to the research questions; however, it meant that participants completed three other measures in addition to those specified. Furthermore, the demographic questionnaire included a number of questions that were not considered relevant to the current investigation.

[25] This study was conducted prior to determining the statistical properties of the BST-PDQ (14) (Chapter 4). For this reason, the original 40-item version of this measure was administered to participants. The subsequent validation of the BST-PDQ resulted in a 14-item version of this measure. Given the satisfactory statistical properties of the BST-PDQ (14), analysis of this construct in the present study was conducted on these items only. Thus, participants completed 14 items which were used to measure the construct of fusion and 28 filler items. The BST-PDQ (14) was shown to have good - excellent internal consistency with the present sample ($\alpha$ = .90).

internal email and via advertisement in the monthly Dorset Trust Link Newsletter. A further advertisement was placed in the Trust's yearly training prospectus. Participation was voluntary. Prospective participants were required to contact the research team to express their interest in participating. These participants were sent an information pack outlining the study in detail, the reasons behind it, and the requirements for taking part. They were informed that the study was designed to increase their understanding of personality disordered clients and the sorts of difficulties that emerge whilst working with this client group. They were also told that they would learn some client-management or self-management strategies to manage the discomfort that can arise in the context of this work. Participants who wished to take part in the study were required to sign and return a consent form in a pre-paid envelope. On return of the consent forms, they were randomly assigned to one of the two training conditions (one of three ACT workshops or one of three PE workshops) and informed that by agreeing to take part they were obligated to attend both training days. Randomisation was achieved using an online random number generator (see random.org for information).

Participants were assessed before the workshop (pre-intervention), immediately following the end of the workshop (post-intervention) and at 3 and 6-month follow-up. The order of questionnaires was randomized for each participant using the Latin-Square technique. The post-workshop pack was completed at the training site at the end of the second training day. All others were posted to participants, and completed at a time and a place convenient to them. All measures were completed at all four stages except for the demographic questionnaire which was only completed at the pre and 6 month follow-up stages (this was to determine whether any changes in their work environment had changed during the process of this investigation).

Both the ACT and DBT workshops were delivered by two Consultant Clinical Psychologists, Professor Sue Clarke and Helen Bolderston. Professor Sue Clarke works as a specialist clinical psychologist for Dorset Healthcare Foundation Trust and is an experienced DBT and ACT therapist and trainer. Indeed, she is a member of the British Isles DBT training team. Helen Bolderston works as a self-employed clinician and has both ACT and DBT experience. The workshops were carried out at the Centre for the Visually Impaired in Poole, Dorset (an independent site). Each workshop contained approximately 16 participants. The workshops ran from 9−5 with an hour lunch break and two 20-minute coffee breaks during the course of the day (see Appendices D & E for timetables outlining both the ACT and DBT

workshops, respectively). The second training day was carried out two weeks after the first day.

## 6.3 Results

*6.3.1 Missing Data and Analysis Strategy*

All participants completed all the pre and post measures. Follow-up packs sent to all participants in the ACTr and DBTr groups were returned by 37 (75%) and 31 (70%) participants at 3-months and 32 (65%) and 23 (52%) participants at 6-months (respectively; see Figure 6.1)[26]. As a result of these drop outs, the numbers of participants in each condition for the different measurement periods varied. In addition, participants occasionally failed to complete the questionnaire measures in full. To minimize further data loss, missing scores were replaced with the item mean for the sample when 10% or less of the questions in each measure were not completed. As a result of the loss of data and unequal numbers in each training group, a Linear Mixed Model (LMM) was used to analyse the results (see Chapter 3). Thus, a factorial 2 (Group; ACTr or DBTr) x 4 (Time: pre-intervention, post-intervention, 3-month follow-up and 6-month follow-up) LMM analysis was conducted for all key dependent variables.

The distribution of the data was examined for each test variable. A number of variables were significantly skewed and despite screening for outliers and running log transformations, the data did not become normally distributed. As a result, both non-parametric and parametric tests were conducted. Interestingly, the results produced by each set of tests were comparable. Research indicates that conducting parametric tests on non-parametric data increases the risk of encountering a Type-II error (Field, 2005) but this was not the case for the present dataset. Because this risk was not realised, a decision was made to proceed using parametric tests only. This procedure was repeated for Studies 5 and 6.

Table 6.2 shows significant correlations between several demographic and test variables. Where applicable, these demographics were entered as covariates in the main LMM analyses. Furthermore, no significant gender differences were found. Independent t-tests on all outcome and process measures showed no significant group differences at baseline.

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[26] As a result of these drop-outs, the sample size at 6-month follow-up is likely to only detect a large effect (e.g., 26 participants per group are required to detect a large effect ($d$ = .80) size at 80% power at $\alpha$ = .05; Cohen, 1990).

*6.3.2 Effects on Stigma*

Descriptive statistics for stigmatising attitudes, as measured by the APDQ, are shown in Table 6.3. A LMM indicated a significant main effect of time, $F(3, 65.67) = 5.89$, $p < .005$, but contrary to prediction, no significant Group x Time interaction was found. A priori, pairwise comparisons indicated that attitudes towards PD clients improved significantly post-training for both groups, p < .005, however, by 3-month follow-up, this effect had reduced to a trend, $p = .09$. Nonetheless, comparisons indicated that attitudes towards PD clients at 6-month follow-up were significantly higher for both groups than prior to the intervention (see Figure 6.2).

Table 6.2

*Correlations between Sample Demographics and All Test Variables*

|  | APDQ | HAQ-II | SDS | MBI | GHQ | AAQ-II | WBSI | BST-PDQ |
|---|---|---|---|---|---|---|---|---|
| Age | .00 | .34** | -.08 | -.20 | -.14 | .07 | -.27** | .07 |
| Work experience - Mental health (yrs) | -.03 | .17 | .06 | .02 | -.14 | .07 | -.27** | .31** |
| Work experience – PD clients (yrs) | .07 | .09 | .20 | .10 | -.10 | .06 | -.05 | .35** |
| No. PD clients currently working with | -.10 | -.32** | .15 | .13 | -.03 | -.09 | .06 | .08 |

*Note*. ** = p < .001, * = p <. 01.
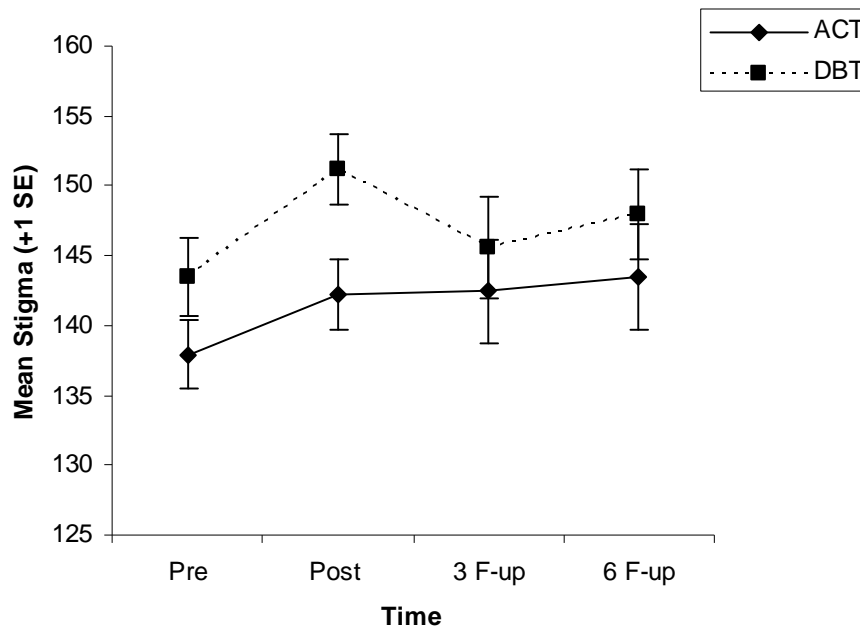
*Note*. Increase in score represents an **improvement** in attitudes towards PD clients.

*Figure 6.2*. Mean Stigmatising Attitudes Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups

### 6.3.3 Effects on Staff Outcomes

Descriptive statistics for burnout and psychological distress, as measured by the MBI and GHQ respectively, are shown in Table 6.3. A LMM indicated a significant main effect of time, $F(3, 68.50) = 3.42$, $p < .05$, and a significant Group x Time interaction on MBI scores, $F(3, 68.50) = 6.98$, $p < .001$. Pairwise comparisons and examination of the mean scores indicated that levels of burnout differed significantly between groups post-intervention, $p < .05$ (see Table 6.3). Contrary to prediction, however, levels of burnout significantly *increased* for participants who attended the ACTr but not for those who attended the DBTr. This difference was, however, only temporary in that no significant differences in scores between pre-intervention and either stage of follow-up were found for either group. These results are shown in Figure 6.3.

Contrary to prediction, A LMM showed no significant main effect of time on GHQ scores and no significant Time X Group interaction (see Table 6.3 and Figure 6.4).

Table 6.3

*Descriptive Statistics for all Test Variables*

|  | ACTr *(M, SD)* | | | | DBTr *(M, SD)* | | | |
|---|---|---|---|---|---|---|---|---|
|  | Pre | Post | 3 f/up | 6 f/up | Pre | Post | 3 f/up | 6 f/up |
| APDQ | 137.90 | 142.23 | 142.47 | 142.05 | 143.49 | 151.17 | 145.54 | 147.96 |
|  | 17 | 17 | 22 | 21 | 19 | 17 | 19 | 15 |
| HAQ-II | 80.01 | 81.68 | 84.92 | 82.45 | 78.92 | 82.67 | 80.77 | 81.78 |
|  | 9 | 8 | 9 | 9 | 8 | 6 | 8 | 8 |
| SDS | 12.02 | 10.25 | 10.65 | 10.97 | 12.00 | 11.09 | 10.40 | 9.65 |
|  | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 5 |
| MBI | 19.74 | 26.20 | 22.29 | 20.94 | 21.91 | 20.46 | 21.63 | 24.00 |
|  | 11 | 13 | 14 | 14 | 13 | 11 | 12 | 13 |
| GHQ | 17.51 | 17.30 | 17.42 | 21.27 | 18.28 | 16.82 | 17.13 | 17.04 |
|  | 9 | 8 | 6 | 13 | 8 | 7 | 8 | 8 |
| AAQ-II | 53.80 | 50.43 | 55.36 | 52.88 | 55.05 | 53.73 | 54.77 | 54.45 |
|  | 8 | 7 | 6 | 8 | 8 | 6 | 6 | 6 |
| WBSI | 40.19 | 46.98 | 41.89 | 40.91 | 42.87 | 43.69 | 42.91 | 42.13 |
|  | 10 | 10 | 10 | 11 | 9 | 10 | 10 | 11 |
| BST-PDQ | 45.09 | 40.98 | 45.66 | 42.80 | 45.11 | 43.04 | 43.11 | 43.61 |
|  | 11 | 8 | 13 | 13 | 11 | 12 | 12 | 12 |

*6.3.4 Effects on Client Outcomes*

Descriptive statistics for the therapeutic relationship and levels of distancing, as measured by the HAQ and SDS respectively, are shown in Table 6.3. A LMM analysis indicated a significant main effect of time for HAQ, $F(3, 65) = 8.46$, $p < .001$, but contrary to prediction, no significant Group x Time interaction was found. Pairwise comparisons indicated that the quality of the therapeutic relationship improved significantly post-training for both groups, $p < .001$, and that these changes were maintained at both 3-month, $p < .05$, and 6-month follow-up, $p < .01$ (see Figure 6.5).

A LMM analysis indicated a significant main effect of time for SDS, $F(3, 68.25) = 9.16$, $p < .001$, but contrary to prediction, no significant Group x Time interaction was found. Pairwise comparisons indicated that levels of distancing towards individuals with a PD

significantly decreased post-training for both groups, $p < .001$, and that these changes were maintained at both 3-month, $p < .001$, and 6-month follow-up, $p < . 005$ (see Figure 6.6).
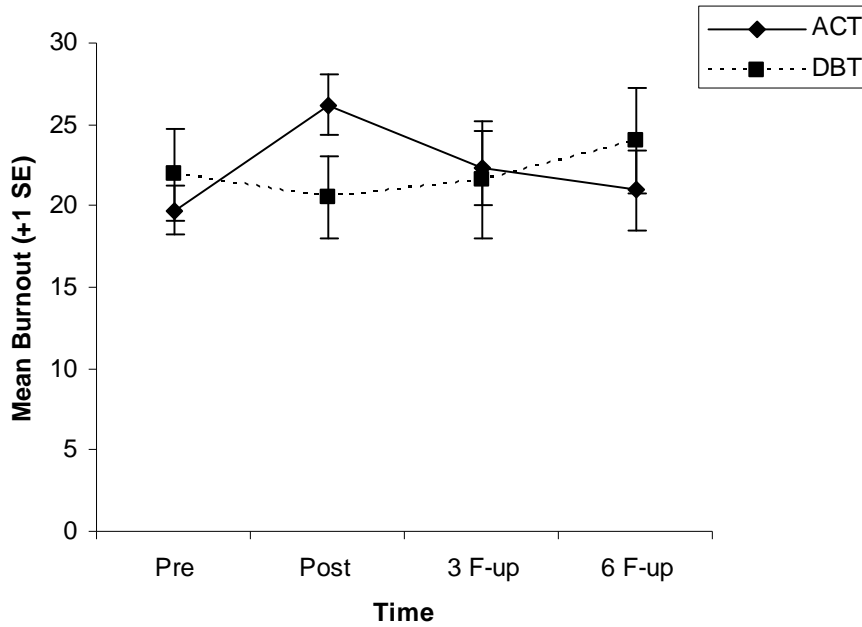


*Figure 6.3.* Mean Burnout Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups
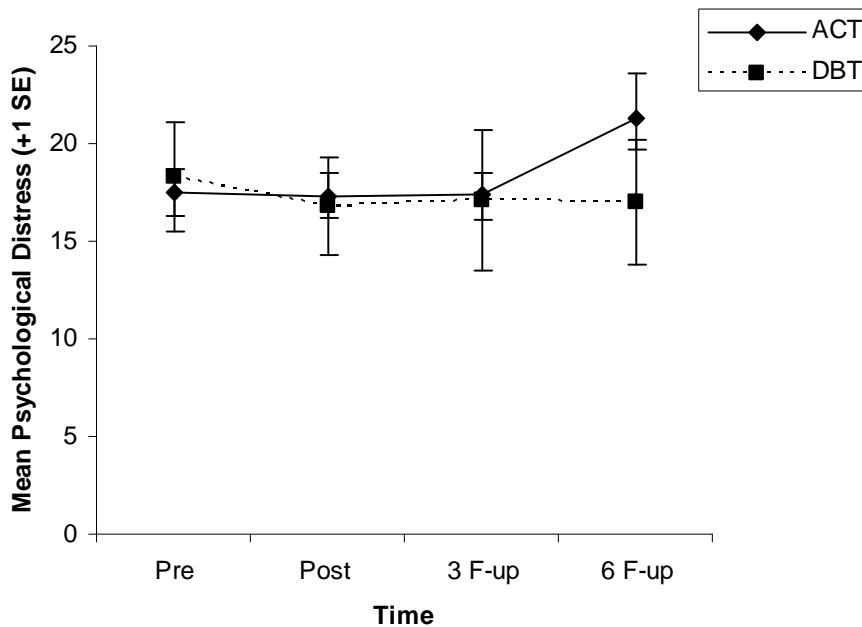


*Figure 6.4.* Mean Psychological Distress Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups.
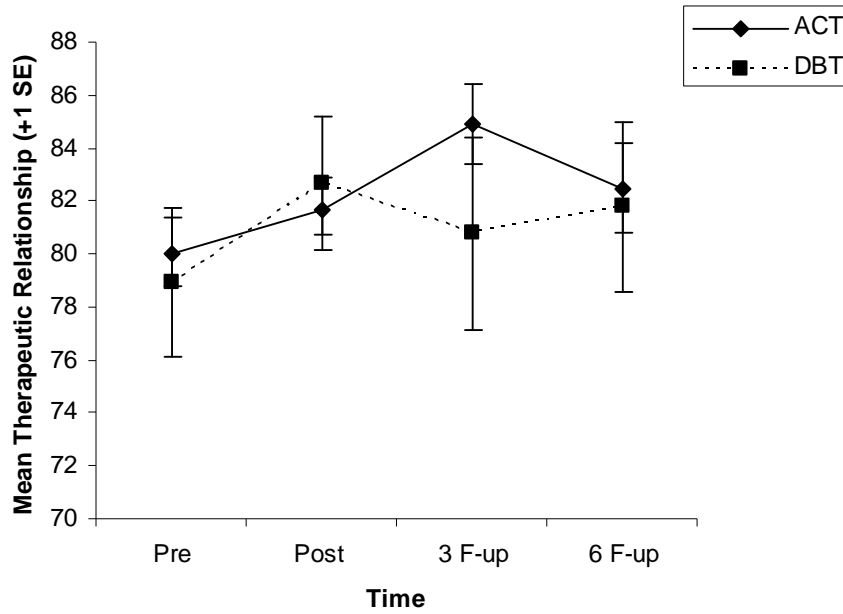
*Figure 6.5*. Mean Therapeutic Relationship Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups
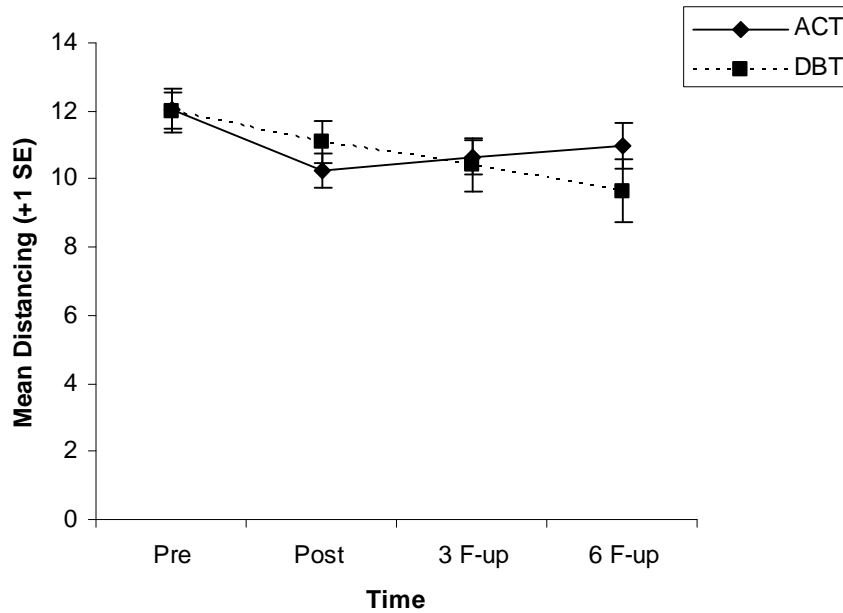


*Figure 6.6*. Mean Distancing Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups

*6.3.5 Process Analysis*

Descriptive statistics for psychological flexibility, thought suppression and cognitive fusion, as measured by the AAQ-II, WBSI, and BST-PDQ (14) respectively, are shown in Table 6.3. A LMM analysis indicated a significant main effect of time on AAQ-II scores, $F(3, 69.81) = 6.76$, $p <.001$. Contrary to prediction, no significant Group x Time interaction was found, however a trend was revealed, $F(3, 69.81) = 2.52$, $p = .07$. Pairwise comparisons and examination of the mean scores indicated that levels of psychological flexibility differed significantly between groups post-intervention, $p < .01$ (see Table 6.3). Contrary to prediction, levels of psychological *inflexibility* significantly increased for participants who attended the ACTr but not for those who attended the DBTr. This difference was, however, only temporary in that no significant differences in scores between pre-intervention and either stage of follow-up were found for either group. These results, shown in Figure 6.7, indicate that in essence ACT had a significant, but unexpectedly negative impact on psychological flexibility.

A LMM analysis indicated a significant main effect of time on WBSI scores, $F(3, 60.42) = 15.46$, $p <.001$, and a significant Group x Time interaction, $F(3, 60.42) = 8.86$, $p < .001$. Pairwise comparisons and examination of the mean scores indicated that levels of thought suppression differed significantly between groups post-intervention, $p < .001$ (see Table 6.3). Contrary to prediction, but consistent with the findings produced for psychological inflexibility, levels of thought suppression significantly increased for participants who attended the ACTr but not for those who attended the DBTr. This difference was, however, only temporary in that no significant differences in scores between pre-intervention and either stage of follow-up were found for either group. These results are shown in Figure 6.8.

It was predicted that a pre-post improvement in psychological flexibility would mediate outcome change in follow-up levels of burnout and psychological distress. Given that no changes in follow-up burnout or psychological distress scores were found, the criteria for mediation analyses were not met.

A LMM analysis did not indicate a significant main effect of time on BST-PDQ scores, however, a trend was revealed, $F(3, 55.67) = 2.49$, $p = .07$. Contrary to prediction, no significant Group x Time interaction was found. Pairwise comparisons indicated that levels of believability decreased from pre-intervention to post, $p = .07$ but this trend was not maintained at either stage of follow-up (see Table 6.3 and Figure 6.9). Thus, the criteria for mediation analyses using the BST-PDQ (14) were not met.

It was predicted that a pre-post improvement in believability would mediate outcome change in follow-up levels of the quality of the therapeutic relationships and social distancing. Despite significant changes in these client-outcome variables at follow-up, levels of believability only changed marginally from pre-post and these changes were not maintained over time. Furthermore, because improvements in the therapeutic relationship and distancing were observed post-intervention, it can not be determined if changes in believability preceded changes in outcome. Overall, the criteria for mediation analyses were not met.
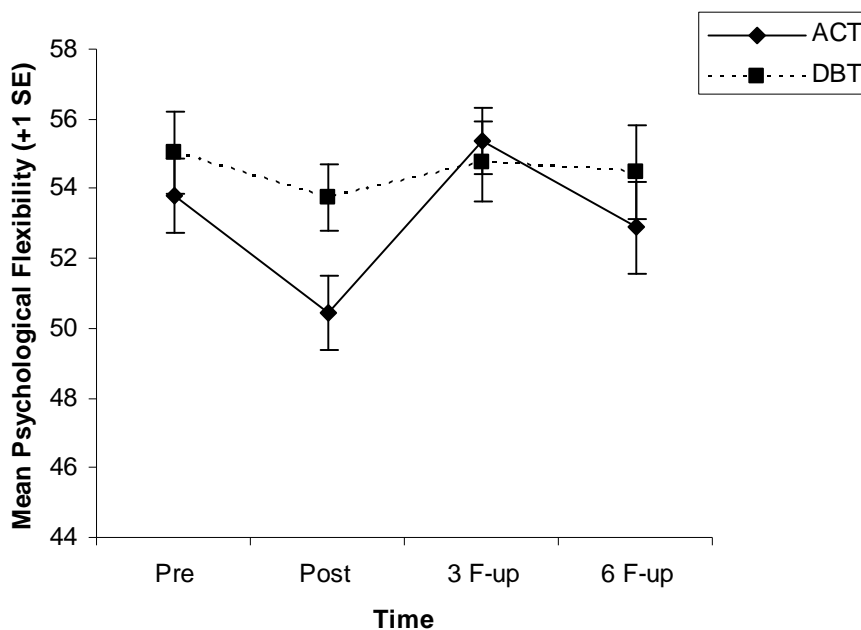


*Figure 6.7*. Mean Psychological Flexibility Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups
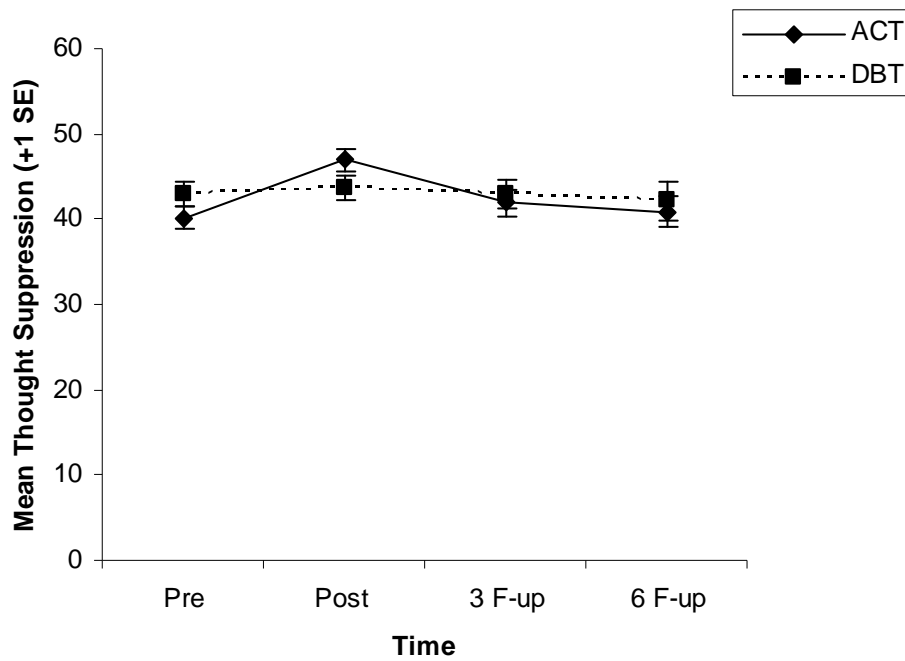
*Figure 6.8.* Mean Thought Suppression Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups
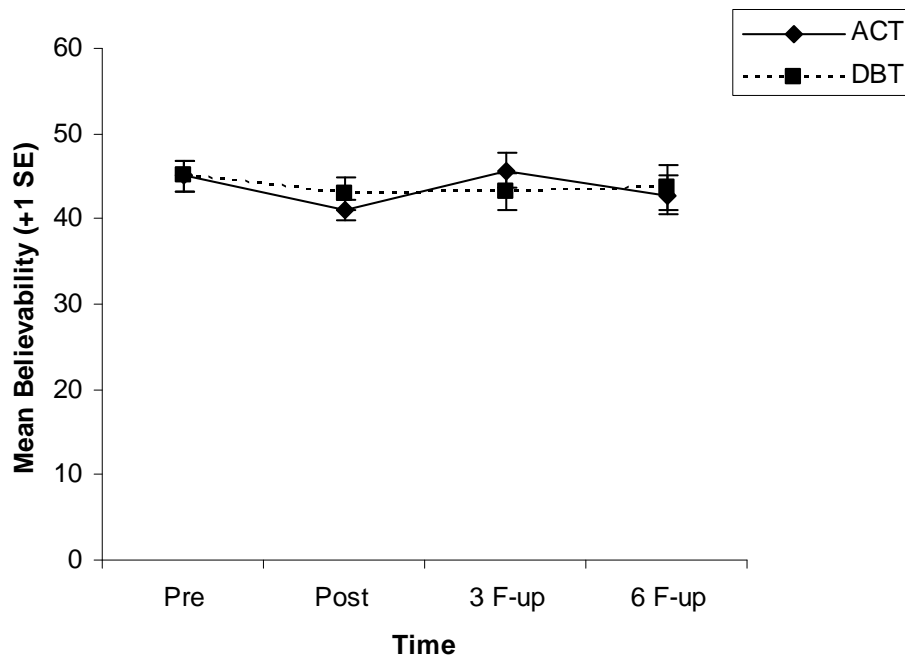


*Figure 6.9.* Mean Believability with Work Related Thoughts scores with One Standard error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups

**6.4 Discussion**

The primary finding of the present study was that both the 2-day ACT-based self-management and the DBT-based client-management training intervention were associated with significant reductions in mental health stigma towards clients with PDs. These significant gains were maintained after 6-months. Furthermore, significant improvements occurred in staff's perceptions of their therapeutic relationships with PD clients, and a significant reduction was seen in their levels of distancing towards them. Once again, these improvements were maintained after 6-months. Contrary to prediction, however, there were no significant group x time interactions, indicating that ACTr could not be differentiated from DBTr in significantly reducing stigmatising attitudes and improving staff-client relationships.

Also contrary to prediction, a group x time interaction indicated that post-intervention burnout scores were significantly higher for the ACT group than for the DBT group. These changes, however, returned to pre-intervention levels by follow-up. These findings are not consistent with previous research that has linked reductions in stigma to reductions in burnout (Hayes et al., 2004). Burnout scores for participants in the DBTr did not change over time. Furthermore, despite temporary changes in burnout, psychological distress scores for participants in both groups did not change over time. Thus, despite reductions in mental health stigma towards clients with PDs and improvements in staff-client relationships, neither ACTr nor DBTr were successful at improving staff wellbeing. The interpretation of these findings, along with the main limitations of this study will be considered in some detail later in this discussion.

Significant group x time interactions were found for psychological flexibility and thought suppression but, contrary to prediction, these differences were attributable to higher post-intervention levels of inflexibility and suppression for the ACT group compared to the DBT group. Nevertheless, both psychological flexibility and thought suppression scores for the ACT group returned to pre-intervention levels by follow-up. These findings are not consistent with predictions because the importance of psychological flexibility and the paradoxical effects of control procedures, such as thought suppression, were specifically addressed by the ACTr. As expected, psychological flexibility and thought suppression scores for participants in the DBTr did not change over time. Finally, no significant group x time interaction was found for levels of believability, although a marginal pre-post improvement was found for both groups. These findings are unexpected for two reasons. First, statistical

evidence (e.g., Chapter 4), and theoretical assertions specify a relationship between believability and psychological flexibility. Therefore, given the pre-post decline in psychological flexibility scores for participants in the ACTr, a marginal reduction in believability of negative work-related cognitions was not anticipated. Second, despite only the ACTr's focus on reducing levels of fusion, slight benefits were observed for both conditions. Nevertheless, this trend was not maintained by either group at follow-up. The unexpected results for the process variables meant that the criteria for mediation analyses were not met (Kraemer et al., 2002). Thus, the mechanisms of change through which ACT training was predicted to achieve its effects on staff and client outcome variables were not determined.

In sum, several findings are not consistent with the specified predictions. First, the groups could not be differentiated on stigma and client outcome variables. Second, no beneficial changes in staff outcomes were observed for either group. Third, neither psychological flexibility nor believability were identified as mechanisms of change through which ACT achieved follow-up improvements in client-outcomes. Moreover, it was not possible to address the mechanisms through which ACT staff training may operate. Finally, pre-post changes in levels of psychological flexibility were in fact counter-therapeutic. The remainder of this discussion considers why these results occurred, taking into account some of the critical limitations of the study. Finally, suggestions for future research are discussed.

### 6.4.1 Limitations

The study has five main limitations that could, alone or in combination, account for why the findings are not consistent with the specified predictions. First, and most critically, DBT skills-based training as an active control was an ambitious test of ACTr in the absence of data from simple pre-post comparisons or wait list controls. Research has demonstrated DBT to be one of the leading therapeutic interventions for treating BPD (e.g. Bohus et al., 2000; Robins & Chapman, 2004), so the prediction that an ACTr intervention would outperform it by virtue of its self directed focus, was a bold hypothesis, especially given that this was its primary delivery to a PD-staff population. The fact that ACTr was no more effective than DBTr at reducing negative stigmatising attitudes and improving therapeutic relationships raises significant problems of interpretation. Thus, although positive changes were found in stigma and client-outcome measures following treatment, there were no differential group effects over time, so it is possible that changes in both groups occurred as a result of non-specific effects. This possibility merits serious consideration, especially because both the ACT

and DBT interventions were delivered by the same facilitators. For this reason, the effectiveness of the interventions can not be fully established without further research using other control procedures (e.g., placebo control delivered by the same facilitators).

Second, the present study was unable to identify the mechanisms responsible for underpinning the observed outcome changes. More specifically, the beneficial changes observed in stigma and client outcome variables for the ACT group, did not occur as a result of changes in either psychological flexibility or believability. In fact, the marginal improvement observed in pre-post believability scores did not precede change in client variables, making it unlikely that it could be facilitating outcome change (Kraemer, 2002). Furthermore, the pre-post improvement in levels of believability was not maintained at follow-up. Given that the improvements in client outcomes were observed for both groups, the findings indicate that an alternative untested variable, inadvertently targeted by both interventions may be responsible for these changes. Given that the identification of these mechanisms would aid the development of successful training interventions, further research is required.

Third, the untested application of a novel version of the ACT stigma training protocol used in the present study may be responsible for several of the unexpected findings. The current protocol was largely based on a standardised ACT-stigma manual that had been used in previous research with healthcare professionals in the U.S (e.g., Hayes et al., 2004). Nonetheless, modifications were made to increase its applicability to healthcare staff working with clients with a PD. For practical reasons related to resource limitations and sampling restrictions, the modified protocol could not be piloted on a small sample of healthcare staff prior to the present RCT. As a result, it was not possible to be certain how professionals working in the U.K would respond to the training, or whether it had addressed the key elements of ACT (e.g., psychological flexibility and fusion) in the most efficacious manner. The unexpected significant pre-post decline in psychological flexibility scores for the ACT group, however, indicated that this was not achieved because participants became significantly more inflexible immediately following the training. Thus, despite frequent reassurance from the trainers that they should only participate in exercises that they felt comfortable with, this finding suggests that trainees may have found the experiential nature of the training too emotionally exposing. As such, the temporary increases in levels of psychological inflexibility and thought suppression may have reflected a short-term need to cope with the discomfort

elicited by the intense nature of the ACTr. This assertion is further supported by the observed pre-post increase in participants' levels of burnout (i.e., emotional exhaustion).

In spite of this, the ACT protocol was successful in improving staff's cognitions, attitudes and perceived behavioural intentions towards clients immediately following training. As such, it appears that whilst the training was responsible for these client-related improvements, its experiential focus resulted in staff becoming more critical and avoidant of themselves. Although the latter effect was temporary, it was not the intention of the training to cause participants to become less accepting of their internal experiences. Thus, the findings indicate that the ACT protocol requires further consideration and, potentially, substantial refinement prior to its use in future research.

Fourth, the recruitment process for the study did not allow for selection of participants on the basis of their baseline scores. Unfortunately, the AAQ-II, APDQ and MBI pre-intervention scores for the sample that volunteered were high compared with normative values (c.f. Bond et al., submitted manuscript; Bowers & Allan, 2006; Maslach, Jackson & Leiter, 1996). Thus, the sample was relatively flexible, positive in their attitudes to PDs and low in terms of burnout and, as such, not representative of the population of healthcare professionals who are often described as being burned out and having negative stigmatising attitudes to PD clients (e.g. Hayes et al., 2004; Lewis & Appleby, 1988; Markham & Trower, 2003). The literature indicates that frontline professionals with frequent contact with difficult clients are most susceptible to experiencing high levels of stress and burnout (Arnetz et al., 1994; Edwards et al., 2000; 2003; & Jenkins & Elliot, 2000; Samuelsson et al., 1997; Thomsen et al., 1999). At the time of this study, however, participants had spent an average of 6-years working with PD clients and their average caseload was three PD clients. In addition, some had never worked directly with PD clients (see Table 6.1). Thus, burnout would not be expected. This sample bias most likely reflects staff self-selection for training. Professionals showing the characteristics of psychological inflexibility and burnout (e.g. rigid thinking, feelings of being over-extended in one's work etc.,) are less likely to take part in *voluntary* training.

A recent study by Masuda et al. (2007) identified that both ACT and educational training significantly reduced mental health stigma for *psychologically accepting* participants. However, unlike ACT training, educational training was not sufficient to produce a significant reduction in levels of stigma for psychologically avoidant individuals. Given the present

sample characteristics, Masuda et al.'s findings suggest that both ACTr and DBTr would be successful and indistinguishable from each other in reducing levels of stigma.

The fifth limitation of the study relates to the fact that attrition rates at follow-up varied between 40% (ACT group) and 51% (DBT group). This substantial loss in sample size resulted in a reduction of statistical power. As a result, the numbers at follow-up were sufficient only to detect a large effect size (Cohen, 1988) so more subtle between-group differences may have been missed.

### 6.4.2 Considerations for Future Research

These limitations raise a number of issues that should be addressed in future research. First, it was predicted that ACTr would be more successful in reducing stigmatising attitudes and improving both client and staff outcomes than DBTr, but no distinguishable group differences were found. DBTr was, however, an ambitious control. Future studies should therefore compare ACT and DBT based training using alternative control procedures, such as no treatment, wait list, placebo, or TAU (e.g., psycho-educational training; see Chapter 1). Alternatively, given that neither ACTr nor DBTr are conventional types of stigma training, it would be beneficial to compare it to a more customary approach, such as psycho-educational training (PE). These approaches could provide more conclusive evidence about the role of ACTr and other stigma approaches in reducing levels of staff stigma.

Second, the present study did not identify psychological flexibility or believability as processes underpinning outcome change. Given that the intervention was also designed to target additional ACT processes such as valued living, it is possible that an un-assessed variable was responsible for the observed outcome changes. As such, the measurement of additional ACT processes in future investigations warrants consideration. Furthermore, given that this was the first time the ACT protocol has been used with a sample of PD staff working in the UK, it is possible that it was unsuccessful in addressing the core ACT processes effectively. This point relates to the third consideration for future work which is discussed in detail below.

Third, the post-intervention increases in psychological inflexibility, thought suppression and burnout scores for participants who attended the ACTr, indicate that they found the nature of the training emotionally exposing. Although the protocol was designed to expose staff to their work related thoughts about clients, it also aimed to inform them how such thoughts, judgments and evaluations occur as a *natural* result of having verbal language.

The results, however, suggest that the latter objective was not conveyed successfully. It is therefore possible that the protocol did not address these core ACT processes successfully and, if so, modifications would need to be made to the current protocol. In order to determine how the protocol should be changed, however, it would be beneficial to seek additional, qualitative data on participants' experiences of the training. Any amended protocol should be piloted on a small sample of staff prior to its use in further, larger scale investigations. An alternative explanation is that the post-intervention measurement point may have differentially affected the two groups. For example, participants who attended the ACTr workshop may have been more tired at the end of the training because of its emotionally demanding nature. Therefore, refinements to the ACT protocol should be considered along with procedural changes in the administration of post-intervention assessments.

Fourth, baseline results indicated that the present sample was non-stigmatising, psychologically flexible, and physically and psychologically healthy. Because of sampling and ethical constraints, these problems are difficult to overcome. Furthermore, because of the self-selecting bias, it is unlikely that burned out, stigmatising staff, would volunteer for training. This problem can not be overcome unless training is mandatory, but this would in itself raise ethical questions. Another interpretation of the baseline scores, however, is possible. Perhaps, in an attempt to protect their professional competency, the present sample provided socially desirable answers. Future research should therefore include a social desirability measure to determine if this is the case.

Future studies should aim to avoid staff attrition and maximise their engagement in providing data. The high attrition rates observed at the 3- and 6-month follow up points may have occurred as a result of the large number of questionnaires included in this study. For this reason, future studies should limit the number of questionnaires.

*6.4.3 Conclusions*

Despite its limitations, this study provides valuable new insights for stigma reduction in the area of PDs. Previous research on the effectiveness of education and skills based training in reducing stigma towards PD clients (e.g. Krawitz, 2004; Hazelton et al., 2006; Perseius et al., 2004 & Perseius et al., 2007), had no control groups so the effectiveness of education and skills based training for PD staff remained unknown. In contrast, the present RCT indicated that providing staff with client-management skills can produce significant and sustained improvements in their attitudes towards PD clients. Furthermore, it has provided

initial evidence to suggest that new ACT-based self-management training can also produce significant and sustained changes in staff stigma. This is the first RCT of its kind to be conducted using staff working with PD clients and offers new insights for stigma reduction interventions. Furthermore, DBT is a well validated training method, so the fact that ACTr was indistinguishable from it shows great promise if the protocol can be refined and the methodological problems solved. In addition, the processes underlying the improvements in participants' attitudes and client and staff outcome variables require further investigation.

In conclusion, these findings suggest that new ACT-based self-management training interventions may be an effective way to improve staff attitudes and therapeutic relationships, which in turn should result in better outcomes for clients (e.g., Priebe, 2002). Additional research is, however, required to determine the effectiveness of this self-management approach (see Appendix L, p.203).

# CHAPTER VII

**Study 4: Acceptance and Commitment Therapy for Clinicians working with Clients with a Personality Disorder – An Uncontrolled Trial**

The follow-up interview study (Appendix L) identified several weaknesses of the methodology used in Study 3 and indicated that the ACTr protocol required refinement prior to its use in future trials. Given that the overarching goal of the current research programme was to explore the effectiveness of ACT-based training interventions for staff working with clients with a PD, the present study aimed to identify ways of overcoming these difficulties. As such, the present study provides a brief summary of the key methodological and protocol weaknesses identified in Appendix L and Study 4, along with details of the how these were addressed in the present study. These aforementioned changes were piloted using a small uncontrolled trial, and the effectiveness of the modified ACT intervention was evaluated.

*7.1.1 Methodological and Protocol Considerations*

Interviews with participants who attended the ACTr suggested that they experienced difficult emotions as a result of the uncomfortable experiential nature of the workshop, which may have accounted for the declines seen in their post-intervention flexibility and burnout scores (see Study 3). Although ACT encourages individuals to experience personal discomfort in the service of something that is valued (Hayes et al. 1999), *increasing* flexibility and *promoting* wellbeing are central to the role of ACT interventions (Hayes et al., 2006). Thus, in an attempt to limit participant distress and to promote flexibility and wellbeing, the exposing nature of the stigma-focussed ACT training protocol was softened in the present study (see Method for details).

The unexpected post-intervention decline observed in flexibility scores for the ACT group was consistent with those seen for related constructs (e.g., burnout and thought suppression), which indicates that they occurred as a result of the training, not because of measurement errors. Nevertheless, despite having been validated, the AAQ-II remains unpublished which raises questions about its validity. Given that flexibility is a core ACT process and is central to this investigation, as a precaution the AAQ-I (Hayes et al., 2004) was administered alongside the AAQ-II in the present study.

In an attempt to reduce attrition, participants in Study 3 were required to complete the post-intervention questionnaires before leaving the final day of the workshop. Although this goal was achieved, several accounts given in Appendix L indicate that this may have been problematic. For example, participants from both groups felt the 2-day workshops were demanding on an emotional or intellectual level. Furthermore, they stated that the quantity of questionnaires administered throughout the trial posed a strain. As such, the timing of the post-training questionnaires may have contributed to, or captured, any negative effects they were already experiencing as a result of the training. Thus, in order to promote participants' welfare and remove unwanted sources of variability, participants in the present study were required to complete the post-intervention questionnaires within one week of the training. Because this could have increased attrition, additional changes were made. For example, the number of measures administered in the current study was somewhat reduced from Study 3 and the staff outcome measures (e.g., burnout and psychological wellbeing) were not administered at the post-intervention stage. The latter decision was made because the current investigation focused on the long term promotion of staff wellbeing, not immediate gains.

Finally, baseline scores from Study 3 indicated that the sample was non-stigmatising, psychologically flexible, and physically and psychologically healthy. Given that these data are not consistent with those obtained from previous samples (e.g., Hayes et al., 2004; Lewis & Appleby, 1988; Markham & Trower, 2003; Masuda et al., 2009) it is possible that in an attempt to protect their professional competency, participants provided socially desirable answers. As a result, a social desirability measure was included in the present study.

*7.1.2 The Present Study*

This small scale pilot investigation aimed to determine the effectiveness of the *modified* 2-day ACT-based self-management training intervention (ACTr) at undermining negative stigmatising attitudes in clinical professionals working with PDs, and improving both staff and client outcomes. Furthermore, it sought to determine whether the methodological and protocol changes led to improvements in participants' levels of psychological flexibility and believability immediately following the intervention and whether these changes would be maintained at follow-up. These aims were addressed using an uncontrolled trial because its design plays a central role in the evaluation of new interventions in the early stages of research (White & Ernst, 2001). In this case, it was intended to determine whether the modified ACTr protocol is suitable for use in larger scale, comparative evaluations. Given the limited scale of

the present study, however, the mediating effects of psychological flexibility and believability on staff and client outcomes could not be formally tested.

## 7.2 Method

### 7.2.1 Participants

Participants were an opportunistic sample of trainees and qualified clinical psychologists with links to the University of Exeter (UoE). All participants came into contact with clients with a PD in their work. Twenty-five individuals participated in the workshop; their demographics are presented in Table 7.1.

### 7.2.2. Revised ACT Intervention

The revised 2-day ACTr was developed by Professor Sue Clarke. Because the protocol used in Study 3 was largely stigma-focused, it required participants to be in regular contact with their stigmatising thoughts and difficult emotions about their clients with a PD. In contrast, the protocol used in the present study was adapted to provide a more general introduction to ACT with less of a focus on stigma and work related issues (see revised ACT protocol, Appendix M). Although the workshop still required participants to be in contact with difficult thoughts and feelings, these were anchored more in their daily living than their work experience.

Participants were introduced to the principles of ACT, the theory underlying it and the key processes used to promote psychological flexibility and wellbeing (e.g., mindfulness, acceptance and values-based living). Consistent with Study 3, participants were provided with an ACT analysis of stigma, but, in order to relieve personal responsibility, it was strongly emphasised that judgments and evaluations form part of our evolutionary history. Akin to Study 3, exercises enabled participants to notice the process of automatic thinking and the paradox of control strategies. Unlike Study 3, these concepts were considered more broadly in daily living with fewer references to work related issues. Furthermore, the number of experiential exercises in the present study was reduced. Participants were taught methods of reducing the impact and believability of difficult thoughts, both in general and in relation to their work, through ACT processes such as, acceptance, mindfulness and cognitive defusion. The workshops ended with a focus on personal values, more specifically asking participants what kind of person they wanted to be, both in their personal and professional worlds. Throughout the training it was strongly emphasised that participation in all the exercises was voluntary.

Table 7.1

*Demographic Characteristics of Clinicians*

| Demographic | (N = 25) | | |
| --- | --- | --- | --- |
| | n/ Mean | %/SD | Range |
| **Age (yrs)** | 34.16 | 9.44 | 26-62 |
| **Gender** | | | |
| Male | 4 | 16 | |
| Female | 21 | 84 | |
| **Relevant work experience (years)** | | | |
| Mental Health | 8.31 | 5.19 | 3-20 |
| Personality Disorder | 4.71 | 6.15 | 0-20 |
| **Number PD clients** | 1.92 | 1.12 | 1-5 |
| **Service** | | | |
| Specialist Personality Disorder | 1 | 4 | |
| Inpatient psychiatric | 3 | 12 | |
| CMHT | 6 | 24 | |
| Child, family & adolescent | 4 | 16 | |
| Primary care | 2 | 8 | |
| Management | 1 | 4 | |
| Psychological therapies | 4 | 16 | |
| Other | 4 | 16 | |

*Note*. Number of PD clients = Number of PD working with at the time of this study.

*7.2.3 Measures*

Consistent with previous chapters, stigmatising attitudes were assessed by the **APDQ**, social distancing by the **SDS**, the therapeutic relationship by the **HAQ**, burnout by the **MBI**, psychological distress by the **GHQ**, psychological flexibility by the **AAQ-II** and believability by the **BST-PDQ (14).** Novel measures are detailed below:

AAQ-I (Hayes, Bissett et al., 2004). The AAQ-I is a 22-item self-report questionnaire designed to evaluate psychological processes targeted by ACT (e.g., acceptance, values-based action, mindfulness etc.) It consists of two factors designed to measure acceptance and

mindfulness and values-based action. These are summed to produce a general measure of psychological flexibility (e.g., "I should act according to my feelings at the time") versus psychological inflexibility (e.g., "If I could magically remove all the painful experiences I've had in my life, I would do so"). Respondents use a 7-point Likert scale to rate "the truth of each statement as it applies to you" (e.g. 1 = Never True to 7 = Always True). The AAQ-I has an acceptable level of internal consistency ($\alpha$ = .70). Total scores range from 22-154, with higher scores reflecting greater levels of psychological flexibility. A composite measure of flexibility can also be produced by summing the items of the AAQ-22 with those from the AAQ-II. This will result in a 30-item measure because two items from the AAQ-22 are also used in the AAQ-II.

*Social Desirability.* Social desirability was assessed using the Impression Management Scale (IMS; Paulhus, 1991). The IMS is 20 item self-report questionnaire designed to measure an individual's tendency toward self-presentation to an external audience. The scale is based on the premise that certain individuals methodically over-report their compliance with a number of socially desirable responses whilst under-reporting undesirable behaviours. Participants are required to rate the extent to which they agree with the statements (e.g., "I never swear") on a scale from 1 (totally disagree) to 7 (totally agree). Total scores range from 0 – 20, with higher scores reflecting a high tendency for self-presentation. The IMS has been shown to have a good level of internal consistency ($\alpha$ = .81)[27].

### 7.2.4 Procedure

The study was approved by both the School of Psychology Ethics Committee and the Dorset Local Research NHS Ethics Committee. Participation was voluntary; participants could attend the training and not take part in the research aspect of the study. Prospective participants willing to take part in the research aspect of the training were required to contact the research team at IPTS to express their interest. Akin to Study 3, these participants were sent an information pack outlining the study in detail, the reasons behind it, and the requirements for taking part. They were informed that the study would teach them self-management strategies to help manage the discomfort that can arise in the context of their

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[27] As stated in Chapter 6, Study 3 formed part of a larger investigation funded by the Health Foundation. For this reason, an additional three measures were administered to participants at the same time as those used to address the research questions specified in Study 3. In order to reduce the number of questionnaires administered in the present study, these measures were removed, along with the WBSI. The AAQ-I and the IMS were, however, added. Nevertheless, participants in the present study were required to answer 51 fewer items than in Study 3. Furthermore, they were not required to complete the MBI or the GHQ at the post-intervention stage, which reduced the total number of items further.

work with challenging clients. They were informed in writing that the experiential aspects of the training could elicit difficult emotional responses. Interested participants were required to provide written consent prior to the commencement of the training.

Participants were assessed before the workshop (pre-intervention), 1-week following the end of the workshop (post-intervention) and at 3 and 6-month follow-up. Questionnaires were counterbalanced using the Latin-Square technique. The post-workshop pack was given to participants at the end of the second training day. Unlike Study 3, they were asked to complete this pack within the next week and to return it to the researchers in the stamped addressed envelope provided (SAE). All other packs were posted to participants, completed at a time and a place convenient to them and returned in SAEs. All measures were completed at all four stages, except for the demographic questionnaire which was only completed at the pre-intervention and 6-month follow-up stages (this was to determine whether any changes in work environment had occurred during the process of this investigation).

The ACT workshop was delivered by Professor Sue Clarke, a Consultant Clinical Psychologist and experienced ACT trainer (see Chapter 6). Professor Clarke was assisted by her Ph.D student (G.T) and her current research assistant (C.N). The workshop was carried out over two consecutive days at the School of Psychology, UoE. The workshop ran from 9−5 with an hour lunch break and two 20 minute coffee breaks during the course of the day

### 7.3 Results

*7.3.1 Missing Data and Analysis Strategy*

All participants completed all the pre-intervention measures. Post-intervention and follow-up packs were returned by 20 (80%) participants 1-week following the training, 16 (64%) participants at 3-months and 12 (48%) participants at 6-months. In addition, participants occasionally failed to complete the questionnaire measures in full. To minimize further data loss, missing scores were replaced with the item mean for the sample when 10% or less of the questions in each measure were not completed. As a result of the unequal numbers at each assessment period, a LMM analysis was conducted.

Table 8.2 shows significant correlations between several demographic and test variables. These demographics were entered as covariates in the main LMM analyses where applicable. No significant correlations were found between the IMS and the test variables indicating that participants were not providing socially desirable responses (see Table 7.2).

*7.3.2 Effects on Stigma*

Descriptive statistics for stigmatising attitudes, as measured by the APDQ, are shown in Table 7.3. A LMM analysis indicated a significant main effect of time, $F(3, 10.46) = 6.66$, $p < .01$. Akin to Study 3, a priori pairwise comparisons indicated that attitudes towards PD clients improved significantly post-training, $p < .01$, but by 3-month follow-up this effect had reduced to a trend, $p = .07$. Nonetheless, comparisons indicated that attitudes towards PD clients at 6-month follow-up were significantly more positive than prior to the intervention, p $< .01$ (see Figure 7.1).

*7.3.3 Effects on Staff Outcomes*

Descriptive statistics for burnout and psychological distress, as measured by the MBI and GHQ respectively, are shown in Table 7.3. Contrary to prediction, a LMM analysis showed no significant main effect of time on MBI scores. In contrast with Study 3, however, examinations of the mean scores indicated changes that, although not significant, were in the predicted direction (see Table 7.3).

A LMM analysis showed a trend for main effect of time on GHQ scores, $F(2, 11.78) = 2.78$, $p = .10$. A priori, pairwise comparisons indicated that staff's psychological wellbeing improved significantly by 3-month follow-up, $p = .04$, however, this effect had reduced to a trend by 6-month follow-up, $p = .08$ (see Figure 7.3).

Table 7.2

*Correlations between Sample Demographics, Social Desirability and all Test Variables*

| | Age | Work experience Mental health (yrs) | Work experience Personality disorder (yrs) | No. PD clients currently working with | IMS |
|---|---|---|---|---|---|
| APDQ | .032 | -.05 | .03 | .52** | .30 |
| HAQ-II | .29 | .41* | .19 | .31 | .24 |
| SDS | -.16 | .25 | .07 | -.13 | -.02 |
| GHQ | -.01 | -.14 | -.13 | -.09 | .32 |
| MBI | .28 | .49* | .42 | .20 | -.30 |
| AAQ-II | -.14 | .12 | -.01 | -.08 | .12 |
| AAQ-30 | -.05 | .14 | -.04 | -.16 | .18 |
| AAQ-22 | -.01 | .14 | -.06 | -.22 | .17 |
| BST-PDQ | -.13 | -.48** | -.52* | -.44* | .18 |

*Note.* ** = p < .001, * = p <. 01.

Table 7.3

*Descriptive Statistics for all Test Variables*

| | APDQ | HAQ-II | SDS | GHQ | MBI | AAQ-II | AAQ-22 | AAQ-30 | BST-PDQ |
|---|---|---|---|---|---|---|---|---|---|
| Pre | 135.64 | 81.92 | 10.60 | 25.16 | 24.68 | 51.72 | 103.56 | 145.92 | 40.14 |
| | (12) | (8) | (4) | (12) | (12) | (6) | (11) | (15) | (11) |
| Post | 141.05 | 83.30 | 10.20 | n/a | n/a | 52.90 | 104.70 | 148.55 | 37.65 |
| | (13) | (9) | (3) | | | (6) | (12) | (17) | (7) |
| 3 F/up | 139.60 | 84.00 | 9.75 | 18.63 | 22.80 | 52.21 | 105.64 | 149.50 | 33.91 |
| | (16) | (9) | (3) | (7) | (13) | (6) | (12) | (17) | (7) |
| 6 F/up | 146.18 | 87.17 | 10.25 | 18.50 | 21.58 | 53.58 | 107.67 | 152.08 | 33.92 |
| | (12) | (5) | (3) | (9) | (10) | (7) | (12) | (17) | (7) |
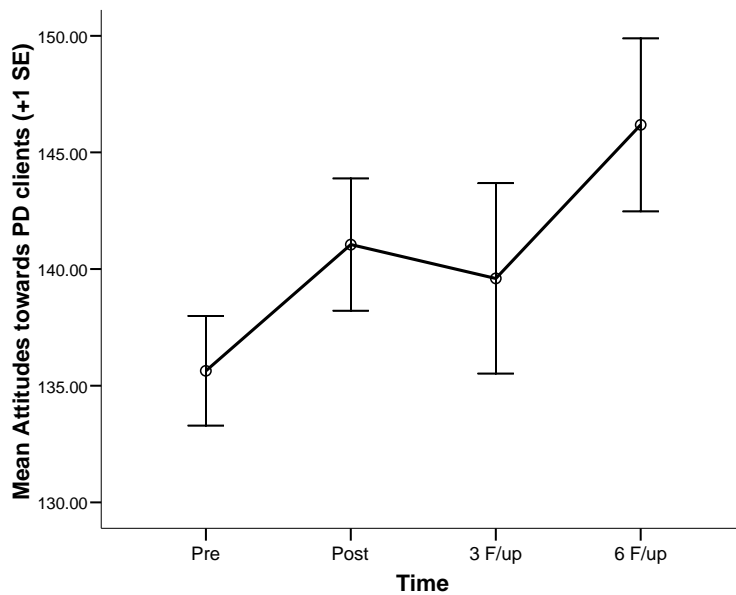


*Figure 7.1*. Mean Attitude Scores towards Clients with a PD with One Standard Error at Pre-intervention, Post-intervention and Follow-up
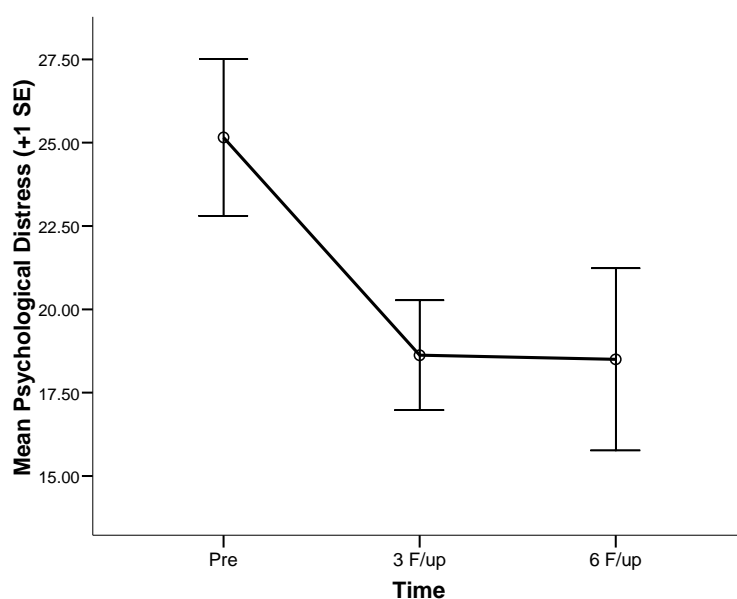
*Figure 7.2*. Mean Psychological Distress Scores with One Standard Error at Pre-intervention and Follow-up

### 7.3.4 Effects on Client Outcomes

Descriptive statistics for the therapeutic relationship and levels of distancing, as measured by the HAQ and SDS respectively, are shown in Table 7.3. A LMM analysis indicated a trend for main effect of time for HAQ, $F(3, 12.67) = 2.98$, $p < .07$. Pairwise comparisons indicated no significant improvements in the quality of the therapeutic relationship post-intervention but significant improvements were found at both 3-month, p < .05, and 6-month follow-up, p < .01 (see Figure 7.3).

Contrary to prediction, a LMM analysis showed no significant main effect of time on SDS scores (see Table 7.3).

### 7.3.5 Process Analysis

Descriptive statistics for psychological flexibility and believability, as measured by the AAQ-II, AAQ-22, AAQ-30 and the BST-PDQ (14) respectively, are shown in Table 7.3. Contrary to prediction, LMMs showed no significant main effects of time for AAQ-II, AAQ-22 or AAQ-30 scores. In contrast with Study 3, examinations of the mean scores for all versions of the AAQ indicated changes in the predicted direction (see Table 7.3). Moreover, paired-samples t-tests indicated a marginally significant post-intervention improvement for AAQ-II and AAQ-30, $p = .10$ and $p = .07$, respectively (Figures 7.4 & 7.5). Significant

improvements were not, however, found between pre-intervention and follow-up scores for any versions of the AAQ, despite changes observed in the mean scores (see Table 7.3).

A LMM analysis indicated a significant main effect of time on BST-PDQ scores, $F(3, 28.14) = 5.69$, $p < .01$. Pairwise comparisons indicated that levels of believability marginally improved from pre to post-intervention, $p = .07$, however, significant improvements were found at both 3-month, $p = .01$, and 6-month, $p = .01$, follow-up (Figure 7.6).
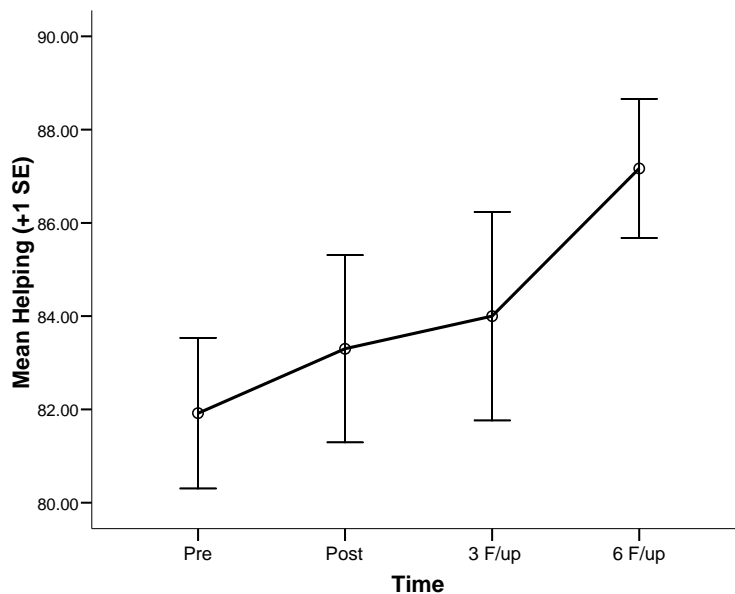


*Figure 7.3.* Mean Therapeutic Relationship Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up
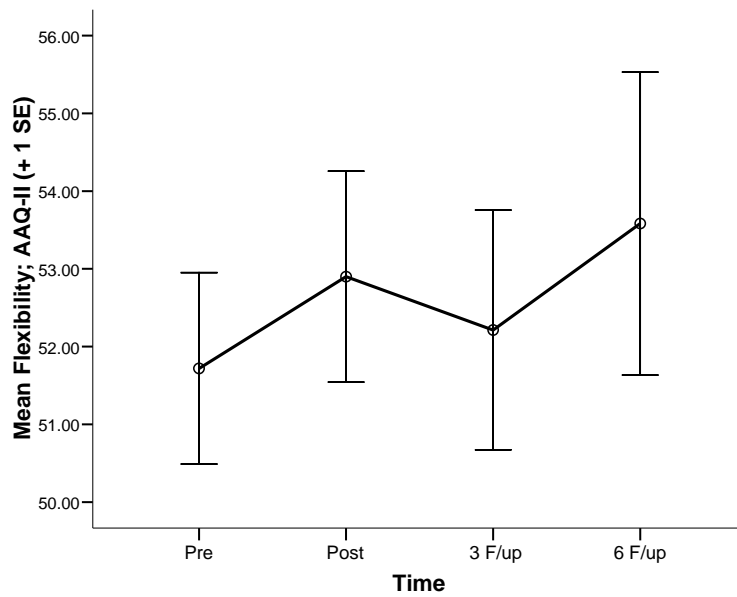
*Figure 7.4.* Mean Psychological Flexibility Scores, as measured by the AAQ-II, with One Standard Error at Pre-intervention, Post-intervention and Follow-up
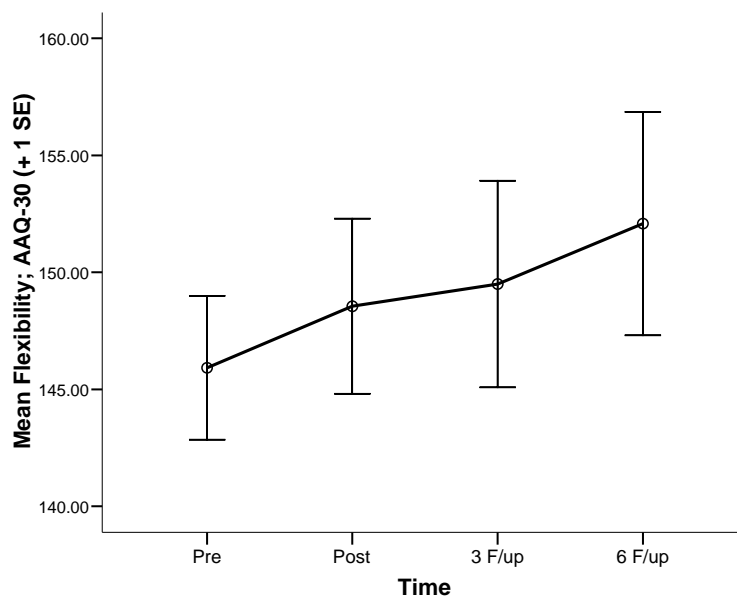


*Figure 7.5.* Mean Psychological Flexibility Scores, as measured by the AAQ-30, with One Standard Error at Pre-intervention, Post-intervention and Follow-up
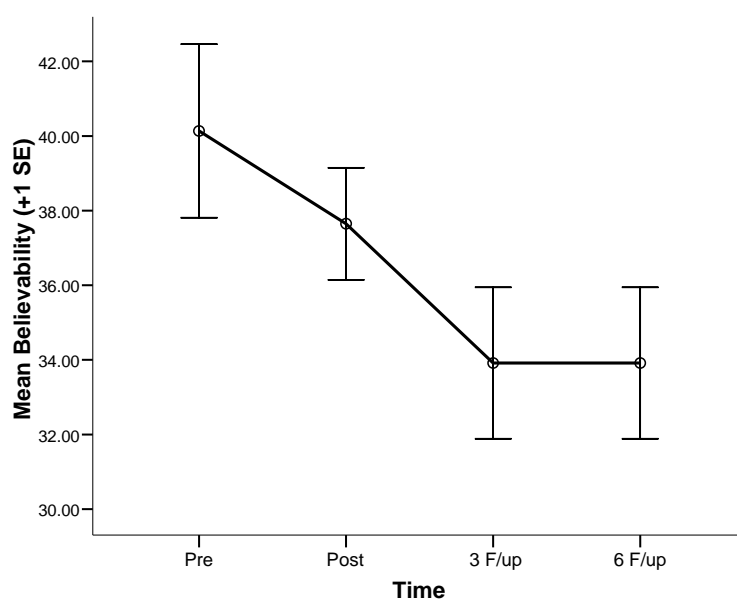
*Figure 7.6.* Mean Believability Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up

## 7.4 Discussion

The purpose of Study 4 was to determine the effectiveness of a *refined* 2-day ACT-based self-management training intervention (ACTr) at undermining negative stigmatising attitudes in clinical professionals working with PDs, and improving both staff and client outcomes. Furthermore, it sought to determine whether the methodological and protocol changes prompted by Study 3 and Appendix L led to improvements in participants' levels of psychological flexibility and believability. The present study resulted in an ACT-based training manual that has promise in the reduction of staff stigma towards PDs and improving both staff and client outcomes. Furthermore, the results indicate that the ACTr manual was also effective in positively impacting key ACT processes. Each of these findings will be discussed in detail below.

Study 4 was successful at significantly reducing staffs' stigmatising attitudes towards PDs following the intervention but this difference was only marginal at 3-month follow-up. Nonetheless, by 6-month follow-up participants were significantly less stigmatising towards PDs than prior to the intervention. Although these findings indicate that the training was successful in reducing stigma, the temporary decline observed in stigmatising attitudes at 3-month follow-up reveals a pattern consistent with the findings of Study 3. This abstruse

similarity indicates that an unknown variable was influencing staffs' attitudes between these two time periods. For example, this setback could be attributed to their working environment. Corrigan and McCracken (1995) indicated that collegial and supervisory variables can interact negatively with the implementation of individuals' newly acquired skills, and as a consequence, recommend team-focussed training as an alternative to teaching individual staff members. Given that the majority of participants in the present study worked in different and often temporary environments, this interpretation is possible. As a result, future consideration should be given to the delivery of team-focussed ACT training. The fact that participants' levels of stigma recovered by 6-month follow-up suggests that the questionnaires administered at the first follow-up stage may have prompted them to reconnect with the training material. This indicates that brief refresher courses should be provided to staff to ensure that they remain connected with the concepts of the training.

The results indicated that participants' levels of psychological distress improved significantly 3-months following the ACTr. This improvement, however, reduced by the 6-month follow-up but levels of distress were still marginally higher than the pre-intervention scores. Given the high rate of attrition at the final assessment period, it is likely that there was insufficient power to detect a significant effect at the final stage of follow-up. Critically, the overall improvements seen following the revised intervention protocol and methodology exceeded those seen in Study 3, suggesting that the changes were necessary and beneficial. Contrary to expectation, however, no significant changes were observed in participants' levels of professional burnout. Nevertheless, in contrast with Study 3, examinations of the mean burnout scores indicated a trend in the anticipated direction. Once again, this provides a preliminary indication that the changes to the protocol were worthwhile in terms of staff outcomes.

The results for client related outcomes indicated a strong trend in improvement in staff perceptions of the quality of their therapeutic relationships with PDs following the training that, by the 3-month follow-up, became a significant effect, which was sustained at 6-months. The absence of improvements in staffs' levels of distancing was unforeseen but this discrepancy may have arisen from the focus of the questionnaires. For example, the therapeutic relationship questionnaire specifically addressed working relationships with clients, whereas the social distancing scale assessed more general contact with PDs, such as house sharing. Nonetheless, the amended protocol showed some promise in improving certain client-related variables.

In contrast to Study 3, staffs' levels of psychological flexibility marginally *improved* following the training. Although this finding was not significant, it shows clear advance in relation to the unexpected deterioration observed in psychological flexibility scores in Study 3. The fact that this trend was not maintained at follow-up, however, indicates that the revised protocol requires further refinement. Nonetheless, it suggests that a less exposing training approach is required in order successfully to promote psychological flexibility. Furthermore, the psychometric properties of the AAQ-II were supported by the AAQ-30; both versions detected comparable post-intervention benefits in flexibility. This finding suggests the unexpected post-intervention decline in staffs' levels of flexibility observed in Study 3 was a result of the training rather than a consequence of measurement error.

A marginally significant reduction in staffs' levels of believability with work related cognitions was observed following the training, and at 3-month and 6-month follow-up the difference was significant. These findings suggest that the revisions made to the protocol were successful in promoting defusion – a key ACT process.

Finally, the absence of social desirability bias suggests participants' self-reported responses were veridical and that the new protocol used in Study 3 improved the quality of the training in several ACT consistent ways. Nevertheless, Study 4 has several notable weaknesses, which are considered below.

### 7.4.1 Limitations and Directions for Future Research

Methodological weaknesses of Study 4 include the reliance on self-report measures, the absence of a control group, the specialist and limited sample, and the high rates of attrition observed at follow-up. The inclusion of more objective measures, such as client reports would have been desirable and should be considered in future studies but, regrettably, these methods were beyond the scope of the present thesis. Critically, the absence of a control group meant that non-specific factors, rather than the ACT intervention, may have resulted in improved outcomes on all, or some of the measures. For this reason, the effectiveness of the present intervention can not be fully established until controlled investigations have been conducted.

Based on Cohen's definition of effect sizes (Cohen, 1988), the limited sample size and the high rate of participant attrition has resulted in the study having a low level of statistical power. This could explain why certain findings produced in the present study were not as robust as those observed in Study 3.

The reduced – but still relatively large – number of questionnaires administered in the present study could have contributed to the high levels of attrition. Future studies might benefit from a further reduction in the number of measures distributed. Finally, because the staff sample used in the present study were specialist clinical psychologists, it is not possible to determine whether the protocol changes were responsible for the improvements, or whether they simply reflected a more 'psychologically minded' sample. To determine the generalisability of the present findings, the current protocol would need to be tested with a sample more similar to that used in Study 3.

*7.4.2 Conclusions*

Despite these limitations, the present study suggests that the refinements made to the novel ACTr protocol used in Study 3 were successful in reducing levels of stigma and improving staff and client outcomes. Although several of the findings were not as robust as those found in Study 3, they indicate that the modifications were necessary to bring about key changes in psychological flexibility and believability that are consistent with ACT theory. Nonetheless, several of the findings were only marginally significant and, although these could in part be attributed to the small sample, further refinements to the protocol could produce greater benefits. For example, increasing the emphasis on core ACT processes may help participants achieve an even more accepting, mindful relationship with their thoughts and feelings about themselves and their clients. These changes could in turn, facilitate greater improvements in both staff and client related outcome variables.

In conclusion, this small scale uncontrolled trial resulted in an ACT-based training manual that had promise in the reduction of staff stigma towards PDs and improving both staff and client outcomes. This revised protocol nevertheless requires further testing in a controlled experimental trial.

# CHAPTER VIII

## Study 5: A comparative evaluation of modified ACT-based self-management training with PE training for staff working with clients with PD

Study 3 was unable to distinguish an ACT-based self-management training intervention from DBT-based skills-management training. Furthermore, the proposed mechanisms of change targeted by the ACT intervention (psychological flexibility and believability) did not alter in an ACT consistent manner and as a consequence, could not be shown to underpin changes in the key outcome variables. Subsequently, follow-up interviews (Appendix L) suggested that the nature of the ACTr may have been too emotionally exposing for staff, perhaps explaining the unexpected process data. As a result, substantial refinements were made to the original ACTr protocol and the timing of the post-intervention assessment was deferred. These changes were evaluated in Study 4. The results were promising, indicating sustained changes in both client and staff related outcomes and pre-post benefits in psychological flexibility and believability. As such, the results of study 4 confirmed the effectiveness and suggest the need to validate the revised protocol in a larger-scale, controlled evaluation.

As discussed previously, the Study 3 prediction that an ACTr intervention would outperform it by virtue of its self-directed focus was a bold one, given that DBT is the leading therapeutic intervention for treating BPD (e.g. Bohus et al., 2000; Robins & Chapman, 2004). Furthermore, despite their noticeable differences, reports from Study 4 suggested that the two approaches were perceived more similarly than intended (e.g., the self-reflective and experiential components). This could account for why, despite efforts to make a clear distinction between the two interventions, they were indistinguishable on a number of key outcome variables. In fact, ACT and DBT are often considered together as 'third-wave CBT interventions' inasmuch as each attempts to change the function of internal events and the individual's relationship to them by using mindfulness and acceptance strategies (Teasdale, 2003). Given that neither ACT nor DBT interventions are conventional training approaches for the amelioration of staff stigma towards PD clients, it might be argued that, at least in the early stages of development, the refined ACTr should be compared with a more typical treatment alternative, such as psycho-educational training (PETr).

A number of reasonable comparators exist. For example, 'Time to Change' – a partnership of mental health charities, including *Mind* and *Rethink* – has recently been formed to help combat the stigma and discrimination that surrounds mental health. It offers a number of schemes, including the provision of education-based training for certain professional groups, such as trainee doctors and teachers. Consistent with DH recommendations (e.g., Breaking the Cycle of Rejection, 2003; see Chapter 1), the goal of 'END' – Education Not Discrimination – is to make a positive difference to the knowledge, attitudes and behaviour of professional groups by providing them with better education about mental health problems (Time to Change, 2009). PETr is thus the leading approach for improving staff stigma towards clients with mental health problems, but surprisingly few studies have evaluated its effectiveness with staff working with PD clients (see Chapter 1). Furthermore, despite some promising preliminary findings, the few studies that have researched the effectiveness of PETr for PD staff have serious methodological limitations (e.g., Krawitz, 2004; Krawitz & Jackson, 2007; Miller & Davenport, 1996; refer to Chapter 1). Critically, they were not systematically controlled and lacked follow-up assessments. Furthermore, evidence reviewed in Chapter 2 indicates that providing staff with knowledge and skills may not be enough to bring about long term changes in staff and client related outcomes because these methods fail to address the importance of staff members' cognitions in relation to their work (Hayes et al., 2004). Thus, PETr is an appropriate, yet dissimilar approach to compare in a systematic evaluation with revised ACTr.

### 8.1.1 The Present Study

The present study was designed to evaluate whether a 2-day refined ACTr intervention was more effective than a more traditional, PE-based client-management training intervention (PETr) at undermining negative stigmatising attitudes in non-specialised mental health staff working with PD clients, and improving both staff and client outcomes. Additionally, it sought to determine whether changes in ACT-based processes would facilitate change in stigmatising attitudes, social distancing, the quality of the therapeutic relationship, and levels of burnout and psychological distress.

Although the revisions made to the ACT protocol in study 4 were beneficial, several additional content and process changes were made for use in the present study (see Method, 9.2). Essentially, some additional content changes were made further to minimise the risk that participants would experience psychological discomfort as a result of the training. The

primary process change involved increasing the emphasis on another core ACT process – values (see Chapter 2). Values are central to ACT and clarify what is important and meaningful to a person, what kind of person they want to be and what they want to stand for in their life (e.g., 'who would you like to be in the lives of your clients?'; Wilson & DuFrene, 2008). Acceptance and mindfulness processes pave the way for a more satisfying life by enabling a person to connect with their core values and overcome the obstacles that are likely to emerge whilst moving in a valued direction. Moving in the direction of what we value is referred to as *committed action* - a behaviour change process that involves setting and moving towards concrete goals consistent with ones' chosen values. Self as context, defusion, acceptance, present moment focus and connection with values are all processes which help to facilitate behaviour change (i.e., working as a committed professional; see Chapter 2).

Thus, there were three key distinctions between the two training approaches. First, ACTr was based on a third-wave CBT intervention, whereas PETr focused on a DH recommended educational model. Second, ACTr was almost entirely focused on *self-management* processes such as defusion, acceptance and committed action while PETr focused on providing precise information about PD clients. Finally, ACTr was mainly experiential and PETr mainly didactic.

Consistent with Study 3, because ACT directly targets self-processes, it was predicted that positive self-reported changes in psychological flexibility, the believability of stigmatising beliefs (i.e., fusion), and valued action[28] would be significantly greater for staff in the ACTr than for staff in the PETr. Furthermore, process changes in flexibility and believability were expected to facilitate changes in the outcome variables for staff receiving ACTr, not the PETr. Moreover, improvements in these processes for staff attending the ACTr were expected to facilitate a greater reduction in stigmatising attitudes, greater than that shown by staff receiving PETr.

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[28] Although emphasis was placed on values, the questionnaire used to assess this process was scored as a measure of committed action – a behaviour change process (see Method, 9.2). Therefore, values/committed action was viewed as an **outcome** variable, not a process of change, in the present study.

## 8.2 Method

### 8.2.1 Participants

Participants were members of the mental healthcare workforce who were in contact with clients with PDs or other complex needs during the course of their work. One hundred and eighteen participants volunteered to attend the workshops; 60 were randomly assigned to the ACT intervention and 58 to the CFT intervention (see Figure 8.1). Demographic details for participants who *attended* the training are shown in Table 8.1.
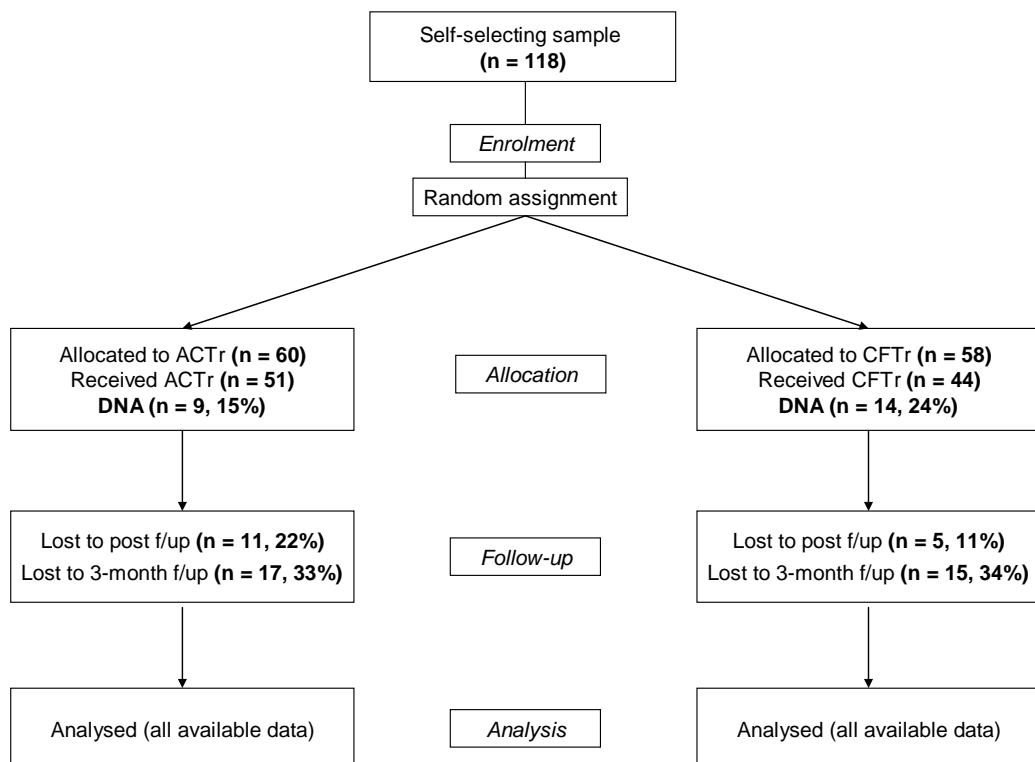


*Figure 8.1*. Number of Participants Randomised to Each Training Type and Selective Attrition at Each Stage of the Investigation

Table 8.1

*Demographic Characteristics of Staff by Training Group*

| Demographic | ACTr (n = 51) | | | CFTr (n = 44) | | |
|---|---|---|---|---|---|---|
| | n/ Mean | %/SD | Range | Mean | %/SD | Range |
| **Age (yrs)** | 41.63 | 8.30 | 24 – 57 | 37.72 | 8.63 | 24 - 59 |
| **Gender** | | | | | | |
| Male | 17 | 33 | | 11 | 25 | |
| Female | 30 | 59 | | 28 | 64 | |
| Undisclosed | 4 | 8 | | 5 | 11 | |
| **Relevant work experience (yrs)** | | | | | | |
| Mental Health | 12.40 | 7.93 | 1.5 – 30 | 10.95 | 8.97 | 0.5 – 33 |
| Personality Disorder | 8.58 | 6.39 | 0.5 – 29 | 9.28 | 7.93 | 0.5 - 28 |
| **Hours per week PD clients** | 15.56 | 14.10 | 1 – 50 | 16.30 | 14.63 | 0.5 – 37.5 |
| **Service** | | | | | | |
| Inpatient Psychiatric | 19 | 37 | | 18 | 41 | |
| Outpatient Psychiatric | 18 | 35 | | 18 | 41 | |
| Addiction Services | 2 | 4 | | 1 | 2 | |
| Psychological Therapies | 5 | 10 | | 0 | 0 | |
| Other | 7 | 14 | | 6 | 14 | |
| Undisclosed | 0 | 0 | | 1 | 2 | |

*8.2.2 Interventions*

*Acceptance and Commitment Training (ACTr).* For use in the present study, both content and process changes were made to the revised 2-day ACTr protocol used in Study 4 (see Appendix N).

Consistent with previous studies, the current protocol was developed by Prof. Clarke incorporating concepts from the book 'Mindfulness for Two' (Wilson & DuFrene, 2008). For example, because the term *stigma* was likely to have negative associations for participants, the emphasis of the current workshop was changed from stigma to *compassion* to minimise threat. Accordingly, the ACT analysis of stigma was replaced with an ACT model of psychopathology and the model's barriers to compassion. Thus, the link between psychopathology and compassion –both for the self and others (e.g., clients) – was strongly

emphasised to participants. Akin to Study 4, the training alternated between a focus on work and daily living. To relieve participants' personal responsibility for the occurrence of judgments and evaluations, the role of evolution was considered along with language and RFT. It was strongly emphasised that our capacity for evaluative judgment is a product of language, and thus our evolutionary inheritance. The need for a detailed understanding of RFT was, however, de-emphasised.

Further changes included a greater focus on the ACT Hexaflex – a model of the processes that contribute towards psychological rigidity (i.e., barriers to compassion; see Chapter 2, section 1.4). Exercises facilitated participants' understanding of the Hexaflex by enabling them to notice processes of automatic thinking and the paradox of control strategies. Furthermore, they were taught methods of reducing the impact and believability of difficult internal events, both in general and in relation to their work, through ACT processes such as, acceptance, mindfulness and cognitive defusion. Although the workshop still required participants to be in contact with difficult thoughts and feelings, like Study 4, these were anchored more in terms of daily living than in direct relation to their work. In addition, the current protocol was refined to include a greater, yet less exposing, focus on values, in particular the relationship between values and vulnerabilities (e.g., on the other side of what we are running from, is likely to be something that we long for).

Because previous studies had suggested some participants find ACT to be emotionally exposing, the experiential nature of the current workshop was modified to reduce social/peer pressure, and personal choice was *encouraged* throughout the workshop. Furthermore, the experiential and self-reflective nature of the workshop was made more explicit in the participant information sheet, which was sent to participants before they were required to confirm their attendance. Whilst retaining its experiential nature, the workshop involved fewer group exercises and discussions; instead, more pair work and imaginal, mindfulness and written activities were introduced.

*Psycho-educational Training (PETr).* The PE training was delivered by Dr Jon Boakes (J.B), a Consultant Clinical Psychologist with over 10-years experience of delivering PETr. The PETr workshop was developed from the NIMHE (2003) training guidelines: *The Personality Disorder Capabilities Framework.* The content and structure of the CFTr was designed to be notably different to the ACTr (and DBTr). The framework elements were selected by the research team, following discussions with J.B. In line with national policy, the workshop was designed to provide participants with a comprehensive understanding of the

diagnosis and treatment of personality disorders (see Appendix O). Unlike the ACTr, however, the PETr was more didactic in nature, delivered via lecture/presentation with several videos but only limited group/pair exercises and discussions.

Participants were introduced to the DH (2003) training guidelines for PD, which state the need for improvements in service delivery for clients with PD, based on better education about the disorder itself. They were required to consider the discrimination surrounding PDs and asked to rate its severity in comparison to other medical and mental health conditions such as schizophrenia and diabetes. They were taught about the assessment and classification of the 11 types of PD, including co-morbidity factors and prominent theoretical accounts (e.g., genetic factors, the biosocial theory etc.) The difficulties of working with PD clients were considered in small groups and subsequently discussed in plenary session. Although participants were required to reflect on their work related experiences, they were not asked to dwell on any personal discomfort that may arise as a result of working with PD clients. Instead they focussed on service limitations and issues such as staff shortages. Short videos produced by service users were used to explain their experiences of treatment and what they would like to receive as recipients of care. Participants were informed of evidence based treatments for PDs based on the NICE guidelines and taught about risk management and signs of relapse. Finally, legal and ethical issues were discussed (e.g., the Mental Health Act and diminished responsibility).

*8.2.3 Measures*

Consistent with previous chapters, stigmatising attitudes were assessed by the **APDQ**, social distancing by the **SDS**, the therapeutic relationship by the **HAQ**, burnout by the **MBI**, psychological distress by the **GHQ**, psychological flexibility by the **AAQ-II** and believability by the **BST-PDQ (14).** Novel measures are detailed below:

*Values/committed action.* The extent to which individuals take action in the most valued areas of their life was assessed using the Valued Living Questionnaire II (VLQ-II; Wilson, 2008). Not yet standardised, the VLQ-II is an  self-report measure that asks the following six questions about 10 areas of life that are valued by some people (e.g., work, family life, spirituality etc.):

- How possible is it that something meaningful could happen in this area of your life?
- How important is this area at this time in your life?

- How important is this area in your life as a whole?
- How much have you acted in the service of this area during the past week?
- How satisfied are you with your level of action in this area during the past week?
- How concerned are you that this area will not progress as you want?

Participants are required to rate their responses on a scale of 1 to 10, with higher scores reflecting a higher level of agreement with the question. In the present study the mean *overall importance* score for participants' top three rated areas of life and the mean *action* score for these three areas were calculated. The mean *action* score was then subtracted from the mean *overall importance* score to produce a mean difference score. Smaller differences are favourable indicating more committed action in valued areas of life.

*Social Desirability.* Social desirability was assessed using the shortened version of the Marlowe-Crowne Questionnaire[29] (MCQ; Marlowe-Crowne, 1964). The MCQ is an 8 item self-report questionnaire designed to measure an individual's tendency toward self-presentation to an external audience. Participants are required to respond to questions (e.g., "Are you quick to admit making a mistake") by agreeing, disagreeing or stating that they are unsure. Total scores range from 8 – 24, with higher scores reflecting a high tendency for self-presentation. The MCQ has been shown to have an acceptable level of internal consistency ($\alpha$ = .74; Greenwald & Satow, 1970).

*Credibility and Expectancy*. The Credibility and Expectancy Questionnaire (CEQ; Devilly & Borkovec, 2000) was used to determine whether participants had preconceived ideas about the training. Respondents are required to rate the extent to which they agree with questions relating to the credibility of the training (e.g., *At this point how logical does the training seem to you*) and their expectations of it (e.g., *at this point, how much do you feel that this workshop will help you to improve your ability to work with personality disordered people*). The questions are summed to produce a total score, with higher scores reflecting a greater level of preconceived ideas about the training.

*Training Satisfaction.* Participants' satisfaction with the training content and the trainer was assessed using two 5-point Likert scales (*not at all satisfied* to *extremely satisfied*).

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[29] The MCQ replaced the IMS used in Study 4 because it had 12 fewer items and good psychometric properties.

*8.2.4 Procedure*

The study was approved by both the School of Psychology Ethics Committee and the South West Hampshire Research Ethics Committee (B). Participants were recruited with the help of Dorset Healthcare NHS Foundation Trust's training department and a Consultant Clinical Psychologist (V.C) working for Hampshire Partnership NHS Trust.  Staff members were approached through directed internal email, via advertisements on the Dorset Trust training website and directly by V.C. Participation was voluntary. Prospective participants were required to contact the research team to express their interest in participating. Those who did were sent an information pack outlining the study in detail, the reasons behind it, and the requirements for taking part. They were informed that the study was designed to increase their understanding of personality disordered clients and the sorts of difficulties that emerge whilst working with this client group. Participants were randomly assigned to one of the two training conditions (one of two ACT workshops or one of two PET workshops). They were informed that by agreeing to take part that they were obligated to attend both training days and required to provide written consent before attending the training. Randomisation was achieved using a random number generator (see random.org for information).

Participants were assessed before the workshop (pre-intervention), within 1-week of completing the training (post-intervention) and at 3-month follow-up. The order of questionnaires was randomised for each participant using the Latin-Square technique. All questionnaire packs were posted to participants, and completed at a time and a place convenient to them. All measures were completed at all three stages.

As in previous studies, the ACT workshops were delivered by Professor Clarke. In the present study, she was assisted by her Ph.D student (G.T). The PET workshops were delivered by Dr Jon Boakes, who similarly, was assisted by G.T. The workshops conducted in Hampshire were carried out at the School of Psychology, University of Southampton; those in Dorset at the Training and Development Centre for DHFT. The workshops ran from 9.30 −5.00 with a 1-hour lunch break and two 20-minute coffee breaks (see Appendices J & K for timetables outlining both the ACT and PET workshops). The training was carried out over 2-consecutive days.

## 8.3 Results

*8.3.1 Missing Data and Analysis Strategy*

All participants completed all the pre-intervention measures with the exception of a few uncompleted questionnaires. The post- and follow-up packs were mailed to all participants, and returned post-intervention by 40 (78%) and 39 (79%) participants in the ACTr and CFTr groups respectively (refer to Figure 8.1)[30]. At 3-months, the corresponding figures were 34 (67%) and 29 (66%). As in Studies 3 and 4, the number of participants in each condition for the different measurement periods varied as a result of these drop-outs. In addition, participants occasionally failed to complete the questionnaire measures in full. To minimise further data loss, missing scores were replaced with the item mean for the sample when 10% or less of the questions in each measure were not completed. As a result of the loss of data and unequal numbers in each training group, a Linear Mixed Model was used to analyse the results (see Chapter 3). Thus, a factorial 2 (Group; ACTr or CFTr) x 3 (Time: pre-intervention, post-intervention and 3-month follow-up) LMM analysis was conducted for all key dependent variables.

Table 8.2 shows significant correlations between the sample demographics, social desirability and all test variables. A significant negative correlation was found between the duration of time participants had been working with PD clients and both levels of believability and the quality of the therapeutic relationship (Table 8.2). In addition, and in contrast to Study 4, results indicate significant correlations between the MCQ (i.e., social desirability) and a number of test variables. As a result, duration of time working with PD clients and the MCQ were entered as covariates in the main LMM analyses where relevant. T-tests on participant gender and all outcome and process measures showed no significant group differences at baseline. Furthermore, no between-group differences for participants' expectations of the training, as measured by the CEQ and satisfaction with the training were found.

*8.3.2 Effects on Stigma*

Descriptive statistics for stigmatising attitudes, as measured by the APDQ, are shown in Table 8.3. A LMM analysis indicated a significant main effect of time, $F(2, 64.87) = 6.18$, $p < .005$, but contrary to prediction, no significant Group x Time interaction was found. A priori

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[30] Data for five participants who attended the ACTr were omitted from the dataset because they all reported having attended previous ACT workshops.

pairwise comparisons indicated that attitudes towards PD clients improved significantly post-training for both groups, $p < .005$ and that these changes were maintained at 3-month follow-up, $p < .005$ (see Figure 8.2).

Table 8.2

*Correlations between Sample Demographics and all Test Variables*

|  | APDQ | HAQ-II | SDS | MBI | GHQ | AAQ-II | VLQ-II | BST-PDQ |
|---|---|---|---|---|---|---|---|---|
| Age | .11 | -.07 | .15 | -.05 | -.14 | .17 | .10 | .09 |
| Work experience - mental health (yrs) | .07 | .17 | .02 | .00 | -.07 | .18 | .13 | -.19 |
| Work experience – PD clients (yrs) | .10 | .23* | -.07 | .00 | -.10 | .13 | .14 | -.27* |
| No. PD clients currently working with | .11 | -.15 | .07 | -.06 | -.05 | .03 | -.12 | .03 |
| MCQ (social desirability) | .33** | .21* | -.03 | -.32** | -.30** | .37** | -.10 | -.07 |

*Note.* ** = p < .01, * = p <. 05.
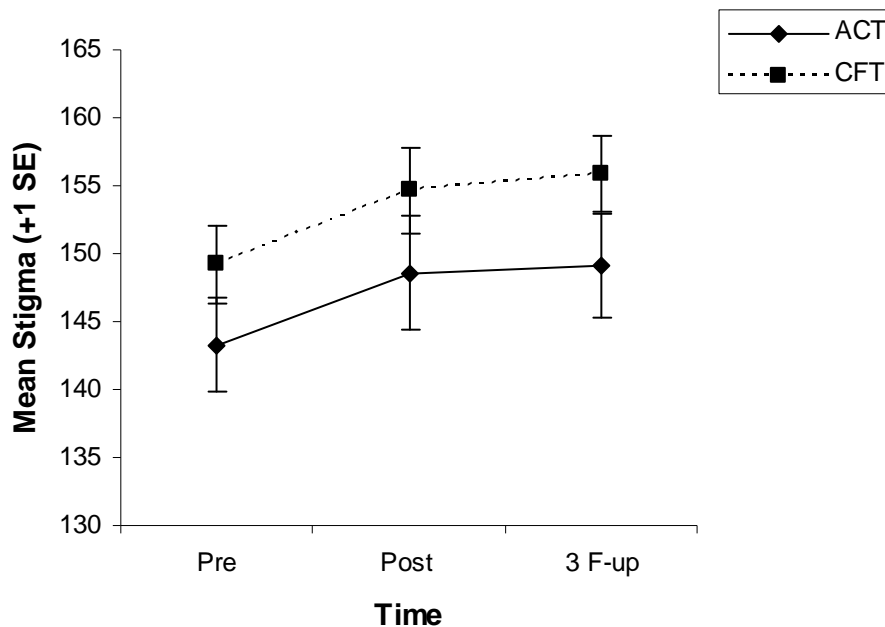


*Note.* Increase in score represents an **improvement** in attitudes towards PD clients.

*Figure 8.2.* Mean Stigma Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups

*8.3.3 Effects on Staff Outcomes*

Descriptive statistics for burnout, psychological distress and committed action, as measured by the MBI, GHQ and VLQ-II respectively, are shown in Table 8.2. Contrary to prediction, a LMM analysis did not show a significant main effect of time or a significant Group x Time interaction on MBI scores (Table 8.3).

Contrary to prediction, A LMM analysis showed no significant main effect of time but revealed a significant Time x Group interaction on GHQ scores, $F(2, 60) = 4.00$, $p < .05$. Examination of the mean scores and a priori, pairwise comparisons indicated that at 3-month follow-up, participants in the CFTr group had significantly lower levels of psychological distress compared with those in the ACTr group (see Table 8.3 & Figure 8.3).
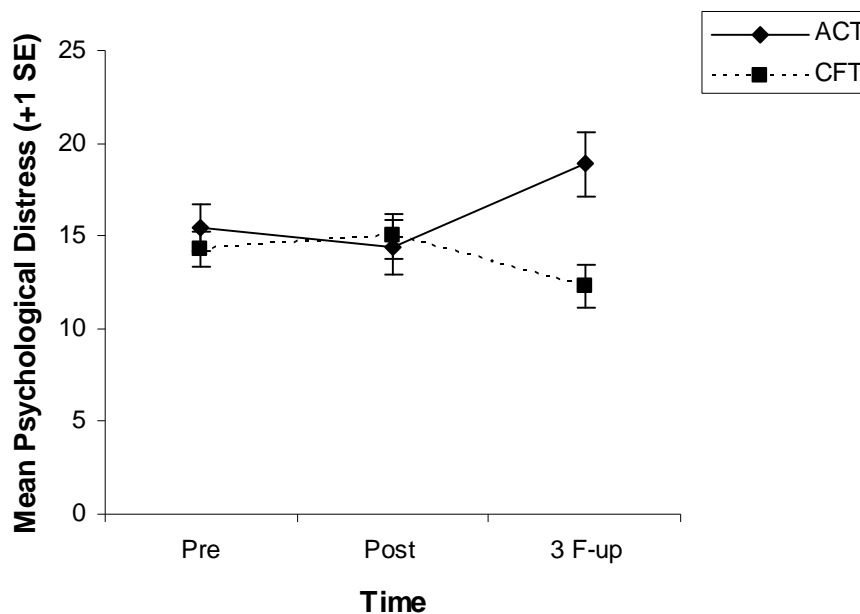


*Figure 8.3*. Mean Psychological Distress Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Each Training Group

A LMM analysis revealed a significant main effect of time on VLQ-II scores, $F(2, 62.44) = 6.33$, $p < .005$, and significant Group x Time interaction, $F(2, 63.21) = 4.28$, $p < .05$. Pairwise comparisons indicated that participants in the ACTr group were acting in ways more consistent with their values at both post-intervention and follow up ($p = .001$ & $p = .02$ respectively), compared with participants in the CFTr group (see Figure 8.4). Despite these

changes, formal mediation analyses with outcome variables could not be conducted because changes in both occurred at the same assessment period.

Table 8.3

*Descriptive Statistics for all Test Variables*

|  | ACTr *(M, SD)* | | | CFTr *(M, SD)* | | |
|---|---|---|---|---|---|---|
|  | Pre | Post | 3 f/up | Pre | Post | 3 f/up |
| APDQ | 143.29 | 148.59 | 149.07 | 149.21 | 154.64 | 155.93 |
|  | 23 | 25 | 21 | 19 | 20 | 15 |
| HAQ-II | 80.05 | 82.31 | 84.47 | 79.13 | 83.89 | 84.55 |
|  | 12 | 12 | 11 | 12 | 10 | 11 |
| SDS | 11.38 | 10.40 | 10.84 | 10.96 | 10.59 | 11.70 |
|  | 4 | 4 | 4 | 4 | 4 | 5 |
| MBI | 19.92 | 20.17 | 20.23 | 15.92 | 17.13 | 18.61 |
|  | 12 | 14 | 10 | 20 | 11 | 11 |
| GHQ | 15.41 | 14.41 | 18.88 | 14.24 | 15.00 | 12.27 |
|  | 8 | 8 | 9 | 6 | 7 | 6 |
| AAQ-II | 54.58 | 54.32 | 55.25 | 54.52 | 57.45 | 56.03 |
|  | 7 | 9 | 8 | 9 | 7 | 8 |
| VLQ-II | 2.14 | .99 | 1.19 | 2.00 | 1.97 | 1.93 |
|  | 2 | 1 | 1 | 2 | 2 | 2 |
| BST-PDQ | 34.19 | 30.91 | 32.30 | 32.07 | 27.38 | 29.31 |
|  | 14 | 14 | 14 | 12 | 9 | 11 |
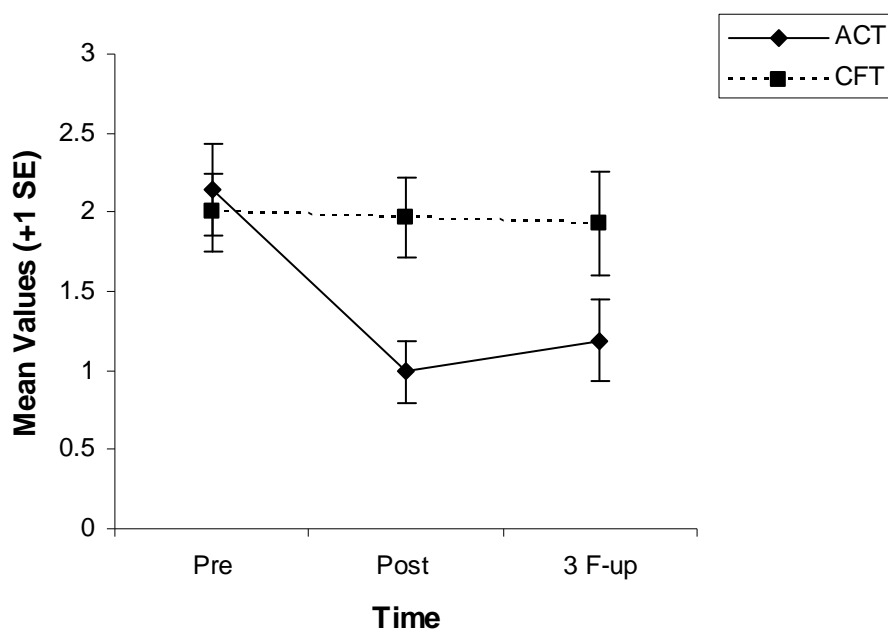
*Figure 8.4*. Mean Valued Action Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Each Training Group

### 8.3.4 Effects on Client Outcomes

Descriptive statistics for the therapeutic relationship and levels of distancing, as measured by the HAQ and SDS respectively, are shown in Table 8.3. A LMM analysis indicated a significant main effect of time for HAQ, $F(2, 62.02) = 7.30$, $p < .005$, but contrary to prediction, no significant Group x Time interaction was found. Pairwise comparisons indicated that the quality of the therapeutic relationship improved significantly post-training for both groups, $p < .005$, and that these changes were maintained at 3-month follow-up, $p < .005$ (see Figure 8.5).

A LMM analysis indicated a significant main effect of time for SDS, $F(2, 59.63) = 3.25$, $p < .05$, but contrary to prediction, no significant Group x Time interaction was found. Pairwise comparisons indicated that levels of distancing towards individuals with a PD significantly decreased post-training for both groups, $p < .001$, however, these changes were not maintained at 3-month follow-up (see Figure 8.6).
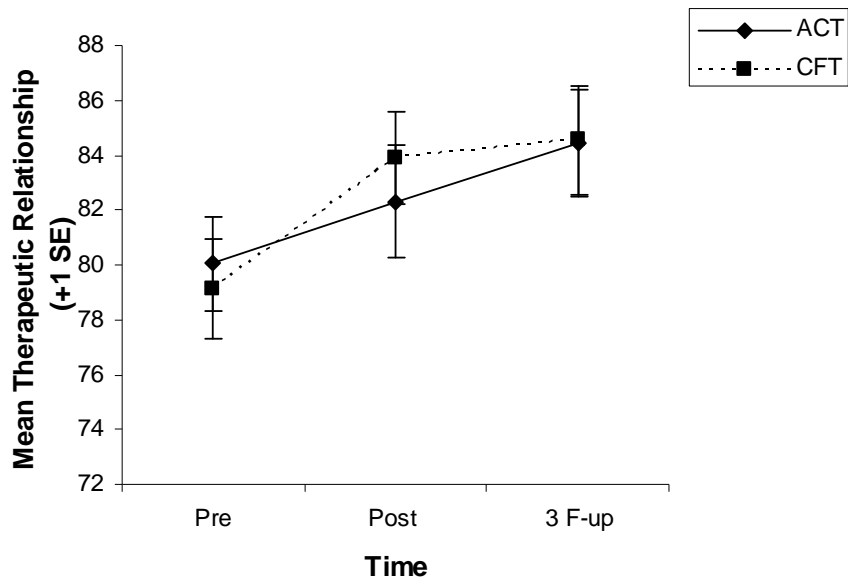
*Figure 8.5*. Mean Therapeutic relationship Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups
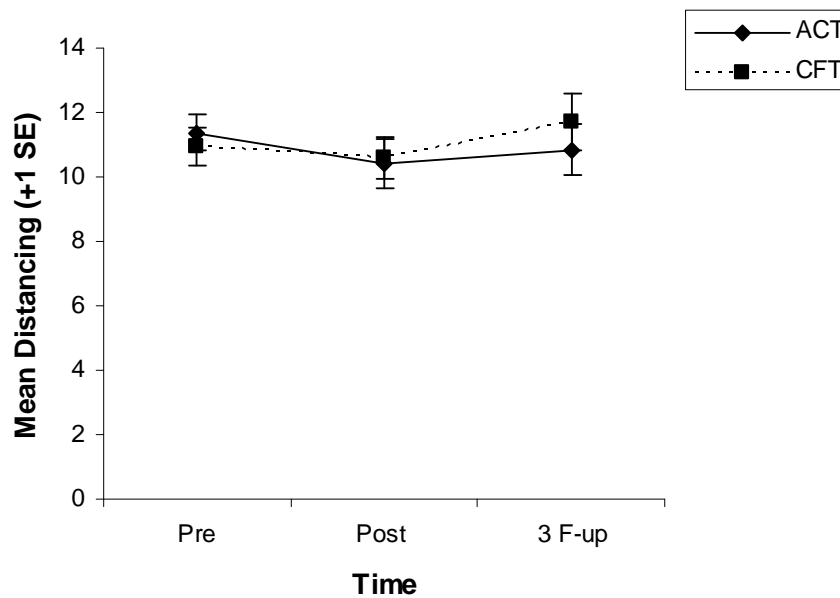


*Figure 8.6*. Mean Distancing Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups.

*8.3.5 Process Analysis*

Descriptive statistics for psychological flexibility and believability as measured by the AAQ-II and BST-PDQ (14) are shown in Table 8.3. Contrary to prediction, a LMM analysis did not show a significant main effect of time or a significant Group x Time interaction on AAQ-II scores. Examination of the mean scores indicated a greater post-intervention improvement for the CFTr group, although this was not significant (see Table 8.3).

It was predicted that a pre-post improvement in psychological flexibility would mediate outcome change in follow-up levels of burnout and psychological distress. Given that no pre-post improvement was found, the criteria for mediation analyses were not met.

A LMM revealed a significant main effect of time on BST-PDQ scores, $F(2, 63.21) =$ 7.59, $p < .005$, however, contrary to prediction no significant Group x Time interaction was found. Pairwise comparisons indicated that levels of believability significantly decreased from pre-intervention to post, $p < .001$ but this improvement was not maintained at 3-month follow-up (see Table 8.3 and Figure 8.7).

It was predicted that a pre-post improvement in fusion would mediate outcome change in follow-up levels of the quality of the therapeutic relationships and social distancing. Despite, significant changes in these client-outcome variables at follow-up, the pre-post improvement in levels of fusion was not maintained at follow-up. Furthermore, because improvements in the therapeutic relationship and distancing were observed post-intervention, it can not be determined whether changes in this process variable preceded changes in the outcome variables. Thus, the criteria for mediation analyses were not met.
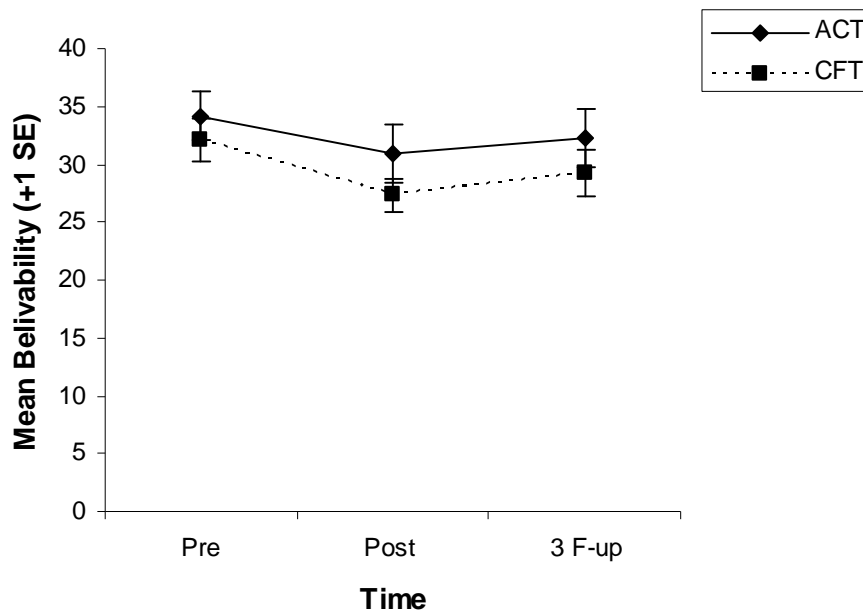
*Figure 8.7*. Mean Believability Scores with One Standard Error at Pre-intervention, Post-intervention and Follow-up for Both Training Groups

## 8.4. Discussion

The overarching goal of Study 5 was to evaluate whether a 2-day refined ACT-based self-management training intervention (ACTr) was more effective than a more traditional, PE-based client-management training intervention (PETr) at undermining negative stigmatising attitudes in non-specialised mental health staff working with PD clients, and improving both staff and client outcomes. As such, this was the first controlled study systematically to examine the effectiveness of these two disparate training approaches for staff working with this client group.

The primary finding of the present study was that both 2-day ACTr and 2-day PETr were associated with significant reductions in mental health stigma towards clients with PDs. Furthermore, these gains were maintained after 3-months. Moreover, significant improvements occurred in staff's perceptions of their therapeutic relationships with PD clients, and these gains were also maintained after 3-months. Additionally, a significant reduction was seen in staff's levels of distancing towards clients following the intervention although, unfortunately, this improvement was not maintained at 3-months. Contrary to prediction, there

were no significant group x time interactions, indicating that ACTr could not be differentiated from PETr in significantly reducing stigmatising attitudes and improving staff-client relationships.

In spite of the positive changes just described, no significant changes in staffs' levels of burnout were observed for either group. Although this finding is disappointing, unlike Study 3, no post-intervention increase in burnout was observed for participants in the ACTr, which suggests that the softening of the current protocol may have been effective. In contrast, however, an unexpected increase in levels of psychological distress for participants in the ACTr, but not the PETr group, was observed 3-months following the training. Given the established relationship between burnout and psychological distress (e.g., Study 2), the inconsistent results for these variables was not anticipated.

The present study included an additional measure designed to evaluate the extent to which individuals take action towards three areas of their life that they value most highly (i.e., valued action). Consistent with prediction, a significant time x group interaction was revealed, indicating that staff who attended the ACT training acted in ways more consistent with their values following the training compared to staff who attended the PETr. Critically, these changes were maintained 3-months following the training. To recap, the goal of ACT interventions is to help people identify what is important to them (i.e. valued goals) and make commitments to moving towards them, irrespective of any internal experiences (e.g. thoughts, beliefs etc.,) to the contrary (See Chapter 2). In that sense, it may be considered that the ACTr protocol successfully fulfilled its main objective. Valued action is facilitated by core ACT processes, and although no changes were observed in participants' flexibility scores (see below), data indicates that they were a psychologically flexible sample prior to the study, which could explain their responsiveness to this behaviour change process.

Overall, despite reductions in mental health stigma towards clients with PDs and improvements in staff-client relationships neither ACTr nor DBTr were successful at improving staff wellbeing. In fact, ACTr was shown to significantly increase participants' levels of distress 3-months following the training. Nonetheless, significant improvements in committed action were observed for the ACTr, but not the PETr. Further possible interpretations of these findings, along with the main limitations of this study will be considered in some detail later in this discussion.

Several findings for the process variables were not consistent with the specified predictions, although the overall picture was more positive than that seen in Study 3.

Regrettably, no significant improvements in levels of psychological flexibility were found for either group. Although this finding was unexpected, unlike Study 3, the unwanted post-intervention decline observed in flexibility scores for participants who attended the ACTr was not replicated, which again, points to the possibility that the refinements made to the original ACT protocol were effective. Disappointingly, the pre-post improvement trend observed in flexibility seen in Study 4 was not replicated in the present study. It was anticipated that a significant effect would have been determined if a larger sample had been used in Study 4. This disparity could be attributed to the additional refinements made to the protocol for use in the present study, or alternatively, could reflect a sampling problem. This assertion will be considered in some detail in Section 8.4.2.

Contrary to prediction, no significant group x time interaction was found for levels of believability, however, a significant pre – post improvement was found for both groups. These findings were not maintained at follow-up. Consistent with Study 3, preliminary benefits were observed for both conditions although only the ACT protocol focused on defusion strategies. Bearing in mind that the PETr did not make any reference to psychological processes, the benefits seen can not be attributed to similarities between the interventions. This may suggest a problem with the validity of the BST-PDQ (14; Study 1) questionnaire, or a non-specific factor common to both interventions. This limitation, along with recommendations for future research will be considered in more detail shortly.

In sum, despite some positive effects, several findings are not consistent with the specified predictions. First, the groups could not be differentiated on stigma and client-outcome variables. Second, no beneficial changes in staff wellbeing were observed for either group. In fact, pre-follow-up changes in levels of psychological distress for participants in the ACT, but not the PET group were counter-therapeutic. Third, the study was unable to determine the mechanisms through which ACT staff training may operate. The remainder of this discussion considers why these results occurred, taking into account some of the critical limitations of the study. Suggestions for future research are provided.

### 8.4.1 Limitations and Directions for Future Research

The study has six main limitations that could, alone or in combination, account for why the findings are not consistent with the specified predictions. First, and most critically, the fact that ACTr was no more effective than PETr at reducing negative stigmatising attitudes, improving client related outcomes and improving ACT process variables raises significant

problems of interpretation. The most plausible explanation, albeit undesirable, may be that ACT is no more efficacious than PET as a staff stigma training intervention. Nonetheless, because the results of this study offer tentative support for the effectiveness of both self-management and education-based training in reducing stigma, a complementary approach (i.e., training providing both self-management skills and education) could be evaluated against another control. These approaches could provide more conclusive evidence about the role of ACTr and PETr in reducing levels of staff stigma and improving client outcomes.

Second, issues relating to the administration of self-report measures contributed to weaknesses in the present study. Most critically, the BST-PDQ (14) may not have been measuring staffs' levels of cognitive fusion but an alternative construct that was coincidentally impacted by *both* training interventions. The BST-PDQ (14) was designed to measure the extent to which individuals *believe* negative stigmatising cognitions about clients with a PD, and was based on a measure designed by Hayes et al., (2004). In accordance with Hayes et al., this construct was termed *cognitive fusion* in the present investigation. In ACT theory (as opposed to research), however, the concept of cognitive fusion is defined more broadly (See Chapter 2.1.2), which indicates that there may be a discrepancy between the theoretical understanding of the construct and the way it is characterised in measurement instruments (e.g., Hayes et al., 2004; Masuda et al., 2009). If this is the case, it is possible that the revised ACT protocol did successfully address cognitive fusion but the measure used to assess changes in this construct may have lacked content validity. Thus, in order to determine a more thorough understanding of fusion and how it relates to other variables, a more encompassing measure of this construct needs to be developed for use in future research.

Third, although the emphasis of the current ACT workshop was changed from stigma to compassion, a questionnaire designed to measure this construct was not included in the present study. Compassion has been defined as the ability to be; *"open to the suffering of self and others in a non-defensive and non-judgmental way"* (Gilbert, 2005, p.1). Because ACT encourages individuals to experience internal events fully and without defence, it is likely that improvements in levels of compassion would be observed for staff in the ACTr group, but not for those in the PETr. Given that certain components of compassion, such as empathy, are linked to the quality of therapeutic relationships (Mercer & Reynolds, 2002), it would have been worthwhile to have included an assessment of compassion. Finally, participants in the present study were shown to have a social desirability bias, which raises some concerns about the validity of the findings. Thus, the use of more objective assessment methods in future

investigations (e.g., client data; staff absenteeism) would provide a way to authenticate staffs' self-report.

Fourth, a number of sampling issues have restricted the efficacy of the current investigation. First, the use of a non-specialist staff population in the present study following the application of the revised protocol to a specialist staff group in Study 4 raises considerable problems of interpretation. For instance, the marginal improvements observed in Study 4 for levels of flexibility were not replicated here, and this discrepancy may have been a result of the differing sample characteristics or the additional refinements made to the ACT protocol. If the sample difference was critical, it suggests that if ACTr is to be effective, participants require some prior knowledge of psychological models, or at least some experience of thinking psychologically. This point will be considered in some detail in the General Discussion.

An alternative explanation for these unexpected results, again relates to sampling difficulties. Comparisons of the mean scores across Studies, 3, 4 and 5 indicate that levels of flexibility for the specialist staff sample in Study 4 were in the normal range, while non-specialist staffs' levels of flexibility were comparable and considerably higher than average (Studies 3 & 5 – present study; c.f. Bond et al., submitted manuscript). These differences could account for why only participants in Study 4 – staff with lower levels of flexibility – made a pre-post improvement on the AAQ-II. In a previous comparative evaluation, Masuda et al., (2007) indicated that education-based training was successful in reducing stigmatising attitudes but only among participants who were already flexible and non-avoidant. In contrast, ACT-based training was successful in reducing stigma regardless of the participants' pre-intervention level of flexibility. Given that participants in the present study were particularly flexible prior to the intervention; these results could reflect a floor effect. Nonetheless, it is important to consider that in the present study high levels of flexibility correlated with a higher tendency for self-presentation (i.e., participants were providing socially desirable responses). Thus, despite controlling for this bias in the analyses, the accuracy of the AAQ-II data is uncertain. Future studies are required to test these assertions.

Fifth, the study had several notable methodological weaknesses. First, although participants were randomly allocated to condition, they knew to which condition they had been assigned. This prior knowledge could explain why participant attrition prior to the workshop was significantly higher for participants allocated to the PETr. This attrition could have resulted in selection biases with unknown impact. Although, attrition rates at follow-up

were comparable across the training groups (e.g., approximately 33%), this substantial loss in sample size resulted in a reduction of statistical power. As a result, the numbers at follow-up were sufficient only to detect a large effect size (Cohen, 1988) so more subtle between-group differences may have been missed. Additionally, because it was not possible to ensure that staff members from the same work setting were assigned to different conditions, cross-contamination could not be controlled. In sum, these methodological issues need to be addressed before it can be determined whether either training method has specific effects in the area of stigma and staff and client wellbeing.

Finally, an unexpected increase in levels of psychological distress was observed for staff that attended the ACTr, but not the PETr, 3-months following the training. This finding is not consistent with the results of Study 4, which showed a significant reduction in clinicians' levels of distress 3-months following the training. Once again, the cause of this discrepancy can not be determined because it could relate to the varying sample characteristics, or the additional refinements made to the ACT protocol. Nevertheless, reductions in distress were found in Study 4, which indicates that staff wellbeing can be impacted by self-management training interventions.

### 8.4.2 Conclusions

Regardless of its limitations, this study has provided some new insights for stigma reduction in the area of PDs. Most critically, it provided additional evidence to suggest that ACT-based self-management training can produce significant and sustained changes in staff stigma, client-related outcomes and committed action. Previous studies that have investigated the effectiveness of education and skills based training in reducing stigma towards PD clients (e.g. Krawitz, 2004; Hazelton et al., 2006; Perseius et al., 2004 & Perseius et al., 2007), had no control groups. As such, the effectiveness of education and skills based training for PD staff remained unknown. The present, RCT, however, has provided some tentative evidence that providing staff with education-based training can produce significant and sustained improvements in their attitudes towards PD clients. Furthermore, in view of the current interest and investment in PETr for staff working with clients with mental health difficulties (e.g., Time to Change, 2009) the fact that ACTr was indistinguishable from it shows promise if the results are sustained when the methodological problems have been solved. Critically, the mechanisms of change underlying the improvements observed in participants' attitudes require

further investigation. Finally, further consideration needs to be given to the impact of training on staff wellbeing.

In conclusion, these findings suggest that ACT-based self-management training interventions may be an effective way to improve staff attitudes and therapeutic relationships. Furthermore, they indicate that the development and evaluation of a training programme which combines both ACT-based training with education-based interventions warrants consideration.

**CHAPTER IX**

**General Discussion**

Individuals with complex psychological disorders, such as BPD, are often stigmatised, not only by the general public but by mental health professionals responsible for their care. Professionals' judgmental attitudes and stigmatising actions harm not only their patients – who drop out early from treatment, or experience poorer outcomes – but also the staff themselves (e.g., psychological distress and burnout; Hayes et al., 2004; Masuda et al, 2008). Despite a lack of data from systematically controlled evaluations, the delivery of education or skills-based training for staff working with clients with a PD, are the favoured approaches for the amelioration of stigma (e.g., Hazelton & Rossiter, 2007; Krawitz, 2004;).

Recently, a new line of reasoning based on the principles of ACT has provided an alternative conceptualisation. This asserts that stigmatisation may occur as a result of the difficult thoughts and feelings occasioned in staff by difficult client groups and the self-protective strategies that staff use to manage them (e.g., Hayes et al., 2004). Indeed, preliminary evidence indicates that ACT-based interventions designed to undermine the avoidance of, and entanglement with, negatively evaluated cognitions are helpful in reducing the impact of stigma and improving the psychological wellbeing of the stigmatising person (Hayes et al., 2004; Masuda et al., 2009). To date, however, no research has investigated the efficacy of this new self-management approach for a staff population working with PD – a particularly complex and intransigent mental health problem. Thus, the overarching aim of this thesis was twofold: first, I attempted to model the relationships between stigmatising attitudes, core ACT processes, and client and staff outcome variables and second, I evaluated the effectiveness of ACT-based training interventions in comparison with other more conventional approaches for staff working with clients with a PD. In this chapter, I summarise and integrate the findings of the present studies and place them in the context of literature regarding ACT and staff training interventions for staff working with PDs. Next, I consider the possible implications of my findings. I conclude by discussing broad directions for future research.

## 9.1 Main Findings

Study 1 determined the psychometric properties of the BSTQ-PD, a questionnaire developed to measure the 'believability of stigmatising thoughts' (i.e., fusion) towards clients with PD. ACT theorists suggest that the extent to which individuals believe their thoughts to be true can influence the way they behave, even when that means behaving in ways that are inconsistent with their work-related values. Despite it being a core ACT process, a psychometrically robust measure of believability of stigmatising thoughts was not available prior to my research. Thus, the validation of the BSTQ-PD makes a unique contribution to the ACT literature base and permits further investigation of this process in the current research programme.

Study 2 identified two functionally important paths of mental health stigma. Path one indicates that psychological inflexibility fully mediates the relationship between stigma and intrapersonal outcomes (e.g., burnout and psychological distress for staff). Path two indicates that believability partially mediates the relationship between stigma and interpersonal outcomes (e.g., the quality of the therapeutic relationship and distancing towards PD clients). Critically, this study identified that stigma amongst PD staff does have negative implications both for them and their clients, and these outcomes are associated with two core processes, inflexibility and believability (i.e., fusion). This novel, ACT-consistent model of staff stigma, in conjunction with previous research (e.g., Hayes et al., 2004; Lillis & Hayes, 2007; Masuda et al., 2007; 2009), offered some new insights into staff stigma towards clients with a PD, and ample justification for attempting to ameliorate it using an ACT-based training intervention.

Study 3 provided a novel, comparative evaluation of ACT-based self-management training (ACTr) and Dialectical Behaviour Training (DBTr) in client management for 100 non-specialist mental health staff working with clients with PD. Results indicated that both ACTr and DBTr significantly improved staff attitudes, staff reports of the quality of their therapeutic relationships and their willingness to be in contact with clients. These findings were maintained at 6-month follow-up. In sum, these results indicate that ACTr matched DBTr – a leading intervention for PD clients – in reducing stigma and improving client-related outcomes. Despite these findings, the changes observed in the process and intrapersonal outcome variables were not consistent with the specified predictions: essentially, no long-term improvements were seen for either group. Furthermore, an unexpected pre-post decline was observed in levels of flexibility and burnout for participants in the ACT, but not the DBT

group. These findings suggested that the ACT protocol required extensive refinement prior to its use in future research.

To obtain richer, more detailed information about staff members' experiences of, and any changes following the ACTr and DBTr workshops, follow-up qualitative interviews with 14 staff who attended these workshops were conducted (Appendix L). The interviews indicated that more subtle group differences, undetected by the psychometric measures did differentiate the groups. Furthermore, the results showed that some participants in the ACT group may have experienced the training to be emotionally exposing. Although participants believed these experiences to be necessary and worthwhile in terms of their personal development, they expressed concern for other attendees. Perhaps because the latter opted not to take part in the interviews, there were few first person reports of difficulty with ACT procedures.

Based on the findings of Study 3 and Appendix L, substantial refinements were made to the original ACT training protocol. Most critically, the experiential nature of the workshop was softened, and the focus on stigma reduced. In Study 4, these revisions were piloted on an opportunistic sample of 25 clinical psychologists and trainees. Because the data strongly suggested that the protocol changes had been beneficial, they were incorporated in Study 4, along with further refinements to the ACT protocol and RCT methodology used in Study 3. Study 5 compared revised ACTr with the leading staff training intervention recommended by National Policy for staff working with clients with a PD – psycho-educational training (PETr). Participants were non-specialist mental health staff working with clients with PD. Contrary to expectation, despite positive and sustained changes in levels of stigma and client outcomes, ACTr and PETr could not be differentiated. Additionally, the results for the staff-outcome variables were inconsistent. More specifically, a pre-post reduction in believability was found for both groups but no changes in flexibility were seen in either group. Finally, a significant and sustained, time x group interaction, in favour of ACT, was found for valued action. Thus, despite some benefits and marginal progress in relation to the first RCT, the general absence of differential group effects was disappointingly inconsistent with ACT theory.

This thesis aimed both to develop an ACT-consistent model of staff adjustment and to determine the effectiveness of model-based ACT staff training. Although an ACT consistent model of staff stigma was produced in the theory-building phase of this research, the relationships observed cross-sectionally were not reflected in the outcome of intervention during the follow-up period. Indeed, the processes believed to underpin changes in the client

and staff-outcome variables for participants in the ACT group were not seen in terms of relevant changes in the process variables. Furthermore, at times, processes thought to be specific to ACT were inadvertently influenced by *both* skills-based and education training. Moreover, although ACTr produced some sustained improvements in stigmatising attitudes and client-outcomes, it could not be differentiated from conventional skills-based or educational training. Similarly, in contrast with ACT theory and emerging empirical data, ACTr did not impact positively staff's levels of psychological distress or burnout. Thus, despite some advancement in the understanding of staff stigma towards clients with a PD, the research programme did produce some unexpected results that were not consistent with ACT theory and previously published empirical data. For this reason, the suitability of ACT-based interventions for staff populations will be reassessed in Section 9.2. First, however, the main strengths and limitations of the programme of research as a whole will be considered.

### 9.1.1 Strengths

Overall, the current research programme has a number of notable strengths. First, several gaps in the client stigma and staff training literature were identified and a novel approach, based on firm theoretical principles, was employed to develop knowledge in these areas. Second, the multi-method, programmatic approach (e.g., experimental and non-experimental [cross-sectional, qualitative] designs) permitted a comprehensive and systematic investigation of the primary research questions. Third, in spite of the associated sampling restrictions, the research programme overcame a number of practical obstacles to ensure its exclusive focus on NHS staff samples. Fourth, the use of advanced and diverse statistical procedures allowed the specified research questions to be tackled in light of recent developments in research methods. Finally, the topic of the thesis was of high social relevance and offered the opportunity to make a contribution to an area of real importance for NHS services.

### 9.1.2 Limitations

The aforementioned strengths must be placed against some notable weaknesses. First, despite recommendations for the evaluation of novel treatments, the current investigation did not use a stage-based approach, instead relying on previously published evidence as the basis for the first RCT. As a result, an untested ACT protocol – with several unknown implications – was used. This omission could have been avoided by beginning the applied phase of the

investigation with a small scale, uncontrolled investigation. Second, as a result of time and sampling constraints, participants' data were used for both the theory testing and applied phases of the research programme. This repeatability restricts the generalisability of the findings. A third limitation of this programme of research was its reliance on self-report measures. Although the use of questionnaires is defendable from both a resource and ethical perspective, self-assessments are subject to inaccuracies as a result of confounds, such as demand and self-presentation biases. Although several efforts (e.g., the inclusion of a social-desirability questionnaire, private and anonymous completion, counterbalancing) were introduced in an attempt to promote accuracy, the use of more objective outcome measures, such as client and staff absenteeism data, could provide more precise information. Fourth, the integrity of the training conditions remains uncertain because formal adherence ratings were not carried out. Finally, the use of a specialist population, in conjunction with high levels of selective attrition, resulted in unexpectedly small sample sizes at the follow-up assessment periods. This may have resulted in more subtle changes being missed.

## 9.2 The Suitability of ACT-based Interventions for Staff Populations

Having reviewed the main findings of this thesis, I believe it is necessary to reconsider the appropriateness of ACT-based training interventions for staff. With these findings in mind, I will re-evaluate the empirical data and theoretical claims on which the thesis was based, and assess whether—in hindsight—they were overly optimistic. The consideration of this evidence, in conjunction with the findings from the current programme of research will enable me to reach a conclusion as to whether there is sufficient evidence to support the application of ACT-based interventions for staff working with clients with a PD.

### 9.2.1 Previous ACT research

ACT is a psychotherapeutic intervention that uses mindfulness and acceptance processes, in conjunction with commitment and behaviour change processes, to establish psychological flexibility in individuals experiencing psychological difficulties (Hayes, Strosahl and Wilson, 1999). Despite being a relatively new psychological intervention, a number of clinical trials have indicated that ACT is successful in improving a broad range of *clinical problems* including, depression, anxiety, psychosis, addictions, obsessive compulsive disorder and chronic pain (see Hayes et al., 2006 for a review). Furthermore, a robust evidence base including data from over 30 RCTs, indicates that ACT-based clinical interventions are

more successful than other treatment alternatives (e.g., CBT, TAU) in relieving psychological distress (Hayes et al., 2006). This evidence base offers firm support for the application of ACT-based interventions for clinical populations and this must, in part, have motivated the originators of ACT, particularly Dr Steven Hayes, to broaden the use of ACT-based interventions to non-clinical populations. As discussed in Chapter 2, ACT is based on RFT – an experimental analysis of human language and cognition – and asserts that human psychological problems are driven by the process of internal dialogues and are therefore a product of having language. Because language is universal, it is in fact plausible that other, non-clinical difficulties could also be improved by ACT interventions. It is this line of reasoning that led theorists to provide an ACT conceptualisation of stigma and assess its impact as a non-clinical intervention.

The single ACT-stigma trial with a staff sample (Hayes et al., 2004), compared 1-day ACT-based training (ACTr) with psycho-educational (PETr) and multicultural training (MCTr), for a sample of 90 counsellors working with clients with substance misuse issues. To recap, the results favoured ACT, with levels of fusion, stigma and burnout significantly reducing post-intervention and these improvements were generally maintained 3-months later. Additionally, regression analyses identified cognitive fusion as a mediator of ACTr's impact on stigma and burnout. Comparable post-intervention benefits in levels of fusion, stigma and burnout were found for the MCTr active-control group, but these effects were not maintained at follow-up. No significant changes were observed for the PET control group. Although these findings appear to be consistent with ACT theory, a number of issues that were previously less salient have become more important in light of the present findings. First, the integration of these findings with those from Studies 3 and 5 of the current research programme, indicate that both ACTr and the active control interventions significantly reduced levels of fusion/believability following the training. Given that only the ACT interventions specifically targeted this process, this pattern is not entirely consistent with theoretical assertions. It suggests that either the measures used to assess this construct lacked validity, or the processes of change through which ACT is predicted to operate may not be exclusive to it. These possibilities could explain the inconsistent process findings and will be considered below.

The BST-PDQ designed for use in the current investigation was based on the measure used by Hayes et al., (2004) and was similarly considered to be a measure of cognitive fusion. In the more recent ACT literature, however, the concept of cognitive fusion is described more broadly (See Chapter 2.1.2), suggesting that the believability of cognitions is only one aspect

of a broader construct. This implies that there may be a discrepancy between the theoretical understanding of the construct and the way it has been characterised by the measurement instruments used in this and earlier studies (e.g., Hayes et al., 2004; Masuda et al., 2009). It is therefore possible that these measures did not accurately sample the core ACT process of fusion, instead indexing the outcome of a process that was sensitive to both forms of training. Alternatively, the processes of change through which ACT is predicted to operate, may not be exclusive to the ACT model, at least for non-clinical applications.

Thus, despite its significance for clinical interventions, it is possible that the ACT model of psychopathology may suggest an overly simplistic approach for non-clinical interventions, at least in its current form. This could explain why in Study 2, psychological fusion was merely identified as a *partial* mediator of the relationships between stigma and client outcomes. This raises the possibility that other untested variables may be critical in understanding the ways in which ACT interventions operate for non-clinical problems, such as professional stigma.

A similar picture has emerged for psychological flexibility. Despite its significance in clinical interventions, no coherent changes in this integral ACT process were found in the controlled studies in the current investigation. Moreover, Hayes and his colleagues have reported an as yet unpublished replication study of the original Hayes et al. (2004) RCT on stigma in mental health workers (Hayes et al., 2009). Like Studies 3 and 5, this research was similarly unable to find differential group effects in levels of psychological flexibility in a staff sample.

As a whole, these findings suggest that in its current form, the ACT model of psychopathology can not be extended for use with clinical staff populations. As such, future research with staff populations should be conducted with caution.

A closer examination of Hayes et al.'s (2004) findings also reveals a number of previously overlooked but, in hindsight, important methodological issues. For example, when examining the mediating role of fusion in stigma and burnout outcomes, Hayes et al. compared both ACTr and MCTr with the control condition but not with each other. As a result, it remains unclear whether the mediating effects of fusion on outcomes could be differentiated between the ACTr and active control condition. Furthermore, against the recommendations of Kraemer et al. (2002), mediation analyses were conducted regardless of the fact that it was impossible to determine whether changes in fusion preceded changes in stigma or burnout. Although Hayes et al.'s believability outcomes were more enduring than

those seen in Studies 3 and 6 of the current investigation, the psychometric properties of their measure had not been established. It is therefore possible that the believability data produced by the validated BST-PDQ in the current investigation were more reliable. Although Hayes et al. should be commended for trying to establish mechanisms of change, taken together, these considerations cast doubt on their conclusion: *"A particularly positive aspect of a beginning study like this is evidence that the processes of change predicted by ACT theory helped to explain the impact of ACT, but not multicultural training, on stigma and burnout"* (Hayes et al., 2004, p.12). Critically, it is these results that underpinned Hayes et al's conclusion that ACT-based interventions could be effective for non-clinical populations, and yet their reliability is questionable.

Finally, Hayes et al., (2004) used a professional sample of substance misuse counsellors. On reflection, these practitioners were likely to be very familiar with a biological model of substance misuse which was central to the content of the PE-control condition. Critically, this means that both ACTr and MCTr would have had the edge in terms of novelty. Thus, in view of their prior knowledge, it is not surprising that no improvements were observed in the PE-control group, and it is possible that the observed differential benefits of ACTr and MCTr over PETr were a result of non-specific effects (e.g., novelty). This is important because the RCTs conducted in the current research programme used non-specialist staff populations and specially tailored interventions. As a result, all conditions would have been novel, which may account for why no differential group effects were found. In addition, Hayes et al. used different trainers for each condition, so it is also possible that their favourable ACT findings reflected a difference in the trainer's levels of competence. Although different trainers were also used in Study 5 of the current investigation, satisfaction ratings, including a specific question about the trainer's skills, were taken from participants as a control procedure. There were no significant group differences. In sum, these considerations suggest that the RCTs conducted in the current investigation were of a superior quality to Hayes et al. (2004), and this casts further doubt over the effectiveness of ACT-based interventions for non-clinical populations.

In a recent replication of the prominent first stigma RCT with substance misuse counsellors, Hayes et al. (2009) found no differential group effects for either the process or outcome variables. These findings are consistent with those of the current research programme. Hayes (2010, personal communication) has conceded that the first stigma RCT (Hayes et al., 2004) resulted in his research team's becoming overconfident in their claims

about the suitability of ACT-based stigma interventions. In light of his recent findings, he acknowledges that ACT-based interventions may not be suitable for all populations and recommends that researchers should precede with alternative ideas until more is known.

It seems clear that the empirical data and theoretical claims that motivated this research were overly optimistic. The data presented in this thesis, particularly taken together with Hayes et al.'s (2009) results, suggest that at present, there is insufficient evidence to support the application of ACT-based interventions for staff working with clients with a PD. Nonetheless, there is some emerging evidence that bears on its potential, such as correlational data (Study 2), improvements in client-related outcomes (Studies, 3, 4 & 5), and a differential group effect in favour of ACT for levels of valued action (Study 5). Therefore, before a definitive conclusion about the suitability of ACT interventions for staff can be achieved, a number of factors that may have impacted the findings in the current investigation should be addressed in future research. These will be considered in the following section.

### 9.3 Directions for Future Research

In this final section, I aim to highlight briefly some fruitful directions for future research that have arisen during this investigation. Because this thesis revealed several unanticipated results, these suggestions are intended to lead towards clarifications of the role of ACT in the reduction of stigma.

Literature reviewed in Chapter 1 indicated that stigmatising attitudes towards individuals with mental health problems, in particular those with a PD, are common among mental health professionals. As a result, a wide-ranging recent initiative – Time to Change – was launched to help ameliorate discrimination towards individuals with psychological difficulties (Time To Change, 2009). Additional evidence suggested that staff members' stigmatising beliefs about clients leads them to engage in self-protective coping strategies, and makes them susceptible to becoming professionally burned out. There is some evidence for burnout: recently the DH has indicated that NHS absenteeism levels – a factor often related to burnout (Cooper, 1990) – are 50% higher than for the private sector (NHS Health & Wellbeing, 2009). Given these data it is perhaps surprising that, throughout the current investigation, staff's pre-intervention levels of stigmatising attitudes and burnout were relatively low in comparison with normative values (e.g., Bowers & Allan, 2006; Maslach, Jackson & Leiter, 2006). For this reason, future investigations should re-examine the attitudes and wellbeing of staff working with clients with a PD to determine whether problems of

stigma and burnout are as prevalent as believed or whether the measures used in the current investigation were problematic. In advancement of the current investigation, particular emphasis should be placed on determining whether staff attitudes and wellbeing differ between professional groups and/or stages of their careers. For example, the baseline scores for a sample of clinical psychologists (e.g., Study 4) differed from those for non-specialist staff groups (e.g., Studies 3 & 6) and participants with *less* experience of working with PDs were shown to have higher levels of fusion with negative work-related thoughts (e.g., Studies 1 & 3). This research would, therefore, clarify whether different professional groups have varying training needs.

A future direction already touched on in this chapter includes further development of measures designed to assess processes integral to ACT theory. Given that ACT research is in its infancy, many researchers have designed and used their own population-specific measures of some processes, most notably experiential avoidance (e.g., Bach & Hayes, 2002; Gifford et al., 2004; Gregg, 2004; Hayes et al., 2004; Luoma et al., 2008). In some cases, the researchers failed to provide basic information about the psychometric properties of these measures, which casts doubt on the validity of their results (e.g., Bach & Hayes, 2002; Hayes et al., 2004). Furthermore, the population-specific nature of any measure limits the development of ACT theory because the results can not be generalised to other populations. Given that little information is known about how ACT interventions operate in non-clinical populations, it is essential to develop some uniformity in the ways in which these variables are assessed. Thus, the development, and consistent use of inclusive and global measures of the proposed ACT variables is likely to determine whether these are general or context dependent processes. As such, this research would enhance theoretical understanding of how ACT-based interventions for non-clinical populations may operate.

The majority of ACT research has focussed on the development of protocols for interventions but the findings of this thesis indicate that more attention needs to be given to the development of ACT theory for staff populations before its efficacy as an intervention can be fully determined. Indeed, my results suggest that in its current form, the application of the ACT model of psychopathology may not be appropriate for applications with non-clinical populations. Perhaps other untested variables, such as compassion, have a significant role to play in non-clinical problems, such as stigma. Empathy and a non-judgmental stance are important components of compassion, and from an ACT perspective, these qualities are promoted by enhancing a self-as-context. Given the relatedness of compassion with

psychological flexibility, an examination of its role would seem like a fruitful first step in future theory-building research.

Refinements made to the ACT protocol in Study 4 resulted in a marginally significant pre-post improvement in levels of psychological flexibility in a sample of clinical psychologists and trainees. This finding was not, however, replicated with a non-specialist staff population in Study 5. This discrepancy suggests that if ACTr is to be effective, participants may require some prior knowledge of psychological models, or at least some experience of thinking psychologically. Indeed, the previous ACT stigma studies that have produced positive benefits in participants' levels of fusion or flexibility, recruited samples, such as counsellors or psychology students, who already had some awareness of formal psychological concepts and ways of thinking (e.g., Hayes et al., 2004; Lillis & Hayes, 2007; Masuda et al., 2007). As such, they may have been better able to see the long term benefits of an emotionally demanding intervention. An alternative explanation for this discrepancy is that staff's training needs are likely to vary depending on their existing knowledge and skills. As such, staff with little or no formal education about PD clients may not benefit from self-management training until they have gained some basic knowledge about this client group. Thus, future investigations should consider staff's educational/training background prior to the delivery of a specific intervention.

Staff in Studies 3 and 5 of the current investigation were randomly allocated to receive either ACT training or the active-control alternative. As such, they did not get the option to choose which type of training they would like to receive. One participant interviewed in Appendix L felt that the ACT training had been of no value to her and explained that she had wanted to receive the active-control alternative, DBTr. As a result, this participant found it hard to engage with an intervention that did not suit her perceived requirements. This reflects a critical weakness of RCT methodology in the assessment of psychological interventions where blinding is not possible. Clearly, assignment to an unwanted condition may be of little benefit to participants and/or researchers. It may therefore be necessary to consider whether all future investigations should randomly assign individuals to their treatment of choice; alternative approaches to the standard RCT methodology, such as the field effectiveness model (Seligman, 1995) may produce some benefits in terms of a fuller evaluation of ACTr. Finally, the results from this investigation indicate that staff benefited from both self-management and skills/education-based training interventions. For this reason, a combined ACT/education-skills training condition could be particularly beneficial. For example, education/skills training

would provide staff with the knowledge and proficiency to be able to intervene with clients effectively, whilst ACT would provide them with self-management skills to help with the inevitable difficulties that will arise as a result of working with this difficult client group. If effective, this combined approach could produce more positive outcomes than either condition alone.

In summary, the present research has raised questions about the suitability of ACT-based interventions for staff working with clients with a PD. Although future research should aim to address limitations and omissions in this thesis, it should also consider the implications of these findings.

## 9.4 Concluding Remarks

Although this thesis has revealed that ACT-based training for staff working with clients with a PD can produce some sustained improvements in stigmatising attitudes and client-related outcomes, critically, it could not be differentiated from conventional skills or education-based training. Furthermore, the processes through which ACT was predicted to facilitate changes in outcome variables were not implicated. These findings suggest that the theoretical claims that motivated this research were overly optimistic and that the empirical data supporting them were not as convincing as once thought. At the present time, there is insufficient evidence to support the application of ACT-based interventions for staff working with clients with a PD. Thus, future research in this area should focus on exploring the processes through which ACT-based interventions for non-clinical populations operate before further outcome studies are conducted.

**APPENDICES**

# Appendix A: BST-PDQ (40)

Imagine that the following thoughts occurred to you right now, in relation to your clients with personality disorder. How valid or believable would each be? Please use the following scale. For each question, please write a number 1 through 6.

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| Not at all believable | | | | | Completely believable |

**Strength of Belief**

1 2 3 4 5 6   1. These clients are not going to change no matter what I do.

1 2 3 4 5 6   2. These clients take up valuable time that should be spent with people who are really ill, or have real problems

1 2 3 4 5 6   3. These clients behave in extreme ways to gain attention

1 2 3 4 5 6   4. These clients have such complex problems that they can't really be helped

1 2 3 4 5 6   5. Clients with extensive histories of treatment failures can be treated effectively

1 2 3 4 5 6   6. Working with these clients requires too much effort to make it worthwhile

1 2 3 4 5 6   7. Most clients with a personality disorder do take responsibility for their difficulties

1 2 3 4 5 6   8. These clients live such chaotic lives, it's impossible to help them

1 2 3 4 5 6   9. These clients complain, no matter what you do

1 2 3 4 5 6   10. If personality disordered clients really wanted to get better, they would

1 2 3 4 5 6   11. Personality disorder clients are not manipulative

1 2 3 4 5 6   12. It is possible to overcome the damage done by their past history

1  2  3  4  5  6    13. These clients will never be able to improve their lives because they can't control their thoughts or emotions

1  2  3  4  5  6    14. These clients are not really ill and should just get on with it

1  2  3  4  5  6    15. These clients will sabotage any efforts to help them

1  2  3  4  5  6    16. These clients will never be able to improve their lives because they can't control their behaviour

1  2  3  4  5  6    17. You can trust personality disordered clients to tell you the truth or give you a complete picture

1  2  3  4  5  6    18. You have to be a very exceptional or skilled person to work with these clients effectively

1  2  3  4  5  6    19. These clients never really improve in the sense that they are always just one step away from a crisis

1  2  3  4  5  6    20. Someone who has a severe personality disorder can be helped effectively

1  2  3  4  5  6    21. These clients have a vested interest in not getting better

1  2  3  4  5  6    22. Personality disordered clients should stop complaining and just get on with it

1  2  3  4  5  6    23. The best you can do for personality disordered clients is to keep them from harming themselves or others

1  2  3  4  5  6    24. It's realistic to expect these clients to be able to live a fulfilling life

1  2  3  4  5  6    25. Personality disordered clients have too much to lose if they begin to take responsibility for their lives

1  2  3  4  5  6    26. These clients are as worthy of professional care as any others are?

1  2  3  4  5  6    27. Personality disordered clients are in control of their behaviour

1  2  3  4  5  6    28. These clients will exploit any care that's offered them

1  2  3  4  5  6    29. These clients are rewarding to work with

1  2  3  4  5  6    30. Personality disordered clients are demanding, you can never do enough

1　2　3　4　5　6　　　　31. Personality disordered clients are emotionally draining

1　2　3　4　5　6　　　　32. Personality disordered clients are too frightening to work with

1　2　3　4　5　6　　　　33. Personality disordered clients are too aggravating to work    with

1　2　3　4　5　6　　　　34. Personality disordered clients are too unpredictable to work with

1　2　3　4　5　6　　　　35. These clients are trouble makers

1　2　3　4　5　6　　　　36. These clients cause splitting amongst staff

1　2　3　4　5　6　　　　37. Personality disordered clients are best avoided

1　2　3　4　5　6　　　　38. These clients will spoil any efforts to help them

1　2　3　4　5　6　　　　39. Personality disordered clients are responsible for the majority of their problems

1　2　3　4　5　6　　　　40. Personality disordered clients are too unreliable to work with

# Appendix B: University of Southampton Ethics Approval Letter (Studies 1 & 2)

23<sup>rd</sup> August 2010

**Georgina Taylor – Ethics approval confirmation study 721**

I hereby confirm that Georgina Taylor's study 'Understanding the processes that underpin staff attitudes towards individuals with a personality disorder' (study ID: 721) has received ethical approval from the School of Psychology Ethics Committee on 15<sup>th</sup> January 2009.

An amendment to this study has received ethical approval from the Chair of the School of Psychology Ethics Committee on 06<sup>th</sup> May 2009.

Barbara Seiter

Research Administrator
School of Psychology
Direct tel: +44 (0)23 8059 5578
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# Appendix C: Ethics Committee Approval Letter (Studies 1 &3) **NHS**

## National Research Ethics Service

**Dorset Research Ethics Committee (REC)**

29 October 2007

Poole Hospital NHS Trust
D Block [Eddie Hawker Wing], Room 20
Longfleet Road
Poole, Dorset
BH15 2JB

Professor Susan Clarke
Head of the Intensive Psychological Therapies Service
51A Layton Road
Parkstone, Poole
Dorset
BH12 2BJ

Tel: 01202 442 737
Fax: 01202 442 954
Email: caroline.hemsley@poole.nhs.uk

3 1 OCT 2007
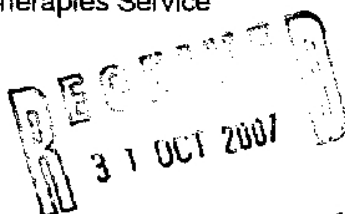
Dear Professor Clarke

| | |
|---|---|
| Study title: | Comparative evaluation of Acceptance and Commitment Training based Staff Hardiness Development package against Psycho-educational approach for staff caring for patients with personality disorder. |
| REC reference: | 06/Q2201/158 |
| Amendment number: | 3 |
| Amendment date: | 15 October 2007 |

The above amendment was reviewed at the meeting of the Committee held on 25 October 2007.

**Ethical opinion**

The members of the Committee present gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

**Approved documents**

The documents reviewed and approved at the meeting were:

| Document | Version | Date |
|---|---|---|
| Participant Information Sheet | 2 | 16 October 2007 |
| Participant Consent Form: Follow up Interview | 2 | 16 October 2007 |
| Notice of Substantial Amendment (non-CTIMPs) | 3 | 15 October 2007 |

**Membership of the Committee**

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

**R&D approval**

All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.
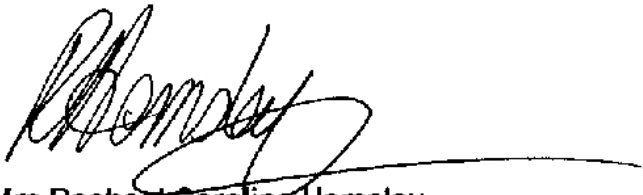
**Statement of compliance**

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.

| | |
|---|---|
| **06/Q2201/158:** | **Please quote this number on all correspondence** |

Yours sincerely

Mrs Rachael Caroline Hemsley
**Committee Co-ordinator**

E-mail: caroline.hemsley@poole.nhs.uk

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

*Copy to:*          *Mr Tim Hollingberry*
                    *Research Development Manager*
                    *Dorset Healthcare NHS Trust*
                    *St Anns Hospital*
                    *Sandbanks*
                    *Poole*

## Appendix D: Approval letters (Studies 1 & 4)

**Devon Partnership NHS**

NHS Trust

Research and Development Directorate
Wonford House Hospital
Dryden Road
EXETER EX2 5AF

Tel: 01392 403462/421
Fax: 01392 403445

Email: jayneclarke@nhs.net
www.sword.nhs.uk

31 March 2008

Professor Susan Clarke
Head of Intensive Psychological Therapies Service (IPTS)
Intensive Psychological Therapies Service (IPTS)
IPTS/Branksome Clinic
51a Layton Road, Parkstone
Poole, Dorset
BH12 2BJ

Dear Professor Clarke

**Re: Study R&D Code: DPT0141 (REC Code: 08/H0201/11) Using Acceptance to Improve Working Relationships with Complex Clients: An Uncontrolled Trial**

I have reviewed the Trust R&D file for your study and am happy to give approval on behalf of the Devon Partnership NHS Trust.

You are reminded that you must report to the R&D office any **adverse event or serious incident,** whether or not you feel it is serious. You are required to submit to the R&D office a **final outcome report** on completion of your study, and to provide interim reports on progress as requested. Should **publications** arise, please send copies to the R&D office, Wonford House for inclusion in the study's R&D file and the Trust's research publications library.

I would also like to remind you of the responsibilities of anyone who conduct research within the NHS, which are:

1. Work must be carried out in line with the research governance framework, which details the responsibilities for everyone involved in research.
2. The Data Protection Act requires that you follow the eight principles of 'good information handling' as summarised in the guide for staff.
3. You must be aware of, and comply with Health and Safety standards in relation to your research

More information about these responsibilities is available from the R&D Office.

With best wishes for a successful study.

Yours sincerely

**Dr Peter Aitken**
**Director of R&D**

cc    Miss Rachel Bennion – Research Ethics Committee
      Mr Tim Hollingbery – R&D Manager, St Anns Hospital, Sandbanks, Poole, Dorset

## Appendix E: BST-PDQ (15)

Imagine that the following thoughts occurred to you right now, in relation to your clients with personality disorder. How valid or believable would each be? Please use the following scale. For each question, please write a number 1 through 6.

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| Not at all believable | | | | | Completely believable |

_____ 1. These clients are not going to change no matter what I do

_____ 2. These clients live such chaotic lives, it's impossible to help them

_____ 3. These clients complain, no matter what you do

_____ 4. These clients will never be able to improve their lives because they can't control their thoughts or emotions

_____ 5. These clients will sabotage any efforts to help them

_____ 6. These clients never really improve in the sense that they are always just one step away from a crisis

_____ 7. These clients have a vested interest in not getting better harming themselves or others

_____ 8. The best you can do for personality disordered clients is to keep them from harming themselves or others

_____ 9. These clients will exploit any care that's offered them

_____ 10. Personality disordered clients are demanding, you can never do enough

_____ 11. Personality disordered clients are too frightening to work with

_____ 12. Personality disordered clients are too aggravating to work with

_____ 13. Personality disordered clients are too unpredictable to work with

_____ 14. These clients cause splitting amongst staff

_____ 15. These clients will spoil any efforts to help them

# Appendix F: BST-PDQ (14)

Imagine that the following thoughts occurred to you right now, in relation to your clients with personality disorder. How valid or believable would each be? Please use the following scale. For each question, please write a number 1 through 6.

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| Not at all believable | | | | | Completely believable |

1. These clients are not going to change no matter what I do

2. These clients live such chaotic lives, it's impossible to help them

3. These clients complain, no matter what you do

4. These clients will never be able to improve their lives because they can't control their thoughts or emotions

5. These clients will sabotage any efforts to help them

6. These clients never really improve in the sense that they are always just one step away from a crisis

7. These clients have a vested interest in not getting better harming themselves or others

8. The best you can do for personality disordered clients is to keep them from harming themselves or others

9. These clients will exploit any care that's offered them

10. Personality disordered clients are demanding, you can never do enough

11. Personality disordered clients are too frightening to work with

12. Personality disordered clients are too aggravating to work with

13. Personality disordered clients are too unpredictable to work with

14. These clients will spoil any efforts to help them

# Appendix G: University of Southampton Ethics Approval Letter (Studies 1, 2, & 5)

23rd August 2010

**Georgina Taylor – Ethics approval confirmation study 871**

I hereby confirm that Georgina Taylor's study 'A comparative evaluation of ACT training with NIMHE approved Capabilities Framework Training for staff working with clients with a personality disorder' (study ID: 871) has received ethical approval from the School of Psychology Ethics Committee on 13th May 2009.

B. Seiter

Barbara Seiter

Research Administrator
School of Psychology
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**Appendix H: Ethics Approval Letter**

# NHS

## National Research Ethics Service

**SOUTHAMPTON & SOUTH WEST HAMPSHIRE
RESEARCH ETHICS COMMITTEE (B)**

1ST Floor, Regents Park Surgery
Park Street, Shirley
Southampton
Hampshire
SO16 4RJ

18 March 2009

Professor Sue Clarke
Head of Intensive Psychological Therapies Service (IPTS)
Dorset Healthcare Foundation Trust
Intensive Psychological Therapies
Service (IPTS), Branksome Clinic,
51a Layton Rd, Parkstone, Poole
BH12 2BJ

| | |
|---|---|
| Tel: | 023 8036 2466 |
| | 023 8036 3462 |
| Fax: | 023 8036 4110 |

Email: scsha.SWHRECB@nhs.net

Dear Professor Clarke

| | |
|---|---|
| **Full title of study:** | **A Comparative evaluation of Acceptance and Commitment Training and NIMHE-approved Capabilities Framework Training for Staff working with clients with a Personality Disorder** |
| **REC reference number:** | **09/H0504/17** |

Thank you for your letter of 13 March 2009, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Alternate Vice-Chair.

**Confirmation of ethical opinion**

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

**Ethical review of research sites**

The Committee has not yet been notified of the outcome of any site-specific assessment (SSA) for the research site(s) taking part in this study. The favourable opinion does not therefore apply to any site at present. We will write to you again as soon as one Research Ethics Committee has notified the outcome of a SSA. In the meantime no study procedures should be initiated at sites requiring SSA.

**Conditions of the favourable opinion**

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

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

Management permission at NHS sites ("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 is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

## Other conditions specified by the REC

**The Committee noted that although question 16 in the MBI questionnaire; the word 'people' was replaced with 'recipients', it is actually question 17 that the Committee asked to be revised by changing "clients" to 'recipients' so as to be consistent with the other questions. Copy of the revised document should be submitted to the Committee for information only.**

## Approved documents

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

| Document | Version | Date |
|---|---|---|
| 3rd Letter to Participants - 3 and 6 Month Follow-up Letter | 1 | 19 January 2009 |
| 2nd Letter to Participants - Post Consent Form Letter | 1 | 19 January 2009 |
| Participant Consent Form | 1 | 19 January 2009 |
| Covering Letter | | 27 January 2009 |
| Application | | 21 January 2009 |
| Questionnaire: CEQ 6: PD Training | | |
| Questionnaire: The General Health - GHQ 28 | | |
| Questionnaire: The Helping Alliance | | |
| Questionnaire: AAQ-II | | |
| Questionnaire: Attitude to Personality Disorder | | |
| Questionnaire: Valued Living - VLQ | | |
| Questionnaire: MC-SD | | |
| Investigator CV: Dr K Wilson | | 19 January 2009 |
| Investigator CV: Professor R Remington | | 27 January 2009 |
| Investigator CV: Dr G Taylor | | 19 January 2009 |
| Letter from Funder | | 31 August 2006 |
| Letter from Funder | | 19 December 2005 |
| Advertisement | 1 | 19 January 2009 |
| Statistician Comments | | 20 January 2009 |
| Letter from Sponsor | | 21 January 2009 |
| Investigator CV: Professor S Clarke | | 26 January 2009 |
| Investigator CV: Ms S Rushbrook | | 27 January 2009 |
| Investigator CV: Ms K Matley | | 19 January 2009 |
| Investigator CV: Ms C Nash | | 26 January 2009 |
| Investigator CV: Ms H Bolderston | | 27 January 2009 |
| Protocol | 1 | 19 January 2009 |
| 4th Letter to Participants - Questionnaire Reminder Letter | 2 | 13 March 2009 |
| 1st Letter to Participants - Introductory Letter | 2 | 13 March 2009 |
| Response to Request for Further Information | | 13 March 2009 |
| Participant Information Sheet | 2 | 13 March 2009 |
| Advertisement | 2 | 13 March 2009 |
| Questionnaire: ~SAB: PD - 42 Believability | 2 | 13 March 2009 |
| Questionnaire: MBI Human Services Survey - revised | 2 | 13 March 2009 |
| Questionnaire: Training Evaluation Form | 2 | 13 March 2009 |
| Questionnaire: Demographic & Occupational Experience | 2 | 13 March 2009 |

This Research Ethics Committee is an advisory committee to South Central Strategic Health Authority

*The National Research Ethics Service (NRES) represents the NRES Directorate within the National Patient Safety Agency and Research Ethics Committees in England*

**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 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
- 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/H0504/17 | Please quote this number on all correspondence |
|---|---|

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

Yours sincerely

**Professor R King**
**Alternate Vice-Chair**

Email: scsha.SWHRECA@nhs.net

Enclosures:         "After ethical review – guidance for researchers" SL- AR2 for other studies

Copy to:            Mr Tim Hollingbery
                    Dorset Healthcare NHS Foundation Trust
                    St Ann's Court
                    St Ann's Hospital
                    69 Haven Road
                    Canford Cliffs
                    Poole, BH13 7LN

This Research Ethics Committee is an advisory committee to South Central Strategic Health Authority

*The National Research Ethics Service (NRES) represents the NRES Directorate within the National Patient Safety Agency and Research Ethics Committees in England*

# Appendix I: ACT Protocol – RCT 1

## Day 1

- Workshop mission / ground rules / invitation to make a difference in your life
- Exercises: mindfulness + Introductions & most like to achieve barriers
- Workshop schedule
- Diagnosis and Prevalence – what is PD? Criteria –
- Exercise: identify a client causing concern and use criteria to assess
- COFFEE
- **What is a judgment / evaluation**
- Exercise: **what makes difficult clients difficult**? Open floor
- **Definition of stigma**
- Exercise: Find an object in the room
- **Categories stereotypes**: when useful and when not
- Exercise: **Cross cutting**
    - o Recall introduction – which of these? – debrief
- L U N C H
- **What is ACT RFT analysis of the problem** / relationship to burnout
- Is it abnormal to be abnormal – is suffering abnormal?
- The cultural agenda – living the good life
- Exercise: **thought suppression**
- Thought suppression – what do the data say
- Assumption of destructive normality – but why?
- **Language** –the core process, RFT, Gub, gub, woo, woo, derived relations
- And make self knowledge useful, painful and stigmatising!
- **Language** our gift and our burden
- Experiential avoidance
- The ACT agenda – **feel** good and live well
- ACT: the central question – in a world…
- **Defining ACT – using behavioural trajectory diagram**
- What do the outcome **data** say?
    - o Clients/Us - Hayes, Bissett, Roget et al 04

- **Increase experiential awareness of the paradox of thought suppression**
- Exercise:  Work related **Barriers** – some work-thing about me that I don't share, the work-things I most wish I could change, what I like least (non-work?), if a miracle…..what would you most wish to come out of workshop?
- Exercise:  Work related **Barriers –** the worst thing about me is, the most difficult clients, I wish I didn't have to work with; I wish I was – feedback?
- Group Exercise:  blonds have more…
- What do gub gubs say?
- T E A
- **Paradox of control / creative helplessness**
- Exercise: Pennebaker writing (10 mins)
- What I least like about myself – how long?
- **Control is the problem**
- Exercise: The polygraph metaphor –
- Exercise: thought suppression
- **Introduce cognitive defusion**
- Exercise: Milk, milk, milk
- Exercise: take you mind for a walk
- Exercise: ways of being – imagine disclosing your most shameful event
- Homework: 10 most familiar judgments
- E N D

**Day 2**

- Mission / schedule / review homework
- **Introduce the observer perspective as means of accepting thoughts**
- Exercise: leaves on the stream
- Group Exercise: Passengers on the Bus
- Exercise: Sticky label - Letting go of fusion: self & others -
- COFFEE
- **Creating empathy and self acceptance**
- The trap of fear
- Deactivate stigmatising process

- Exercise: shared shame in your mind's eye
- Exercise: eyes on
- LUNCH
- **Defining most cherished work-values and goals**
- Mandela
- The central question – in a world where… why? Legitimize the struggle
- Distinguishing values and goals – what do you want your life to be about?
- Exercise: Choice vs decision A & Z
- Choices are not reasoned judgments – *decision to have children*?
- Exercise: Sweet spot
- Exercise: Retirement part mediation
- Pascals / Wilson's Wager
- TEA
- **Treating unwanted feelings and thoughts with acceptance and compassion to facilitate engagement and vitality with respect to work-values**
- The life question – am I willing to have my thoughts and feelings… fully and without defence and do what takes me in a valued direction
- The life question continued: what I want to be about is, the barriers, what I've been doing, what the costs are and my commitment
- Exercise: Just listening – values, fusion & avoidance
- Commitment ceremony in fours
- E N D
- **Completion of post-intervention questionnaires**

# Appendix J: DBTr Protocol (RCT 1)

**Day One**
- What is PD?
- DSM-IV Criteria for PD
- Co-morbid difficulties
- Prevalence of PDs
- What is BPD?
- DSM-IV Criteria for BPD
- *Pair exercise*; *identify a client with BPD using the DSM-IV criteria (5 mins)*
- Associated Features/difficulties of BPD
- DBT Research and Findings

**COFFEE BREAK**

- Understanding BPD
- Emotion regulation and the Biosocial Theory (Linehan)
- Emotional vulnerability
- Invalidating environment
- Tasks in emotion regulation
- *Pair exercise; Problem solving/solution analysis (15 mins)*

**LUNCH BREAK**

- DBT Treatment stages and targets
- *Group exercise; Draw a treatment hierarchy (10 mins)*
- Dialectics as a means of persuasion
- DBT core dialectic
- *Pair exercise; Dialectical tensions and resolutions – identify tensions that arise between you and your client and identify a dialectical synthesis (15 mins)*
- Dialectical Strategies

**TEA BREAK**

- *Pair exercise: identify a time when you met a personal challenge – what helped you, what hindered you and what did you learn? (5 mins)*
- Identify your commitment to clients
- Definition of values and goals?
- Barriers to action
- *Group exercise; identify a client – what values and goals may motivate them to change? What barriers may prevent them from moving forward? Of these, what could you validate? (15 mins)*
- DBT commitment strategies
- Homework - During the next week, identify a time when you are emotionally vulnerable (either high sensitivity, reactivity, or slow return to baseline). Identify the emotion, events immediately before and following and what coping strategies you used

**Day Two**
- Types of validation defined
- What can you verbally validate?
- Functions of validation
- Levels of validation
- *Exercise: Note examples of validation at 6-levels in a recent session with a client (15 mins)*

## COFFEE BREAK

- The ABCs of problematic behaviour
- Chain analysis of events overtime
- Basic Behaviour Theory Paradigm
- *Exercise: Identify an incident recently reported by a client and create a moment by moment chain analysis (15 mins)*
- The relevance of context and consequences
- Solution analysis

## LUNCH

- Interpersonal effectiveness skills
- Getting your objectives – DEAR MAN
- *Group exercise; Objectives; DEAR MAN (15 mins)*
- Emotion regulation – steps for reducing emotional vulnerability
- Emotion regulation – steps for increasing positive emotions
- Acting opposite to emotions
- *Group exercise; Identify distinctions between warranted and unwarranted emotions*
- Change emotion by acting opposite to unwarranted, painful emotions
- Change by identifying cues for unwarranted painful emotions

## TEA BREAK

- Distress Tolerance skills
- Crisis survival skills: Wise mind ACCEPTS
- Self-soothing in the 5-senses
- Crisis skills: improve the moment
- Crisis skills – pros and cons
- *Pair exercise; think of a recent incident when a client engaged in problematic behaviour. Identify the pros and cons of tolerating versus not tolerating the distress*
- Mindfulness core skills
- *Mindfulness exercise; drinking water non judgementally, in the moment, focus on what works*
- Post-intervention questionnaires

## END

# Appendix K: Demographic Questionnaire

Demographic and Occupational Experience Questionnaire

Please fill out this questionnaire as honestly as possible as it will be used to assess how effective training was for various groups of people working within the NHS. All information you supply will remain confidential. Any data you provide will be stored anonymously. No individual data will be used, only group data will be analysed & published.

1. Participant Number        2. Gender (delete as appropriate)        3. Age

Male  /  Female

4.      What is the highest level of education you have completed:
        (please tick the appropriate box)

        ☐ No formal education completed
        ☐ Secondary education (i.e. GCSE's etc)
        ☐ College (A' levels/NVQ equivalent etc)
        ☐ Bachelor's degree
        ☐ Master's degree
        ☐ Doctoral degree
        ☐ Professional degree (MD etc)
        ☐ Other please specify:

5.      Please list any relevant **mental health training or qualifications** you have received concerned with the understanding or treatment of people with a personality disorder

6.      Have you attended previous ACT training? If yes, please provide details below:

7. Which best describes your working environment?
   (Please tick the appropriate box(s))

   ☐ Inpatient Psychiatric Care
   ☐ Community Mental Health Team (CMHT)
   ☐ Accident and emergency (A&E)
   ☐ Addiction services
   ☐ Psychological therapies service
   ☐ Volunteer services, please specify:
   ☐ Other please specify:

8. What is your current job title?

9. How long have you worked in this position? (years)

10. How many hours do you work a week in your current role?

11. How many hours per week do you spend in contact with patients suffering from a personality disorder?

12. How many years experience (in total) do you have working in contact with people suffering from mental health problems?

13. How many years experience do you have working in contact with people suffering from a personality disorder?

**Thank you for your participation**

# Appendix L: A Follow-up Interview

## A Comparative Evaluation of ACTr and DBTr for staff working with clients with a PD – a Follow-up Qualitative Interview Study

The results of Study 3 did not support my prediction that the processes of change predicted by ACT theory (e.g., psychological flexibility and the believability of stigmatising thoughts) would function as mediators of ACTr's impact, but not DBTr's impact, on stigmatising attitudes, burnout, psychological wellbeing, distancing and helping alliance. In fact, the process data were unexpected with psychological flexibility significantly *decreasing* from pre to post for the ACTr group. Given that the ACT protocol was designed to purposely target ACT processes with the aim of increasing levels of flexibility, this finding is puzzling. Flexibility levels did, however, return to pre-intervention levels by follow-up. As much of the ACT workshop was experiential, with participants spending a significant period of time in contact with their difficult thoughts and feelings about their clients, it is possible that the training made them feel uncomfortable. With this in mind and given that ACTr has not yet been used for mental health professionals working with PD clients in the U.K., it would be beneficial to determine their experiences of the training.

Contrary to the flexibility findings, levels of believability (as measured by the BST-PDQ [14]) marginally *improved* from pre to post-intervention for *both* groups, but scores returned to baseline levels by follow-up. Thus, despite being a key intrapsychic variable specifically targeted only by the ACTr, post-intervention changes in believability scores were observed in both groups. Moreover, these improvements occurred at the same time that psychological flexibility (as measured by the AAQ-II) scores significantly decreased for the ACTr and remained unchanged for the DBTr. Given that previous studies have shown these processes to significantly correlate with one another (see Chapters 4 & 5), these findings were unforeseen. Unlike the AAQ-II, however, the BST-PDQ (14) specifically targets PD related content, while the former is a global measure of flexibility. Thus, the marginal improvement observed in participants' negative cognitions about PD clients is in keeping with the observed changes in the other client variables (i.e., stigma, helping alliance and distancing). In contrast, because the AAQ-II does not exclusively measure flexibility towards PD clients, it is reasonable that changes in their perceptions of clients could occur in the absence of global improvements in flexibility. Although this discrepancy has not been reported in previous

studies, this could be because other researchers have tailored the AAQ to measure subject related content (e.g., Gifford et al., 2004; Gregg, 2004; Luoma et al., 2008). Nonetheless, these findings were unforeseen and further information that may explain them would be valuable.

Given the lack of literature in this area, the lack of time x group interactions for the outcome variables and the unexpected results for the process variables makes interpretation of them difficult. Moreover, because this is the first time ACTr has been delivered to mental health professionals working with PD clients, no existing literature accounts for the findings. Thus, in order to help understand the results of Study 3, it is critical to determine participants' experiences of the training.

*The Present Study*

Study 4 attempted to shed light on the findings produced in Study 3 by exploring participants' experiences and perceptions of the workshop they attended. To achieve this, a qualitative design was employed – an approach considered to be particularly effective for eliciting individuals' subjective experiences of events (Boyatzis, 1998). More specifically, semi-structured interviews – the leading type of interview used in clinical research – were conducted because they permitted me to explore desired topics whilst enabling participants to give rich and detailed responses (Silverman, 2000; Wilkinson, Joffe & Yardley, 2004). Given the objectives and the exploratory nature of this investigation, the semi-structured interview was considered to be a leading approach.

The overall aim of this study was to explore participants' experiences and perceptions of the workshop they attended in Study 3. More specifically, it aimed; 1) to investigate why participants in the ACT group became more inflexible and burned out immediately following the workshop, 2) to further to explore the outcome changes observed, and 3) to investigate whether any more subtle group differences, undetected by the self-report questionnaires, existed.

**Method**

*Participants*

A sub-sample of participants who took part in Study 3 participated in the current study[31]. All participants who returned their 3-month follow-up questionnaires were invited to participate (ACTr; n = 37, DBTr; n = 31)[32]. A total of 15 participants (13 females and two males) volunteered to take part, eight of whom had attended ACTr (Seven females and one male) and seven DBTr (six females and one male). Participants ranged in age from 25-59 years with a mean of 45.8 years. Participant's experience of working in the mental health sector ranged from 4 to 20 years, with a mean of 11 years. Their experience of working directly with PD clients ranged from 0 to 12 years, with a mean of 6.2 years. Akin to Study 3, participants worked in a range of mental health settings and their professional roles varied.

*Procedure*

The current study was approved by both the School of Psychology Ethics Committee and the Dorset Local Research Ethics Committee. Prospective participants were sent a letter outlining the study and were asked to contact one of the researchers to arrange an interview if they were interested in taking part[33]. For their convenience, participants were given the option of being interviewed at either the Intensive Psychological Therapies Service (IPTS) – the host NHS site for the research conducted in this thesis – or at their place of work. I conducted the interviews along with a NHS research assistant (C.N), who at the time of this study was working at the IPTS[34]. In preparation for the interviews, H.B conducted a training session using role play and video feedback. The aims of the session were; to achieve consistency in the way in which the interviewers asked questions, to ensure the interviewers did not follow-up participants' responses with leading questions and to achieve a friendly, conversational style.

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[31] This study was conducted in collaboration with a clinical psychologist and M.Sc. student, Helen Bolderston. The data for the ACT group was written up separately and submitted by H.B as part of her M.Sc. course.

[32] Initially, an equal number of participants who had shown either a significant improvement or deterioration in levels of helping, stigma and distancing and a significant improvement or deterioration in levels of believability and flexibility at 3-month follow-up, as measured by the self-report questionnaires administered in Study 3, were approached. Responses were, however, limited so a decision was made to approach all participants who had completed their evaluation at 3-month follow-up. Participants were chosen on a first-come, first-serve basis.

[33] Given that the recruitment procedure relied on self-selection, it is acknowledged that the sample is unrepresentative and may contain biases.

[34] My co-researcher, H.B, was unable to conduct the interviews because she was one of the ACT trainers in Study 3. Thus, it was believed that her presence could bias participants' responses.

Prior to the commencement of each interview, participants were reminded of the requirements of the study and provided written consent. At the start of each interview, the interviewer informed them that their feedback would help improve the quality of future training, therefore, positive or negative feedback about the training would be equally beneficial. Participants were then asked seven broad, open ended questions, designed to elicit rich and detailed responses about the training (see page 221). When necessary, standardised prompts such as *'would you be willing to tell me more about that?'* were used to draw out more descriptive responses. At the end of each interview, participants were asked if they had anything further that they would like to add. Following this, the recording was stopped and participants were given the opportunity to ask any questions before being thanked and debriefed.

*Analysis*

Fourteen interviews were transcribed verbatim[35] and analysed using thematic analysis – a systematic procedure which permits the researcher to explore meanings within the context of the interviewees' experiences (Joffe and Yardley, 2004). More specifically, this process permits the researcher to encode qualitative data into themes (Boyatzis, 1998). Given the exploratory nature of this study, inductive themes were generated across the transcripts – analysis that is driven by the data rather than by theory – as this method is most likely to generate novel themes not previously considered by the researchers. Initially, H.B read the ACT transcripts through repeatedly to familiarise herself with the narrative and to start identifying patterns within the text[36]. Following this, a summary of the raw data for each transcript was made to make the material more manageable for the process of identifying themes. Seventeen provisional themes were identified across the ACT transcripts and a tentative set of labels corresponding to the themes was applied. This process of identification was repeated until all the data had been classified into themes. In some instances, the same narrative was coded under more than one theme to maintain depth of meaning. Discussions between the researchers resulted in the initial set of themes being collapsed into 12 themes. During this process a coding manual was developed which clearly defined each of the themes and provided an example of relevant text taken from the interview transcripts.

---

[35] Two interviews were not transcribed because of poor sound quality.
[36] H.B conducted the initial analysis of the ACT transcripts and I conducted the initial analysis of the DBTr transcripts.

Following the analysis of the ACT transcripts, I coded the DBT transcripts using the coding manual. Slight changes were made to the existing 12 themes which then accounted for the majority of the narrative. Two additional themes were created to encompass the remaining data. Throughout this process, the coding manual was refined until a final version of the manual was agreed between the researchers. The final set of 14 themes was agreed and their provisional labels were replaced with more encompassing terms (see page 221).

## Results

### Reliability Analysis

An inter-rater reliability assessment was conducted to determine the accuracy of the themes identified by the researchers. Following the coding of the ACT transcripts by H.B, I used the coding manual to recode one of the transcripts. This process was repeated for the DBT transcripts. The results showed a good level of inter-rater agreement, kappa = .80, indicating that the themes assigned were clearly identifiable.

### Main Analysis

The 14 themes identified during the analysis are displayed in Table 1. Themes relevant to the specific aims of this study are discussed below. Participant identification numbers preceded by A or D stand for people who attended the ACTr or DBTr respectively.

Table 1

*Definition of Each of the 14 Themes Identified in the Present Study*

| Themes | |
|---|---|
| Number | Definition |
| 1 | Before the training<br>   a)  personal attitudes towards challenging clients<br>   b)  perceptions of how challenging clients are treated/responded to by others<br>   c)  impact of working with challenging clients on the participant |
| 2 | Expectations of the training<br>   a)  contrary to expectation<br>   b)  as expected |
| 3 | Difficulties experienced during the training<br>   a)  emotional<br>   b)  other (e.g., physical, intellectual etc.,) |
| 4 | Difficulties during the training were worthwhile<br>   a)  emotional<br>   b)  other |
| 5 | Positive about the training |
| 6 | Negative about the training |
| 7 | Concerned about other people at the training |
| 8 | Exercises and concepts remembered from the training |
| 9 | Since the training<br>   a)  attitudes towards challenging clients<br>   b)  impact of working with challenging clients<br>   c)  positive experiences |
| 10 | Already working like this and/or had this knowledge/information |
| 11 | Training<br>   a)  motivation for attending<br>   b)  future training |
| 12 | Along time since the training and can not remember |
| 13 | Questionnaires |
| 14 | Professional role<br>   a)  before the training<br>   b)  after the training |

**1. Before the training**

    **a) Personal attitudes towards challenging clients**

    **b) Perceptions of how challenging clients are treated/responded to by others**

    **c) Impact of working with challenging clients on the participant**

Although participants were not asked directly about their attitudes towards their PD clients, whilst reflecting on their work related experiences *prior* to the training, nearly all of the ACT interviewees openly expressed negative, stigmatising thoughts and attitudes towards their clients:

*"They're deliberately kind of undoing all your good work"* (participant A2)

*"They're a nightmare"* (participant A4)

Interestingly, none of the ACT participants expressed positive attitudes about this client group despite stating positive, more general aspects of their work.

In contrast, none of the DBT participants expressed any *personal* attitudes towards their PD clients. Instead, they focused on how PD clients are treated by the 'service' and/or 'other professionals'. All of these statements were negative:

*"People with challenging behaviours don't get treated as individuals, they're very much sidelined"* (participant D9)

All participants in the ACT group expressed some negative impact on *themselves* as a result of working with PD clients, including feeling stressed, frustrated and vulnerable:

*"I was frightened"* (participant A1)

*"Over-worked, stressed, and my anxiety levels were quite high"* (participant A3)

In contrast, although the majority of participants in the DBT group also talked about some negative impact of working with PD clients, the emphasis was on threats to their *professional competency*, not themselves:

*"I used to have quite high levels of anxiety about whether I was doing the right thing or saying the right thing"* (participant D13)

In spite of disclosing negative implications of working with PD clients, a small number of participants in both groups also talked about more positive effects of working with this client group:

*"It* [working with these clients] *makes me feel I can use my skills"* (participant A1)

*"I've always found* [working with these clients] *very stimulating"* (participant D9)

**2. Expectations of the training**

 **a) Contrary to expectation**

 **b) As expected**

For the ACT group, all participants but one talked about how different the training was to what they had expected. Similarly, the majority of participants in the DBT group found the training to be different to their expectations. Indeed, for *both* groups, participants were not expecting the training to be as experiential and interactive in nature. Additionally, participants in the ACT group were not expecting the emphasis of the training to be on them.

*"I found that it was much more of a personal thing about me, and it was more… it was more encouraging you to be introspective, in thinking about your relationships with other people"* (participant A6)

*"What was really different is that we got case studies and there was a lot of humour and there was, and we actually went off to work on things ourselves"* (participant D10)

**3. Difficulties experienced during the training**

 **a) Emotional**

 **b) Other (e.g. physical, intellectual etc.)**

Whilst recalling aspects of the training, almost all of the participants in the ACT group talked about experiencing challenging emotions and/or other *personal* difficulties during the experiential exercises:

*"There was an element of vulnerability just because you're in a room with a lot of other workers who you don't know…disclosing stuff about yourself that you don't usually disclose"* (participant A3)

*"We did this exercise, and it was very difficult…it was really kind of intense"* (participant A4)

Although participants in the DBT group spoke of personal difficulties, in contrast to the ACT group, these related to physical and intellectual challenges, not emotional:

*"It was very hard work and challenging"* (participant D9)

*"I found it quite tiring"* (participant D11)

**4. Difficulties experienced during the training were useful/worthwhile**

    **a) Emotional**

    **b) Other**

Interestingly, nearly everyone in the ACT group who talked about having had difficult emotional experiences during the workshop, continued to say that they thought the experiences had been helpful or even a necessary aspect of the training:

*"Some of the experiential sessions were quite* [laughing] *challenging for everyone, but I think they were necessary to get the points across"* (participant A4)

Similarly, the majority of participants in the DBT group stated that the physical/intellectual challenges were beneficial:

*"As I said, very challenging* [the training] *and I enjoyed that"* (participant D9)


**5. Positive about the training**

All participants in the ACT group made positive comments about the training, such as complimenting the ACT approach and the style and content of the workshops:

*"It was really powerful actually, it was really good"* (participant A6)

*"I thought it was brilliant – I loved it"* (participant A1)

Similarly, all participants who attended the DBT training made positive comments about the workshop, particularly praising its content and delivery:

*"I just found it really, really helpful"* (participant D8)

*"They* [the trainers] *were so enthusiastic in what they were doing and their delivery was very, very clear, especially S.C, she was brilliant"* (participant D12)


**6. Negative about the training**

Four of the ACT participants made negative comments about the training. Some negative comments were about practical issues such as the amount of material covered.

*"It was a very long day, because it was 9 to 5, something like that, and there was a lot of information"* (participant A3)

One person from the ACT group viewed the training to be generally unhelpful (participant A2), although during her interview, she also expressed a number of positive aspects of it:

*"The bottom line was it was a waste of time"* (participant A2)

Only one of the DBT participants made a negative comment about the training and this related to the amount of material covered during the two days:

*"It was quite a lot to take in, in one day and then do another day, quite a lot to take in I, I would say that perhaps it would have been better to be spread out over three days"* (participant D11)

## 7. Concerned about other people at the workshop

A small number of people in the ACT group thought that other people at the workshops had struggled emotionally, although they themselves had been fine. Similarly, one of the DBT attendees stated that other members of her group found some of the *experiential* tasks challenging:

*"She was finding it really, really hard to take part, or to even sort of follow what was going on and I felt uncomfortable for her"* (participant A1)

*"People were quite upset, um, about some of their experiences"* (participant D12)

Furthermore, a couple of interviewees felt that the ACT training did not appeal to some of the other attendees.

*"I spoke to another woman that did it and she was just like 'oh my god, you wouldn't believe it. They got us doing this, that and the other' and it was obviously really not her thing"* (participant A6)

Additionally, another member of the DBT group expressed concern that the workshop may not have benefited attendees from other professional backgrounds:

*"There was a lot of people on that training from a lot of different areas of work and professions and I wasn't really sure exactly how it was going to help them"* (participant D8)

## 8. Exercises and concepts remembered from the training

All participants in the ACT group recalled concepts from the training but focused largely on the impact of the experiential exercises:

*"What I do remember is disclosing of self"* (participant A3)

*"I felt connected, a sense of belonging . . . because you know, we'd all kind of discussed ourselves"* (participant A6)

A few participants in the DBT group also recalled concepts from the training and like the ACT group *all* made extensive reference to the experiential aspects of it. Although their

main recollections were of work-related exercises, one interviewee also revealed how participants opened up to other group members on a more personal note:

*"We could actually share how we were actually feeling about what this person was like to work with"* (participant D10)

*"One lady talked about her husband dying and how she, you know I was just amazed how open she was"* (participant D12)

**9. Since the training**

      **a) Attitudes towards challenging clients**

      **b) Impact of working with challenging clients**

      **c) Positive experiences**

Whilst reflecting on work related experiences with PD clients since the training, less than half of the participants in the ACT group expressed negative attitudes towards the client group:

*"*[Clients with a PD] *are very chaotic, very problematic, very demanding"* (participant A2)

Consistent with their accounts prior to the training, none of the ACT participants expressed positive attitudes specifically relating to their clients following the training. However, unlike prior to the training, less than half of the ACT interviewees described any negative impact on themselves as a result of working with PD clients.

In keeping with their accounts prior to the training, participants in the DBT group did not disclose any personal attitudes towards PD clients following the training. Furthermore, unlike their experiences prior to the training, DBT interviewees did not describe any negative impact on their professional competency as a result of working with PD clients following the training.

Almost all participants who attended the ACT training talked about positive experiences following the training, mostly in terms of changes in their own emotions and their relationship with their thoughts:

*"It just felt freer and it was so less stressful"* (participant A5)

*"I haven't kind of been beating myself up every time that I have a thought that might be a bit negative"* (participant A4)

More than half of the ACT participants specifically mentioned changes in how they feel about themselves, not only in relation to work, but more generally:

*"Self assured, my self-esteem's ok, I feel ok about myself"* (participant A3)

All of the participants who attended the DBT training talked about positive experiences following the training, however, in contrast to the ACT group, these changes specifically related to their professional role and interactions with clients, not themselves personally:

"*I just had it all reinforced, that actually I do, do a good job*" (participant D11)

"*I treat them now with a little bit more understanding*" (participant D12)

"*I am happy to do it* [work with PD clients], *I think that's the word, I don't feel like I, I need to hand this over, so that's how it's helped*" (participant D10)

## 13. Questionnaires

A couple of participants from each group made a negative reference to the number of questionnaires administered. In addition, a couple of participants felt that the questionnaires may not accurately reflect how things have been for them since participating in the training.

"*The thing I didn't like was all those questionnaires, I really felt that it was too much…they were quite time consuming*" (participant D8)

"*I answered those questionnaires at Christmas, it was a really stressful time, and like, you know, this that and the other had happened, so it might not necessarily account for kind of what you're looking for*" (participant A6).

## 14. Professional role

### a) Before the training

### b) After the training

This theme specifically relates to participants who attended the DBT training. Throughout the interviews, they provided rich descriptions of their professional roles. As such, they answered questions as a professional. DBT interviewees talked about themselves as professionals whilst the ACT attendees focused on their private experiences as a person. These differences are reflected in the quotes chosen to reflect the previous themes.

**Discussion**

The present study aimed to explore participants' experiences and perceptions of the stigma workshop they attended in Study 3. More specifically, it was designed to facilitate the interpretation of the quantitative results produced in the previous study, and to investigate whether any more subtle group differences, undetected by the self-report questionnaires, exist.

All participants in the ACT group expressed having negative attitudes about clients with a PD prior to taking part in the training. Their willingness to communicate these difficult feelings could be attributed to the content of the training, which explained an ACT conceptualisation of stigma (e.g., judgments occur as a natural by-product of language; Hayes, Strosahl & Wilson, 1999). As such, it appears that the ACTr may have been successful in reassuring staff that experiencing negative thoughts about clients is a natural process for humans. Despite all the DBT participants acknowledging that PD clients are often stigmatised, they did not – in contrast to the ACT participants – admit ownership of such attitudes. Instead, they talked about how their clients are treated negatively by *'other professionals'* or the *'healthcare system'*. Their unwillingness to reveal having stigmatising attitudes about clients suggests that they construe this negatively. This lack of disclosure may reflect a self-preservation bias, which could also be reflected in the DBT groups' quantitative data.

All the ACT participants stated that working with PDs prior to the training had had a negative emotional impact on them. Consistent with previous research (e.g., Lewis & Appleby, 1998; Krawitz, 2004; Wright et al., 2007; See Chapter 1), they reported that working with this client group produced feelings of anger, fear and frustration. This finding confirms the importance of developing effective training for staff working with PDs, and supports the rationale of this research programme. For the DBT group, however, the reported negative impact of working with PD clients related solely to threats to their professional competency (e.g., feeling ineffectual as a professional), a position that is shared by other professional groups (e.g., Wright et al., 2007). Given that participants' accounts were retrospective; this finding indicates that the two types of training were distinguishable, with ACT focussing on internal events, and DBT on professional practice. Despite the quantitative data indicating low levels of burnout and psychological distress for this sample, the present findings suggest that working with PD clients may have a negative impact on participants. Finally, in relation to their thoughts about clients prior to the training, several participants from each group disclosed

some benefits of working with them. This might explain why the baseline stigma levels for the present study were low in relation to other populations (e.g., Bowers & Allan., 2006).

Whilst focussing on attitudes towards clients following the training, participants in the ACT group expressed fewer negative attitudes than before, but did not express any positive ones. This finding is consistent with ACT theory, which asserts that the elimination of negative thoughts is unlikely to be achievable (Hayes et al., 2004; Lillis & Hayes, 2007). Nonetheless, fewer negative attitudes were reported, which is consistent with the quantitative stigma data (See Study 3). In keeping with their attitudes prior to the training, participants in the DBT group did not disclose any personal attitudes towards PD clients following the training. Thus, in spite of the improvements observed in their quantitative data, they were unwilling to disclose any personal attitudes about clients to the interviewer. Thus, unlike the ACT group, it appears that these participants continued to interpret the presence of stigmatising attitudes negatively. This finding may reflect a further distinction between the two training approaches.

Participants in both groups explained that the training differed from their expectations. Indeed, the majority of ACT participants were not expecting the training to have such a personal focus. Given that ACT-based self-management training is a novel approach for staff working with PD clients, this finding was expected. Contrary to expectation, however, participants in *both* groups were not anticipating the training to be as experiential and interactive in nature. Although this finding coincides with the training protocol used for the ACT group (see Appendix I), it does not correspond with the protocol used for the DBT group, which was designed to be more didactic. Furthermore, these views were supported by both the ACT and DBT participants' accounts of exercises and concepts remembered from the training, most of which were experiential. However, participants in the ACT group specifically discussed exercises relating to self disclosure, whilst the DBT participants discussed work related experiences. Nevertheless, one participant from the DBT group described an occasion where another attendee discussed the loss of her husband. This finding may suggest that the experiential aspects of the DBTr made more of an impression on participants than expected and on occasion may have inadvertently elicited personal disclosures from them. This shortcoming suggests that the format of the ACT and DBT workshops may have been more similar than intended. These similarities could help explain why the groups could not be differentiated on the main outcome quantitative data and suggests that in future studies, ACT should be evaluated against a less similar control.

Similarly, participants from both groups admitted that they had found the training difficult at times but the reasons for these difficulties varied considerably between the two groups. All participants in the ACT group stated that they had felt uncomfortable during certain experiential exercises. More specifically, they reported feeling vulnerable, exposed, and distressed, as well as concerned for other members of the group, who in their opinions appeared to be struggling. Critically, these reports accord with the ACT participants' psychological flexibility and burnout scores, which unexpectedly deteriorated immediately following the workshop but returned to pre-intervention levels by follow-up (see Study 3). It seems likely that participants were still experiencing discomfort as a result of the experiential nature of the training at the time they completed the post-training questionnaires (i.e., before leaving the workshop). Nevertheless, some participants explained that they thought the uncomfortable aspects of the training were necessary to bring about the positive changes they experienced as a result of the workshop. This willingness to experience personal discomfort in the service of something that is valued is a process central to ACT (Hayes et al. 1999), and explains why their flexibility and burnout scores returned to baseline levels by follow-up. Nevertheless, participants reported feeling distressed as a result of the ACTr and despite stating that the uncomfortable nature of the training may have been necessary to bring about positive changes, this might not be the case. Furthermore, these interviews were conducted with a small, self-selecting sample of participants who might not share the same views of other attendees. Nevertheless, important consideration should be given to the content of the current protocol if it is to be used in additional training interventions.

In contrast to the ACT group, the difficulties experienced by participants during the DBT workshop appeared to solely relate to intellectual and physical challenges. For example, participants felt that the quantity of material covered over the two days was overly ambitious. Furthermore, one participant was unsure how the training would benefit other members of the group with limited experience of working with PD clients. Given the nature of these difficulties, it is unsurprising that no changes were seen in their post-intervention flexibility or burnout scores. Akin to the ACT group, however, the DBT participants also felt that these difficulties were worthwhile because it provided them with the knowledge and skills they required.

In sum, these findings aid our understanding of the unexpected post-intervention changes observed in the ACT participants' flexibility and burnout scores and may provide some suggestions as to why they did not occur for participants in the DBT group. As such,

these findings have identified aspects of the ACT protocol that may require refining before future use, which in turn, should improve the effectiveness of the training by minimising participants' discomfort. In spite of the difficulties, however, the majority of participants from both groups talked very positively about a number of aspects of the training, such as its style, content and delivery.

Almost all participants who attended the ACT training talked about positive experiences following the training, mostly in terms of changes in their own emotions and their relationship with their thoughts. More specifically, participants described increased awareness and acceptance of their own private experiences, despite continued difficulties with clients. These reports are in keeping with the ACT aim of enabling individuals to have valued life experiences in the face of other difficulties (Hayes et al., 1999). These reported self-management changes were not however, observed in participants' follow-up process data. This inconsistency raises two issues. First, the experiences of participants interviewed in the present study may not represent those of the remaining sample; second, the measures chosen to evaluate the self-management processes may not have been suitable to detect these changes (i.e., the AAQ-II and the BST-PDQ). As such, these proposals require further investigation. For the present sample, however, these findings imply that the self-reflective aspect of the ACTr was successful in changing participants' relationships with their internal events.

Although every participant who attended the DBT training also talked about positive experiences following the training, in contrast to the ACT group, these changes specifically related to their professional role and interactions with clients, not themselves personally. As such, these accounts are consistent with the professional stance maintained by participants throughout the interviews and once again, emphasise possible between group differences.

The participant from the ACT group who felt that the training had been of no value to her had wanted to attend the DBT training, but through the process of randomisation was assigned to the ACT condition. As such, this participant found it hard to engage with the intervention because she felt it did not suit her requirements. Furthermore, a participant from the ACT group implied that the nature of the training had definitely not appealed to one of the other attendees. These circumstances reflect a critical weakness of RCT methodology by indicating that assignment to an unwanted condition can be of little benefit to the participant or the researcher. A further methodological issue raised by one of the participants, relates to the administration of self-report questionnaires in the RCT over a protracted period of time (e.g., 6-months). She indicated that external events such as Christmas may have influenced her

responding on the quantitative measures, which brings into question the accuracy of her data. As such, it is possible that the self-report, quantitative data may not accurately represent participants' experiences. Furthermore, a number of participants from both groups explained that the number of questionnaires administered was excessive and as a result may not have been completed correctly. This problem is hard to remedy for two reasons. First, in order to determine the effectiveness of the training over time, it is critical to assess participants over a substantial period and second, evaluation methods other than self-assessment would be problematic to administer, time consuming and costly (see Chapter 3). In order to reduce the questionnaire fatigue experienced by participants and to promote the accuracy of their responses it would, however, be beneficial to reduce the number of measures administered. Finally, a few participants explained that they were very tired by the end of the second training day, which is when the post-training questionnaires were completed. In view of this information, it would seem beneficial to delay the completion of the post assessment questionnaires.

*Limitations*

The present study has a number of weaknesses. Most notably, it was based on a small, self selecting sample that may not accurately represent the views of others who opted not to participate. As such, the findings need to be interpreted with care. Second, in spite of our efforts, it was not possible to recruit an equal number of participants from each group who could be differentiated on the quantitative measures. If this had been the case, it would have been interesting to establish whether their accounts notably differed from one another. Third, the interviews were conducted approximately 6-months after the completion of the training, which resulted in a few participants struggling to remember certain details of the workshop. Finally, because participants were only interviewed after the training, they were required to provide retrospective accounts of their experiences with clients prior to the workshop. As such, these accounts may not accurately reflect their true experiences prior to the training.

*Considerations for Future Research and Conclusions*

In spite of these weaknesses, the present study permitted an in depth exploration of participants' experiences of the training they attended as part of Study 3, which has facilitated the interpretation of its findings. Most critically, this small scale study has suggested that at times, participants may have found the nature of the ACTr too emotionally exposing. This

finding may account for the pre – post decline observed in participants' quantitative psychological flexibility and burnout scores. Despite their scores returning to pre-intervention levels by follow-up, and their claims that the uncomfortable experiential nature of the training may have been necessary to bring about the positive changes they experienced, a fundamental aim of ACT interventions is to *promote* flexibility and wellbeing. This information suggests that the training protocol used in Study 3 may require softening prior to future use.

Second, participants' reports suggested that the format of the ACT and DBT workshops were more similar than intended. As such, these similarities could help justify why the two groups could not be differentiated on the main outcome quantitative data and suggest that in future studies, ACT should be evaluated with a less comparable control. In spite of these similarities, the present study did reveal some group distinctions that could not be detected by the self-report questionnaires. For example, participants in the ACT group appeared to be more accepting of their negative attitudes about PDs than DBT participants. Furthermore, the accounts provided by ACT participants reflected a focus on internal events, whereas the DBTs' centred on their professional practice. However, it is important to bear in mind that these data were collected from a small, self-selecting sample and may not represent the views of other workshop attendees.

The findings from the present study appear to support the basis of this research programme by suggesting that mental health professionals may hold negative attitudes about PD clients and that working with this challenging client group can impact them negatively. More importantly, they suggest that ACT and DBT have a useful contribution to make in addressing the impact of mental health staffs' stigmatising attitudes towards their clients. Critically, the present study not only shows how the ACTr protocol could be improved, but provides a more general insight into how future evaluations should be conducted.

In conclusion, this small scale qualitative investigation appears to have been an effective way of systematically exploring staff members' experiences of the workshop they attended in Study 3, which in turn has aided the interpretation of the quantitative findings.

# Interview Questions

Can you tell me what it was like working with challenging clients prior to doing the training?

Before you went on the training, what did you imagine it would be like?

What was your actual experience of doing the training?

Can you tell me about any parts of the training you particularly remember?

What did you think about those parts of the training at the time?

What do you think about those parts of the training now?

Can you tell me about what it has been like working with challenging clients since doing the training?

# Coding Manual

**Theme 1 – Before the training**

**Theme 1a**
Label – **Before the training**: **Personal Attitudes towards challenging clients**

Definition – The participant makes statements indicating their attitudes, judgments, opinions, assumptions and generalisations about challenging patients, in response to a question about their experiences before the training.

Code all statements that refer to before the training that are descriptions of this client group, including labels, e.g. 'manipulative' and 'they're a nightmare', descriptions of behaviours e.g. 'they say one thing but do another' and assumptions e.g. 'they're doing it on purpose'.

Do not code statements that refer to the impact of working with this client group on the staff member. E.g. code 'they're frustrating' but not 'I feel frustrated'.

Do not code statements that are descriptions of the client group that refer to after the training.

**Theme 1b**
**Label - Before the training: Perceptions of how challenging clients are treated/responded to by others**

Definition – The participant refers to how they believe challenging clients are responded to/treated by others (this includes other professionals and the system as a whole). E.g. 'quite often I feel that people with challenging behaviours don't get treated as individuals'

**Theme 1c**
**Label –Before the training: Impact of working with challenging clients on the participant**

Definition – The participant refers to the impact, either negative or positive, of working with challenging clients generally and of the individual clients specifically in relation to before the training.

1c(i) Negative impact - code all statements that refer to before the training that are descriptions of negative impact on the participant as a result of contact with challenging clients. This includes behaviour, e.g. 'I kind of get sucked in', emotions, e.g. 'I feel frightened' and thoughts, e.g. 'I used to go home and churn it over in my head'.

1c(ii) Positive impact – code all statements that refer to before the training that are descriptions of positive impact on the participant as a result of contact with challenging clients. This includes behaviour, e.g. 'I can use my skills' and emotions, e.g. 'I get excited about the challenge'.
Generally, for both 1c(i) and 1c(ii):

Do not code statements that are about the clients rather than the impact on the participant. For example, code 'I feel frustrated' but not 'they're frustrating'.
Do not code statements that refer to after the training.

**Theme 2 – Expectations of the training**

**Theme 2a**
**Label – Contrary to expectation**
Definition – The participant indicates that before the training they had expected it to be different to how it was in reality

Code all statements that refer to a difference between prior expectation and actual experience of the training. E.g. 'I expected it to focus on the clients not on me' and 'more challenging'.

**Theme 2b**
**Label – As expected**
Definition – The participant indicates that before the training they had expected it to be the same as it was in reality

Code all statements that refer to no difference between prior expectation and actual experience of the training. E.g. 'As I thought really'.

**Theme 3 – Difficulties experienced during the training**

**Theme 3a**
**Label – Difficult emotions during the training**

Definition – The participant indicates that they experienced some kind of difficult, intense or painful emotion during the training.

Code all statements referring to difficult emotions during the training. E.g. 'vulnerable', 'it was really kind of intense and difficult' and 'embarrassed'.

**Theme 3b**
**Label – Other difficulties experienced during training (such as physical or intellectually demanding)**

Definition – The participant indicates that at some point during the training they found the experience demanding.

Code all statements referring to difficult experiences during the training that were not emotional. E.g. 'I felt drained' 'It was challenging, hard work'

**Theme 4 – Difficulties during the training were worthwhile**

**Theme 4a**
**Label – Difficult *emotions* during training were useful**

Definition – The participant indicates that they experienced difficult emotions during the training and that they considered this to be acceptable and/or necessary.

Code all statements indicating that the participant views these difficult emotional experiences as acceptable, necessary or otherwise positive. E.g. 'I think they were necessary and helpful' and 'it liberates you'.

**Theme 4b**
**Label – Other difficulties experienced during the training were worth it**

Definition – The participant indicates that at some point during the training they found the experience demanding but that these demands were acceptable and/or necessary or in fact beneficial. E.g. 'I really liked the fact that it challenged me, made me look at my practices, and made me change my practices…'

**Theme 5 – Positive about the training**

Definition – The participant refers to some aspect of the training as being positive.

Code all statements referring to positive aspects/experiences of the training including:
(i) General. E.g. 'I loved it'.
(ii) The trainers. E.g. 'they did some self disclosure which was quite helpful'.
(iii) Being in a group. E.g. 'I liked the group, the sharing'.
(iv) Treating clients as individuals. E.g. 'seeing them as people'
(v) Exercises and concepts. E.g. 'I liked the bit about values rather than goals'.

Do not code statements that refer to the necessity of experiencing difficult emotions during the training. E.g. statements that will be coded under theme 4.

Do not code statements that refer to the approach advocated in the training matching the participant's way of working. E.g. statements that will be coded under theme 10.

**Theme 6 – Negative about the training**

Definition - The participant refers to some aspect of the training as being negative.

Code all statements referring to negative aspects/experiences of the training including:
(i) General. E.g. 'it was a waste of time to be honest'.
(ii) Too much material covered. E.g. 'couldn't take it all in'
(iii) Exercises. E.g. 'but that was all very forced, to be honest'.

Do not code statements referring to concerns about the impact of the training on other participants, e.g. the statements that will be coded under theme 7.


**Theme 7 – Concerned about other people at the training**

Definition – The participant indicates that they had concerns about how other people were experiencing the training.

Code all statements where the participant refers to their view that other people were having difficulties with the training, e.g. 'she couldn't handle it' as well as statements referring to the participant's thoughts and feelings about this, e.g. 'I felt uncomfortable for them struggling' 'People were quite upset about some of their experiences'

**Theme 8**
**Label – Exercises and concepts remembered from the training**

Definition – The participant describes exercises or aspects of exercises that they remember from the training

Code all statements that refer to examples of exercises and concepts from the training, including partially remembered aspects of the training and statements where it is clear that the participant has remembered the basic principles of an exercise or concept, even if they can not remember the correct name for it E.g. 'values' and 'sitting face to face with someone and staring at them', 'What I do remember is disclosing of self'

Do not code if the participant says that they can remember aspects of the training but gives no examples.

**Theme 9 – Since the training**

**Theme 9a**
**Label  – Since the training: Attitudes towards challenging clients**

Definition – The participant makes statements indicating their attitudes, judgments, opinions, assumptions and generalisations about challenging patients, in response to a question about their experiences after the training.

Code all statements that refer to after the training that are descriptions of this client group, including labels, descriptions of behaviours e.g. 'they get very angry' and assumptions.

Do not code statements that refer to the impact of working with this client group on the staff member. E.g. code 'they're frustrating' but not 'I feel frustrated'.

Do not code statements that are descriptions of the client group that refer to before the training.

**Theme 9b**
**Label – Since the training: Impact of working with challenging clients on the participant**

Definition – The participant refers to the impact, either negative or positive, of working with challenging clients generally and of the individual clients specifically in relation to after the training.

9b(i) Negative impact - code all statements that refer to after the training that are descriptions of negative impact on the participant as a result of contact with challenging clients. This includes behaviour, emotions and thoughts. E.g. 'It's still quite difficult'.

9b (ii) Positive impact – code all statements that refer to after the training that are descriptions of positive impact on the participant as a result of contact with challenging clients. This includes behaviours and emotions.

Generally, for both 9b(i) and 9b(ii):

Do not code statements that are about the clients rather than the impact on the participant. For example, code 'I feel frustrated' but not 'they're frustrating'.

Do not code statements that refer to before the training.

**Theme 9c**
**Label – Since the training: Positive experiences**

Definition - The participant refers to relevant positive experiences since the training

Code all statements where the participant refers to relevant positive experiences and changes since the training e.g. 'You become freer', 'less stressful' and 'don't battle feelings and thoughts'. Also code all positive statements specifically about the participants' sense of themselves e.g. 'I feel good enough now', 'I accept who I am more'.

Do not code statements that refer to positive experiences that result from working with challenging clients, as opposed to positive experiences with those clients but are the result of something else (such as the training). E.g. Code 'You become freer' but do not code 'challenging clients give you a chance to use your skills'.

**Theme 10 - Already working like this**

Definition – The participant states that before the training, at least to some extent, they were already working in a style compatible with or the same as the one advocated in the training or already had the knowledge/information. E.g. 'the way I work with people, I don't think it's

changed very much. I think that's always something I've been quite aware of', 'it just kind of reinforced what I already thought'

**Theme 11 - Training**

**Theme 11a**
**Label – Motivation for attending/ need for training**

Definition – The participant explains why they chose to attend the PD training or provides information that suggests why they should attend. E.g. 'we don't have a lot of guidelines and guidance about how to deal with people who are challenging the norm' 'we can become very complacent' 'we don't reflect on our work enough'

**Theme 11b**
**Label – Future training**

Definition – The participant makes reference to possible future training.

Code all statements referring to future training including wishes. E.g. 'if they did a DBT 2 day training . . . I'd be very happy to go on that' and suggestions, e.g. 'I think everyone should go on it'.

**Theme 12 - A long time since the training and can not remember everything**

Definition – The participant refers to it having been a long time since the training as an explanation for them not being able to remember details of it.

Code all statements that refer to the length of time between the training and the interview as a reason for them not being able to remember more. This might be clearly stated, or implied. E.g. 'It's a long time ago now . . .'

Do not code references to how long ago the training was, if there is no reference to or implication that this is an explanation for not being able to remember more.

**Theme 13**
Label – **Questionnaires**

The participant makes reference to the questionnaires. The statements can be positive or negative or simply descriptive. E.g. 'I hadn't been very well at the time, so they might not be relevant'

**Theme 14 – Professional role**

**Theme 14a**
**Label – Before the training: Descriptions of participant's professional role**

Code all statements that refer to the participant's professional role (e.g. descriptions of how they interact with clients, descriptions and or perceptions of what their job entails), before taking part in the training. Do not include the participant's feelings about clients or the impact of client's behaviours on them.

**Theme 14b**
**Label – Since the training: Positive changes relating to participant's professional role**

Code all statements that refer to positive changes in the participant's practice or understanding of client group, such as knowledge gained, techniques used, approach to clients etc. E.g. 'I have been using techniques that we were discussing'; 'I appear to have a lot more understanding' 'What I'm thinking now…they're feeling this so we need to deal with the fact that they're feeling like this and deal with that appropriately' 'actually seeing a lot more of what is going on with these people'

## Appendix M: ACTr Protocol – Uncontrolled Trial (Study 4)

Day 1

- Definition and prevalence of **only PD if required**
- Workshop purpose / ground rules / invitation to make a difference
- Exercises: Opening mindfulness & Introductions in pairs
- Workshop schedule
- **Exercise**: Identify a client: **what makes difficult clients difficult**?
- **Definition of stigma**
- **Exercise**: Find an object in the room
- **Categories stereotypes**: when useful and when not
- **Exercise: Cross cutting** Recall introduction – which of these? – debrief
- C O F F E E   B R E A K
- What is ACT RFT analysis of the problem / relationship to burnout
- Is it abnormal to be abnormal – is suffering abnormal?
- The cultural agenda – living the good life
- **Exercises: Chocolate cake** then **Polygraph metaphor** acted out with participant
- **What do the data say** – thought suppression
- Psychopathology, risky behaviours Cheavens et al., and Kingston et al.
- **Control is the problem**
- **Assumption of destructive normality** – but why?
- **Language** –the core process, RFT, Gub, gub, woo, woo, derived relations
- Self knowledge useful, painful and stigmatising! **Language** our gift & burden
- **Definition of EA**
- L U N C H
- **What about us?**
- Group Exercise:  blonds have more…
- Increase experiential awareness of the costs of EA
- **Exercise**:  Work related **Barriers –** the worst thing about me is, the most difficult clients, I wish I didn't have to work with; I wish I was – feedback?
- **Exercise: Ways of being?**  Difficult thoughts and feelings
- **Exercise: Barriers continue -** Fears concerning the responses of others. Compensations for feeling weak, small, inadequate, or bad. Cost of

compensatory and avoidance: connection or support from others. **Example**: Bess

- **Exercise**: how long trying to manage problem?
- **What do the data say?**
- <u>**Paradox of control / creative helplessness**</u>
- '**Quicksand**' and or '**man in a hole**' metaphors
- What do gub gubs say? Works by addition not subtraction
- **T E A**
- **The ACT agenda** – **feel** good and live well
- ACT: the central question – in a world… manage life or feelings
- **Defining ACT – Hexagram**
- What do the **outcome data** say: Clients - treatment resistance?
- What do the **outcome data** say: Professionals – stigma etc?
- <u>**Introduce cognitive defusion**</u>
- **Definition** fusion & defusion **Exercise** Two hands
- **Variety of defusion exercises**
- **Exercises**: <u>Milk</u>, milk, milk; vocalizations; physicalizing your experience: give cards <u>Taking your mind for a walk</u>: Anything that is not avoidant and anything that is present moment
- **Homework** – judgments and <u>identify own defusion</u> technique, give table

**Day 2**

- **Mission** / schedule / review homework
- <u>**Introduce the observer perspective as means of accepting thoughts**</u>
- **Exercise: The Big Screen**
- **Exercise: Labelling your thoughts** eyes-on but <u>low key</u>
- **Metaphor: Passengers on the Bus?** I just talk this through
- **Exercise**: **Sticky label** - Letting go of fusion: self & others – could move to after break
- **C O F F E E**
- <u>**Creating empathy and self acceptance**</u>
- **The trap of fear** – conditioned suppression – narrowing avoidance repertoire
- **Deactivate** stigmatising process

- **Exercise**: shared shame in your mind's eye (omit?)
- **Exercise**: eyes on looking at labels – being present to each other's pain
- Sebastian Moore quote
- **L U N C H**
- <u>Defining most cherished work-values and goals</u>
- The central question – in a world where… why?
- Distinguishing values and goals – what do you want your life to be about?
- Choices are not reasoned judgments – *decision to have children*?
- Values and vulnerability – two sides of coin
- Mandela quote
- Pascals / Wilson's Wager
- **Exercise**: Eyes on Sweet spot
- **Exercise**: Retirement part mediation
- **T E A**
- <u>Treating unwanted feelings and thoughts with acceptance and compassion to facilitate engagement and vitality with respect to work-values</u>
- **The Willingness question** – am I willing to have my thoughts and feelings…
- **The Life question** continued: what I want to be about is, the barriers, what I've been doing, what the costs are and my commitment
- **Exercise: PB Writing task** – values, fusion & avoidance
- **Commitment ceremony** in fours
- **E N D**

## Appendix N: ACTr Protocol – revised (RCT 2; Study 5)

DAY ONE

**Brief introduction of myself:** notice what shows up (?)

**Brief introductions of participants in groups of four:** notice what shows up (?)

**Is it abnormal to be abnormal?***

- Ubiquity of human suffering and yet……

**What about us?**

- *Creative hopelessness exercise*:  Something about me that I don't often share, that I most wish I could change, what I like least
- How long have you been fighting? Aren't you sick of it?

**Cultural agenda*** and **alternative assumption***

- **Out with the bad***
- **The ACT agenda***
- **The paradox of thought suppression**
- **Control is the problem** *one or more of following exercises:*
  - *What are the numbers exercise?*
  - *Polygraph metaphor*
  - *Chocolate cake exercise*
  - cf Wagner emotions / behavioral dispositions – My tremor

**Brief mention of role of language as double edged sword, without RFT**

B R E A K

- **DSM IV definition of Personality Disorder**
  - Overview of associated problems (BPD)
  - What shows up for us? What do we do?

- **A  functional understanding clients**
  - Experiential avoidance - cuts across DSM categories
  - **And us** – this thing we most dislike – how we are with our clients?

- **An evolutionary understanding** – Inflexibility
  - taking the burden of responsibility

- **When behaviour loses flexibility \***
- **Flexibility and Stimulus Control\***
- Behavioural understanding of psychological inflexibility – for our patients and also for us – where do we find inflexibility and flexibility?
  - conditioned suppression
  - narrowing of attention and behavioural repertoire
  - evolutionary function – bunny rabbits and hidey holes

- **Snake phobia as an example\*** –
  - 'Have to' quality – **stereopathy** that cuts across DSM categories
  - Draw examples of **our own** 'have to' in the clinic

- **Exposure\***
  - Aimed not at reducing elicitation and avoidance (though it will) but at increasing breadth and flexibility
  - What about Fusion?

L U N C H   B R E A K

**What about us?**

- **Cross cutting exercise** either video or participants?
  - Reactions
  - Recall initial introductions – what grabbed your attention?
  - Recall your own introduction – what was withheld?

- Exercise: Complete
  - Blondes have more xxxx etc
  - Borderline **clients** are xxx?
  - Anorexic clients are xxx?
  - Alcoholic clients are xxx?
  - The problem with (one of above) is that they xxx
  - The chance of (one of above) ever leading a fulfilling life is xxxxx

**Self disclosure**

- Exercise: Describe any object in the room

- Exercise: Complete
  - The worst thing about **me** is xxxx
  - I wish I didn't have to work with people who xxx
  - I wish I was xxxx
  - If only I could fix this problem I could xxxxx
  - If only this qualification, this job, this xxxx I could xxxx
  - 
- Group Exercise:  blonds have more  xxxx, there's no place like xxxx etc etc
- Are you going to turn your life over to this?

**Self disclosure**

Reactions?

- **Fusion**
- Saliva exercise

- **Aim of workshop:**
  - **To put people in the room: us and our clients** the harder the client, the more we squeeze down / client phobic / work phobic – if we can get present in hardest moments, then maybe we can help them?

B R E A K

- o Defusion

- o **Potential ACT Strategies\***
  - o Should attack aspects of context that support the narrow repertoire
    - Can be serious or playful
    - Gestalt, repetition, experiential exercises – all where psychological flexibility is the critical change process
    - Any way of interacting in the present moment that is not avoidant
    - Slowing down - lingering
    - Appreciation
    - Play etc
    - Shift in context to free them up in their lives

    - *Exercise: Milk, milk, milk*
    - *Exercise: Repetition of potent self or other stigmatising word*

    - Anything that is not avoidant and is present moment
    - *Exercise: get group to generate defusion strategies*

- **Mindfulness-like exercise\***
  - o Coaching present moment in the face of difficulty
  - o Noticing letting go as new behaviour

- **The Observer Perspective**
  - o *Leave on the stream or cinema exercise*

- Recall, narrowness, inflexibility and fusion in the face of aversives

DAY TWO

- **What about values?**

- **Sweet spot exercise**
  - let go of social exchanges, notice have to, explanations – get silent and breath
  - Maths problems or sunsets
  - Orientate them to their values, to their clients values, to how they are with their clients

- What's it like sitting in this room to witness?
  - What showed up?
  - What would it be like to wonder what sweet moments your client may have had?  Even your boss may have had?

- What's it like to be seen?
  - What showed up?
  - How fusion eroded and dissolved in presence of values
  - How many times in their life have they really been seen?
  - **Self disclosure – clinical examples** Mothers / fathers

B R E A K

- **Treatment / Work Life and the Question?***
  - In a world where you could choose…
  - Victor Frankle
  - How would you want to be an instrument in your client's lives – what would you be willing to bear, to witness, what animates you?
- Reactions?

- **Wilson's wager –** language of possibility - probable no, possible yes.

- Conversations of limitation / threat rather than appreciation / possibility or intimacy

**Interpersonal effects***

  o  Intimacy, values and vulnerability – what happens..?

- **Shared Values Work***

  o  Explicit therapist commitment

  o  Search for therapeutic contract that is inspiration to both

▪  **Values and vulnerability**

  o  Jen Plumb exercise

    ▪  Poured from same cup

    ▪  **Self disclosures bitter sweet spots: Ollie, RTA**

    ▪  **Clinical examples**

  o  Impact on relationship, impact on the work

  o  Words of caution re fusion and avoidance

  o  Vital importance of **willingness question** / permission (theoretically and ethically - put predictability and control in their hands

L U N C H   B R E A K

▪  **Video – Jenny**

  o  Pause and draw reactions

  o  How many people would want to spend time with Jenny?

  o  What showed up?

  o  Notice inflexibility / narrowing / fusion and softening / broadening / defusion

    ▪  In Jenny?

      o  Present moment

      o  EA

      o  Fusion

      o  Sense of self? -  Who is Jenny?

    ▪  In us?

      o  Present moment

      o  EA

- o   Fusion
- o   Sense of self?

B R E A K

- ▪ **Valued Living 2 questionnaire**
    - o   Forced choice
        - ▪   Now 3, now 2, now 1? If you had to get rid of one, then which?
        - ▪   One small thing – without explicit commitment
        - ▪   One big thing – without explicit commitment
    - o   What did you notice?
    - o    'Have to' leads to fusion, so take active commitment off the table
    - o   If I was going to live this day on purpose, what would it look like?
        - ▪   A different conversation to whether you can do it or not
        - ▪   There may be more life in a small commitment
        - ▪   What would one small act of kindness look life?

        - ▪   *Exercise: Eye's on appreciation and expression*
            - •   One small thing
            - •   One big thing
            - •   What would this mean for us and (maybe) the people that we care for?

END

# Appendix O: PETr Protocol (RCT 2; Study 5)

## Day One

- *Breaking the Cycle of Rejection: the personality disorder capabilities framework*  2003
- Diagnosis
- Co-morbidity
- Causes
- Evidence based treatments
- Process Issues
- National Policy
- Forensic issues
- Risk assessment/ risk management

**Definition**
DSM IV: Personality Disorders
ICD 10 International Classification of Diseases

Differences between Classification systems

Prevalence of PD in different populations

**Types of personality disorder**
(Review each type of PD supported by footage from Thames Valley Personality Disorder Project)
- Schizoid
- Avoidant
- Dependent
- Paranoid
- Schizotypal
- Histrionic
- Narcissistic
- Anankastic /Obsessive Compulsive
- Anti-social Personality Disorder
- Borderline
- Borderline PD re-organised

**Co-morbidity**
Co-morbidity with Axis 1 disorders

Small Group Exercise:
*Identify one of your more troublesome clients.*
        *In small groups consider:*
*1/ Were you able to fit the client into these personality criteria?*
*2/ Was there any overlap? co-morbidity?*

**Assessment of PD**:  psychometrics including MCMI-III/SCID

Large Group Exercise:
*The advantages and dis-advantages of diagnosis*

Advantages of personality disorder diagnostic model
Problems with Diagnosis

**Psychological Formulation**

**PD in other groups**
Can children/adolescents have personality disorders?
Assessing Personality Disorder in clients with Learning Disability
Criminal Behaviour and PD

**Stigma**
*Large Group Exercise*
- *In Pairs:  Image you had a diagnosis and everybody in the world knew about it.  Rate from 1 (Like) to 10 (least like).*

  *Heart disease; Syphilis; Depression; Personality disorder; Diabetes; Psychosis; Genital warts; Hyperhidrosis (excessive sweating); Asthma; Irritable bowel syndrome*

## NATIONAL POLICY CONTEXT

WHAT DO CLIENTS WITH PD FIND HELPFUL ?
NIMHE:  Personality Disorder no longer a diagnosis of exclusion
Helpful features of PD Services
Unhelpful features of PD Services
PD and Mental Health Act

**Causation**
*Small Group Exercise:*
- *What are the causes of Personality Disorder?*

CAUSES OF PERSONALITY DISORDER

*STEPPING OFF THE MAP* PART 2  (Somerset Mind training video)
*Causes of Personality Disorder*

The Bio-Psycho-Social Model
THE INVALIDATING ENVIRONMENT
Attachment

*STEPPING OFF THE MAP* (Somerset Mind training video)
*PART 3  How people are affected*

*STEPPING OFF THE MAP* (Somerset Mind training video)
*PART 4 Intervention*

Day Two

**Outline and Evidence base for interventions**
Detailed explanation of the following interventions

- Dialectical Behaviour Therapy
- Therapeutic Communities
- Schema Focused Cognitive Behaviour Therapy
- Cognitive Analytic Therapy (CAT)
- Therapeutic Communities

Interventions in forensic settings

Drug Interventions

*Small group exercise*
    *What are some of the problems working with this patient group for you as:*
    *1/ a clinician?*
    *2/as a team?*

**Common Processes**:  Discussion regarding dynamics with this patient group and impact on staff teams (e.g. *splitting; idealisation; over control; anxiety*)

*Large group exercise*
*What are some of the solutions in dealing with the difficulties.*

Guidance (NICE Guidance for BPD and ASPD)

Crisis Management

**Forensic Issues:**

Psychopathy  discussion introduce PCL-R

Exert form Ch 4 Documentary

**Risk Assessment**

Risk to Others
EXERCISE: Large Group
 identify risk factors for risk of harm to others

Risk Of Violence HCR_20

Risk reduction factors and positive coping strategies

Legal/ethical issues in management of risk

RISK TO SELF

RISK FACTORS FOR A SUICIDE ATTEMPT

Management of Suicide Risk

**Risk Assessment/Management**
*Exercise: Small Groups*
*Think of a client with PD who has been worrying you.*
*What is the nature of the risk (risk to self or others) how could you manage the risk?*

**Risk Management**

**END**

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