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Working in Adult Mental Health:

Burnout and the Effects of Dialectical Behaviour Therapy Skills Training

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Working in Adult Mental Health:
Burnout and the Effects of Dialectical Behaviour Therapy
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Contents

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Working in Adult Mental Health: Burnout and the Effects of Dialectical Behaviour Therapy Skills Training

Abstract

This thesis aims to explore the predictors of burnout in adult community mental health services and whether DBT skills training is an effective intervention on outcomes for mental health staff.

The first chapter consists of a systematic literature review, examining the predictors of burnout in community based mental health staff. In total, 24 studies met the inclusion criteria and consisted of mainly cross sectional survey designs. The review partially supported existing literature on models of burnout, whilst emphasising the importance of personal factors on the development of burnout. The findings were limited due to the lack of studies with longitudinal designs.

The second chapter examines the empirical research investigating the relationship of brief DBT skills training on outcomes for mental health staff. 141 mental health staff were recruited at the beginning of the study who completed questionnaires on including burnout, wellbeing, stigma towards clients with BPD, organisational readiness for change, and attitudes towards evidence based practices pre and post training and 39 participants participated at follow up. ANOVA analysis found that the training was significant in reducing stigma towards clients with personality disorder and had a short term effect (from pre to post training) in reducing burnout. The clinical implications and the limitations of the research paper are discussed.

The third chapter discusses the papers referred to above with regard to theories and models of burnout potentially providing a psychological explanation for why some factors predict burnout better than others. It also explores why DBT skills training appears to have a small effect on burnout. A reflective commentary is provided at the close of the thesis.

Chapter One: Literature Review

Burnout in Mental Health Staff Working in Community Based Settings: A Systematic Review

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Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

Abstract

Background: Working with clients experiencing suffering and distress on a daily basis can put mental health staff at risk of burnout. Burnout is a multifaceted construct and has several consequences which can affect staff members; their relationship with the client; and organizational outcomes.

Aims: This study systematically reviews the existing literature exploring the predictors of burnout in mental health staff working in community mental health settings.

Method: PsychARTICLES, Web of Science, CINAHL, and Ovid databases were searched, and articles were examined according to set inclusion and exclusion criteria.

Results: 24 articles met inclusion. Predictors were characterised as either: personal and socio-demographic characteristics; role specific characteristics; and environmental / organizational characteristics. Being younger, less experienced, working overtime and a lack of support were the most common predictors.

Conclusion: Demographic and personal variables on the whole did not significantly predict emotional exhaustion, but did have a role in the development of depersonalization and personal accomplishment. Organisational and role specific factors seem to predict emotional exhaustion and should be the primary target of burnout interventions. Findings were limited due to the shortage of studies utilising longitudinal design.

Keywords: burnout, mental health staff, community mental health, predictors, systematic review.

1. Introduction

Individuals involved in direct patient care in the health sector can be exposed to suffering and distress on a daily basis. The growing gap between demand for services and available resources means that staff are acting as shock absorbers, working longer hours and more intensely to protect patient care (Robertson et al., 2017). Thus, leading to higher levels of stress and absence due to sickness (Robertson et al., 2017). These individuals working in human services are said to be at increased risk of burnout (Lizano, 2015). Burnout is a state of physical, emotional and mental exhaustion caused by long-term involvement in emotionally demanding situations, accompanied by disillusionment and negative emotions (Pines & Aronson, 1988).

Burnout, conceptualised by Maslach & Jackson (1981) is a multifaceted construct consisting of emotional exhaustion, depersonalization, and reduced personal accomplishment. The primary construct of emotional exhaustion is believed to be a result of depleted emotional resources, leading to staff feeling unable to give of themselves at a psychological level (Maslach & Jackson, 1981). Depersonalization is the result of negative, cynical attitudes and feelings about one's clients (Maslach & Jackson, 1981), which reflects emotional detachment to work (Maslach & Jackson, 1981). The third component, reduced personal accomplishment or personal efficacy, is the tendency to evaluate oneself negatively, particularly with regard to one's work with clients (Maslach & Jackson, 1981).

1.2 Burnout in Mental Health Services

Research into job burnout emerged in the 1970s stimulating research on job stress, particularly in areas like the helping professions (Schaufeli et al., 2009). Research into burnout in mental health services has lagged behind other areas of healthcare (Johnson et al, 2018), yet is exceptionally relevant. Reported prevalence rates in mental health staff range

from 21 to 67% (Morse et al., 2012), with a recent study reporting 69% of therapists as suffering from burnout (Westwood et al., 2017).

Burnout is associated with many negative impacts in mental health care including absenteeism and turnover, greater organisational costs, increased negative attitudes towards patients, and poorer patient outcomes (Morse et al., 2012). Higher burnout rates are also associated with poorer wellbeing (Morse et al., 2012) including higher levels of depression, anxiety, sleep disturbances and substance misuse (Ahola et al., 2005; Rohland, 2000). Few interventions have concentrated on reducing burnout, although it is acknowledged that such interventions are effective, however, effect sizes are small (Johnson et al., 2018). The factors appearing to drive burnout are the imbalance between demands and resources at work, and the conflict between values (i.e. between personal values and those of the organization, and between the officially stated organizational values and the values in action) (Schaufeli et al., 2009). This appears to be relevant in the context of mental health services and the current state of the National Health Service.

1.3 Community Based Mental Health Settings/Services (CBMHS)

This study explores burnout in community based mental health settings, internationally. In the United States of America, no differentiation is made between the types of CBMHS; whilst in the United Kingdom CBMHS are differentiated on the basis of clients' needs: primary and secondary mental health care service. Primary mental healthcare providers offer a service to individuals experiencing mild to moderate mental health problems. This includes the provision of Improving Access to Psychological Therapies (IAPT) service in England. Treatment may consist of counselling, psychological intervention or some form of online mental health support. These individuals often do not meet criteria for secondary care mental health service. Individuals with more serious or complex

psychiatric disorders, including severe and enduring psychosis and personality disorders are referred to secondary mental health care also known as community mental health teams (CMHTs). There are also specialist CMHTs for example: crisis teams (for people experiencing a mental health crisis), Assertive Outreach Teams (AOT) (for people with complex mental health needs), and Early Intervention Teams (for people experiencing their first episode of psychosis).

Both primary and secondary mental healthcare have differing demands. IAPT for example has a high caseload and high throughput of clients, which may increase the likelihood of burnout. Suicidal threats or violence may be a common occurrence in any mental health setting; however, the pressures related to this may be particularly intense in a CMHT, alongside a longstanding concern that teams are under resourced in being able to provide a service to this severe and enduring population (Prosser et al., 1997). The client group, working environment, resources and demands will be particular to CBMHS staff; hence the rationale for exploring the literature for this specific occupational group, although we acknowledge that service, organisational and culture differences will be present. For the purpose of this study CBMHS includes: outpatient services, day hospitals, CMHTs, recovery teams, AOTs, crisis teams, IAPT, and mental health centres.

1.4 Aims

This review explores and identifies contributing factors of burnout development in all mental health staff in CBMHS. Implications regarding intervention for burnout in this specific population are suggested.

2. Method

2.1 Search Strategy

A systematic literature search of PsychARTICLES, Web of Science, CINAHL, and Ovid for peer reviewed articles published on, or before 30 April 2018 was conducted. The following search terms were used: (mental health OR psychiatric AND burnout) which identified 3176 articles. A manual search of reference lists and articles resulted in identification of an additional 10 studies.

2.2 Eligibility Criteria

Titles and abstracts of identified articles were screened for inclusion according to the following criteria:

- Studies published in English.

- Participants were mental health staff working primarily in adult community mental health services.

- When more than one type of population was included i.e. a comparative study of inpatient and community mental health staff (CMHS), the study sample must include at least 50% CMHS.

- A measure of burnout was included in the study.

- Any quantitative study design.

- No limit on date of publication.

- If multiple studies reported the same data, the article that reported the most complete data set was included for further analysis.

Titles and abstracts of identified articles were screened for exclusion according to the following criteria:

- Articles which focused primarily on forensic, intellectual disability, child and adolescent mental health, inpatient, neurological/stroke, university counselling, occupational health, military mental health / veterans.

- Intervention studies.

- Solely qualitative studies were excluded due to the nature of the review.

- Studies that focused on measuring burnout after a national crisis or natural disaster as the authors were interested in chronic burnout in the work place.

- Published dissertation abstracts.

- Articles which did not report on the numbers or percentages of community based staff.

- Articles which were ambiguous with regards to the client group.

2.3 Included Studies

Following screening, a total of 71 papers were identified. The full text articles were then examined according to the above criteria, resulting in 24 articles included in the final review. Figure 1 outlines the search processes and reasons for exclusion.

[Insert Figure 1]

Quality Assessment

Due to a lack of quality measures available for cross sectional studies, the author informally evaluated the studies' strengths and weaknesses based on Polit & Beck's guide of an overall critique of a quantitative research report (2010, p. 99-105) and the PRISMA checklist (Moher et al., 2009).

3. Results

3.1 Description of Studies

Table 1 summarizes the sample populations, design, measures, and main findings for each of the 24 studies included. They are listed alphabetically. Studies were published between 1997 and 2018. Sample sizes ranged from 34 to 1499 participants, with the pooled sample consisting of 5,247 CMHS. Studies included a range of disciplines, and 14 studies used samples of mixed staff groups, including psychiatric nurses, psychologists, psychiatrists, IAPT practitioners, support staff, social workers, and occupational therapists. Three studies included non clinical staff in their samples specifically administrative or secretarial staff (Lasalvia et al., 2009; Onyett et al., 1997; Wykes et al., 1997). Studies were carried out in multiple countries, including Europe (n=14), Australia (n=1), USA (n=7), Canada (n=1) and Japan (n=1). Nelson et al.'s (2008) study had multiple centres in Europe.

Response rates ranged from 32 to 93%. Three studies did not record a response rate (Delgadillo et al., 2018; Kraus & Stein, 2013; Ryan et al., 2007). The majority of the studies took a quantitative cross sectional survey design, with the exception of Ryan et al. (2007) and Prosser et al. (1999) who employed a longitudinal design. Evans et al. (2006) employed a mixed methods design in the form of focus groups and cross sectional survey. Roncalli and Byrne (2015) utilised a cross sectional survey and qualitative design.

The studies published in 1990s and early 2000s, overall, were of lower quality compared to recently published studies. They lacked a power analysis calculation for sample size; were more exploratory in nature; and some did not include a response rate or effect sizes.

3.2 Outcome Measures

83.3% (n=20) of the studies utilised the Maslach Burnout Inventory (MBI) as the primary outcome measure for burnout. The MBI has long been recognised as one of the leading and most respected measures of burnout. The MBI conceptualises the development of burnout with exhaustion assumed to develop first, in response to high demands and overload, with exhaustion precipitating detachment and negative reactions to people and the job (depersonalization or cynicism) (Maslach and Leiter, 2007). If this continued, then the next stage would be feelings of inadequacy and failure (reduced personal accomplishment or professional inefficacy) (Maslach and Leiter, 20070. There are several different versions of the MBI including those that target specific occupational groups, and it has been translated into numerous languages. The most utilised versions in the studies were the MBI-Human Service Survey (MBI-HSS; Maslach et al., 1996) and the MBI-General Survey (MBI-GS; Maslach et al., 1986; Maslach & Jackson, 1981, 1996; Maslach et al, 1996). The Burnout Scale (Malakh-Pines et al., 1981), translated into Japanese (Inaoka et al., 1984;) was utilised in one study, which includes a single factor of exhaustion, and again conceptualises burnout as stemming from work related stress. All the other studies (12.5%, n=3) utilised the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003) which includes factors of exhaustion and disengagement.

[Insert Table 1]

3.3 Predictors of burnout

The current review identified multiple predictors of burnout which can be conceptualised as either / and;

1. personal and socio-demographic characteristics including age, ethnicity and personality traits (n=19);

2. role characteristics including tenure, discipline and caseload (*n*=11);

3. environmental / organizational characteristics including supervision and managerial support (*n*=14).

3.4 Personal & socio-demographic characteristics

3.4.1 Age and Tenure

Most studies reported that younger participants had higher levels of depersonalization (DP) (Acker, 2008; Acker, 2010; Edwards et al., 2006; Steel et al., 2015) and exhaustion (Ray et al., 2013). Being older was predictive of personal accomplishment (PA) in one study (Kraus & Stein, 2010), and being in the age category of over 46 was associated with less DP (Nelson et al, 2009). In contrast, Imai et al. (2004) reported a bimodal distribution of exhaustion in the 30s and 50s age group. Imai et al. (2004) explained the peak in the 30s age group due to staff being in their 'prime', possessing large amounts of knowledge and experience; leading to high expectations and heavy work demands, contributing to burnout. Farber (1990) in agreement, proposed that a lack of experience in younger psychotherapists was associated with the tendency to set unrealistically high expectations, in terms of their potential clinical efficacy. The peak in emotional exhaustion (EE) in staff aged 50 was suggested to be associated with reduced physiological functioning and increased ill health (Imai et al., 2004), although this has not been confirmed by the research.

Less experienced staff reported higher levels of DP, and reduced levels of PA (Acker, 2010). Whilst, those who had worked longer within the field had lower DP scores (Hannigan et al., 2000), and less exhaustion (Nelson et al., 2009; Ray et al., 2013). Di Benedetto & Swadling (2014) offered the following explanations, which may account for these findings:

either those who are more sensitive to burnout quickly leave the profession, while those resistant to burnout remain; or that those who remain in the profession build resilience towards burnout over time. Contradictorily, longer tenure predicted burnout in a range of mental health staff (Lasalvia et al., 2009) and in the IAPT service (Westwood et al., 2017). Longer time in an IAPT service predicted disengagement in Psychological Wellbeing Practitioners (PWPs) (those trained in low intensity Cognitive Behaviour Therapy) (Westwood et al., 2017). Roncalli and Byrne (2015) found that an interaction between experience and job grade in psychologists was positively correlated with DP. Lasalvia et al. (2009) suggested the longer tenure predicts burnout as plausible, since if burnout is the result of chronic job related stress, older workers or staff with longer job tenure would be expected to have higher burnout.

Age related and tenure findings were inconclusive. The inconsistencies may reflect bias related to the cross-sectional designs of studies, in that younger and less experienced staff, in some cases, may have already left their roles (Di Benedetto & Swadling, 2014; Simionato & Simpson, 2018).

4.1.2 Gender and Family

The majority of studies reported that males had significantly more DP, compared to females (Acker, 2003; Edwards et al., 2006; Evans et al., 2006; Hannigan et al., 2000; Nelson et al., 2009 ;Ryan et al., 2007). Ryan et al. (2007) suggested higher levels of DP in men were due to them being exposed to higher levels of violence than women; however, they were not able to confirm this from their own data. Two studies predicted higher levels of exhaustion in females (Scanlan & Still, 2013; Westwood et al., 2017). Dreison et al., (2018) was the only study that reported that men had significantly higher levels of PA.

Prosser et al. (1997) found that those staff that had children living at home had less DP, although, they suggested no rationale for this. Acker (2003) found that family support

had statistically significant negative correlations with EE. However, women in the sample reportedly received less support from family and friends than men. Acker (2003) suggested this finding may indicate the conflicting roles of women as caregivers of family members and professionals. Congruent with Acker (2003), Guendouzi (2006) found that women were more prone to exhaustion compared to males, due to having non-work related domestic responsibilities on top of already high job demands. These findings remain inconclusive, and may be attributed in part to the female dominant workforce in mental health services (Morison et al., 2014; Willyard, 2011), which was reflected in the higher proportions of females in the review studies.

4.1.3 Ethnicity

Findings regarding ethnicity were inconclusive. A minority of studies (n=7) reported ethnicity to be a predictor. The majority reported that white staff were more emotionally exhausted (Acker, 2008; Prosser et al., 1999; Wykes et al., 1997), and depersonalized (Acker, 2010; Wykes et al., 1997) than non-white staff. These findings are consistent with the early burnout literature (Maslach, 1982), that claims that non-white workers, compared to white workers, do not burn out as much; as they have a more realistic perspective about life and an appreciation of their own difficult experiences and, thus, are better prepared to cope with stressful job situations. Webster and Hackett (1999) reported that African- Americans, Asian-Americans, Native-Americans, and other ethnic minorities rated themselves as experiencing less PA, and more DP than the Caucasian and Hispanic groups. More DP was also found in individuals with a black/minority ethnic background in Westwood et al.'s study (2017). Whilst Nelson et al. (2009) reported that being of Asian ethnicity is associated with less EE, DP and a greater sense of PA, and being Black or mixed race was associated with greater burnout.

One explanation given for these differences is that the wording of the burnout questionnaire items may be culturally biased such that some groups may be more or less likely to endorse them (Salyers & Bond, 2001). Salyers and Bond (2001) also suggested that staff who are racially incongruent with the majority of their caseload, reported higher levels of burnout than those who were racially congruent, which are consistent with findings that clients who are matched with treatment staff for ethnicity, are more likely to keep appointments with their case managers (Blank et al., 1994), and less likely to use emergency mental health services (Snowden et al., 1995). It is acknowledged that research into ethnicity as a predictor of burnout is an under researched area (Salyers & Bond, 2001; Westwood et al., 2017).

4.1.4 Educational Background

Some studies reported that those with a higher level of educational background had higher levels of DP (Acker, 2003; Kraus & Stein, 2013), higher EE (Acker, 2003 & Acker) and lower PA (Dreison et al, 2018). Acker (2008) explained that those with higher educational levels, seek employment that offers greater involvement with people with mild emotional disorders and life adjustment reactions. Whilst, the clients seen by the CMHS in the study were in the severe and enduring range, resulting in role incongruence and burnout. Piko (2006) suggested that those with a higher level of education were less satisfied with their jobs, which resulted in burnout. However, the evidence is inconclusive as Dreison et al. (2018) stated that a higher level of education was associated with lower DP and PA.

4.1.5 Personality Traits

Surprisingly, only one study reported on how personality traits may predict burnout. Those who were higher on agreeableness, conscientiousness and emotional stability demonstrated lower DP scores. Regression models found higher levels of emotional stability were associated with lower EE, and higher PA (Zaninotto et al., 2018). Zaninotto et al. (2018)

hypothesised that these personality traits may foster better coping strategies which may be protective against burnout.

4.1.6 Coping Mechanisms and Social Support

Hannigan et al. (2000) reported that those that were more burnt out had lower self esteem, were more psychologically distressed, and had less adaptive coping strategies. However, it is hard to infer whether these variables predict burnout or are a consequence. Intriguingly, Hannigan et al. (2000) also reported, that those who drank alcohol (in any amount) scored higher on PA, which is contrary to the predicted association by Maslach et al. (1996). Delgadillo et al. (2018) proposed burnout and resilience could be seen as related factors, such that one may be moderated by the other, and could be plausibly influenced by individual ways of coping, that may serve to either mitigate or maintain burnout (Tyrrell, 2010). Delgadillo et al (2018) did not elaborate on the individual ways of coping.

In terms of social support outside the work environment, Acker (2003) found statistically significant correlations with EE, in that the presence of social support reduces EE. Steel et al. (2015) found social support to be irrelevant in their sample, concluding that work setting variables were more important predictors of burnout. In agreement, Wykes et al. (1997) established that social support of a stable relationship did not predict burnout. An offering by Rzeszutek and Schier (2014) may explain these inconclusive findings. They stated that in a sample of therapists, the perceptions of social support were stronger predictors of burnout, than actual social support itself.

4.1.7 Conclusion

Personal and socio-demographic factors may predict burnout; however, the evidence was inconclusive, and the variables only predicted a small amount of the overall variance (Acker, 2003; Kraus et al., 2013; Steel et al., 2015; Westwood et al., 2017). Demographic

variables have little to say in predicting EE, but may have a stronger association with DP, and PA (Acker, 2008; Steel et al., 2015).

4.2. Role Characteristics

4.2.1. Caseload and Client Contact

Caseload size predicted burnout, specifically EE (Acker, 2008; Kraus et al, 2013, and EE and DP (Acker, 2003), with bigger caseloads predicting higher burnout. Acker (2008) stated that caseload number had a statistically significant positive correlation with involvement with clients with severe mental illness (SMI). Involvement with individuals with SMI predicted higher EE and DP (Acker, 2010). Acker (1999) explained why involvement with clients with SMI may produce burnout: 1. great difficulty in maintaining the therapeutic relationship; 2. limited engagement due to the potential for inappropriate behaviour; 3. the clients' progress in treatment is especially slow, and signs of change and improvement can be very minimal; and 4. their problems are often so severe and chronic that they are not amenable to most therapeutic interventions. In agreement, Onyett et al. (1997) stated that caseload size was not associated with burnout; psychiatrists had a larger caseload than all other disciplines, but infrequently saw their clients. Concluding, that burnout was mostly predicted by a higher frequency of face-to-face interaction with clients (Lasalvia et al., 2009). This was corroborated in an IAPT service; in that greater hours of patient contact, and telephone contact by high intensity practitioners (therapists qualified to a postgraduate level in CBT) predicted greater exhaustion. A predictor of exhaustion in PWPs was more hours inputting data (Westwood et al., 2017).

Stressful involvement with clients was a significant predictor of DP (Prosser et al., 1997; Steel et al., 2015). Whilst involvement with an elderly caseload, indicated higher mean DP scores (Hannigan et al., 2000). Steel et al. (2015) explained that experiencing therapeutic

work as anxiety provoking predisposed individuals to EE. Experiencing clients as threatening may well precede disparaging attitudes. Whilst healing involvement, and in session feelings of flow were correlated with PA (Steel et al., 2015).

4.2.2 Working Hours and Overtime

Office hours which included evenings and weekends; telephone on call; and on call overnight shifts, predicted greater DP (Nelson et al., 2009). Overtime was associated with increased burnout (Imai et al., 2004; Luther et al., 2017; Westwood et al., 2017). Westwood et al. (2017) reported that each hour of overtime, predicted burnout in PWPs. In IAPT an interaction was found between weekly hours of telephone contact and time in service: for those working in the service for two or more years, each hour of telephone contact predicted higher odds of burnout (Westwood et al., 2017). Additionally, overtime was related to a higher caseload (Westwood et al., 2017). Luther et al. (2017) suggested that those who were the most burnt out, may find the need to work extra time out of a reduced sense of PA (Luther et al., 2017). Equally, there may be alternative variables responsible; i.e. those who report working overtime may be more conscientious and engaged at work, which could lead to reduced work–life balance, and in turn burnout and reduced job satisfaction (Luther et al., 2017). Conversely, Wykes et al. (1997) did not find an association between overtime and burnout.

4.2.3 Role, Responsibility and Salary

Psychologists had high levels of EE (Dreision et al., 2018; Onyett et al., 1997); as did psychiatrists (Lasalvia et al., 2009; Onyett et al., 1997), nurses (Onyett et al., 1997) and social workers (Lasalvia et al., 2009; Onyett et al., 1997; Prosser et al., 1999). Although, psychiatrists were reported to be emotionally exhausted, and depersonalised (Onyett et al., 1997) they also reported high PA (Onyett et al., 1997).

Nurses rated personal efficacy lower than unqualified staff (Ray et al., 2013). This was corroborated Ryan et al. (2007); EE and DP were observed of higher levels in professionally qualified staff compared to other occupational groups such as administrative staff. The unqualified group also scored significantly higher on PA. Ryan et al. (2013) offered the explanation that qualified staff on the whole occupied higher managerial positions, with wider responsibilities and greater workloads increasing the risk of burnout. In agreement, a study of psychologists found an interaction between experience and job grade was positively correlated with DP (Roncalli & Byrne, 2015). In contrast, in one study PA mean scores were significantly higher for those who held managerial responsibility (Hannigan et al., 2000).

Length of training and completion of specialist post qualifying training were associated with higher levels of PA (Steel et al., 2018; Hannigan et al., 2000). In IAPT, mental health nurses followed by PWPs, and then high intensity therapists had the highest disengagement scores (Delgadillo et al., 2018). Westwood et al. (2017) also found that PWPs were more burnt out compared to high intensity therapists; this was attributed to differences in caseload/workload.

Staff who were dissatisfied with their salary had higher levels of EE (Acker, 2003; Acker 2008). Interestingly, Acker (2003) noted that practitioners who were more involved in their work with clients with SMI, were more dissatisfied with their salary. Staff who reported that 'the salary was good', an important attraction to the post reported higher exhaustion (Scanlan and Still, 2013). Scanlan and Still (2013) suggested that individuals who are attracted to positions for the aforementioned reason, may struggle to sustain their wellbeing over the longer term; perhaps due to the inability to derive sufficient meaningfulness from their work.

4.2.4 Setting / Team

Urban / city staff had higher levels of DP (Wykes et al., 1997) and EE (Hannigan et al., 2000), compared to rural staff. No explanations were given for this difference, only that the city environment produced higher stress (Wykes et al., 1997). AOT and Crisis Resolution Team (CRT) staff showed similar levels of PA, which was of a fairly good level; than those working in CMHT's (Nelson et al., 2008). CRT staff had the highest level of PA overall, and this was explained by factors specific to CRT: greater autonomy; seeing change more quickly; the benefits of team working and keeping clients out of hospital (Nelson et al., 2008).

4.2.5 Conclusion

Role characteristics appeared to add another set of factors in predicting burnout; however, most findings were inconclusive, potentially due to the methodological flaws of the studies i.e. cross sectional design and small sample sizes.

4.3 Environmental / Organizational Factors

4.3.1 Job Demands, Resources, Support and Opportunities

Social support from co-workers had statistically significant positive relationships with PA (Acker, 2003), and negative correlations with EE (Acker, 2003). support from supervisor had the same correlations (Acker, 2003; Scanlan & Still, 2013; Dreison et al., 2018). Role ambiguity and role conflict has statistically significant positive correlations with EE and DP, and a negative correlation with PA (Acker, 2003; Prosser et al., 1997). Supervision was found to be significantly negatively correlated with EE and DP, indicating that effective supervision was protective of burnout (Evans et al., 2006; Webster & Hackett, 1999; Westwood et al., 2017).

Interestingly, Acker (2003) reported that those who scored high on level of education received less support from their supervisor, were more emotionally exhausted, and more depersonalized. Linked to this, dissatisfaction with a manager or having an unsupportive manager and/or supervisor was associated with higher burnout (Hannigan et al., 2000; Roncalli & Byrne, 2015). Team / staff cohesion significantly predicted lower EE (Dreison, 2018; Lasalvia et al, 2009; Roncalli & Byrne, 2015). Team role clarity, personal role clarity, team identification and personal identification were positively associated with EE and DP (Onyett et al., 1997).

Role satisfaction was associated with reduced DP and EE (Delgadillo et al., 2018; Evans et al., 2006; Kraus & Stein, 2013; Prosser et al., 1997). Being attracted to opportunities for involvement in research or quality improvement, and opportunities for professional development were associated with lower levels of burnout (Acker, 2010; Scanlan & Still, 2013).

Ray et al. (2013) utilised the Areas of Work Life Scale (AWS) which measures person– job match or congruence in six areas of work life: workload, control, reward, community, values, and fairness (Leiter & Maslach, 2000). Higher overall person-job match in the six AWS were predictive of lower burnout (EE and cynicism). Perceived unfairness and dependency on others was associated with higher burnout (Imain et al., 2004; Lasalvia et al, 2009).

4.3.2 Organizational Context and Leadership

Those employed in public agencies reported higher levels of EE, DP and reduced PA (Acker, 2008; Acker, 2010). Acker (2008) hypothesised that public agencies are associated with higher job demands, a larger organization and larger caseloads which would result in higher levels of EE. Additionally, mental health staff who perceived their agency to offer higher level of recovery orientated services, were less likely to be emotionally exhausted and

depersonalized (Kraus & Stein; 2013). This is similar to 'healing involvement' in IAPT (Steel et al., 2015). The view of being able to make a difference may increase engagement with clients and with their work (Kraus & Stein, 2013).

Only one study explored leadership practice and burnout (Webster & Hackett, 1999). Leadership practice was negatively correlated with EE and DP (Webster & Hackett, 1999). Webster & Hackett (1999) suggest that leadership may contribute to the development of a positive working climate. Which, in turn, reduced an employee's sense of EE and DP. The presence of institutional responses to risk situations (namely, protocols for managing aggression) was associated with higher levels of PA (Zaninotto et al., 2018). Zaninotto et al. (2018) hypothesised that PA also depended on the sense of coherence, organization and proper functioning of the institution, in which protocols achieved this. Johnson et al. (2018) named violence as one of the causes of staff burnout, signifying the implications of Zaninotto et al.'s (2018) findings.

Not feeling valued by the employer was associated with DP (Evans et al., 2006). Participation in decision making and autonomy was associated with lower levels of burnout and higher PA (Evans et al, 2006; Scanlan & Still, 2013; Steel et al., 2015).

4.3.3 Conclusion

Organizational / environmental factors seemed to have the most conclusive evidence in predicting burnout. Generally, job resources were negatively correlated with EE and DP, and positively correlated with PA (Dreison et al., 2018). High job demands were associated with EE (Evans et al., 2006; Steel et al., 2015).

5. Discussion

The aim of this review was to determine predictors of burnout in mental health staff in community based settings. The research question sought to ascertain which factors (personal,

role specific and environmental) impacted on burnout. In summary, the personal factors' findings demonstrated mixed results with studies providing contradictory evidence on all variables. On the whole, personal characteristics seem to moderate burnout, rather than being a predictor (Morse et al., 2012). Role specific factors added another layer of understanding to the factors contributing to burnout. Higher caseload seemed to predict higher levels of burn out, although, higher caseload correlated to higher client contact which seemed to better predict burnout. Stressful involvement, and working with complex clients also predicted burnout. Overtime also appeared to increase the risk of burnout, with overtime correlating to a higher caseload. Environmental/organisational factors in line with Morse et al. (2012), seemed to have the most conclusive evidence in predicting. Support from line management and co-workers; effective supervision; team and role clarity; autonomy and input in decision making were all seen as protective of burnout; corresponding with the findings of Onyett (2011).

The job demands-resources (JD-R) model (Demerouti et al., 2001) may be a useful framework for understanding how burnout develops in mental health staff. Job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical, and/or psychological effort or skills, and are therefore, associated with certain physiological and/or psychological costs (Demerouti et al., 2001), i.e. working overtime, high caseload and complex clients. Job resources refer to those physical, psychological, social, or organizational aspects of the job that are either: functional in achieving work goals; reduce job demands and the associated physiological and psychological costs, or stimulate personal growth, learning and development (Demerouti et al., 2001). Job resources can be at varying levels of the overall organisation in the form of salary, opportunity for progression and job security; the immediate environment in the form of role clarity and decision making; at the interpersonal or social level such with the

individual's supervisor, colleagues or the team climate; and at the level of the task, for instance autonomy (Bakker & Demerouti, 2007). Therefore, we may conclude that role characteristics as denoted in this review can be seen as demands, and organisational factors seen as resources.

[Insert Figure. 2]

Research indicates that long-term exposure to job demands can lead to burnout (Demerouti et al., 2001). The demands listed in the JD-R model correspond to those in this review and in the wider literature (Morse et al., 2012, Onyett, 1997; Johnson et al, 2018). In a climate of an ever evident growing gap between demand for services and available resources, organisations need to provide adequate resources to support mental health staff in their role. Job resources may protect against the impact of high job demands (Bakker et al., 2003) resulting in an environment which is more clinically effective and safe for both staff and clients. The National Institute for Health and Care Excellence (NICE; 2006), along with Johnson et al., (2018) recommend a number of interventions which could reduce staff burnout. These include support or training to improve skills or job role; increasing staff numbers, altering shift or work practices; increasing job autonomy; and opportunity for professional progression. However, a purely structural change such as changing peoples' work schedules, does not necessarily influence workplace culture (Public Health England, 2016). An aspect of a healthy organisation is employer-employee trust, which can be built through the successful participation of employees in planning and implementation of the organisational changes / burnout interventions (Kuoppala et al., 2008).

In addition to the JD-R model, our findings suggested that personal factors contribute to burnout alongside organisational factors. Personal characteristics seem to moderate the development of burnout; possibly via the incongruence of personal characteristics with job demands and personal resources (Maslach & Leiter, 2007). An example of this is

age/tenure: older/more experienced workers experienced less burnout, compared to their younger colleagues. Both workers are exposed to the same stressors, however, age or experience, moderates the experience of burnout. Being older or more experienced appeared to be protective, in most studies. This was suggested due to their increased resilience. Admittedly, this area requires further research.

6. Limitations

Many of the studies were of an exploratory nature, meaning that samples were not necessarily representative of individuals in community based settings, due to the poor response rates in most studies. Potentially, mental health staff that was highly burnt out were unlikely to participate in activities that require extra demands, like research, which may implicate the samples. Thus, the samples may have represented individuals with less burnout. Prosser et al (1997) noted busy work demands as one of the main reasons for non-responses. Due to the cross sectional design of the majority of the studies, this provides little opportunity for exploring the longitudinal trajectory of burnout. Additionally, due to the correlational design of all of the studies, causality should be interpreted with caution. It is possible that the factors presented may have a third-variable problem, for example those who reported high burnout may have reported less competence in their role, due to reduced opportunity for training, and supervisory support in their workplace.

It is worth noting that non-English resources were excluded, therefore the studies reviewed only represent a proportion of the literature. The majority of the studies took place in the United Kingdom (41.7%), followed by the United States of America (29.2%). In addition, only over half of the studies (58.3%) were published in the last 10 years, indicating a lack of focus in this field, although research in Improving Access to Psychological Therapies services seems to be growing. Despite these limitations, the

current review was unique in attempting to capture the predictors of burnout in mental health staff employed in community based mental health settings.

7. Conclusion

This paper reviewed the literature exploring the relationship between personal factors, occupational, and organizational factors in burnout development in community mental health staff. Risk factors included stressful involvement, overtime, caseload and lack of support. The Job Demand-Resources model offers a theoretical framework, which can help explain the interaction between demands on mental health staff and the (lack of) resources available to them, and thus, promoting burnout development. Services and organisations have a duty in acting proactively in ameliorating burnout, by offering adequate resources for staff to carry out their roles safely and effectively. The cross sectional and correlational designs of the studies indicate the need for further longitudinal research.

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Study (first author)	n	Participants	Setting	Design	Measure	Statistical Analysis	Main findings	Strengths	Weaknesses
Acker (2003)	259	20 had Doctoral degrees in social work or related fields. 155 Masters in Social Work. 35 MA in other related field. 30 BSW or BA. 11 No college degree.	15 outpatient mental health settings in New York providing managed mental health care.	Cross sectional - survey	Maslach Burnout Inventory (1986)	Correlations and hierarchical regression analysis	Correlations: role ambiguity and role conflict statistically significant positive correlations with emotional exhaustion and depersonalization. Role ambiguity had a statistically negative correlation with a feeling of personal accomplishment. Social support from supervisor, co-staff and family had statistically significant negative correlations with emotional exhaustion. Social support from co-staff and length of employment had statistically significant relationships with personal accomplishment. Staff who were dissatisfied with their salary had higher levels of emotional exhaustion. Those who scored high on level of education received less support from their supervisor, were more emotionally exhausted, and more depersonalized. Women were less depersonalized than men. Regression: role conflict, role ambiguity, involvement and social support significantly contributed to emotional exhaustion, depersonalization	1. Demographic variables controlled for in regression. 2. Implications for practice included. 3.Clear aims and hypotheses.	1. 74.1% sample was females. 2. No information on the non-responders. 3. No sample power calculation. 4. No effect sizes or confidence intervals. 5. Not much information on non social work participants in sample. 6. 43% response rate.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

Author	N	Sample	Setting	Design	Measure	Analysis	Findings	Strengths	Limitations
							and personal accomplishment beyond and above demographic variables.		
Acker (2008)	460	3% doctoral degrees in social work or other related fields, 50% with masters degrees in social work or related field, 27% with undergraduate degrees, 11% with associate degrees, and 10% without a degree.	64% worked in outpatient mental health agencies and 36% in community support systems in New York State	Cross sectional - survey	Maslach Burnout Inventory (1986)	Correlations and hierarchical regression analysis	White staff more emotionally exhausted. Higher levels of education reported higher levels of emotional exhaustion. Staff in public agencies reported higher levels of emotional exhaustion. Demographic variables do not predict emotional exhaustion but do predict depersonalization, and personal accomplishment. Agency characteristics: Type, funding, salary, size and caseload predict emotional exhaustion.	1. Large sample size with scope for diversity. 2. Clear aims and hypotheses. 3. Answers gaps in literature at the time. 4. Implications for future research included. 5. 65% response rate.	1. No sample size calculation. 2. Many correlations were non significant with a Bonferroni correction. 3. Occupations of the sample unclear. 4. Focus on social worker. 5. 71% female sample population.
Acker (2010)	591	Social Staff	Social Staff practicing in the New York State	Cross sectional - postal survey	Maslach Burnout Inventory (1996)	Correlations and hierarchical regression analysis	Higher perceived competence in the context of managed care, reported lower emotional exhaustion. Involvement with client who suffer with from severe and persistent mental illness (SPMI) correlated with higher levels of EE and DP. Younger and less experienced Social Staff (SW) reported higher levels of DP and reduced levels of PA. White staff reported higher levels of	1. Large sample size. 2. 58% response rate. Clear aims and hypotheses.	1. Due to sampling method, the sample was homogenous.2. Self-report - sensitive to mood fluctuations . 3. No power calculation analysis. 4. 80% of the respondents were females.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

							EE and DP. SWs employed in public agencies reported higher levels of EE, DP and reduced PA. Involvement with SPMI, social support, opportunities for professional development, caseload size, satisfaction with salary, years of SW experience, and type of agency had significant relationships with EE and DP.		
Delgadillo (2018)	56	Improving Access to Psychological Therapy (IAPT) therapists. Psychological Wellbeing Practitioners, Cognitive Behavioural Therapists and Mental Health Nurses	IAPT Service in Northern England	Cross sectional - survey	Oldenburg Burnout Inventory	Multilevel modelling and ordinary least square regression	OLBI-Disengagement scores were significantly associated with the therapist's role and job satisfaction and discrepancy scores. On average MHNs, tended to have the highest OLBI-D scores, followed by PWPs, and CBTs. Inverse correlation between OLBI-D and JDSS. Role explained 13% of the variance, and JDSS explained approximately 34% of variance in OLBI-D scores.	1. First study to empirically test the influence of burnout on clinical outcomes. 2. Sophisticated statistical analysis. 3. Clear aims.	1.Sample size many not be sufficient. 2. Design means no conclusive inferences about direction of causality can be made. 3. Primary care service sample - not generalisable to secondary care. 4. No response rate recorded.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

| Dreison (2018) | 358 | Disciplines: Psychology, Social Work, Counselling, Nursing, Addictions, Business, Psychiatry and other. | 55 clinical teams from 13 mental health agencies in Indiana, New Jersey and New York providing Illness Management and Recovery service model. | Cross Sectional - online and paper surveys | Maslach Burnout Inventory- Human Services Survey (1996) | Correlations and hierarchical multiple regressions | Correlations: Psychologists had significantly higher emotional exhaustion. Education was significantly related to lower depersonalization, and lower personal accomplishment. Men reported significantly higher levels of personal accomplishment. Job resources were negatively correlated with emotional exhaustion and depersonalization. Job resources were positively correlated with personal accomplishment (only self efficacy statistically significant). Hierarchical Regression Analysis: Higher levels of supervisor autonomy support and staff cohesion significantly predicted lower emotional exhaustion. Higher levels of self efficacy were predictive of higher personal accomplishment. None of the job resources were significant predictors of depersonalization. | 1. Policy and practical implications included. 2. Good response rate (61.1%). 3. Included a theory (self-determination theory) in predicting burnout. | 1. Due to design cannot infer causality. 2. Self-report bias. 3. Not information on certain demographic variables collected: race and ethnicity. 4. Break down of work setting unclear. |

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

| Edwards (2006) | 166 | Community Mental Health Nurses | 11 NHS Trusts in Wales employing Community Mental Health Nurses. | Cross sectional - survey | Maslach Burnout Inventory (1986) | Mann-whitney U-Test, Kruskal-Wallis one-way ANOVA, and Pearson's Correlations | CMHNs who were younger, male, and who had not experienced six or more sessions of clinical supervision had higher DP. Manchester Clinical Supervision Scale total score was significantly negatively correlated with EE and DP. EE was correlated to finding time and trust rapport from the MCSS. DP was correlated with finding time, trust/rapport, supervisor advice and support and importance/ value of clinical supervision. | 1. One of the first studied to examine the effectiveness of supervision rather than exploring whether having supervision is associated with burnout. 2. Study reported clearly and concisely. 3. Clear aims and hypotheses. 4. NHS sample. 5. Sample size estimation for MCSS included. | 1. 32% response rate. 2. Correlational study - causation cannot be implied. 3. No control of confounding factors. 4. Generalisablity issues - CMHNs samples in Wales. |
| Evans (2006) | 237 | Mental Health Social Staff (68% recorded as Active Approved Social Staff) | Mental Health Social Staff working in 109 councils in England and Wales with social service responsibilities | Multi method design - Two focus groups & cross sectional design (a national postal survey) | Maslach Burnout Inventory (1986) | ANOVAs and linear regression models | High emotional exhaustion was associated directly with higher job demands. Personal accomplishment was associated with high decision latitude. Depersonalisation was not associated with any aspect of job content but associated with dissatisfaction about the role, work in current mental health services, not feeling valued by the employer and being male. | 1. Acceptable response rate (49%).2. Controlled for mediating and confounding variables. 2. Targeted a large population sample. 3. Pilot study ran for social staff ineligible for the main study. | 1. Design means causation cannot be inferred. 2. Study took place at a time of uncertainty for mental health social staff which may have confounded the findings. 3. Self-selection bias related to workforce who responded. 4. Did not report on the precise work settings of social staff. |

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

Hannigan (2000)	283	Community Mental Health Nurses	11 NHS Trusts in Wales employing Community Mental Health Nurses.	Cross sectional - survey	Maslach Burnout Inventory (1996)	Two tailed t-tests	EE mean scores were significantly higher for those working in urban areas than those in rural areas and were higher for those who reported having an unsupportive manager. DP mean scores were significantly higher for those who were male, who felt they did not have job security, who worked with the with an elderly caseload and who reported an unsupportive line manager. Those CMHNs who had worker longer within the field had lower DP scores. PA mean scores were significantly higher for those who held managerial responsibility, had completed specialist post qualifying training, and who drank alcohol. Those who were burnt out were more stressed, more psychologically distressed, had less adaptive coping strategies, and lower self esteem .	1. Data reported clearly. 2. Concise article. Large sample size.	1. Aims not easily accessible - have to read other papers. 2. No power analysis calculation for sample size. 3. Generalization of results with caution due to a 49% response rate and sample is in Wales.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

| Imai (2004) | 423 (control = 435) | Community Psychiatric Nurses & a control group of non psychiatric nurses | Community Psychiatric Nurses working at 329 in public health centres in Japan and a control group of public health nurses working in the same public health centres | Cross sectional between groups design - postal survey | Pine's Burnout Measure - Japanese version | Mantel-Haenszel tests & Wilcoxon rank-sum test | Relative risk of burnout was significantly increased for the Psychiatric group. Two factors that differed significantly between psychiatric and control groups, age strata (peak in 30s and 50s) and number of years in service. Frequency of emergency overtime and lack of job control due to dependency on physician were significantly correlated with prevalence of burnout in the psychiatric group but not in the control group. | 1. 81.7% response rate and a large sample size. 2. Power calculation for sample size included. 3. Confidence intervals reported in results. 4. Inclusion of control group. | 1. The analysis which included the running of multiple tests may have contributed to positive results. 2. The Japanese version of the Pine's Burnout Scale is not verified. 3. Generalisability of study - Sample included Community Psychiatric Nurses only in Japan. 4. Only looked at environmental factors that may predict burnout. |
| Kraus (2013) | 114 | Case Managers - 75% reported to be working with clients living with SMI and c-occurring disorders (60%). | 46 Community mental health centres /agencies across Ohio offering adult outpatient services | Cross sectional | Maslach Burnout Inventory (1986) | Pearson product-moment correlations and hierarchical multiple regressions | Demographic variables did not significantly predict EE. Higher caseload size accounted a significant proportion of the variance of EE. Case managers who perceived their agency to offer higher level of recovery orientated services were less likely to be emotionally exhausted. Case managers with higher educational levels were more likely to report depersonalisation. Caseload size and years in agency did not predict DP. Case managers who perceived their agency to offer higher level of recovery orientated services were less likely to be DP. Older case managers were | 1. Examined individual (I.e. demographics) and process / environmental factors. 2. Clear aims. | 1. Response rate is named as a limitation however, the actual rate is not reported. 2. Information on professional background is limited (educational background). 3. No power calculation for sample size. 4. 78.6% of the sample was females. |

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Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

						more likely to have PA as well case managers who perceived their agency to offer higher level of recovery orientated services.		
Lasalvia (2009)	1499	Mental Health Staff: Psychiatrists, Clinical Psychologists, nurses, healthcare support staff and secretarial staff. 42.2% of the sample was psychiatric nurses, support staff (22.9%) and psychiatrists (10.5%).	22 collaborating sites involved with the Psychosis Incident Cohort Outcome Study (assessing outcome of individuals with first episode psychosis attending community mental health services in Veneto region, Italy.	Cross sectional survey	Maslach Burnout Inventory - General Survey	Chi squared tests and generalized linear latent and mixed models.	Psychiatrist and Social staff reported highest levels of burnout, and support staff and psychologists, the lowest. Burnout was mostly predicted by a higher frequency of face-to-face interaction with users, longer tenure in mental healthcare, weak work group cohesion and perceived unfairness.	1. Large sample. 2. Representative sample of mental health staff. 3. Explored job related and perceived organisational factors in predicting burnout. 3. Response rate (78.6%).	1. Cross sectional design - cannot infer causality. 2. Generalisability - specific region in Italy working with a specific client group. 3. Response bias due to social desirability could be possible.
Luther (2017)	182	Mental Health Clinicians (aged 18+) having direct contact with children or	Two community mental health centres, one in rural Indiana, and one in an	Cross sectional survey	Maslach Burnout Inventory - Human Services Survey	Chi square, t tests and one-way analysis of	Controlling for exempt status and group differences. Those who reported working overtime experienced significantly more burnout on all three indices: greater EE	1. High response rate (93%). 2. Effect sizes reported. 3. Assessed clinicians' perceived quality of	1. Although, the authors' explored the clinicians' perceived quality of care, they did not ask clients' their perception. 2. Cross

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

Author (Year)	N	Population of interest	Setting	Design	Measure	Analysis	Results	Strengths	Limitations
		adults.	urban setting in Missouri.		(1996)	covariance tests.	and DP and lower PA.	care.	sectional design means the direction of causation cannot be inferred. 3. No information on whether clinician's worked a second occupation.
Nelson (2009)	132	Population of interest: Crisis Resolution Team Staff comparison with Assertive Outreach Staff and Community Mental Health Staff	Eleven CRTs (Crisis Resolution Teams) in 7 London Boroughs. Comparison data on Assertive Outreach and CMHT were drawn from the Pan-London Assertive Outreach Study.	Multi Centre cross sectional survey	Maslach Burnout Inventory (1986)	Chi square tests, clustering, regression analysis	AOT and CRT staff showed similar levels of personal accomplishment (fairly good) than those working in CMHT. CRT staff had the highest level of PA overall. EE - less EE in Asian Ethnic group, less exhaustion with longer career. DP - Greater DP-CMHT member, females - less DP, Psychologist (less DP), Asian and Black ethnic group - less DP, Age 46-54-less DP and aged over 55, longer career - less DP, office hours including evenings and weekends, no overnight (greater DP), shifts, telephone on call only (greater DP), shifts, plus on call overnight (greater DP). PA: AOT member (greater PA), CMHT member (less PA), Asian ethnic group (greater PA), time in type of team (greater PA).	1. Comparison of specific type of Community based mental health service. 2. Response rate (78%). 3. Attempt to control group differences by clustering. 4. Breakdown o disciplines and a multi disciplinary sample.	1. CRT had only been established for 3.5 years. 2. Study in London- less representative of rural areas. 3. Self-report data.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

| Onyett (1997) | 445 | Community Mental Health Team members - Community Psychiatric Nurses, "other" nurses, administrative staff, Occupational Therapists, Clinical Psychologists, Consultant Psychiatrists, "other" doctors, support/generic worker, specialist therapist, voluntary staff, employment staff, case managers, counsellor, student nurse, an IT worker. | 57 CMHTs (42% urban, 9% rural, and 49% mixed / suburban areas). Location not stated. | Cross sectional survey | Maslach Burnout Inventory (1986) | Pearson product moment correlation coefficients. One way analysis of variance. Kruskal Wallis test. B Tukey or Mann Whitney U tests. | Consultant psychiatrists, social staff, nurses and psychologists were particularly emotionally exhausted, and voluntary staff and consultant psychiatrists reported more PA. Consultant psychiatrists reported higher DP than the scale normal, in contrast to the sample as a whole. Team role clarity, personal role clarity, team identification, personal identification associated with EE and DP. Team role clarity, personal role clarity, team identification, personal identification and caseload size associated with PA. (All correlations less than 0.4). | 1. Representative range of CMHT team members. 2. Only modest correlations discussed. | 1. Use of non-parametric, less robust. 2. Unable to validate self-report measure. 3. Uncertain as to the location of the CMHTs taking part. |

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

Prosser (1997) & (1999)	121 (1997 & 1999), 100 (1999) & 94 (1999)	Clinical mental health staff- Nursing staff, nursing assistants, psychiatrists and other members of the MDT.	Three adult mental health sectors in inner South London. Community based, inpatient, day or outpatient based.	Cross Sectional survey (1997). Longitudinal survey - over 3 years (1999)	Maslach Burnout Inventory (1986)	Multiple regression models	1997 findings: EE: Increased if White. Increased with stress from role. Increased with stress from poor support. Increased with stress from overload. Decreased with satisfaction from career. PA: Increased with satisfaction from working with people. DP: Reduced if children at home. Increased with stress from poor support. Increased with stress from client. Decreased with career satisfaction. Decreased with satisfaction from working with people. Decreased with manager satisfaction. 1999 findings: EE: Higher if: social worker; white. PA: No variables significant. DP: Higher if white. Lower if psychologist. No evidence of burnout from change of inpatient outpatient setting in the 3 years.	1. Longitudinal design . 2. Modest response rate for the three years: 76% 60% and 62% respectively and for the initial study. 3. Contacted non-responders. 4. Controlled confounding variables.	1. Generalisability - London sample. 2. MBI measured as a DV to measure changes in workplace in longitudinal study. 3. High turnover of staff impacted longitudinal study.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

Ray (2013)	169	Frontline Metal Health Practitioners including nursing, social work, psychology, psychiatry and managers. Full time and part time.	One CMHT, One Community Crisis site, one mental health outpatient and one mental health inpatient unit in South Ontario, Canada	Cross sectional survey.	Maslach Burnout Inventory-General Survey (1996)	Pearson correlations and hierarchical linear regressions	Emotional Exhaustion (DV) significant predictors = years of experience in the profession ;Compassion Satisfaction , Compassion Fatigue, Areas of Work Life (person-job match) Cynicism (DV) Significant Predictors = Compassion Satisfaction, Compassion Fatigue, AWS. Higher levels of CS, lower levels of CF,and higher overall person-job match in the six AWS (Areas of Work Life Scale) were predictive of lower burnout (EE and cynicism).Demographic variables & Personal Efficacy (Burnout) Position= RN/RPNS (nurses) rated PE lower than mental health staff (educated to high school level).Worksite= inpatient setting rated PE significantly lower than CMHT (p=.02)	1. Sample size calculation. 2. First study of it's kind to look at these specific variables. 3. Personal and organizational factors included.	1. Cross-sectional design which limits interpretations of causality. 2. Generalisabilty issues due to the sample being representative of that organization in Canada. 3. Only 18.3% of the sample was male. 4. 45% response rate.
Roncalli (2015)	77	Psychologists	Working nationwide in Irish Community Mental Health Teams or who had left the CMHT in the last 3 years.	Mixed Cross sectional tri-partite questionnaire and qualitative analysis	Maslach Burnout Inventory - 3rd edition (1996)	Hierarchical regression analyses, Cross-tabulation, Mann-Whitney U test and logistic regressio	No difference in burnout between those who currently worked in the CMHT and those who had left the CMHT in the last year. Correlations: EE significant correlations with DP and likelihood of choosing again to become a psychologist. PA - no significant correlations. DP significant correlations with liaison with management / supervisor scale, experience x	1. Use off bootstrapping in an effort to get robust results. 2. Focus on relational aspects of the role.	1. 76.6 % female. 2. 37.6% response rate. 3. Generalisability: limited to Psychologists working in Ireland. 4. Small sample size.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

					n. Thematic analysis	grade and negatively correlated with satisfaction with how co-staff get along with each other. Regression: Predictors of EE and DP= satisfaction with co-staff and hours worked per week. PA= model did not explain any significant portion.			
Ryan (2007)	414	205 Inpatient staff & 209 community staff	Six European mental health services: Aarhus and Storstrom in Denmark, Cambridge in the UK, Bodo in Norway, Tampere in Finland and Warsaw in Poland.	Longitudin al time series with repeated measures at baseline, six months and 12 months	Maslach Burnout Inventory (1986)	General Linear Model factor analysis. The analysis of variance was performe d on the transfor med variables.	Site and team: no significant differences in EE. Statistically significant differences between Cambridge DP total score and that of Storstrom. Storsom scored significantly less on PA than any other site with regard to both inpatient and community team scores. Both Warsaw teams scored significantly higher on PA than any other site. Sociodemographic variables: EE and DP: highest levels observed in professionally qualified staff compared to other occupational groups such as administrative staff. Staff who had received previous training about occupational stress prior the study experienced less EE than those with no prior relevant training. Men had higher levels of DP. The "other" occupational group scored significantly higher on	1. Longitudinal design. 2. Six European mental health centre. 3. Sample size calculation. 4. Included demographic and situational factors.	1. Small sample size at some locations - i.e. Storstrom community team sample was 13. 2. Due to the aforementioned, the values of the scales were not normally distributed. 3. 74.6% of the sample were females - generalisability issues. 4. No response rate recorded.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

							PA than professionally qualified staff. Overall, professionally qualified staff scored higher on all three MBI factors than did unqualified staff.		
Scanlan (2013)	34	Occupational Therapists	Mental health service which includes inpatient, community case management, community early intervention, community rehabilitation, management and other in Sydney, Australia	Cross sectional survey	Oldenburg Burnout Inventory (2003)	Independent t-tests, one way analysis of variance, bivariate correlational analyses, stepwise multiple regression.	Correlations between disengagement and exhaustion and turnover intention was high. Females reported higher exhaustion than males, and people in higher level positions reported lower level positions. Job hindrance was significantly related to exhaustion and disengagement. Those reporting being stressed or fatigued reported greater disengagement and more significant exhaustion. Participants who reported that 'the salary was good' was an important attraction reported higher exhaustion. Respondents who reported that 'the opportunity for involvement in quality improvement / research' was an important attraction reported lower disengagement.	1. Used a framework: Job Demands-Resources Model as a rationale. 2. Response rate approximately 60%.	1. Small sample size. 2. Sample only contained Occupational Therapists. 3. Generalisability issues - Sample in metropolitan Australia. 4. Cross sectional design, cannot infer causality.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

| Steel (2015) | 116 | Improving Access to Psychological Therapists (IAPT) Therapists, including High Intensity Therapists and Psychological Wellbeing Practitioners, Clinical Psychologists and other training | 8 IAPT services in England | Cross sectional web survey. | Maslach Burnout Inventory (1996) | Estimating confidence intervals for means difference and multiple regression analysis | EE and DP subscales showed a modest correlation. Predictors of EE: Psychological job demands, decision latitude and stressful involvement. Predictors of DP: Therapist age and psychological job demands. Stressful involvement was the most significant predictor. In session anxiety had the highest correlation with DP. Predictors of PA: Length of training. Control coping and decision latitude were the most significant predictors . Healing involvement was significant. In session feelings of "flow" showed the highest correlation with PA. | 1. Based on The General Model of Burnout (Maslach et al., 1996). 2. Power analysis included. | 1. 44.3% response rate. 2. Sampling was not random. 3. No data on non-responders. Cross sectional design, cannot infer causality. |
| Webster (1999) | 151 | Mental health Clinicians including doctors, nurses, psychologists, social staff, Marriage Family Counsellor and those who did not have a degree / license to practice. | Community mental health agencies in five counties in Northern California | Cross sectional postal survey. | Maslach Burnout Inventory (1986) | Correlations and ANOVAs | Leadership practice inventory was negatively correlated with EE (encouraging the heart, enabling others to act, inspiring a shared vision, challenging the process, modelling the way). Enabling others to act, inspiring a shared vision, challenging the process, modelling the way were negatively correlated to DP. DP also had a negative correlation with the supervision scale. African-Americans, Asian-Americans, Native-Americans, and Others rated themselves as experiencing less PA and | 1. Individuals who had less than 6 months experience in working in the system were excluded from the analysis. | 1. 76% of the sample were Caucasian. 2. No response rate reported. 3. The client group seen by the clinicians is not reported. 4. One measure was not validated (Clinical Supervisor Rating Scale). |

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

							more DP than the Caucasians and Hispanic groups. Individuals who were license eligible rated themselves lower on PA and higher on DP.		
Westwood (2017)	201	IAPT Practitioners - 105 PWPs and 96 HI therapists.	15 IAPT Services in the South of England	Cross sectional survey	Oldenburg Burnout Inventory (2005)	Regression modelling	Emotional exhaustion and disengagement, disengagement and burnout were all higher for PWPs. Predictors of EE: PWP: Female. More hours inputting data. Doing overtime. HI: greater hours of patient contact and telephone contact. Predictors of disengagement: PWPs: being from a Black or Ethnic minority group. Longer time in the service, hours of overtime. Protective: hours of supervision. HI therapists: total hours and total hours of telephone contact. Each hour of overtime predicted burnout in PWPs. There was an interaction between weekly hours of telephone contact and time in service: Working in the service for two or more years, each hour of telephone contact predicted higher odd of burnout.	1. Power analysis calculation. 2. Used web and paper surveys	1. Poor response rate (33.4%). 2. Cross sectional design - causality cannot be inferred. 3. Generalisability - included services from the South of England only.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

Wykes (1997)	61	Members of community care teams. Psychiatrists, nurses, occupational therapists, clinical psychologists, health / support staff and administrative staff.	Six multidisciplinary NHS community care teams based in six different centres in the UK	Cross sectional survey.	Maslach Burnout Inventory (1986)	Independent t-tests, Pearson's correlation and stepwise regression analyses.	Inner city staff reported higher levels of DP. Staff who take less sick leave report higher EE. When there was relatively high level of turnover, levels of PA were higher. Work hassles predict stress which in turn predicts burnout.	1. Authors cite that the sample is representative of community care teams as the composition of the MDT and due to the fact that the sample was from a range of geographical locations. 2. Good response rate (82.3%).	1. Small sample size. 2 No sample size calculation. 3. No reported effect sizes. 4. Majority of participants described as "white".
Zaninotto (2018)	215	Mental health professionals including psychiatrists, psychologists, nurses and medical assistants	Six CMHTs operating in North East Italy.	Cross sectional survey	Maslach Burnout Inventory (1996)	Student's t-tests, ANOVAs, Pearson product moment correlation tests and Generalized Linear Models	Those who were higher on agreeableness, conscientiousness and emotional stability demonstrated lower DP scores. Emotional stability also showed a negative correlation with EE and a positive correlation with PA. Those who worked mainly in the outpatient unit were characterised by higher levels of EE, while those who affirmed that there were some procedures in their CMHS for managing aggressive or violent patients reported a significantly higher levels of PA. GLMs did not confirm any potential predictor of DP. Higher levels of emotional stability were associated with lower EE, and higher PA. Higher scores on PA were also linked to the presence of	1.Power analysis calculation included. 2. Good response rate (66%).	1. Correlational design - cannot infer causality. 2. generalisabilty - specific region in Italy . 3.Risk of type I error due to large number of correlations. 4. Response bias due to social desirability could be possible.

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

							protocols for managing aggressive or violent patients.		

EE: Emotional Exhaustion; DP: Depersonalization; PA: Personal Accomplishment; GLM: General Linear Model; CMHS: Community Mental Health Staff; CMHT:

Community Mental Health Team; ANOVA: Analysis of variance; IAPT: Improving Access to Psychological Therapies; PWPs: Psychological Wellbeing Practitioners; HI:

High Intensity; MDT: Multi-Disciplinary Team; CRT: Crisis Resolution Team; AOT: Assertive Outreach Team; JSDS: job satisfaction and discrepancy scores; OLBI-D:

Oldenburg Burnout Inventory-Disengagement; OLBI-e: Oldenburg Burnout Inventory-Exhaustion; SPMI: Severe and Persistent Mental Illness; SMI: Severe Mental Illness

Table 1 - *Summary of Studies Exploring Burnout in Mental Health Staff in Community Based Settings*

Identification

Studies indentified through database search *(n=3961)*

Studies identified through manual search (*n*=10)

Screening

Studies screened (*n*=3726)

Studies excluded from screening (*n*=3656) for:

- Not published in English
- Did not include a mental health sample
- Duplicates
- Not peer reviewed journals
- No measure of burnout
- Not quantitative research

Eligibility

Full-text articles assessed for eligibility (*n*=71)

Full text articles excluded (*n*=47) for:

- No measure of burnout.
- Client population seen not specified.
- Mental health practitioners working in child setting.
- Burnout was not the dependent variable.
- No burnout measure.
- % sample population does not work in community based mental health services.
- Duplicate due to longitudinal study.

Included

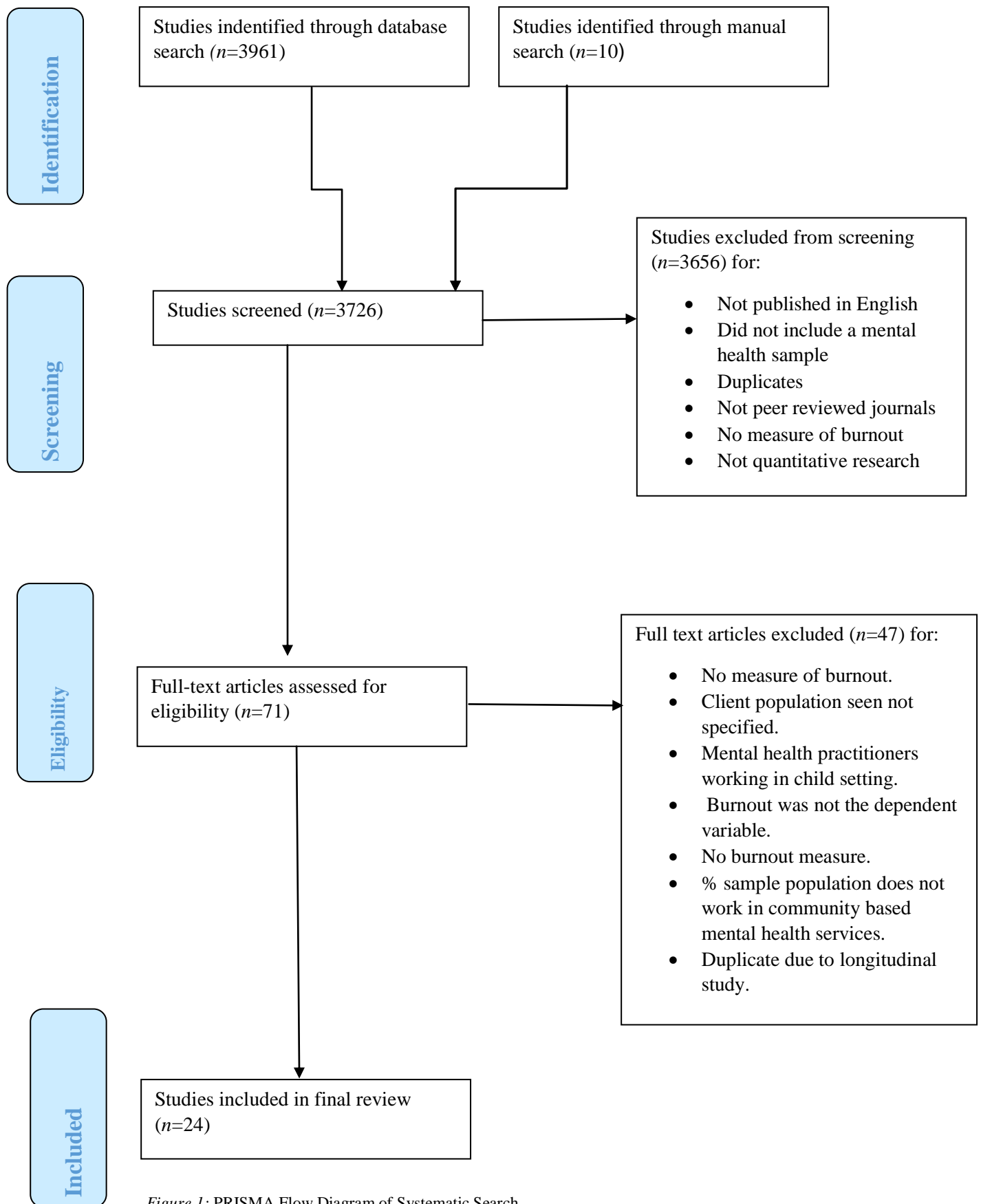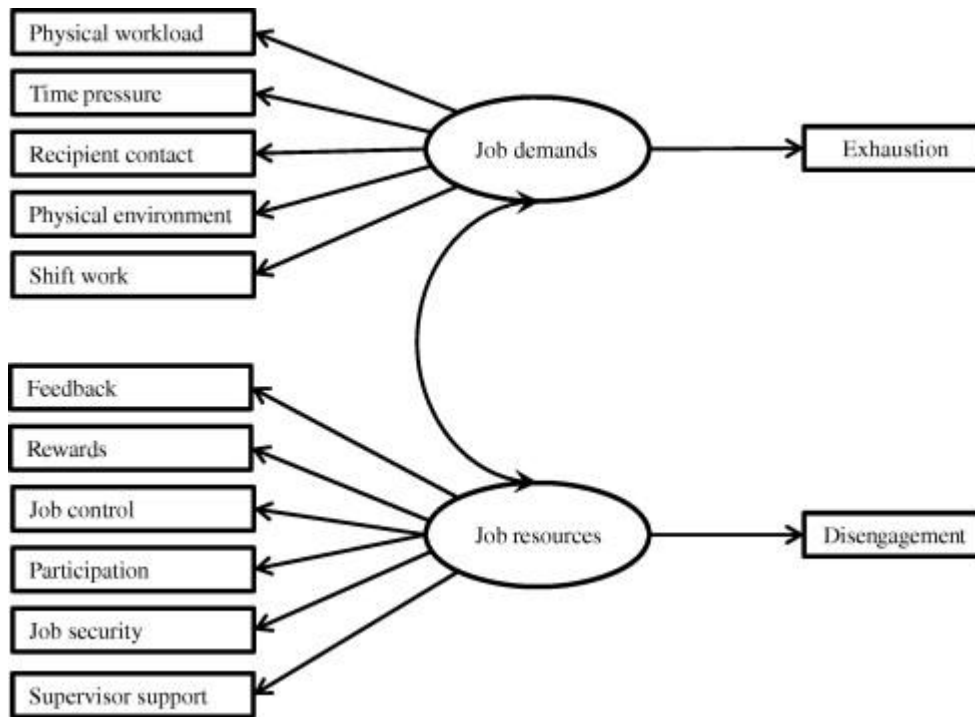Studies included in final review (*n*=24)

Figure 1: PRISMA Flow Diagram of Systematic Search

Figure 2: Job Demands-Resources Model (Demerouti et al., 2001).

Chapter Two: Empirical Study

The Effectiveness of Dialectical Behaviour Therapy Skills Training on Outcomes for Mental Health & Learning Disability Staff

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Abstract

Background: Staff working with clients with a Borderline Personality Disorder (BPD) diagnosis, have been shown to be at higher risk of burnout (Linehan et al., 2000). Suicidal, violent and aggressive behaviours that are common in this client group, frequently lead to burnout. The proportion of clients presenting to mental health services with these problems are high (NCISH, 2018).

Aims: The study evaluated a two day Dialectical Behaviour Therapy (DBT) skills training on several outcomes including burnout, wellbeing, stigma towards clients with BPD, organisational readiness for change, and attitudes towards evidence based practices.

Method: 141 mental health staff participated in the study. Self-report measures were taken at baseline, immediately after training completion, and at follow up (approximately six months).

Results: Stigma towards clients with BPD significantly reduced from pre to post training, and at follow up. Burnout significantly reduced from pre to post training. No other significant differences were found on all other outcomes.

Conclusion: DBT skills training was effective in decreasing stigma towards clients with BPD and reducing burnout, although, effect sizes were small. Findings suggest that this training may be a worthwhile investment for mental health and intellectual disability services.

Keywords: BPD, staff, DBT, training, stigma, burnout

Introduction

This introduction contextualises the type of clients community mental health staff are often presented with. The impact that stressful client contact has on staff; on evidence based practice; and the organisation is explored; leading to a brief overview of existing research on burnout interventions. The section concludes by proposing why brief Dialectical Behaviour Therapy training, may be helpful in ameliorating impact on staff.

Research in the mental health field has revealed a wide variety of stressors for staff (Prosser et al., 1997; Edwards et el., 2000). Client related factors have been named as an important source of stress; with clients displaying violent, aggressive or suicidal behaviour perceived as stressful to work with (Carson et al, 1991; Sullivan, 1993; Reid et al, 1999; Johnson et al., 2018). Individuals with Borderline Personality Disorder (BPD) have been perceived as particularly difficult to work with. BPD is characterised by a pervasive pattern of instability in affect regulation, impulse control, interpersonal relationships, and self-image (Lieb et al., 2004). Individuals given this diagnosis are frequent users of mental health resources (NCISH, 2018). Figures have estimated that BPD occurs in 0.7% to 1.0% of the general population (Coid et al., 2006; Wittchen et al., 2011). The prevalence has been recorded as high as 22.6% in a general psychiatric outpatient setting (Korzekwa et al., 2008), and over 40.0% in inpatient settings (Zimmerman et al., 2008). There have been noted difficulties in the management and engagement of individuals with BPD in mental health services, including high levels of service disengagement and treatment refusal (Percudani et al., 2002), and frequent reported difficulties in the relationship between staff and patients (Norton, 1996). Professionals have often reported being sceptical about the clinical treatability of the disorder (National Institute for Mental Health in England, 2003). Consequently, those providing mental health services are likely to become burnt out (Linehan

et al., 2000). Three components are suggested to make up burnout: 1. emotional exhaustion, 2. depersonalization, and 3. diminished personal accomplishment, as measured by the Maslach Burnout Inventory (MBI; Maslach et al., 1996). Emotional exhaustion has been described as a feeling of being emotionally overextended and exhausted by one's work, whilst depersonalization refers to the development of cold, negative attitudes towards clients. Reduced personal accomplishment meanwhile refers to a tendency to evaluate oneself negatively, particularly with regard to one's work with clients. Prevalence estimates of burnout in mental health range from 21 to 67% (Morse et al., 2012). A study by Westwood et al. (2017) found a burnout prevalence of 50 to 69% in Improving Access to Psychological Therapies (IAPT) service. IAPT is a primary care service in England, offering primarily psychological interventions to individuals with mild to moderate mental health difficulties.

"Well-being is a......holistic concept that encompasses facets of mental health, physical health, and stress" (Johnson et al., 2018). Higher levels of burnout are closely associated with lower levels of well-being (Johnson et al., 2018). Poorer well-being and higher burnout are associated with poorer quality and safety of patient care, higher absenteeism, and higher turnover rates (Johnson et al., 2018). Staff absences and turnover are also correlated with reduced fidelity to Evidence-Based Practices (EBP) (Mancini et al., 2009; Rollins et al., 2010). Morse et al. (2012) concluded that organisational factors such as limited decision making in factors affecting the employee, lack of autonomy and excessive workload were more predictive of burnout than employees' personal characteristics (i.e. age and sex). Aarons et al. (2006) found demoralizing organizational climates, characterized by high levels of role conflict, emotional exhaustion, and depersonalization, were associated with perceived divergence between usual practice and EBP. Whilst, more positive organizational culture was associated with more positive provider attitudes towards EBP

(Aarons et al., 2006). Attempts to implement new programs, practices, or policies in organizations often fail because leaders do not establish sufficient organizational readiness for change (Kotter, 1996). Organizational readiness refers to 'the extent to which organizational members are psychologically and behaviourally prepared to implement organizational change' (Weiner et al., 2008). When organizational readiness is high, members are more likely to initiate change, exert greater effort, exhibit greater persistence, and display more cooperative behaviour, which overall results in more effective implementation of the proposed change (Weiner et al., 2008b).

Few interventions have concentrated on staff well-being and reducing burnout, although, it has been acknowledged that such interventions are effective, however, effect sizes are small (Johnson et al., 2018). Dialectical Behaviour Therapy (DBT; Linehan, 1993) is a Cognitive Behavioural based therapy designed to help clients who struggle to manage their emotions and who do not have the requisite skills to cope; leading to chaotic behaviour and destructive coping responses. It was originally developed for outpatient treatment of clients with BPD, and has been a recommended treatment for BPD by the National Institute for Clinical Health Excellence (NICE, 2009). The evidence-base for DBT has expanded considerably, with research suggesting its effective application across a number of clinical disorders and settings, including substance dependence, depression, post-traumatic stress disorder and eating disorders (Dimeff & Koerner, 2007; Stoffers-Winterling et al., 2012). Training in DBT has been associated with increased knowledge regarding detection and treatment of BPD, and improved staff attitudes toward individuals with BPD, even after a two day workshop (Hazelton et al., 2005). Similar findings were found for brief DBT skills training for mental health staff in a child and adolescent residential setting (Haynos et al., 2016). Training significantly increased DBT knowledge; decreased staff personal and work

burnout, and decreased stigma towards BPD clients. Research remains limited on the outcomes of brief DBT training on mental health staff in both inpatient and outpatient settings. Additionally, previous studies had small sample sizes: Hazelton et al. 2005 (n=94) and Haynos et al. 2016 (n=22).

In the current study, the authors evaluated the effects of brief DBT skills training on mental health and learning disability staff (MHLDS) working with adults in inpatient and community settings in a Welsh Health Board. From previous research the authors hypothesised that training would:

1. Decrease stigma towards individuals with BPD.

2. Decrease burnout.

3. Increase wellbeing.

Attitudes towards evidence based practice (the participants attitudes towards adopting DBT), DBT skills use (whether they applied the skills to themselves), and organisational readiness for implementing change (whether organisational factors meant that implementation of DBT was more difficult) were also measured to see if there was an interplay between these factors. If an interaction was found, future training could be streamlined in order to target a specific variable(s) to achieve the outcome on the other variables.

Method

Study design

This study evaluated the impact of a two day DBT skills training on several outcomes, including burnout, wellbeing, stigma towards clients with BPD, organisational readiness for change, and attitudes towards evidence based practice, in MHLDS. The study was a non-

controlled, cross-sectional survey design. Self-report measures were taken at baseline, immediately after completing the training, and at approximately six months post training.

Participants

Participants were recruited via a training flyer disseminated to Mental Health and Learning Disability Division teams of a Welsh Health Board. Participants attended three two day workshops held on consecutive days between January 2017 and April 2017. Training completion was defined as completing both days of training (12 hours). The participants provided a range of mental health and intellectual disability services, including inpatient, outpatient and specialist services for adults aged 18 and above.

The Intervention

The DBT skills training consisted of two, six hour interactive training sessions delivered over two days, which focused on introducing the DBT model, including research evidence, psycho education on BPD, acquisition of DBT skills and coaching clients to use skills effectively. Training consisted of PowerPoint presentations, mindfulness skills exercises, role-plays, smaller group discussions, demonstrations, video clips, whole group discussions and ample opportunities for feedback/review throughout the training. Each participant was given a booklet which included an outline of training, the PowerPoint presentations, and worksheets related to relevant skills. An overview of the content of the training is listed in Figure 1.

[Insert Figure 1]

Participants were trained in three cohorts in January 2017, February 2017, and April 2017, at local venues not associated with the Health Board. The training delivered to all

participants was done by the last author, who is a well known international expert in training, delivering and supervising DBT in a wide range of settings.

Measures

Wellbeing. The Short Warwick Edinburgh Mental Well-Being Scale (SWEMWBS) is a shortened version of the 14 item WEMWBS. The scores from the two scales are highly correlated (0.954) (Stewart-Brown et al, 2009). The WEMWBS has moderate to high levels of construct validity with nine other comparable scales (median .73, range .42-.77) and test-retest reliability was reported as high (0.83) (Tennant et al, 2007). It has been standardised on a UK population and measures positive mental health, including subjective perspectives on psychological functioning. Items are rated on 5-point scales from "none of the time" to "all of the time". The SWEMWBS is scored by first transforming the raw scores on each item to a metric score, in order to provide a single score ranging from 7.00 to 35.00. The national median is 23.21 (inter-quartile range 21.52-26.03) (Health Survey for England, 2011).

Stigma. *The Attitudes toward Borderline Personality Disorder Questionnaire (ABPDQ)* was used to assess stigma towards individuals who have a diagnosis of BPD, or perceived to have BPD traits and related problems. The ABPDQ is a thirty item scale, in which each item describes either a positive attitude towards people with BPD, or a negative attitude. Responses are scored on a five point Likert scale from 1=Disagree Strongly to 5=Agree Strongly. Negative items are reverse scored. Scores on this scale range from 30 to 150, with higher scores indicating greater positive attitudes towards individuals with BPD. Item one was altered with the author's permission from "I find working with adolescents with BPD rewarding" to "I find working with clients with BPD rewarding". Haynos et al. (2016) reported an internal consistency of the subscales as measured by Cronbach's alpha of .88 to .90.

Burnout. The Oldenburg Burnout Inventory (OLBI) uses a two factor structure with the components: emotional exhaustion and disengagement to measure burnout. There are 16 items, asking for a response on a 4 point-scale from 1=Strongly Agree to 4=Strongly Disagree. Negative items are reversed scored. Higher scores indicated more exhaustion or disengagement. A mean score was used for both exhaustion and disengagement.

The OLBI is reported to have an acceptable internal consistency; with scores ranging from .74–.87, and in terms of test retest reliability the OLBI scores were moderately correlated (r=.51, p<.001, for exhaustion; r=.34, p<.01, for disengagement) (Halbesleben, & Demerouti, 2005). Cut off scores from Peterson et al. (2008), which correspond with the MBI, were used to indicate whether participants was experiencing problematic burnout. The cut off scores are: $\geq$2.25 for exhaustion and $\geq$2.10 for disengagement.

DBT Skill Use. The Dialectical Behavior Therapy Ways of Coping Checklist (DBT-WCCL) was used to measure DBT skills use. The measure asks individuals to rate their coping over the last month by rating on a 4 point scale from 0=Never Used to 3=Regularly Used, on 59 items. It consists of two subscales: one assessing coping via DBT skills, the DBT Skills Subscale, and one assessing coping via dysfunctional means, the Dysfunctional Coping Subscale (DCS). The DCS has two factors: general dysfunctional coping factor (factor 2) and blaming others factor (factor 3). A mean is calculated for each subscale, higher scores indicate more of this coping style. DBT Skills Subscale was found to have excellent internal consistency, ranging from α=0.92 to α=0.96 (Neacsiu et al. 2010). Factors 2 and 3 had good to excellent internal consistency, ranging from α=0.87 to α=0.92 and α=0.84 to α=0.88, respectively (Neacsiu et al., 2010).

Attitudes towards evidence based interventions. The Evidence-Based Practice Attitude Scale (EBPAS) was used to assess participants' attitudes toward adopting evidence-

based practices. Scores on the EBPAS derive from 4 subscales (Appeal, Requirements, Openness, and Divergence), as well as the total scale. The scale consists of 15 positively and negatively worded items, measured on a 5-point Likert scale ranging from 0 =Not at all to 4=To a very great extent. A higher score on the Appeal, Requirements, Openness sub scales, and total scale indicates a more positive attitude towards adopting evidence-based practices. Reliability coefficients for the subscales ranged from .91 to .67 (total scale .74) (Aarons et al, 2010).

Organizational readiness for implementing DBT Skills: Organizational readiness for implementing change (ORIC) is a measure developed form Weiner's theory of organizational readiness for change. The ORIC has 12 items measured on a five point Likert scale ranging from 1=Disagree to 5=Agree. Two items were omitted (questions one and five) to create a 10 item scale, since these two items did not load on the expected factor (and lacked face validity as measures of change commitment) (Shea et al., 2014). The items measure change commitment and change efficacy. Higher scores indicate higher readiness for implementing change. Alpha coefficients for the five-item Change Commitment Scale and the five-item Change Efficacy Scale have been noted as 0.92 and 0.88 respectively (Shea et al., 2014).

Demographic Data. This consisted of age, gender, job role, number of years in role, the number of years working for the Health Board, and the type of work setting.

Data Collection Procedure

Participants were made aware that they would be asked to take part in evaluating the training on the recruitment flyer. The training and data collection was conducted from January 2017 to February 2018, in Wales. On the first day of training, information sheets, participant consent forms and the questionnaire booklets were made available at each training venue. The facilitator gave a brief overview of the study and it was made clear that

participation was voluntary. Participants were then given time to read and complete the relevant paper work, and all questionnaires and consent forms were collected at the end of the first day. There was a section in the questionnaire booklet asking participants for a postal address or e-mail address to send the follow up questionnaire.

On the second day the second questionnaire booklet (with the same questionnaire set, in a different order) were handed out before the end of the training and collected at the end of the day. Six to 11 months post training; the participants were either sent out a paper questionnaire booklet, with a pre-paid addressed envelope, or e-mailed a link to the online survey version. Those who requested both were sent both methods. Both versions of the survey had a covering letter stating that they could request the latter method. Postal methods were sent one reminder, along with another copy of the questionnaire. Three e-mail reminders were sent to the participants who preferred this method. 89.7% of the follow up sample completed the online survey.

Ethical Approval

Ethical approval was obtained from Bangor University's Psychology Ethics and Research Committee (application number: 2017-15903), and the local Health Board's Research and Development Department. Participants were given information about the study, and gave written informed consent to participate. They were also informed that all data would be anonymised, and that they were free to withdraw at any time and have their data removed.

Data Analysis

IBM SPSS Statistics version 22 (IBM Corp., Armonk, NY) was used for descriptive and statistical analysis. Repeated measures ANOVAs were conducted to examine changes in skills application, burnout, evidence based practice attitudes, organisational readiness for

implementing change and BPD stigma at pre to post training, and at follow up. ANOVAs were also conducted to examine the relationship between work setting and the outcome variables. Cohen's d analyses were used to estimate effect size (Cohen, 1988).

To detect an effect size of $d=0.37$ (as found by Haynos at al., 2016), a power analysis calculation estimated that with an alpha level set to 0.05, and a power of 0.8, 49 participants would be required for the study.

Results

Response Rate

A total of 163 participants attended the training. 141 participants (86.5%) agreed to participate in the study and completed pre (on day one) and post (on day two) questionnaires. 39 participants out of 141 (27.7%) responded at follow up.

Participant Characteristics

The characteristics of the sample are summarised in Table 1. As majority of the population were female, the analysis pertaining to difference between genders were not performed. One participant did not record their age. In order to ensure confidentiality, specific information about job role and work setting were not used. Instead individuals were categorised as either working in the community, inpatient or other. The "other" category included individuals who worked in both inpatient and community settings, and those in training roles.

At baseline, there were significant group level (setting) differences observed in attitudes towards individuals with BPD ($F_{1,135}=9.56$, $p=.002$) and in mental wellbeing scores ($F_{1,135}=7.20$, $p=.008$). Inpatient staff seemed to have more positive attitudes towards BPD clients, whilst community staff seemed to have a higher mental wellbeing score. There were

no significant group level (setting) differences observed on any other variables: mean OLBI-D ($F_{1,135}$=.58, p=.45); mean OLBI-E ($F_{1,135}$=.42, p=.52); EBPAS total score ($F_{1,135}$ =.14, p=.71); ORIC total score (F_{1},135=0.50, p=.48) or mean DBT-WCCL Skill Use ($F_{1,135}$=1.58, p=.21). Post training, mental wellbeing remained significant ($F_{1,135=}$7.20, p=.008), however, attitudes towards BPD clients did not ($F_{1,135=}$2.67, p=.104). The "other" category was omitted from this analysis due to the small sample size.

   Burnout.   On the pre measures (baseline) of training, 70.2% were classified as burnt out in terms of disengagement (n=99, SD=.46), as measured by the Peterson et al. (2008) classification. 78.7% (n=111, SD=.41) of the population were classified as burnt out in terms of exhaustion, again, measured by the Peterson et al. (2008) classification. On day two only 43.3% were classified as being disengaged (n=61, M=2.15, SD=.34), and 39.7% were classified as exhausted (n=56, M=2.41, SD=.38). At follow up 33.3% of the sample were disengaged (n=13, M=2.06, SD=.50) and the majority were exhausted: 69.2% (n=27, M=2.39, SD=.37).

   Mental Wellbeing. In terms of the population's mental wellbeing, 56% of the population reported having a wellbeing score below the national average score of 23.61, at baseline (n=79) (Health Survey for England, 2011). The median of the sample was 23.21 which is the same as the national median score (M= 23.25, range=15.84-35.00, SD=3.23, n=141). By day two 52.5% of the population had a wellbeing score below the national average (n=74, M=23.40, SD=3.74), with a median of 23.21. At follow up 48.8% of the sample had a wellbeing score below the national average (n=19, M=23.82, SD=3.05), and a median of 24.11.

Changes in outcomes from pre and post training

As highlighted by Table 2, there was a significant increase in ABPDQ scores ($p<.001$), and a significant decrease in disengagement ($p=.01$) and exhaustion ($p=.03$) burnout subscales. However, there were no significant increases in wellbeing, evidence based attitudes, organisation readiness for implementing change, or the DBT skill use subscale score. There were no significant decreases in the DBT subscales for general dysfunction or blaming. One participant did not complete the OLBI, and another participant did not complete the DBT-WCCL, therefore these responses were excluded in the analysis pertaining to these measures. There were no significant differences between variables; therefore, analysis pertaining to mediation was not done.

[Insert Table 2]

Changes in outcomes from pre training and follow up

As highlighted in Table 3, the only significant change that was sustained from pre training to follow up, was the significant increase in ABPDQ score (p=.03).

[Insert Table 3]

Discussion

Main Findings

In this study, the authors explored whether brief DBT training for Mental Health and Learning Disability Staff (MHLDS) could have an impact on stigma towards clients, burnout, wellbeing, attitudes towards evidence based practice, organisational readiness for implementing change and DBT skills use. The results suggest that the training improved attitudes towards clients with BPD, and this was maintained at follow up. Our results are consistent with Haynos et al. (2016) and Hazelton et al.'s (2005) studies, which supported the

claim that brief DBT training, can improve staff attitudes towards clients with BPD. The training in line with DBT, focused on the importance of taking a non-judgemental stance towards clients, and provided psychoeducation regarding BPD, which may have improved attitudes towards clients. Perceived negative attitudes towards BPD can result in poorer treatment outcomes (Rüsch et al., 2008). These results support the clinical utility of such training for MHLDS working with clients with BPD, which consequently may improve treatment outcomes.

Our data suggests that at pre training, 70.2% of participants were experiencing problematic levels of emotional exhaustion, and 78.7% were experiencing problematic levels of disengagement. Morse et al., (2012) noted a burnout prevalence of 21-67% among mental health staff and Westwood et al., (2017) noted a prevalence of 50.0-68.8% in Improving Access to Psychological Therapies practitioners, suggesting that our population had higher than expected burnout rate. The training significantly reduced burnout in the short term, but this effect was not observed at follow up.

Decreasing burnout through brief DBT training has a wide range of benefits to MHLDS, clients and the Health Board. Burnout is associated with many negative impacts in mental health care including absenteeism and turnover, greater organisational costs, increased negative attitudes towards patients, and poorer patient outcomes (Morse et al., 2012). Higher burnout rates are also associated with poorer wellbeing (Morse et al., 2012). Our data supports these findings; at pre training over half of the sample had a mental wellbeing score below average, although, the median score was the same as the national median score. Caution should be noted when interpreting these findings as the national average and median mental wellbeing scores are based on a sample population in England. There were no

significant changes in mental wellbeing, which suggests that brief DBT training may not improve mental wellbeing.

The authors were also interested in attitudes towards evidence based practice, DBT skills use, and organisational readiness for implementing change. The training did not appear to have a significant impact on these outcomes. Other studies have suggested that staff absences and turnover are correlated with reduced fidelity to evidence-based practices (Mancini et al., 2009; Rollins et al., 2010), however, as we did not request this data, this could not be examined.

Methodological Considerations

The sample is likely to be representative of mental health staff in Wales. There are differences in services and legislation in Wales, which may have contributed to the high burnout rate. This includes no provision of Improving Access to Psychological Therapies services, and the Mental Health (Wales) Measure (2010). Burnout rates significantly decreased by day two of training, however, this reduction in burnout was small and was sustained by follow up.

It should be noted that the sample, although small, included individuals who worked in intellectual disability services (n=12). To our knowledge, this is the first study to have delivered brief DBT skills training to this occupational group. Further research with a larger sample size, is required to make further inferences regarding the effectiveness of the intervention on outcomes for this group.

There may be a ceiling effect with the burnout variable, as we cannot rule out that our study did not attract MHLDS with greater levels of burnout compared to staff who did not attend training. However, training was advertised as two day training in DBT, for all staff to avoid bias. The effect sizes in this study were small to medium effects; further training or

delivery of the training over several weeks may have produced larger effect sizes. However, Haynos et al.'s (2016) study was delivered over six weeks and their effect sizes were similar to those reported in this study.

Conclusion

Brief DBT skills training has been shown to be effective in reducing burnout post training, and decreasing stigma towards clients with BPD post training, and at follow up. Due to much research reporting the negative outcomes on treatment, resulting from burnout and negative attitudes towards clients, these findings suggest that this training may be a worthwhile investment for Health Boards, and services providers working with this client group.

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Figure 1. Overview of the content

Day one:

- Orientation to the training

- Research

- Understanding your own and our patients' contexts

- Introduction to the DBT model

- Mindfulness skills in DBT

- Emotion Regulation Skills

Day two:

- Emotion Regulation Skills continued

- Distress Tolerance Skills

- Interpersonal Effectiveness Skills

- Coaching Skills

- Review

Table 1. Mental Health Staff Characteristics (Pre Training)

Demographics			
Gender N (%)	Female 112 (79.4%)		
Age - Mean (SD)	42.75 (10.1) Range= 23-70		
Age Categories N (%)	Over 44 years old - 70 (50)	Under 44 years old - 70 (50)	
Occupational Variables			
Average number of years in role (SD)	8.7 (8.64) Range=0.08-49.00		
Average number of years working in the Health Board	12.7 (10.47) Rage=0.25-49.00		
Setting N (%)	Community 87 (61.7)	Inpatient 50 (35.5)	Other 4 (2.8)
OLBI-D mean (SD)	2.19 (0.32)	2.24 (0.41)	2.16 (0.53)
OLBI-E mean (SD)	2.47 (0.41)	2.51 (0.41)	2.13 (0.42)
ABPDQ mean (SD)	91.65 (6.45)	93.78 (7.01)	94.00 (4.55)
SWEMWBS mean (SD)	23.8 (3.35)	22.27 (2.90)	23.29 (2.01)
EBPAS Total Score mean (SD)	44.02 (6.41)	44.44 (6.10)	46.25 (7.14)
ORIC Total Score mean (SD)	32.66 (6.26)*	33.36 (7.51)	29.75 (4.03)
DBT-WCCL Skills Use Score mean (SD)	2.15 (0.37)	2.07 (0.37)	2.12 (0.23)

SD=Standard Deviation; OLBI=Oldenburg Burnout Inventory, D=Disengagement; E=Exhaustion; ABPDQ-Attitudes toward Borderline Personality Disorder Questionnaire SWEMWBS- Short Warwick Edinburgh Mental Well-Being Scale; ; EBPAS- The Evidence-Based Practice Attitude Scale; ORIC- Organizational readiness for implementing change; DBT-WCCL- Dialectical Behavior Therapy Ways of Coping Checklist; N=86

Table 2. Means, standard deviations, and ANOVA results between pre (day one) and post (day two) training on BPD stigma scores, evidence base practice scores, organisational readiness for implementing change scores, DBT Skill use scores, burnout and wellbeing scores.

	Pre Training		Post Training						
	M (SD)	Range	*M*(SD)	Range	*F*	*Df*	*p*	*D*	*N*
ABPDQ Score	91.65 (6.45)	74.00-100.00	93.43 (6.20)	78.00-101.00	15.57	1.00	<.001**	0.28	141
EBPAS Total score	44.23 (6.28)	29.00-58.00	44.30 (6.99)	27.00-59.00	.020	1.00	.89	0.01	141
ORIC Commitment score	16.54 (3.54)	5.00-25.00	16.81 (3.71)	5.00-25.00	1.03	1.00	.31	0.08	140
ORIC Efficacy score	16.29 (3.54)	5.00-25.00	16.32 (3.82)	5.00-25.00	.01	1.00	.92	0.01	140
ORIC Total score	32.83 (6.68)	10.00-50.00	33.14 (7.15)	10.00-50.00	.41	1.00	.52	0.05	140
DBT-WCCL Skill Use score	2.12 (.37)	1.03-2.89	2.12 (.37)	.61-2.84	.06	1.00	.81	0	140
DBT-WCCL General Dysfunctional score	1.56 (.57)	.27-2.93	1.54 (.61)	.07-2.86	.24	1.00	.62	.04	140
DBT-WCCL Blaming score	1.00 (.57)	.00-2.67	1.02 (.56)	.00-2.67	.22	1.00	.64	0.04	140
OLBI Disengagement mean score	2.21 (.36)	1.25-3.25	2.15 (.34)	1.00-3.88	6.67	1.00	.01*	.17	141
OLBI Exhaustion mean score	2.47 (.41)	1.25-3.75	2.41 (.38)	1.00-3.88	5.01	1.00	.03*	.15	141
SWEMWBS score	23.24 (3.23)	15.84-35.00	23.40 (3.74)	16.88-35.00	.47	1.00	.50	.05	141

*<.05; **<0.001; ABPDQ-Attitudes toward Borderline Personality Disorder Questionnaire; EBPAS- The Evidence-Based Practice Attitude Scale; ORIC- Organizational readiness for implementing change; DBT-WCCL- Dialectical Behavior Therapy Ways of Coping Checklist; OLBI- Oldenburg Burnout Inventory; SWEMWBS- Short Warwick Edinburgh Mental Well-Being Scale.

Table 3. Means, standard deviations, and ANOVA results between post training (day two) and follow up on BPD stigma scores, evidence base practice scores, organisational readiness for implementing change scores, DBT Skill use scores, burnout and wellbeing scores.

	Pre Training		Follow up						
	M (SD)	Range	*M*(SD)	Range	*F*	*Df*	*P*	*D*	*N*
ABPDQ Score	90.97 (6.90)	74.00-104.00	93.44 (6.46)	80.00-104.00	5.42	1.00	.03*	.36	39
EBPAS Total score	45.54 (5.51)	33.00-57.00	45.59 (7.22)	29.00-58.00	.002	1.00	.96	.01	39
ORIC Commitment score	16.15 (3.97)	5.00-21.00	16.00 (4.65)	5.00-25.00	.06	1.00	.82	.04	39
ORIC Efficacy score	15.41 (3.70)	5.00-21.00	16.54 (4.93)	5.00-25.00	2.73	1.00	.11	.31	39
ORIC Total score	31.56 (7.37)	10.00-41.00	32.54 (9.17)	10.00-40.00	.62	1.00	.44	.13	39
DBT-WCCL Skill Use score	2.22 (.35)	1.03-2.79	2.16 (.38)	.37-2.79	2.37	1.00	.13	.17	39
DBT-WCCL General Dysfunctional score	1.49 (.55)	.33-2.80	1.40 (.60)	.20-2.40	1.92	1.00	.18	.16	39
DBT-WCCL Blaming score	.92. (.52)	.00-2.00	.89 (.53)	.00-2.17	.21	1.00	.65	.17	39
OLBI Disengagement mean score	2.06 (.42)	1.38-3.25	2.06 (.50)	1.00-3.63	.000	1.00	1.00	.00	39
OLBI Exhaustion mean score	2.42 (.40)	1.50-3.38	2.39 (.37)	1.63-3.25	.26	1.00	.61	.08	39
SWEMWBS score	24.20 (3.40)	18.59-35.00	23.82 (3.05)	16.36-30.70	.49	1.00	.49	.11	39

*<.05; ABPDQ-Attitudes toward Borderline Personality Disorder Questionnaire; EBPAS- The Evidence-Based Practice Attitude Scale; ORIC- Organizational readiness for implementing change; DBT-WCCL- Dialectical Behavior Therapy Ways of Coping Checklist; OLBI- Oldenburg Burnout Inventory; SWEMWBS- Short Warwick Edinburgh Mental Well-Being Scale.

Chapter Three: Contributions to Theory and Practice

<center>**Contributions to Theory and Practice**</center>

This chapter discusses the two previous papers, exploring how their separate findings further existing theory, and contribute to clinical practice within the mental health arena. Following a brief overview of the review and empirical studies, first theoretical and then clinical implications are discussed. The chapter concludes with personal reflections.

1. Overview of Chapters

1.1 Systematic Review

The systematic review summarised predictors of burnout, specifically in mental health staff working in community based settings. Burnout predictors were conceptualised as either personal or socio-demographic characteristics; role specific characteristics; and environmental / organizational characteristics. Being younger, less experienced, working overtime, involvement with complex clients and a lack of support were the most common predictors. The Job Demands -Resources Model (Demerouti et al., 2001) suggests that burnout may result from a combination of excessive demands and a lack of resources to manage these. The review supported the model, whilst offering the addition that personal have a role in moderating burnout.

1.2 Empirical Paper

The findings from this paper, suggested that a two day Dialectical Behaviour Therapy (DBT) skills training workshop, can reduce mental health staff stigma against individuals with Borderline Personality Disorder (BPD). Signifying the importance of these findings is previous research, suggesting negative attitudes towards clients can result in poorer treatment outcomes (Rüsch et al., 2008). Our results also suggested that at pre training, 70.2% of the mental health staff were experiencing problematic levels of emotional exhaustion, and 78.7% were experiencing problematic levels of disengagement. This was above the reported prevalence of other research studies. Training also significantly reduced burnout from pre to

post training; however, this was not sustained by follow up. The training seemed to have no significant effect on changing attitudes towards evidence based practice, organizational readiness for implementing change, DBT skills use or mental wellbeing.

2. Theoretical Implications

2.1 Methodological Limitations

The majority of papers in the systematic review reported on studies that utilised a cross-sectional survey design, resulting in a lack of longitudinal data. This is a limitation as there is not enough evidence on how burnout develops over time. This data could prove useful in service planning and development, as some research suggests that older and experienced workers experience less burnout compared to younger and less experienced workers. The empirical paper did take pre, post and follow up measures between 6-11 months post training, however, this was not a sufficient time scale to make inferences regarding the development of burnout over time. In addition, both the review and empirical paper utilised self report designs, which may be subject to social desirability and inaccurate reporting.

The systematic review aimed to explore predictors associated with all mental health staff working in community based services; however, this was rather limited due to most studies having a majority of psychiatric nurses in their samples, thus, limiting the generalisability of the findings. There was an under representation of psychologists, psychiatrists, occupational therapists, and social workers. Additionally, many studies included in the review did not state the breakdown of professional groups or were generally categorised as mental health professionals. There were some studies that concentrated on these underrepresented professionals entirely, for example social workers; psychologists; and occupational therapists, however, the sample sizes, especially for the latter two occupational

groups were small. Thus, drawing conclusions for underrepresented groups in this review, should be done with caution.

Medically trained staff, such as psychiatric nurses and psychiatrists could potentially have differing job demands associated with balancing medical and psychotherapeutic roles, in comparison to psychologists for example (Simionato & Simpson, 2018). This could lead to medically trained staff experiencing pressure associated with managing both physical and psychological health of clients (Brent & Kolko, 1998).

Furthermore, both the study samples in the review and the empirical paper suffer from a lack of mental health staff from the Black, Minority and Ethnic demographic groups, which further limits the scope of generalising the findings. Future studies could build upon this by targeting these underrepresented groups or include a sampling method which increases representation of these professionals. Additionally, due to the inconsistencies in outcome measures of burnout across the studies included in the review, this limited the synthesis of results across all research questions, as some measures measure emotional exhaustion, depersonalization and personal accomplishment, whilst The Burnout Scale (Pines et al., 1981) for example measures only a single factor of exhaustion.

Generally, the overall quality of the studies was low to medium, overwhelmed by significant methodological weaknesses, including small samples, low response rates, samples of convenience, cross sectional designs, self report methods and correlational analysis. However, since: *"Ironically, the mental health field has paid relatively little attention to the health and wellbeing of its own workers..."* (Morse et al., 2012), the emerging body of research is a welcome development in trying to intervene in this important issue. Future research could develop on these methodological limitations.

The systematic review and empirical paper primarily, focused on mental health staff employed in adult settings. Therefore, it is unclear whether the findings of this study

generalise to professionals working with other population groups. Some evidence exists of the application of brief DBT skills with child and adolescent inpatient mental health staff (Haynos et al., 2016). Qualitative studies were also excluded from the review to make synthesis of the findings more comparable, neglecting a vast amount of literature which could unearth personal meanings regarding the experience of burnout.

In the empirical paper, the cut off values used to identify problematic burnout i.e. Peterson et al. (2008), have not been extensively validated, and there is evidence suggesting that these indicators may vary by country (Schaufeli & Vandierendonck, 1995), which would render the findings difficult to generalise internationally. Additionally, the authors faced some challenges during the follow up phase of the research, namely the NHS Cyber Attack. Most healthcare organisations increased their security settings following the attack, and as a result, e-mails which included a link to the follow up online survey were blocked. The ethics board granted an extension for the follow up period, in order to increase the chances of responses. Even with this extension and several reminder e-mails, the response rate was low. However, it is at the level expected in comparison to other studies (21% response rate quoted by Kaplowitz et al., 2004). Due to the extension of the follow up period, replies were gained from six months post training to 11 months post training, which could have significantly impacted the results, due to context related variables such as staff turnover, sickness absence and annual leave. Therefore, the follow up results must be interpreted with caution.

The empirical study and a majority of the literature review studies is did not collect direct patient outcomes (excluding Delgadillo et al., 2018). This is a crucial limitation as burnout is said to have an impact on patient outcomes (Morse et al., 2012). The authors were also curious to whether the DBT training resulted in less staff complaints, less untoward incidents involving abuse towards staff, less need for restraining practices and seclusion in

inpatient settings, and less staff sickness absence. This was beyond the scope of the empirical paper; however, such information could be gained from Health Board if the study were to be replicated. To conclude, future studies evaluating brief DBT training should include larger and more diverse samples, a comparison group to control for potential confounds, organisational specific moderators and outcomes, and direct patient-related outcomes.

2.2 Contributions to Theory

The systematic review highlighted several risk factors or predictors of burnout associated with working within a community mental health context. The review appeared to support the Job Demands Resources Model (JD-R; Demerouti et al., 2001), in that high job demands and a lack of support and resources partially explained burnout.

1. Job demands suggested in the review included: high caseloads, working with complex patient populations (including those with severe mental illness), overtime, client contact, including telephone contact in Improving Access to Psychological Therapy (IAPT) services. These factors had a significant impact on burnout levels.

2. Job resources, or often the lack thereof, highlighted by the review included: supervision, support from managers, supervisors and teams, involvement in decision making, role ambiguity, professional growth including access to training, role clarity, leadership, and positive involvement with clients. A lack of the aforementioned resources placed significant physical and emotional stress on mental health workers leading to burnout.

High emotional exhaustion (EE), depersonalisation (DP) and low personal accomplishment (PA) are due to high job demands and a lack of job resources. This model captures areas of intervention and development of mental health workers' job roles which could improve their experience of work related stress leading to burnout. EE as suggested by the review, supported Maslach and Jackson's (1981) theory. Their theory suggested that

EE is the primary component of burnout, which leads to DP and lowered PA. High job demands and low job resources predicted EE, but did not predict DP. Similarly, Morse et al. (2012) concluded that organisational factors such as limited decision making in factors affecting the employee, lack of autonomy, excessive workload, lack of supervisory and colleague support as being more predictive of burnout rather than personal characteristics (i.e. age and sex). Nonetheless, demographic variables seem to predict DP and PA. Therefore, the review supported the JD-R model of burnout; with the addition that demographic variables appeared to moderate the experience of burnout.

The systematic review included papers from 1997 to 2018. Significant changes in the organisational structure and working practices of mental health services have occurred during this time period including the expansion of community services which in the UK, for example, included the development of assertive outreach teams, their subsequent dismantling and amalgamation with several community mental health teams into the creation of 'super' recovery teams; changes in NHS working configurations such as the 'hub and spoke' model (Bostock & Britt, 2014); the development of Improving Access to Psychological Therapies (IAPT) in 2008 (NHS England, 2018), and the introduction of new legislation, including the Mental Health (Wales) Measure (2010). Regardless of these changes, the predictors overall seem to be similar throughout the years, although with a few changes in delivery of the work due to technological advances such as remote working and data inputting. Overall, it seems that it the same factors drove burnout in the late 90s, is still relevant in 2018, suggesting the longevity of the JD-R model of burnout. This is in agreement with the findings of Schaufeli et al. (2009). They reviewed the research findings of burnout from the 1970s to 2008, concluding that the same basic factors seem to drive burnout now as before. They suggested the most prominent factors were the imbalance between demands and resources at work, and the conflict between values (i.e. between

personal values and those of the organization, and between the officially stated organizational values and the values in action) (Schaufeli et al., 2009).
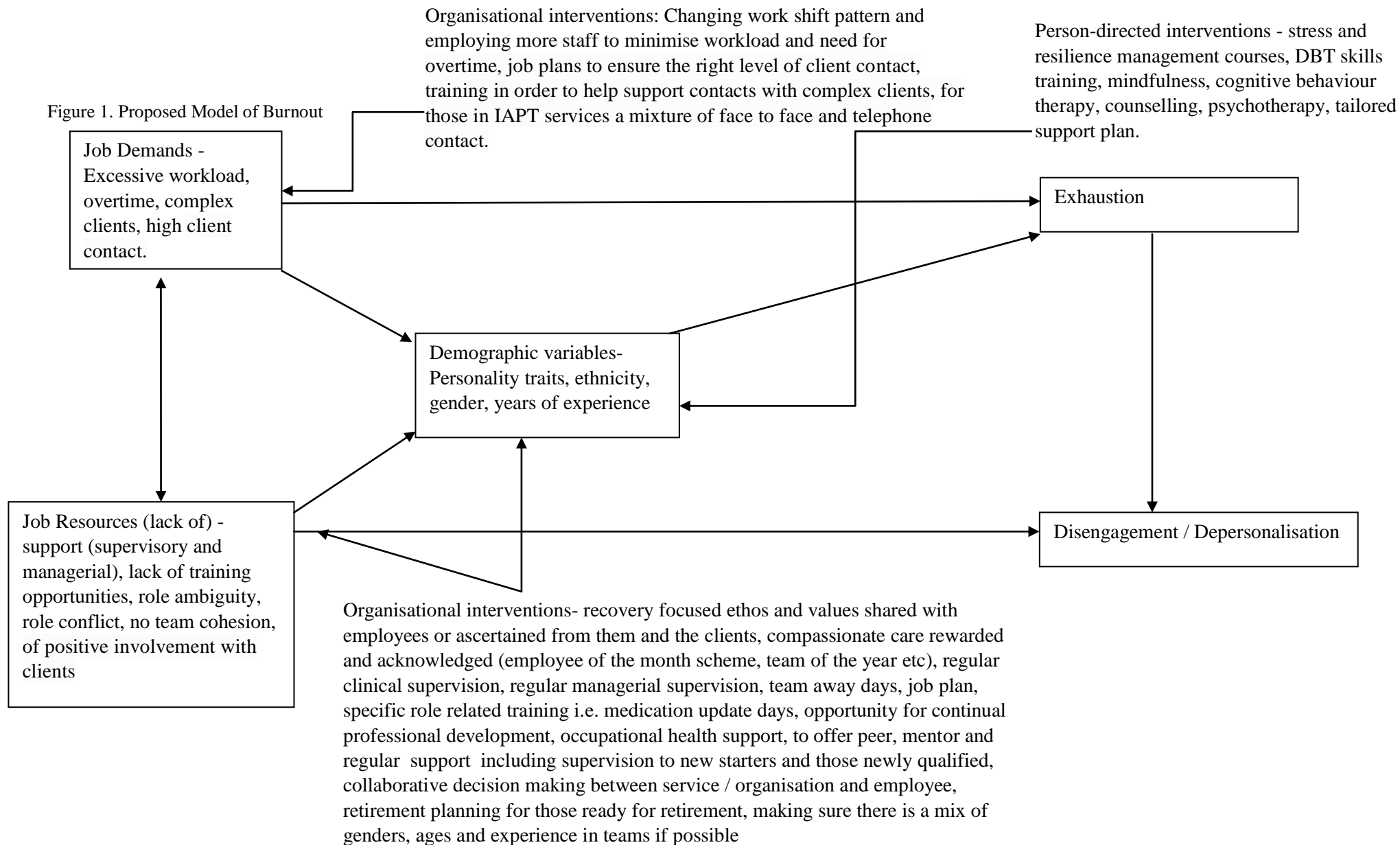
The empirical study suggested that brief DBT training was significant in reducing negative attitudes towards clients with BPD, with a small effect size. This is consistent with previous research (Hazelton et al., 2005; Haynos et al., 2016), suggesting DBT is effective in improving staff attitudes towards BPD. Interestingly, attitudes towards individuals with BPD did not seem to mediate burnout. In spite of this, negative attitudes towards clients could be a consequence of burnout. Whilst, the authors did not measure PA, as they did not utilise the Maslach Burnout Inventory (Maslach & Jackson, 1996), one may hypothesise that low PA, which is the tendency to evaluate oneself negatively, particularly in relation to work with clients, could be a predictor of attitudes towards the BPD client group. The hypothesis being: that low levels of personal accomplishment being associated with more negative attitudes towards clients.

DBT skills training was significant in reducing exhaustion and disengagement from pre to post training only, with a small effect size. This again is consistent with Haynos et al.'s (2016) findings; however, this significant reduction was not sustained at follow up. Haynos et al.'s (2016) study did not include a follow up phase and their training was delivered over six weeks. Future studies of this kind could compare the effectiveness of two day training to a longer training program, and incorporate a longitudinal design to calculate longevity of effectiveness.

Interestingly, the small effect sizes produced by the brief DBT training echoed findings by Johnson et al., (2018). Johnson et al. (2018) concluded that person-directed interventions (i.e. psychological interventions such as the DBT skills training) were more effective than organizational interventions (e.g. work scheduling changes, and teamwork training). Future studies may explore the comparison in effectiveness of person-directed only

interventions, versus organisational interventions only, versus a combination of a person directed and organisational interventions. The latter, may result in a larger effect size in reducing burnout, and explain why brief DBT skills training on its own had a small effect size.

With the aforementioned theories and the results of the empirical paper in mind, the author proposes a new model of burnout, one which develops on the existing JD-R model and incorporates demographic and personal factors, as well as areas of intervention. Interventions will be discussed in more detail in the next section (clinical implications). The proposed model suggests that job demands and job resources are linked. If demands and resources are equal or if resources outweigh demands, burnout is low or non-existent. However, when the demands outweigh resources, this leads to exhaustion and as a result can lead to disengagement. A lack of job resources can also lead to disengagement. Demographic factors and personal characteristics moderate the relationship between job demands, job resources and exhaustion.

Figure 1. Proposed Model of Burnout

Organisational interventions: Changing work shift pattern and employing more staff to minimise workload and need for overtime, job plans to ensure the right level of client contact, training in order to help support contacts with complex clients, for those in IAPT services a mixture of face to face and telephone contact.

Person-directed interventions - stress and resilience management courses, DBT skills training, mindfulness, cognitive behaviour therapy, counselling, psychotherapy, tailored support plan.

Job Demands - Excessive workload, overtime, complex clients, high client contact.

Exhaustion

Demographic variables- Personality traits, ethnicity, gender, years of experience

Job Resources (lack of) - support (supervisory and managerial), lack of training opportunities, role ambiguity, role conflict, no team cohesion, of positive involvement with clients

Disengagement / Depersonalisation

Organisational interventions- recovery focused ethos and values shared with employees or ascertained from them and the clients, compassionate care rewarded and acknowledged (employee of the month scheme, team of the year etc), regular clinical supervision, regular managerial supervision, team away days, job plan, specific role related training i.e. medication update days, opportunity for continual professional development, occupational health support, to offer peer, mentor and regular support including supervision to new starters and those newly qualified, collaborative decision making between service / organisation and employee, retirement planning for those ready for retirement, making sure there is a mix of genders, ages and experience in teams if possible

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3. Clinical Implications

The systematic review paper which partially supported the JD-R model of burnout, summarises the predictors of burnout and suggests organisational intervention in order to prevent or ameliorate the development of burnout. Person-directed interventions are recommended in order to manage role that demographic and personal characteristics have in moderating burnout. The empirical paper which reported on the effectiveness of brief DBT skills training on several outcomes for mental health staff, suggested that this kind of training was effective in changing staff's negative attitudes towards clients with BPD. Additionally, training was effective in reducing burnout in the short term. What has become apparent from the literature and the empirical paper is that mental health staff burnout is on the rise (Morse et al., 2012; Westwood et al., 2017), alongside the negative consequences of burnout on multiple levels including staff wellbeing and productivity, client outcomes, and cost implications for organisations including staff absences and turnover. With limited resources and funding cuts endemic in health services it is crucial to find effective and cost efficient burnout interventions. We outline recommendations on burnout interventions guided by the research literature.

3.1 Service / Organisational Implementation

The research on burnout interventions are often reactive and based on anecdotal research findings on the causes of burnout (Johnson et al, 2018). On the surface, the findings from the review of Morse et al. (2012) and Johnson et al. (2018) seem conflicting. Morse et al. (2012) concluded that organisational factors such as limited decision making in factors affecting the employee, lack of autonomy, excessive workload, lack of supervisory and colleague support as being more predictive of burnout rather than personal characteristics (i.e. age and sex). On the contrary, Johnson et al. (2018) found that person-directed interventions (i.e. psychological interventions such as cognitive-behaviour therapy,

mindfulness groups, or counselling) were more effective than organizational interventions (i.e. educational interventions, work scheduling changes, and teamwork training) for burnout reduction, which would suggest that personal characteristics where more important in burnout development than organisational factors. However, deconstructing organisational interventions revealed that job training / educational interventions had a significant impact on burnout (Johnson et al., 2018). Dreison et al. (2018) found larger effect sizes for job training / educational interventions, than person directed interventions on all burnout composite scores. Person directed interventions were concluded to be the most effective at reducing emotional exhaustion specifically.

Recommendations

In line with the literature review findings, increasing competency in job related skills by offering job training and education interventions, thus reducing role ambiguity and incongruence could be achieved by psychosocial intervention training i.e. engagement skills, motivational interviewing skills, cognitive behaviour therapy (CBT) for anxiety, CBT for depression, working with self harm. It could also include behavioural intervention training i.e. functional analysis.

For depersonalization reduction, person directed interventions such as mindfulness skills, personal counselling or psychotherapy and stress management workshops could be offered, in combination to the above.

Finally, the following interventions may be useful. They are based on the suggested predictors found in the systematic review. Evidence base for these interventions are still emerging:

1. Increasing staffing levels, thus reducing the need for overtime; decreasing excessive client contact by increasing staff to patient ratio; creating more time for supervision and staff training.

2. Training managers and supervisors in delivering supervision. Effective supervision has been suggested to reduce burnout.

3. Training in leadership skills for managers and those in senior positions as this may create a more positive organisational climate.

4. Protocols and training in managing violence and suicidality, including de-escalation techniques, with opportunity for staff support after incidences have occurred. Violence and suicidality were found to be predictors.

5. Team away days can have dual purpose in offering job training for half the day and team building in order to improve team cohesion.

6. Job plans to reduce role ambiguity and role conflict.

7. Staff to be consulted with regards to service development changes. And staff be included and their opinions heard and considered in meetings in which they are a part of client's care. This will increase involvement in decision making.

Finally, the DBT skills training discussed in the empirical paper is a noteworthy mention, this type of training can be considered as a person-directed intervention i.e. teaching coping skills to the staff, and an organisational level intervention specifically a job training/educational intervention i.e. psycho-education on BPD; training a model/intervention; and training on managing suicidality. Therefore, DBT skills training should be considered as an intervention for reducing burnout, as this was shown to be the case in the short term. To conclude, the above interventions may require a vast financial investment, however, the hoped benefits in reducing rates of burnout will result in cost effective savings from reduced sickness absences and staff turnover. Recently, the BBC made a Freedom of Information request to a Welsh Health Board requesting data on how many sickness days it had due to stress between 2012 and 2017. In 2017, the total number of days lost to stress-related sickness was 76,919, which cost the Health Board approximately

£5,428,479. This is a key area which requires further research, as potential savings due to burnout interventions are currently uncorroborated.

3.2 Future Research

Currently, the literature is lacking longitudinal data. Little is known about the long term development of burnout. In addition, limited knowledge is known about the individuals that do not respond to research requests. It is possible that those who experience high levels of burnout have left the profession / service. Longitudinal data would be helpful in gaining this knowledge and further exploration of the characteristics / predictors of those who stay, and those who leave the profession, aiding in service planning.

Patient informed data on the whole is crucially missing in both the literature review and empirical paper. Future studies would be wise in incorporating this data, including treatment outcomes and patients' experience of services, strengthening the value of these interventions for organisations. Connected to this, prospective studies could evaluate burnout interventions related to organisational outcomes, including sickness absences, untoward incidences, client suicide prevalence and staff turnover, by appraising the overall cost effectiveness of these interventions.

Job-match research suggested increased burnout if job-match is incongruent to areas of work-life. Incongruence between training and job role could explain role ambiguity and subsequent burnout. Exploring the relevance of training courses which professionals complete in order to get professional registration, and how effective they are at preparing professionals for their subsequent qualified roles, could lead to changes in these courses

In terms of the empirical study, further research needs to be done on the longevity of the intervention, and exploration of whether a longer training period over a number of months, and supervision groups may have increased effectiveness and implementation of the skills.

At a practical level, research suggested the high likelihood of individuals working in healthcare organisations being burnt out; therefore, these individuals solely, may not have the resources to undertake research. Linking with local universities, including the schools of psychology, medicine and nursing, creates valuable partnerships and added resources in implementing research.

4. Personal Reflections

Published days before thesis hand in; Lord Carter's Review (2018) on productivity in NHS mental health and community services (England) was a timely reminder of the relevance of this thesis. Lord Carter (2018) makes recommendations regarding the productivity and efficiency of these services, and importantly gives attention to the workforce.

"..... we were told that they [staff] are coming under increasing strain. Staff engagement, sickness absence, bullying and harassment and retention levels are concerning and show significant variation between different organisations. Effective action must be taken to support trusts in addressing these issues. This includes an emphasis on leadership at all levels in the organisation and the importance of the role of trust boards in driving this" (Lord Carter, 2018).

Although, this report provided some welcome support for addressing mental health staff wellbeing, I believe the report missed the wider pertinent issues. The report was about improving productivity and increasing efficiency in order to make cost savings. However, money needs to be invested into services in order to resource the workforce for them to work effectively. It appeared that the purpose was to squeeze more efficiency and productivity out of the workforce without further investment. How can services continue on a "shoe string" and "good will"?

Lord Carter (2018) made some valuable recommendations with regards to workforce improvement; most of these are included in this thesis:

"Effective rostering, job planning, managing sickness absence, maximising the clinical time of community staff, appropriate skills mixing, and effective training all lend themselves to detailed management attention. This is, however, something that we have found to be missing in too many providers." (Lord Carter, 2018).

On reflection, the recommendation of "effective training", seemingly a great suggestion, but in reality, where does the funding for this come from when cost savings are a priority? My experiences of attending training in NHS services have been few and far between; with staff writing near enough a business case for going to external training courses, and having to equally justify the need of attending in-house training. Reflecting on the last three years of the doctorate, I realise how lucky I have been. I have had many opportunities for funded professional development opportunities, and whilst there have been stressful times, notably this thesis; the demands that my full time colleagues are facing in the NHS, on daily basis are incomparable.

How ironic, the fact that I am going to be working in a service, which provides support to distressed individuals, whilst there is a high chance that my colleagues and I may be experiencing poor psychological wellbeing. I could think about changing my profession, but I know from my own experience of being on placement, and working in different NHS organisations that even on a bad day you can find some good. First and foremost I truly believe that (most) of the individuals that come into the caring profession, do so as they actually care about making a positive change in peoples' lives. I have come across burnt out clinicians, but for every one that is burnt out there are two or three others that seem to be coping and passionate about their work.

There is emerging literature with regards to the mental health workforce, in that we are attracted to the role due to our own personal experiences of mental health. And whilst this may give us some helpful insights and empathy, perhaps, this also predisposes us to our own vulnerabilities in terms of our psychological health? What I have witnessed are services under resourced, with staff which are doing their best with the little that they do have. Seemingly, let down by their training, organisation and most importantly, by the government.

On balance, it is likely that a combination of factors drives burnout. Frustratingly, some of the resolutions seem simple, like employing more staff, but this is a wider issue than at service and organisational level. The future of the mental health workforce's wellbeing does seem bleak. This is of concern in thinking about the next generation of mental health workers: the "snowflake generation*".

I hope this thesis is a small, but meaningful step towards making a difference, which makes the desire to get published and getting the word out, even more appealing and relevant. In thinking about my influence as a nearly qualified psychologist, in this apparent epidemic, my way of minimising burnout will to be boundaried with regards to capacity, both physically and emotionally; be attentive to my own psychological needs and potential triggers; maintain a good work life balance (including plenty of spa breaks and holidays); be supportive to colleagues (but not to the degree of an emotional sponge) with offerings of supervision, compassion, training and most importantly cups of tea; utilise supervision and training opportunities to their full advantage, and indulging in a moderate consumption of chocolate and prosecco (the latter to increase my personal accomplishment; Hannigan et al., 2000).

Footnote

*"The "snowflake generation" is a disparaging term now commonly used to refer to young people, who are perceived to be over-sensitive and intolerant of disagreement." (Rudgard, 2017).

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Appendices

I. Bangor University, School of Psychology Ethics Committee Approval

II. NHS IRAS Form

III. Research & Development Approval Letter

IV. Participant Consent Form – English

V. Participant Consent Form – Welsh

VI. Participant Information Sheet – English

VII. Participant Information Sheet – Welsh

VII. Research Protocol

Appendix I -Bangor University, School of Psychology Ethics Committee Approval

Ethical approval granted for 2017-15903-A14235 Amendment to Effectiveness of a 2 day DBT skills training program on the outcomes for staff working in NHS Mental Health and Learning Disability settings

E

ethics@bangor.ac.uk

Reply all|
Wed 14/02, 12:07
Caryl Parry Roberts
Flag for follow up. Start by 17 May 2018. Due by 17 May 2018.

Dear Caryl,

2017-15903-A14235 Amendment to to Effectiveness of a 2 day DBT skills training program on the outcomes for staff working in NHS Mental Health and Learning Disability settings

Your research proposal number 2017-15903-A14235
has been reviewed by the Psychology Ethics and Research Committee
and the committee are now able to confirm ethical and governance approval for the above research on the basis described in the application form, protocol and supporting documentation. This approval lasts for a maximum of three years from this date.

Ethical approval is granted for the study as it was explicitly described in the application

If you wish to make any non-trivial modifications to the research project, please submit an amendment form to the committee, and copies of any of the original documents reviewed which have been altered as a result of the amendment. Please also inform the committee immediately if participants experience any unanticipated harm as a result of taking part in your research, or if any adverse reactions are reported in subsequent literature using the same technique elsewhere.

Dear Caryl,

2017-15903 Effectiveness of a 2 day DBT skills training program on the outcomes for staff working in NHS Mental Health and Learning Disability settings

Your research proposal number 2017-15903
has been reviewed by the Psychology Ethics and Research Committee
and the committee are now able to confirm ethical and governance approval for the above research on the basis described in the application form, protocol and supporting documentation. This approval lasts for a maximum of three years from this date.

Ethical approval is granted for the study as it was explicitly described in the application

If you wish to make any non-trivial modifications to the research project, please submit an amendment form to the committee, and copies of any of the original documents reviewed which have been altered as a result of the amendment. Please also inform the committee immediately if participants experience any unanticipated harm as a result of taking part in your research, or if any adverse reactions are reported in subsequent literature using the same technique elsewhere.

Appendix II-NHS R&D IRAS Form

IRAS Project Filter

The integrated dataset required for your project will be created from the answers you give to the following questions. The system will generate only those questions and sections which (a) apply to your study type and (b) are required by the bodies reviewing your study. Please ensure you answer all the questions before proceeding with your applications.

Please complete the questions in order. If you change the response to a question, please select 'Save' and review all the questions as your change may have affected subsequent questions.

Please enter a short title for this project (maximum 70 characters)
Effectiveness of a 2 day DBT skills training program

1. Is your project research?

⦿ Yes ◯ No

2. Select one category from the list below:

◯ Clinical trial of an investigational medicinal product

◯ Clinical investigation or other study of a medical device

◯ Combined trial of an investigational medicinal product and an investigational medical device

◯ Other clinical trial to study a novel intervention or randomised clinical trial to compare interventions in clinical practice

◯ Basic science study involving procedures with human participants

⦿ Study administering questionnaires/interviews for quantitative analysis, or using mixed quantitative/qualitative methodology

◯ Study involving qualitative methods only

◯ Study limited to working with human tissue samples (or other human biological samples) and data (specific project only)

◯ Study limited to working with data (specific project only)

◯ Research tissue bank

◯ Research database

If your work does not fit any of these categories, select the option below:

◯ Other study

2a. Please answer the following question(s):

a) Does the study involve the use of any ionising radiation?	Yes	⦿	No
b) Will you be taking new human tissue samples (or other human biological samples)?	Yes	⦿	No
c) Will you be using existing human tissue samples (or other human biological samples)?	Yes	⦿	No

3. In which countries of the UK will the research sites be located?*(Tick all that apply)*

☐ England
☐ Scotland

☑ Wales

☐ Northern Ireland

3a. In which country of the UK will the lead NHS R&D office be located:

○ England

○ Scotland

◉ Wales

○ Northern Ireland

○ This study does not involve the NHS

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4. Which applications do you require?

IMPORTANT: If your project is taking place in the NHS and is led from England select 'IRAS Form'. If your project is led from Northern Ireland, Scotland or Wales select 'NHS/HSC Research and Development Offices' and/or relevant Research Ethics Committee applications, as appropriate.

☐ IRAS Form
☑ NHS/HSC Research and Development offices
☐ Social Care Research Ethics Committee
☐ Research Ethics Committee
☐ Confidentiality Advisory Group (CAG)
☐ National Offender Management Service (NOMS) (Prisons & Probation)

For NHS/HSC R&D Offices in Northern Ireland, Scotland and Wales the CI must create NHS/HSC Site Specific Information forms, for each site, in addition to the study wide forms, and transfer them to the PIs or local collaborators.

For participating NHS organisations in England different arrangements apply for the provision of site specific information. Refer to IRAS Help for more information.

It looks like your project is research requiring NHS R&D approval but does not require review by a REC within the UK Health Departments Research Ethics Service – is that right?

◉ Yes   ○ No

4b. Please confirm the reason(s) why the project does not require review by a REC within the UK Health Departments Research Ethics Service:

☐ Projects limited to the use of samples/data samples provided by a Research Tissue Bank (RTB) with generic ethical approval from a REC, in accordance with the conditions of approval.

☐ Projects limited to the use of data provided by a Research Database with generic ethical approval from a REC, in accordance with the conditions of approval.

☐ Research limited to use of previously collected, non-identifiable information

☐ Research limited to use of previously collected, non-identifiable tissue samples within terms of donor consent

☐ Research limited to use of acellular material

☐ Research limited to use of the premises or facilities of care organisations (no involvement of patients/service users as participants)

☑ Research limited to involvement of staff as participants (no involvement of patients/service users as participants)

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5. Will any research sites in this study be NHS organisations?

⦿ Yes   ◯ No

6. Do you plan to include any participants who are children?

◯ Yes   ⦿ No

7. Do you plan at any stage of the project to undertake intrusive research involving adults lacking capacity to consent for themselves?

◯ Yes   ⦿ No

Answer Yes if you plan to recruit living participants aged 16 or over who lack capacity, or to retain them in the study following loss of capacity. Intrusive research means any research with the living requiring consent in law. This includes use of identifiable tissue samples or personal information, except where application is being made to the Confidentiality Advisory Group to set aside the common law duty of confidentiality in England and Wales. Please consult the guidance notes for further information on the legal frameworks for research involving adults lacking capacity in the UK.

8. Do you plan to include any participants who are prisoners or young offenders in the custody of HM Prison Service or who are offenders supervised by the probation service in England or Wales?

◯ Yes   ⦿ No

9. Is the study or any part of it being undertaken as an educational project?

⦿ Yes   ◯ No

Please describe briefly the involvement of the student(s):

9a. Is the project being undertaken in part fulfilment of a PhD or other doctorate?

⦿ Yes   ◯ No

10. Will this research be financially supported by the United States Department of Health and Human Services or any of its divisions, agencies or programs?

◯ Yes   ⦿ No

11. Will identifiable patient data be accessed outside the care team without prior consent at any stage of the project (including identification of potential participants)?

◯ Yes   ⦿ No

Integrated Research Application System

Application Form for Research administering questionnaires/interviews for quantitative analysis or mixed methodology study

NHS/HSC R&D Form (project information)

Please refer to the Submission and Checklist tabs for instructions on submitting R&D applications.

The Chief Investigator should complete this form. Guidance on the questions is available wherever you see this symbol displayed. We recommend reading the guidance first. The complete guidance and a glossary are available by selecting Help.

Please define any terms or acronyms that might not be familar to lay reviewers of the application.

Short title and version number: (maximum 70 characters - this will be inserted as header on all forms)
Effectiveness of a 2 day DBT skills training program

PART A: Core study information

1. ADMINISTRATIVE DETAILS

A1. Full title of the research:

Effectiveness of a 2 day DBT skills training program on the outcomes for staff working in NHS Mental Health and Learning Disability settings

A2-1. Educational projects

Name and contact details of student(s):

Student 1

	Title Forename/Initials Surname
	Miss Caryl P Roberts
Address	North Wales Clinical Psychology Programme
	School of Psychology, Bangor University, Brigantia Building,
	43 College Road, Bangor, Gwynedd
Post Code	LL57 2DG
E-mail	psp6dc@bangor.ac.uk
Telephone	07724960495
Fax	

Give details of the educational course or degree for which this research is being undertaken:

Name and level of course/ degree:
Doctorate in Clinical Psychology (DClinPsy)

Name of educational establishment:
Bangor University

Name and contact details of academic supervisor(s):

Academic supervisor 1

	Title Forename/Initials Surname
	Dr Michaela Swales
Address	North Wales Clinical Psychology Programme
	School of Psychology, Bangor University, Brigantia Building,
	43 College Road, Bangor, Gwynedd
Post Code	LL57 2DG
E-mail	m.swales@bangor.ac.uk
Telephone	+44 (0)1248 382552
Fax	

Please state which academic supervisor(s) has responsibility for which student(s):
Please click "Save now" before completing this table. This will ensure that all of the student and academic supervisor details are shown correctly.

Student(s)	**Academic supervisor(s)**
Student 1 Miss Caryl P Roberts	☑ Dr Michaela Swales

A copy of a <u>current CV</u> for the student and the academic supervisor (maximum 2 pages of A4) must be submitted with the application.

A2-2. Who will act as Chief Investigator for this study?

◉ Student

◯ Academic supervisor

◯ Other

A3-1. Chief Investigator:

	Title Forename/Initials Surname
	Miss Caryl P Roberts

Post	Trainee Clinical Psychologist
Qualifications	Psychology BSc (Hons)
	Postgraduate Certificate (Merit)
Employer	Betsi Cadwaladr University Health Board
Work Address	North Wales Clinical Psychology Programme
	School of Psychology, Bangor
	Gwynedd
Post Code	LL57 2DG
Work E-mail	psp6dc@bangor.ac.uk
* Personal E-mail	caz_740@hotmail.com
Work Telephone	

* Personal Telephone/Mobile 07724960495

Fax

* This information is optional. It will not be placed in the public domain or disclosed to any other third party without prior consent.

A copy of a <u>current CV</u> (maximum 2 pages of A4) for the Chief Investigator must be submitted with the application.

A4. Who is the contact on behalf of the sponsor for all correspondence relating to applications for this project?
This contact will receive copies of all correspondence from REC and HRA/R&D reviewers that is sent to the CI.

	Title Forename/Initials Surname
	Mr Hefin Francis
Address	School Manager
	Bangor University, School of Psychology,
	Brigantia Building, Penrallt Road Gwynedd
Post Code	LL57 2AS
E-mail	h.francis@bangor.ac.uk
Telephone	01248388339
Fax	

A5-1. Research reference numbers. *Please give any relevant references for your study:*

Applicant's/organisation's own reference number, e.g. R & D (if available):

Sponsor's/protocol number:

Protocol Version:

Protocol Date:

Funder's reference number:

Project website:

Ref.Number Description	Reference Number
Additional reference number(s):	

Registration of research studies is encouraged wherever possible. You may be able to register your study through your NHS organisation or a register run by a medical research charity, or publish your protocol through an open access publisher. If you have registered your study please give details in the "Additional reference number(s)" section.

A5-2. Is this application linked to a previous study or another current application?

◯ Yes   ⦿ No

Please give brief details and reference numbers.

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2. OVERVIEW OF THE RESEARCH

To provide all the information required by review bodies and research information systems, we ask a number of specific questions. This section invites you to give an overview using language comprehensible to lay reviewers and members of the public. Please read the guidance notes for advice on this section.

A6-1. Summary of the study. *Please provide a brief summary of the research (maximum 300 words) using language easily understood by lay reviewers and members of the public. Where the research is reviewed by a REC within the UK Health Departments' Research Ethics Service, this summary will be published on the Health Research Authority (HRA) website following the ethical review. Please refer to the question specific guidance for this question.*

The National Institute for Health and Care Excellence (NICE) recommends Dialectical Behaviour Therapy (DBT; Linehan, 1993) as an effective treatment for Borderline Personality Disorder (BPD), particularly as a priority for females with a history of repetitive self-harm (NICE, 2009). DBT is derived from Cognitive-Behavioural Therapy and strongly emphasises the teaching of new and effective coping skills for managing emotions and relationships (Linehan, 19

2015). The evidence-base for DBT has expanded considerably over the last two decades, with research suggesting its effective application across a number of clinical disorders and settings, including in the treatment of BPD, substance dependence, depression, PTSD, eating disorders and in inpatient settings (Dimeff & Koerner, 2007).

Staff in Betsi Cadwaladr University Health Board were keen to increase the opportunities for their patients to practise and generalise their skills learned in treatment on the wards and to change the inpatient culture away from a focus on medical interventions to one focused more on increased skillful coping resulting in a request for DBT training.

A recent study in an inpatient CAMHS service reported that brief DBT skills and coaching techniques training for psychiatric nursing staff produced significant benefits, including reduced staff burnout and stigma towards patients with BPD-related problems (Haynos et al. (2016). Furthermore, the findings suggested that the reduction in BPD stigma may have driven the reduction in burnout.

Due to a lack of research regarding the effects of DBT skills training on attitudes towards BPD and staff burnout, this study aims to expand previous research and further our understanding of working with this population to help inform service development and clinical practice.

The 2 day training has been approved by Karen Jowitt (Lead Nurse - West Locality) & Jen French (Director of Nursing).

A6-2. Summary of main issues. *Please summarise the main ethical, legal, or management issues arising from your study and say how you have addressed them.*

Not all studies raise significant issues. Some studies may have straightforward ethical or other issues that can be identified and managed routinely. Others may present significant issues requiring further consideration by a REC, R&D office or other review body (as appropriate to the issue). Studies that present a minimal risk to participants may raise complex organisational or legal issues. You should try to consider all the types of issues that the different reviewers may need to consider.

Participants will be NHS care professionals therefore this is a possibility that potential participants may feel obliged to participate in the study due to their job role. The participant information sheet will outline choice to participate and how choosing not to participate or withdrawing from the study will not affect their participation in training. The researcher   will try and make herself available to introduce herself and explain the rationale of the study during the first day of training, if this is not possible, the research supervisor will take on the role. Interested participant will be given information sheets and consent forms. If they are interested they are asked to complete the consent form.

Details of those who wish to participate will be kept confidential and anonymised.

It is not anticipated that the questionnaire pack will elicit undue psychological distress, however, if this occurs, the researcher is a trainee clinical psychologist and research supervisor is a experienced qualified clinical psychologist whom have the skills necessary to manage high levels of emotion or distress. Signposting to GP, for supervision or occupational health may be necessary. Occupational health details have been made available on the participant information sheet.

Participants may feel reluctant to give honest reports of their experiences, particularly if discussing attitudes or challenges faced. The participant information sheet will clearly state that the research will be anonymous and that their participation in the study will not affect their employment or participation in the training.

Participants will be asked to share contact details in order to send follow up questionnaires which could include an e- mail address or address. Betsi Cadwaladr University Health Board (BCUHB) Confidentiality procedures will be upheld throughout the research process and will be explained clearly to all participants on the information sheet.

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3. PURPOSE AND DESIGN OF THE RESEARCH

A7. Select the appropriate methodology description for this research. *Please tick all that apply*:

☐ Case series/ case note review

☐ Case control

☐ Cohort observation

☐ Controlled trial without randomisation

☐ Cross-sectional study

☐ Database analysis

☐ Epidemiology

☐ Feasibility/ pilot study

☐ Laboratory study

☐ Metanalysis

☐ Qualitative research

☑ Questionnaire, interview or observation study

☐ Randomised controlled trial

☐ Other (please specify)

A10. What is the principal research question/objective? *Please put this in language comprehensible to a lay person.*

Does training reduce staff burnout?

A11. What are the secondary research questions/objectives if applicable? *Please put this in language comprehensible to a lay person.*

Does training change attitudes towards BPD?
Does training change attitudes towards applying evidence-based practices in the workplace?
Does training increase self-reported coping skills?
Does training lead to the increase of the implementation of skills with clients?
Does training lead to fewer incidents (specifically physical and verbal abuse) on the unit (if possible to obtain the data
- risk incident reporting?)

A12. What is the scientific justification for the research? *Please put this in language comprehensible to a lay person.*

The National Institute for Health and Care Excellence (NICE) recommends Dialectical Behaviour Therapy (DBT; Linehan, 1993) as an effective treatment for Borderline Personality Disorder (BPD), particularly as a priority for females with a history of repetitive self-harm (NICE, 2009). DBT is derived from Cognitive-Behavioural Therapy and strongly emphasises the teaching of new and effective coping skills for managing emotions and relationships (Linehan, 2015). The evidence-base for DBT has expanded considerably over the last two decades, with research suggesting its effective application across a number of clinical disorders and settings, including in the treatment of BPD, substance dependence, depression, PTSD, eating disorders and in inpatient settings (Dimeff & Koerner, 2007).

Staff in Betsi Cadwaladr University Health Board were keen to increase the opportunities for their patients to practise and generalise their skills learned in treatment on the wards and to change the inpatient culture away from a focus on medical interventions to one focused more on increased skillful coping resulting in a request for DBT training.

A recent study in an inpatient Child and Adolescent Mental Health Service reported that brief DBT skills and coaching techniques training for psychiatric nursing staff produced significant benefits, including reduced staff burnout and stigma towards patients with BPD-related problems (Haynos et al. (2016). Furthermore, the findings suggested that the reduction in BPD stigma may have driven the reduction in burnout.

Due to a lack of research regarding the effects of DBT skills training on attitudes towards BPD and staff burnout, this study aims to expand previous research and further our understanding of working with this population to help inform service development and clinical practice.

A13. Please summarise your design and methodology. *It should be clear exactly what will happen to the research participant, how many times and in what order. Please complete this section in language comprehensible to the lay person. Do not simply reproduce or refer to the protocol. Further guidance is available in the guidance notes.*

Participant recruitment

The workshop will run in each of the three geographical areas in North Wales (East, Central & West) from January 2017 to March 2017. Betsi Cadwaladr University health Board Staff from any of the areas, working in the Mental Health and Learning Disability division can attend any of the workshops for 2 days consecutively. Training event will be advertised by a A4 training flyer disseminated via e-mail.

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Managers will need to proactively release staff and plan for coverage of the ward

during the training. 55 places available in each workshop.

Participants will be included in the study if they specify they work in a Betsi Cadwaladr University Health Board Mental Health and Learning Disability division.

Design and Procedures

Mainly Questionnaire Design and extraction of risk incident records from DATIX (risk incident recording program). Possibility of some qualitative analysis (from usefulness of training evaluations) - content analysis.

Measures
The workshops will be evaluated by assessing for changes on the following:
• Staff burnout - Oldenburg Burnout Inventory (OBI) (Demerouti & Bakker, 2008)
• Staff Wellbeing - The Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS)(Tennant et al, 2007).
• Attitudes towards BPD - Attitudes toward Borderline Personality Disorder Questionnaire (Fruzzetti, 2004)
• Attitudes towards applying evidence-based practices in the workplace - Evidence-based practice attitude scale (EBPAS) (Aarons, 2004)
• Self-reported coping skills -DBT- Ways of Coping Checklist (WCCL) (Neacsiu et al, 2010).
• Incidents on the unit (Extraction from DATIX-information provided by ward managers)
• Measure of organization readiness for change - Organizational Readiness for Implementing Change (ORIC) (Shea et al, 2014).

Assessments will take place before and after training and three months after completion of the workshop. Participants will be asked to provide their BCUHB e-mail address and personal e-mail address in order to be contacted for follow up.
An e-mail will be sent in 3 months time with the option of asking for a paper format (including a pre paid envelope to return the questionnaire) of the survey or clicking on an online version of the survey (via Survey Monkey or similar).

Data management and analysis

Password protected Microsoft Excel and SPSS (data analysis program) documents and each participant will be assigned a specified research identification number, to uphold their anonymity and no identifiers will be stored on the computer. Returned questionnaires will be anonomyised. Data will be kept and stored on record in accordance with Bangor University procedures.

Parametric analysis will be used to examine changes in skills application, burnout, and BPD stigma pre to post- training. Cohen's d analyses were used to estimate effect size. Pearson's correlations will be conducted between DBT skill knowledge, OBI scores, and ABPDQ scores at pre- and post- and follow up training assessment points in order to examine the relationship between these variables. Mediation analysis will be considered using hierarchical linear regressions to further examine the relationship between variables.
Diversity The diversity of the sample will inevitably be defined by the sample of participants available for the project, any limitations of which will be addressed in the write-up of the project.

A14-1. In which aspects of the research process have you actively involved, or will you involve, patients, service users, and/or their carers, or members of the public?

☐ Design of the research

☐ Management of the research

☐ Undertaking the research

☐ Analysis of results

☐ Dissemination of findings

☑ None of the above

Give details of involvement, or if none please justify the absence of involvement.

RESEARCH PARTICIPANTS

A15. What is the sample group or cohort to be studied in this research?

Select all that apply: Blood
☐ Cancer Cardiovascular
☐ Congenital Disorders
☐ Dementias and Neurodegenerative Diseases Diabetes
☐ Ear Eye
☐ Generic Health Relevance Infection
☐ Inflammatory and Immune System Injuries
☐ and Accidents
☑ Mental Health
☐ Metabolic and Endocrine
☐ Musculoskeletal Neurological
☐ Oral and Gastrointestinal Paediatrics
☐ Renal and Urogenital Reproductive Health
☐ and Childbirth Respiratory
☐ Skin
☐ Stroke
☐
☐
☐
☐
☐
☐
☐

Gender:	Male and female participants
Lower age limit: 18	Years
Upper age limit:	Years

A17-1. Please list the principal inclusion criteria (list the most important, max 5000 characters).

Participants must be healthcare professionals currently working within Betsi Cadwaladr University Health Board and have attended the 2 day training.

A17-2. Please list the principal exclusion criteria (list the most important, max 5000 characters).

Those who do not complete the 2 day training or drop out.
Significant communication disorder i.e. illiterate and unable communicate verbally.
Significant intellectual disability.

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A18. Give details of all non-clinical intervention(s) or procedure(s) that will be received by participants as part of the research protocol. *These include seeking consent, interviews, non-clinical observations and use of questionnaires.*

Please complete the columns for each intervention/procedure as follows:

1. Total number of interventions/procedures to be received by each participant as part of the research protocol.

2. If this intervention/procedure would be routinely given to participants as part of their care outside the research, how many of the total would be routine?

3. Average time taken per intervention/procedure (minutes, hours or days)

4. Details of who will conduct the intervention/procedure, and where it will take place.

Intervention or procedure	1	2	3	4
Individuals interested in attending the 2 day training are made aware that they can get involved in evaluating the effectiveness of the training.	1	N/A	5 minutes	Individuals who receive the training flyer advertising the training are made aware that they will have the opportunity to participate in evaluating the training. "Staff attending the course will be asked to participate in an evaluation of the effectiveness of the training in their own place of work."
Approached regarding the research	1	N/A	5 minutes	Research supervisor whom will be delivering the training or researcher if available will verbally introduce the prospect that the attendees to the 2 day workshop have the opportunity to participate in research. This will take place in all three setting where the research will take place: Bangor, Wrexham and Bodelwyddan. The locations are venues paid by Betsi Cadwaladr University Health Board.
Given information sheets	1	N/A	10-15 minutes	Research supervisor or/and researcher will hand out information sheets to those interested in participating and given time to read these and ask questions.
Request to participate and given consent form	1	N/A	5 minutes	Those interested in participating are asked to make themselves known and a consent form is given for them to read and sign if they agree.
Questionnaire pack handed out to participants to complete	3	N/A	60 minutes	Participants are given questionnaire to complete on the first day of training, on the second day of training and 3 months post training. Post training the researcher will send the questionnaire either electronically or via the postal system. Preference will be asked on the demographics part of the questionnaire.

A21. How long do you expect each participant to be in the study in total?

From being sent information to being sent a summary page of the findings, to some extent the participants will be involved for a maximum of 24 months. However, participants will only actually be actively involved in the research process (completing questionnaires) for approximately 2 hours.

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A22. What are the potential risks and burdens for research participants and how will you minimise them?

For all studies, describe any potential adverse effects, pain, discomfort, distress, intrusion, inconvenience or changes to lifestyle. Only describe risks or burdens that could occur as a result of participation in the research. Say what steps would be taken to minimise risks and burdens as far as possible.

Participants will be NHS health care professionals, therefore there is a possibility that potential participants may feel obliged to participate in the study due to their job role. The participant information sheet will outline choice to participate and how choosing not to participate or withdrawing from the study will not affect their employment or their participation in training.

Participants may feel reluctant to give honest disclosures in the questionnaires, particularly if discussing perspectives, attitudes or challenges that they may face. This may also discourage participation. The participant information sheet will make it clear that the research will be anonymous and that their participation in the study will not affect their employment or their place on training. This will be explained verbally prior to the information sheets being handed out. It is important to stress that their line managers will not be made preview to their individual response but that responses will be summarized as a collective group.

Although, there is no intention of creating psychological distress some distress may occur when individuals are completing questionnaires regarding burnout or psychological well being as this may cause reflection of their own situations. The researcher is a trainee clinical psychologist and the research supervisor is a qualified psychologist, both of whom have skills in order to deal with distress. The staff will also be encouraged to discuss issues related to their employment in supervision. Participant are also signposted to occupation health's contact details on the information sheet if they feel this is appropriate for them.

The anonymity of the data could be compromised by the fact that the research supervisor will know the participants after delivering training. The researcher will overcome this by removing any identifiable information for analysis.

A23. Will interviews/ questionnaires or group discussions include topics that might be sensitive, embarrassing or upsetting, or is it possible that criminal or other disclosures requiring action could occur during the study?

◉ Yes   ○ No

If Yes, please give details of procedures in place to deal with these issues:

Questionnaires will ask for participants to report on their demographics, psychological wellbeing, burnout, and attitudes towards the clients that they work with.If participants become distressed they would be given an opportunity to discuss their concerns and would be directed to appropriate support within their workplace (supervision, line manager, occupational health).

A24. What is the potential for benefit to research participants?

Participants may find the research beneficial in enabling an opportunity to reflect on their current practice.
Participants are contributing to the knowledge base for the effectiveness of DBT and clients with borderline personality disorder.
There is a potential benefit for the participants as professionals working in this field, in furthering their understanding of working with individuals with borderline personality disorder.
Participation in the training may reduce burnout as discussed in previous research (Haynos et al, 2016).

A26. What are the potential risks for the researchers themselves? *(if any)*

No apparent risks. The researcher will make use of frequent supervision and be able to discuss any risks that may arise.

RECRUITMENT AND INFORMED CONSENT

In this section we ask you to describe the recruitment procedures for the study. Please give separate details for different study groups where appropriate.

A27-1. How will potential participants, records or samples be identified? Who will carry this out and what resources will be used?*For example, identification may involve a disease register, computerised search of GP records, or review of medical records. Indicate whether this will be done by the direct healthcare team or by researchers acting under arrangements with the responsible care organisation(s).*

Potential participants are made aware of the study when they receive a training flyer that is disseminated by e-mail to staff who work for the mental health and learning disability division in Betsi Cadwaladdr University Health Board:
"Staff attending the course will be asked to participate in an evaluation of the effectiveness of the training in their own place of work."
This training flyer will be disseminated by admin staff on the instruction of Dr Michaela Swales, delivering the training and the research supervisor.

Everyone attending the training will be offered the opportunity to participate in the research. The researcher will assign each participant with a research identification number and information will therefore be anonymised on the computer (Bangor University computer). Any other personal information or identifiers i.e. work contact information for follow up will be stored in a locked filing cabinet at the Bangor University. Once the project is completed, we aim to

delete all data in accordance with Bangor University and Data Protection policies.

A27-2. Will the identification of potential participants involve reviewing or screening the identifiable personal information of patients, service users or any other person?

○ Yes   ◉ No

Please give details below:
This is not necessary.

A28. Will any participants be recruited by publicity through posters, leaflets, adverts or websites?

◉ Yes   ○ No

If Yes, please give details of how and where publicity will be conducted, and enclose copy of all advertising material (with version numbers and dates).
Initially, everyone interested in the 2 day DBT training will be made aware that they will be asked to participate in service evaluation on a flyer advertising the training.

A29. How and by whom will potential participants first be approached?

Participant will be initially made aware of the research by reading the training flyer.

They will then be verbally told (face to face) about participation of the study by the research supervisor / deliverer of training and / or the researcher on the first day of training. Those who are interested are then asked to read information sheets and give consent to participate by signing a consent form.

A30-1. Will you obtain informed consent from or on behalf of research participants?

◉ Yes   ○ No

If you will be obtaining consent from adult participants, please give details of who will take consent and how it will be done, with details of any steps to provide information (a written information sheet, videos, or interactive material). Arrangements for adults unable to consent for themselves should be described separately in Part B Section 6, and for children in Part B Section 7.

If you plan to seek informed consent from vulnerable groups, say how you will ensure that consent is voluntary and fully informed.

Potential participants will be given detailed patient information sheets on the first day of training by either and/or research supervisor or researcher.
The researcher or research supervisor will obtain written informed consent by those whom have expressed an interest verbally in participating .

If you are not obtaining consent, please explain why not.

Not applicable

Please enclose a copy of the information sheet(s) and consent form(s).

A30-2. Will you record informed consent (or advice from consultees) in writing?

◉ Yes   ○ No

A31. How long will you allow potential participants to decide whether or not to take part?

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Participants will be made aware of Participants have approximately 30 minutes from being given the information sheets to deciding whether or not they would like to take part. The rationale for this is that the researcher cannot ascertain who will turn up to the training event. The study is measuring the effectiveness pre and post training. Therefore, consent and completion of questionnaire must be completed before training commencing to measure the effectiveness reliably. Participant have the opportunity to drop out of the research at any time up to 1st September 2017 when data will be finalized.

A33-1. What arrangements have been made for persons who might not adequately understand verbal explanations or written information given in English, or who have special communication needs? *(e.g. translation, use of interpreters)*

Information sheets, opt in forms and consent forms will be made available in English and in Welsh. The researcher is a fluent Welsh speaker. Questionnaires cannot be translated into Welsh as they will not be validated.

A33-2. What arrangements will you make to comply with the principles of the Welsh Language Act in the provision of information to participants in Wales?

All information sheets, and consent forms will be made available in English and Welsh.Questionnaires cannot be translated to Welsh as they would not be validated.

A35. What steps would you take if a participant, who has given informed consent, loses capacity to consent during the study? *Tick one option only.*

○ The participant and all identifiable data or tissue collected would be withdrawn from the study. Data or tissue which is not identifiable to the research team may be retained.

○ The participant would be withdrawn from the study. Identifiable data or tissue already collected with consent would be retained and used in the study. No further data or tissue would be collected or any other research procedures carried out on or in relation to the participant.

○ The participant would continue to be included in the study.

○ Not applicable – informed consent will not be sought from any participants in this research.

◉ Not applicable – it is not practicable for the research team to monitor capacity and continued capacity will be assumed.

Further details:

CONFIDENTIALITY

In this section, personal data means any data relating to a participant who could potentially be identified. It includes pseudonymised data capable of being linked to a participant through a unique code number.

Storage and use of personal data during the study

A36. Will you be undertaking any of the following activities at any stage (including in the identification of potential participants)? *(Tick as appropriate)*

☐ Access to medical records by those outside the direct healthcare team

☐ Access to social care records by those outside the direct social care team

☐ Electronic transfer by magnetic or optical media, email or computer networks

☐ Sharing of personal data with other organisations

☐ Export of personal data outside the EEA

☑ Use of personal addresses, postcodes, faxes, emails or telephone numbers

☐ Publication of direct quotations from respondents

☑ Publication of data that might allow identification of individuals

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☐ Use of audio/visual recording devices

☑ Storage of personal data on any of the following:

☐ Manual files

☐ (includes paper or

☐ film) NHS

☐ computers

☑ Social Care

☐ Service computers

☐ Home or other

personal

computers

University

computers

Private

company

computers

Laptop

computers

Further details:
Participants have the opportunity to consent to the follow up questionnaire to be sent to their work address and/or e- mail and consent to this by signing the consent form. These details will be stored in a lockable cabinet at the university and will not be removed from here. This information will only be known to the researcher and research supervisor. All information will be transported via a lockable briefcase, i.e. completed consent forms and questionnaires.

The researcher may publish data that may identify a participant's job role however, responses will be published as collective for example "Staff in community teams had the biggest reduction in burnout...."

Identifiable information will be changed to a unique research ID for analysis purposes and this will be stored on an encrypted USB stick provided by North Wales Clinical Psychology Programme.

A37. Please describe the physical security arrangements for storage of personal data during the study?

No paper information regarding participants will be removed from its original Bangor University location and will be kept in a locked cabinet at Bangor University. Participants will each be assigned a number and this will be used to identify participant information that will be stored on the encrypted USB stick. A document linking participants names to their assigned numbers will be held securely at Bangor University in a locked cabinet and stored on a password protected document on the researcher's personal university drive. Information and questionnaires will be transported via a locked briefcase.

A38. How will you ensure the confidentiality of personal data? *Please provide a general statement of the policy and procedures for ensuring confidentiality, e.g. anonymisation or pseudonymisation of data.*

All names, places and specific information relating to participants will be anonyised to avoid any identification. Care will also be taken when reporting job roles of participants to ensure that this is not identifiable.

Any identifiers located in the data will be anoymised. Any information that is not considered to be essential (e.g. names of places, towns, hospitals) in the questionnaire will be anonymised.

All contact information will be deleted once the follow up phase of the research has been completed i.e. work 129 addresses and e-mail addresses will be deleted.

A40. Who will have access to participants' personal data during the study? *Where access is by individuals outside the direct care team, please justify and say whether consent will be sought.*

To arrange follow up questionnaires the researcher will contact participants via their preferred method stated on their demographics form.

Contact details (work address or e-mail) of participants that indicate that they would like will be kept in a locked cabinet at Bangor University and destroyed after the follow up questionnaire or those requesting feedback has been sent.

A41. Where will the data generated by the study be analysed and by whom?

The data will be generated on premises (venues) that have been paid by the NHS in order to deliver the training. It is unknown where the data will be generated in the follow up phase of the study as individuals can state a preference of where and how they would like to receive their questionnaire packs (paper or electronic format). There will be a possibility of completing the questionnaire via Survey Monkey (online survey provider website). Data generated in this way will be e-mailed to the researcher's university e-mail account and only accessed at the University.
Questionnaire will be transferred to an excel file on a Bangor University computer. Data will be made confidential on a Bangor University computer by the researcher.
Anonymised data will be transferred to an encrypted USB stick for analysis. Supervision will be required for the analysis process which will be conducted by Dr Michaela Swales at Bangor University.

A42. Who will have control of and act as the custodian for the data generated by the study?

	Title Forename/Initials Surname
	Dr Michaela Swales
Post	Reader in Psychology & Consultant Clinical Psychologist
Qualifications	PhD
	MPhil
	BA (Hons) upper second
	British Psychological Society: Diploma of Clinical Psychology
Work Address	North Wales Clinical Psychology Programme School of Psychology, Bangor University 45 College R
	Bangor University, 45 College Road
	Bangor, Gwynedd
Post Code	LL57 2DG
Work Email	m.swales@bangor.ac.uk
Work Telephone	01248 332552
Fax	01248 382599

A43. How long will personal data be stored or accessed after the study has ended?

◉ Less than 3 months

◯ 3 – 6 months

◯ 6 – 12 months

◯ 12 months – 3 years

◯ Over 3 years

A44. For how long will you store research data generated by the study?

Years: 5
Months: 0

A45. Please give details of the long term arrangements for storage of research data after the study has ended. *Say where data will be stored, who will have access and the arrangements to ensure security.*

Digital and paper copies of data will be stored at Bangor University North Wales Clinical Psychology Programme in a locked filing cabinet until the project has been completed. In accordance with Bangor University procedures, anonymised data will be stored for five years after thesis submission to be available for scrutiny. The research supervisor will have access to the data and ensure it is adequately stored for the five years and destroyed after this time.

A46. Will research participants receive any payments, reimbursement of expenses or any other benefits or incentives for taking part in this research?

○ Yes ⦿ No

A47. Will individual researchers receive any personal payment over and above normal salary, or any other benefits or incentives, for taking part in this research?

○ Yes ⦿ No

A48. Does the Chief Investigator or any other investigator/collaborator have any direct personal involvement (e.g. financial, share holding, personal relationship etc.) in the organisations sponsoring or funding the research that may give rise to a possible conflict of interest?

○ Yes ⦿ No

NOTIFICATION OF OTHER PROFESSIONALS

A49-1. Will you inform the participants' General Practitioners (and/or any other health or care professional responsible for their care) that they are taking part in the study?

○ Yes ⦿ No

If Yes, please enclose a copy of the information sheet/letter for the GP/health professional with a version number and date.

PUBLICATION AND DISSEMINATION

A50. Will the research be registered on a public database?

○ Yes ⦿ No

Please give details, or justify if not registering the research.
The research is not publicly funded and therefore will not be registered on a public database. It will be registered on the Betsi Cadwaladr University Health Board for the duration of the study and a paper copy of the completed Doctorate Thesis will be stored at the Bangor University library.

Registration of research studies is encouraged wherever possible.
You may be able to register your study through your NHS organisation or a register run by a medical research charity, or publish your protocol through an open access publisher. If you are aware of a suitable register or other method of publication, please give details. If not, you may indicate that no suitable register exists. Please ensure that you have entered registry reference number(s) in question A5-1.

A51. How do you intend to report and disseminate the results of the study? *Tick as appropriate:*

☑ Peer reviewed scientific journals

☐ Internal report

☑ Conference presentation

☐ Publication on website

☐ Other publication

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☐ Submission to regulatory authorities

☐ Access to raw data and right to publish freely by all investigators in study or by Independent Steering Committee on behalf of all investigators

☐ No plans to report or disseminate the results

☐ Other (please specify)

A52. If you will be using identifiable personal data, how will you ensure that anonymity will be maintained when publishing the results?

Particular care will be taken around anonymising reporting of participants' job roles and work place to ensure that this is not identifiable.

A53. Will you inform participants of the results?

◉ Yes   ◯ No

Please give details of how you will inform participants or justify if not doing so.
Participants will be asked if they would like to received feedback of the results and those that do so will be sent a one page summary.

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5. Scientific and Statistical Review

☐ Independent external review

    Review within a company

    Review within a multi−centre research group

☐ Review within the Chief Investigator's institution or host organisation

☐ Review within the research team

☑ Review by educational supervisor

☑ Other

☑

Justify and describe the review process and outcome. If the review has been undertaken but not seen by the researcher, give details of the body which has undertaken the review:
The proposal for this study has been reviewed and approved following amendments requested by the North Wales Clinical Psychology Programme at Bangor University. The research team are a group independent from the researcher who analyse the viability of the research proposal.

For all studies except non-doctoral student research, please enclose a copy of any available scientific critique reports, together with any related correspondence.

For non-doctoral student research, please enclose a copy of the assessment from your educational supervisor/ institution.

A56. How have the statistical aspects of the research been reviewed? *Tick as appropriate:*

☐ Review by independent statistician commissioned by funder or sponsor

☐ Other review by independent statistician

☐ Review by company statistician

☑ Review by a statistician within the Chief Investigator's institution

☐ Review by a statistician within the research team or multi−centre group

☑ Review by educational supervisor

☐ Other review by individual with relevant statistical expertise

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☐ No review necessary as only frequencies and associations will be assessed – details of statistical input not required

In all cases please give details below of the individual responsible for reviewing the statistical aspects. If advice has been provided in confidence, give details of the department and institution concerned.

	Title Forename/Initials Surname
	Dr Chris Saville
Department	North Wales Clinical Psychology Programme
Institution	Bangor University
Work Address	North Wales Clinical Psychology Programme
	School of Psychology, Bangor University
	45 College Road, Bangor, Gwynedd
Post Code	LL57 2DG
Telephone	01248338740
Fax	
Mobile	
E-mail	c.saville@bangor.ac.uk

Please enclose a copy of any available comments or reports from a statistician.

A57. What is the primary outcome measure for the study?

The primary outcome measure will be statistical analysis of the burnout score collected on day one of training and the burnout score collected 3 months post training.

A58. What are the secondary outcome measures? *(if any)*

Statistical analysis on the changes collected on the 1st day of training and on follow up on:
psychological wellbeing scores
attitudes towards borderline psychology scores
organisational readiness for change scores
attitudes towards implementing evidence based practice scores
coping skills scores.

A59. What is the sample size for the research? *How many participants/samples/data records do you plan to study in total? If there is more than one group, please give further details below.*

Total UK sample size: 49
Total international sample size (including UK): 49
Total in European Economic Area:

Further details:
Minimum of 49, maximum of 165.

A60. How was the sample size decided upon? *If a formal sample size calculation was used, indicate how this was done, giving sufficient information to justify and reproduce the calculation.*

Each workshop has a capacity of 55 staff members each. Therefore, giving a total possible sample size of 165, if 55 people turn up for training and all agree to participate and do not drop out, the sample size would be n=165.

Realistically, a power anaysis calculation was done indicating a sample size of n=49 would be sufficient. To gain an appropriate effect size of d=0.37 (as referenced in previous research: Haynos at al, 2016), with an alpha level set to 0.05 (a=0.05), the chance of finding an effect would be 0.8, requiring 49 participants for the study.

A61. Will participants be allocated to groups at random?

○ Yes ◉ No

A62. Please describe the methods of analysis (statistical or other appropriate methods, e.g. for qualitative research) by which the data will be evaluated to meet the study objectives.

Statistical analysis using Statistical Package for the Social Sciences (SPSS) version 22. It is anticipated if data does not violate the assumptions of parametric tests Repeated measures ANOVAs will be used to examine changes in skills application, burnout, and BPD stigma pre- to post-training. Cohen's d analyses will be used to estimate effect size. Pearson's correlations will be conducted between DBT coping skills, burnout (OBI scores), and attitudes toward clients (ABPDQ) scores at pre- and post- and follow up training assessment points in order to examine the relationship between these variables. Mediation analysis will be considered using hierarchical linear regressions to further examine the relationship between variables.

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6. MANAGEMENT OF THE RESEARCH

A63. Other key investigators/collaborators. *Please include all grant co−applicants, protocol co−authors and other key members of the Chief Investigator's team, including non-doctoral student researchers.*

	Title Forename/Initials Surname
	Dr Michaela Swales
Post	Reader in Psychology & Consultant Clinical Psychologist
Qualifications	PhD
	MPhil
	British Psychological Society: Diploma of Clinical Psychology
Employer	Bangor University & Betsi Cadwaladr University Health Board
Work Address	School of Psychology, Bangor University 45 College Road
	BANGOR,
	Gwynedd
Post Code	LL57 2DG
Telephone	01248 332552
Fax	01248 382599
Mobile	
Work Email	Michaela.Swales@wales.nhs.uk

A64. Details of research sponsor(s)

A64-1. Sponsor

Lead Sponsor

Status: ○ NHS or HSC care organisation   Commercial status:

◉ Academic

○ Pharmaceutical industry

○ Medical device industry

○ Local Authority

○ Other social care provider (including voluntary sector or private

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organisation)

○ Other

If Other, please specify:

Contact person

Name of organisation Bangor University

Given name   Hefin
Family name   Francis
Address   Brigantia Building, School of Psychology, Penrallt Road
Town/city   Bangor
Post code   LL57 2DG
Country   UNITED KINGDOM
Telephone   01248388339
Fax   01248382599
E-mail   h.francis@bangor.ac.uk

Is the sponsor based outside the UK?
○ Yes   ● No

Under the Research Governance Framework for Health and Social Care, a sponsor outside the UK must appoint a legal representative established in the UK. Please consult the guidance notes.

A65. Has external funding for the research been secured?

☐ Funding secured from one or more funders

☐ External funding application to one or more funders in progress

☑ No application for external funding will be made

What type of research project is this?

○ Standalone project

○ Project that is part of a programme grant

○ Project that is part of a Centre grant

● Project that is part of a fellowship/ personal award/ research training award

○ Other

Other – please state:

A66. Has responsibility for any specific research activities or procedures been delegated to a subcontractor (other than a co-sponsor listed in A64-1) ? *Please give details of subcontractors if applicable.*

○ Yes   ● No

A67. Has this or a similar application been previously rejected by a Research Ethics Committee in the UK or another country?

○ Yes   ◉ No

Please provide a copy of the unfavourable opinion letter(s). You should explain in your answer to question A6-2 how the reasons for the unfavourable opinion have been addressed in this application.

A68-1. Give details of the lead NHS R&D contact for this research:

	Title Forename/Initials Surname
	Dr Rossela Roberts
Organisation	Betsi Cadwaladr University Health Board
Address	Research & Development, Clinical Academic Office, Clinical School
	Ysbyty Gwynedd,
	Bangor, Gwynedd
Post Code	LL57 2PW
Work Email	rossela.roberts@wales.nhs.uk
Telephone	01248384877
Fax	
Mobile	

Details can be obtained from the NHS R&D Forum website: http://www.rdforum.nhs.uk

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A69-1. How long do you expect the study to last in the UK?

Planned start date: 30/01/2017
Planned end date: 01/10/2018
Total duration:
Years: 1 Months: 8 Days: 3

A71-1. Is this study?

◉ Single centre

○ Multicentre

A71-2. Where will the research take place? *(Tick as appropriate)*

☐ England

☐ Scotland

☑ Wales

☐ Northern Ireland

☐ Other countries in European Economic Area

Total UK sites in study 1

Does this trial involve countries outside the EU?
○ Yes   ◉ No

A72. Which organisations in the UK will host the research? *Please indicate the type of organisation by ticking the box and give approximate numbers if known:*

- [ ] NHS organisations in England
- [x] NHS organisations in Wales   1
- [ ] NHS organisations in Scotland
- [ ] HSC organisations in Northern Ireland
- [ ] GP practices in England
- [ ] GP practices in Wales
- [ ] GP practices in Scotland
- [ ] GP practices in Northern Ireland
- [ ] Joint health and social care agencies (eg community mental health teams)
- [ ] Local authorities
- [ ] Phase 1 trial units
- [ ] Prison establishments
- [ ] Probation areas
- [ ] Independent (private or voluntary sector) organisations
- [ ] Educational establishments
- [ ] Independent research units
- [ ] Other (give details)

Total UK sites in study: 1

A73-1. Will potential participants be identified through any organisations other than the research sites listed above?

◯ Yes   ⦿ No

A74. What arrangements are in place for monitoring and auditing the conduct of the research?

The supervisory team, the North Wales Clinical Psychology Programme, the researcher and the Bangor University School of Psychology Ethics Department will take responsibility for the conduct of the research. Research Governance Frameworks will be adhered to and monitored if necessary, by the Betsi Cadwaladr University Health Board NHS R&D Department. Additionally, in July 2017 and November 2018 to ensure that the study is on track and has not breached it's timetable progress report will be submitted. The primary researcher will endeavor to have fortnightly or monthly (the latest) supervision to aid monitoring progress of the study and conduct of the research carried out.

A76. Insurance/ indemnity to meet potential legal liabilities

Note: in this question to NHS indemnity schemes include equivalent schemes provided by Health and Social Care (HSC) in Northern Ireland

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A76-1. What arrangements will be made for insurance and/or indemnity to meet the potential legal liability of the sponsor(s) for harm to participants arising from the management of the research? *Please tick box(es) as applicable.*

Note: Where a NHS organisation has agreed to act as sponsor or co-sponsor, indemnity is provided through NHS schemes. Indicate if this applies (there is no need to provide documentary evidence). For all other sponsors, please describe the arrangements and provide evidence.

- [ ] NHS indemnity scheme will apply (NHS sponsors only)
- [x] Other insurance or indemnity arrangements will apply (give details below)

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Bangor University will meet the potential legal liability of the sponsor for harm to participants arising from the management of the research.

A76 *Please enclose a copy of relevant documents.*

sponsor(s) or employer(s) for harm to participants arising from the design of the research? *Please tick box(es) as applicable.*

Note: Where researchers with substantive NHS employment contracts have designed the research, indemnity is provided through NHS schemes. Indicate if this applies (there is no need to provide documentary evidence). For other protocol authors (e.g. company employees, university members), please describe the arrangements and provide evidence.

☐ NHS indemnity scheme will apply (protocol authors with NHS contracts only)

Other insurance or indemnity arrangements will apply (give details below)

Bangor University will meet the potential legal liability of the sponsor for harm to participants arising from the management of the research.

Please enclose a copy of relevant documents.

investigators/collaborators arising from harm to participants in the conduct of the research?

Note: Where the participants are NHS patients, indemnity is provided through the NHS schemes or through professional indemnity. Indicate if this applies to the whole study (there is no need to provide documentary evidence). Where non-NHS sites are to be included in the research, including private practices, please describe the arrangements which will be made at these sites and provide evidence.

☑ NHS indemnity scheme or professional indemnity will apply (participants recruited at NHS sites only)

Research includes non-NHS sites (give details of insurance/ indemnity arrangements for these sites below)

Bangor University will meet the potential legal liability of the sponsor for harm to participants arising from the management of the research.

Please enclose a copy of relevant documents.

A78. Could the research lead to the development of a new product/process or the generation of intellectual property?

◯ Yes ⦿ No ◯ Not sure

PART C: Overview of research sites

Please enter details of the host organisations (Local Authority, NHS or other) in the UK that will be responsible for the research sites. *For NHS sites, the host organisation is the Trust or Health Board. Where the research site is a primary care site, e.g. GP practice, please insert the host organisation (PCT or Health Board) in the Institution row and insert the research site (e.g. GP practice) in the Department row.*

Research site		Investigator/ Collaborator/ Contact	
Institution name	Betsi Cadwaladr University Health Board	Title	Dr
Department name	North Wales Adolescent Service	First name/ Initials	Michaela
Street address	Abergele Hospital, Llanfair Road	Surname	Swales
Town/city	Abergele		
Post Code	LL22 8DP		

D1. Declaration by Chief Investigator

1. The information in this form is accurate to the best of my knowledge and belief and I take full responsibility for it.

2. I undertake to abide by the ethical principles underlying the Declaration of Helsinki and good practice guidelines on the proper conduct of research.

3. If the research is approved I undertake to adhere to the study protocol, the terms of the full application as approved and any conditions set out by review bodies in giving approval.

4. I undertake to notify review bodies of substantial amendments to the protocol or the terms of the approved application, and to seek a favourable opinion from the main REC before implementing the amendment.

5. I undertake to submit annual progress reports setting out the progress of the research, as required by review bodies.

6. I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and confidentiality of patient or other personal data, including the need to register when necessary with the appropriate Data Protection Officer. I understand that I am not permitted to disclose identifiable data to third parties unless the disclosure has the consent of the data subject or, in the case of patient data in England and Wales, the disclosure is covered by the terms of an approval under Section 251 of the NHS Act 2006.

7. I understand that research records/data may be subject to inspection by review bodies for audit purposes if required.

8. I understand that any personal data in this application will be held by review bodies and their operational managers and that this will be managed according to the principles established in the Data Protection Act 1998.

9. I understand that the information contained in this application, any supporting documentation and all correspondence with review bodies or their operational managers relating to the application:

    - Will be held by the REC (where applicable) until at least 3 years after the end of the study; and by NHS R&D offices (where the research requires NHS management permission) in accordance with the NHS Code of Practice on Records Management.
    - May be disclosed to the operational managers of review bodies, or the appointing authority for the REC (where applicable), in order to check that the application has been processed correctly or to investigate any complaint.
    - May be seen by auditors appointed to undertake accreditation of RECs (where applicable). Will be subject to the provisions of the Freedom of Information Acts and may be disclosed in response to requests made under the Acts except where statutory exemptions apply.
    - May be sent by email to REC members.

10. I understand that information relating to this research, including the contact details on this application, may be held on national research information systems, and that this will be managed according to the principles established in the Data Protection Act 1998.

11. Where the research is reviewed by a REC within the UK Health Departments Research Ethics Service, I understand that the summary of this study will be published on the website of the National Research Ethics Service (NRES), together with the contact point for enquiries named below. Publication will take place no earlier than 3 months after issue of the ethics committee's final opinion or the withdrawal of

the application.

Contact point for publication*(Not applicable for R&D Forms)*

NRES would like to include a contact point with the published summary of the study for those wishing to seek further information. We would be grateful if you would indicate one of the contact points below.

Chief Investigator

○ Sponsor

○ Study co-ordinator

○ Student

○ Other – please give details

○ None

Access to application for training purposes *(Not applicable for R&D Forms)*

Optional – please tick as appropriate:

☐ I would be content for members of other RECs to have access to the information in the application in confidence for training purposes. All personal identifiers and references to sponsors, funders and research units would be removed.

This section was signed electronically by Miss Caryl Roberts on 14/12/2016 22:06.

Job Title/Post:	Trainee Clinical Psychologist
Organisation:	Bangor University
Email:	psp6dc@bangor.ac.uk

D2. Declaration by the sponsor's representative

If there is more than one sponsor, this declaration should be signed on behalf of the co-sponsors by a representative of the lead sponsor named at A64-1.

I confirm that:

1. This research proposal has been discussed with the Chief Investigator and agreement in principle to sponsor the research is in place.

2. An appropriate process of scientific critique has demonstrated that this research proposal is worthwhile and of high scientific quality.

3. Any necessary indemnity or insurance arrangements, as described in question A76, will be in place before this research starts. Insurance or indemnity policies will be renewed for the duration of the study where necessary.

4. Arrangements will be in place before the study starts for the research team to access resources and support to deliver the research as proposed.

5. Arrangements to allocate responsibilities for the management, monitoring and reporting of the research will be in place before the research starts.

6. The duties of sponsors set out in the Research Governance Framework for Health and Social Care will be undertaken in relation to this research.

   Please note: *The declarations below do not form part of the application for approval above. They will not be considered by the Research Ethics Committee.*

7. Where the research is reviewed by a REC within the UK Health Departments Research Ethics Service, I understand that the summary of this study will be published on the website of the National Research Ethics Service (NRES), together with the contact point for enquiries named in this application. Publication will take place no earlier than 3 months after issue of the ethics committee's final opinion or the withdrawal of the application.

8. Specifically, for submissions to the Research Ethics Committees (RECs) I declare that any and all clinical trials approved by the HRA since 30th September 2013 (as defined on IRAS categories as clinical trials of medicines, devices, combination of medicines and devices or other clinical trials) have been registered on a publically accessible register in compliance with the HRA registration requirements for the UK, or that any deferral granted by the HRA still applies.

This section was signed electronically by Mr Hefin Francis on

15/12/2016 13:41. Job Title/Post: School Manager for

Psychology

Organisation: Bangor University

Email: h.francis@bangor.ac.uk

D3. Declaration for student projects by academic supervisor(s)

1. I have read and approved both the research proposal and this application. I am satisfied that the scientific content of the research is satisfactory for an educational qualification at this level.

2. I undertake to fulfil the responsibilities of the supervisor for this study as set out in the Research Governance Framework for Health and Social Care.

3. I take responsibility for ensuring that this study is conducted in accordance with the ethical principles underlying the Declaration of Helsinki and good practice guidelines on the proper conduct of research, in conjunction with clinical supervisors as appropriate.

4. I take responsibility for ensuring that the applicant is up to date and complies with the requirements of the law and relevant guidelines relating to security and confidentiality of patient and other personal data, in conjunction with clinical supervisors as appropriate.

Academic supervisor 1

This section was signed electronically by Dr Michaela Swales on 15/12/2016 09:46.

Job Title/Post:	Consultant Clinical Psychologist
Organisation:	BCUHB
Email:	Michaela.Swales@wales.nhs.uk

Appendix III -Research & Development Approval Letter

| | GIG CYMRU NHS WALES | Bwrdd Iechyd Prifysgol Betsi Cadwaladr University Health Board |

Betsi Cadwaladr University Health Board
Ysbyty Gwynedd
Clinical Academic Office
Bangor, Gwynedd
LL57 2PW

Miss Caryl Roberts
North Wales Clinical Psychology Programme
School of Psychology, Bangor University
Brigantia Building
43 College Road
Bangor
LL57 2DG   psp6dc@bangor.ac.uk

Chairman/Cadeirydd – Dr Nefyn Williams PhD, FRCGP
Email: rossela.roberts@wales.nhs.uk
Debra.slater@wales.nhs.uk
sion.lewis@wales.nhs.uk
Tel/Fax: 01248 384 877

20th January 2017

Dear Miss Caryl Roberts

Re: Confirmation that R&D governance checks are complete / R&D approval granted

Study Title — Effectiveness of a 2 day DBT skills training program on the outcomes for staff working in NHS Mental Health and Learning Disability settings

IRAS reference — 220031

Thank you for submitting your R&D application and supporting documents. The above research project was reviewed at the meeting of the BCUHB R&D Internal Review Panel.

The Panel is satisfied with the scientific validity of the project, the risk assessment, the review of the NHS cost and resource implications and all other research management issues pertaining to the revised application.

The R&D Office, on behalf of the Internal Review Panel, is pleased to confirm that all governance checks are now complete and to grant approval to proceed at Betsi Cadwaladr University Health Board sites as described in the application.

The documents reviewed and approved are listed below:

Document:	Version:	Date:
R&D form	V5.3.2	14/12/2016
SSI form	V5.4.0	06/01/2017
Protocol	VIII	14/12/2016
Participant Information Sheet	V2	12/12/2016
Participant debrief information	V1	14/12/2016
Consent	V3	06/01/2017
Poster advert		22/11/2016
Questionnaire - Short Warwick-Edinburgh Mental Wellbeing Scale		2007
Questionnaire - ORIC		-
Questionnaire - ABPD		2003
Questionnaire - OBI-Oldenburg Burnout Inventory		12/10/2009
Questionnaire - Demographics	V1	21/11/2016
Questionnaire - EBPAS – Evidence Based Practice Attitude Scale		-
Questionnaire - DBT – WCCL – Ways of Coping checklist		-
Summary CV: Swales		August 2016
Summary CV: Roberts		22/11/2016
Evidence of Insurance (UMAL)		Expires 31/07/2017

Cyfeiriad Gohebiaeth ar gyfer y Cadeirydd a'r Prif Weithredwr / Correspondence address for Chairman and Chief Executive:
Swyddfa'r Gweithredwyr / Executives' Office,
Ysbyty Gwynedd, Penrhosgarnedd, Bangor, Gwynedd LL57 2PW
Gwefan: www.pbc.cymru.nhs.uk / **Web:** www.bcu.wales.nhs.uk

R&D Research & Development   Y&D Ymchwil & Datblygald

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All research conducted at the Betsi Cadwaladr University Health Board sites must comply with the Research Governance Framework for Health and Social Care in Wales (2009). An electronic link to this document is provided on the BCUHB R&D WebPages. Alternatively, you may obtain a paper copy of this document via the R&D Office.

Attached you will find a set of approval conditions outlining your responsibilities during the course of this research. Failure to comply with the approval conditions will result in the withdrawal of the approval to conduct this research in the Betsi Cadwaladr University Health Board.

If your study is adopted onto the NISCHR Clinical Research Portfolio (CRP), it will be a condition of this NHS research permission, that the Chief Investigator will be required to regularly upload recruitment data onto the portfolio database. To apply for adoption onto the NISCHR CRP, please go to: http://www.wales.nhs.uk/sites3/page.cfm?orgid=580&pid=31979.

Once adopted, NISCHR CRP studies may be eligible for additional support through the NISCHR Clinical Research Centre. Further information can be found at: http://www.wales.nhs.uk/sites3/page.cfm?orgid=580&pid=28571 and/or from your NHS R&D office colleagues.

To upload recruitment data, please follow this link: http://www.crncc.nihr.ac.uk/about_us/processes/portfolio/p_recruitment. Uploading recruitment data will enable NISCHR to monitor research activity within NHS organizations, leading to NHS R&D allocations which are activity driven. Uploading of recruitment data will be If you would like further information on any other points covered by this letter please do not hesitate to contact me.

On behalf of the Panel, I would like to take this opportunity to wish you every success with your research.

Yours sincerely,

Dr Nefyn Williams PhD, FRCGP
Associate Director of R&D
Chairman Internal Review Panel

Copy to:

Sponsor: Mr Hefin Francis
                                School Manager
                                Bangor University,
                                School of Psychology,
                                Brigantia Building
                                Penrallt Road
                                LL57 2AS   h.francis@bangor.ac.uk

Academic Supervisor: Dr Michaela Swales
                                North Wales Clinical Psychology Programme
                                School of Psychology, Bangor University
                                Brigantia Building
                                43 College Road
                                Bangor
                                LL57 2DG   m.swales@bangor.ac.uk

Appendix IV - Participant Consent Form - English & Cymraeg Versions

Consent Form

Name of department: North Wales Clinical Psychology Programme, School of Psychology, Bangor University

Title of the study: Effectiveness of a 2 day DBT skills training program on the outcomes for staff working in BCUHB Mental Health and Learning Disability settings

	Please initial to confirm that you have understood and agree with the following statements:
▪ I confirm that I have read and understood the information sheet for the above project and the researcher has answered any queries to my satisfaction.	
▪ I understand that my participation is voluntary and that I am free to withdraw from the project at any time, up to the point of completion, without having to give a reason and without any consequences. If I exercise my right to withdraw and I don't want my data to be used, any data which have been collected from me will be destroyed.	
▪ I understand that I can withdraw from the study any personal data (i.e. data which identify me personally) at any time.	
▪ I understand that anonymised data (i.e. data which do not identify me personally) cannot be withdrawn once they have been included in the study.	
▪ I understand that any information recorded in the investigation will remain confidential and no information that identifies me will be made publicly available.	
▪ I agree to be contacted approximately three months following completion of the training in order to participate in the final stage of the project.	
▪ I consent to being a participant in the project.	

PRINT NAME:	
Signature of Participant:	Date:

RHAGLEN SEICOLEG CLINIGOL GOGLEDD CYMRU

NORTH WALES CLINICAL PSYCHOLOGY PROGRAMME

Ffurflen Gydsynio

Enw'r Adran: Rhaglen Seicoleg Glinigol Gogledd Cymru, Ysgol Seicoleg, Prifysgol Bangor

Teitl yr astudiaeth: Effeithiolrwydd rhaglen hyfforddi sgiliau DBT dau ddiwrnod ar y canlyniadau i staff sy'n gweithio yn Iechyd Meddwl ac Anableddau Dysgu BIPBC

	Rhowch eich llythrennau enw yn y bocsys isod i ddangos eich bod yn deall a chytuno gyda'r datganiadau osgwelwch yn dda.
▪ Rwyf yn cadarnhau fy mod i wedi darllen y daflen wybodaeth ac wedi'i deall ar gyfer y prosiect uchod, a bod yr ymchwilydd wedi ateb unrhyw ymholiadau i'm boddhad.	
▪ Rwy'n deall fy mod i'n cymryd rhan yn wirfoddol, a fy mod i'n rhydd i dynnu'n ôl o'r prosiect ar unrhyw bryd, hyd at y pwynt cwblhau, heb roi rheswm a heb unrhyw ganlyniadau. Os wyf yn defnyddio fy hawl i dynnu'n ôl, ac nad wyf eisiau i fy nata gael ei ddefnyddio, bydd unrhyw ddata sydd wedi cael ei gasglu gennyf yn cael ei ddinistrio.	
▪ Rwyf yn deall y gallaf dynnu'n ôl unrhyw ddata personol o'r astudiaeth (h.y. data sy'n fy nynodi i'n bersonol) ar unrhyw adeg.	
▪ Rwy'n deall na all unrhyw ddata dienw (h.y. data nad yw'n fy adnabod i'n bersonol) gael ei dynnu'n ôl unwaith y maent wedi ei gynnwys yn yr astudiaeth.	
▪ Rwy'n deall y bydd unrhyw wybodaeth a gofnodir yn yr ymchwiliad yn aros yn gyfrinachol, ac ni fydd unrhyw wybodaeth sy'n fy enwi ar gael i'r cyhoedd.	
▪ Rwy'n cytuno i rywun gysylltu â mi oddeutu tri mis yn dilyn cwblhau'r hyfforddiant er mwyn cymryd rhan yng ngham olaf y prosiect.	
▪ Rwy'n cydsynio i gymryd rhan yn y prosiect.	

(PRINTIWCH EICH ENW)	
Llofnod y Cyfranogwr:	Dyddiad:

Appendix V - Participant Information Sheets English and Cymraeg Versions

Participant Information Sheet

Name of department: North Wales Clinical Psychology Programme, School of
Psychology, Bangor University

Title of the study: Effectiveness of a 2 day DBT skills training program on the outcomes for staff working in BCUHB Mental Health and Learning Disability settings

I would like to invite you to participate in this research project which forms part of my Clinical Psychology Doctoral research. You should only participate if you want to; choosing not to take part will not disadvantage you in anyway. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully.

What is the purpose of this project?

I am interested in evaluating the effectiveness of this 2 day training on several outcome measures for staff including:

- psychological wellbeing (specifically burnout)
- usefulness of the skills in the work setting
- adoption of skills in the work setting
- the organization's attitude towards implementing new practices
- attitudes of working with the client group
- coping skills.

Do I have to take part?

Participation is voluntary. You do not have to take part. You should read this information sheet and if you have any questions you should ask Dr Michaela Swales (Research Supervisor) or me. You can withdraw at anytime, without reason. If you do not wish to participate or withdraw participation at anytime, this will not affect any other aspects of the training course.

What will I do in the project?

If you decide to take part you will be given this information sheet to keep and will be asked to sign a consent form. You will then be asked to complete a series of short questionnaires that will take approximately 10-15 minutes to complete. You will be asked to do this at three different time points:

- on the first day of training
- on the second day of training
- three months after training - you will be contacted either by e-mail or sent a paper copy of the questionnaire pack (you will be able to state your preference) .

Even if you have decided to take part, you are still free to stop your participation at any time and to have research data/information relating to you withdrawn without giving any reason up to 1st July 2017.

Why have you been invited to take part?

I am inviting all BCUHB Mental Health and Learning Disability staff that have received this training.

What are the possible benefits and risks of taking part?

The information I get from the study will help to decided whether further training events would be beneficial for BCUHB staff. Furthermore, I will provide you with a summary of a final report describing the main findings. The main disadvantage to taking part in the study is that you will be donating around an hour of your time to take part.

There are no foreseeable risks in participating in the study.

Will my taking part be kept confidential?

What you report in the questionnaires is regarded as strictly confidential and will be held securely until the research is finished. We ask for your names and contact details in order to send out the questionnaire three months after the training has ended and to track changes, however, all data for analysis will be anonymised i.e. all names will be given an ID number when placed on a computer database and personal information destroyed.

In reporting on the research findings, I will not reveal the names of any participants or the locations where you work. At all times there will be no possibility of you as individuals being linked with the data and I will not be contacting your line manager to discuss individual responses.

The UK Data Protection Act 1998 will apply to all information gathered within the interviews and held on password-locked computer files and locked cabinets within Bangor University. No data will be accessed by anyone other than myself and the research supervisor. No data will be able to be linked back to any individual taking part in the study.

How is the project being funded?

The project is being funded by the School of Psychology, Bangor University. The study has been approved by the Bangor University Research Ethics Committee.

What will happen to the results of the study?

I will produce a final report summarising the main findings, which will be sent to you. I also plan to disseminate the research findings through publication and conferences within the UK.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Caryl Roberts (Trainee Clinical Psychologist)
North Wales Clinical Psychology Programme
School of Psychology
Brigantia Building
BANGOR
LL57 2DG
Tel: 01248 388365

E-mail: psp6dc@bangor.ac.uk

What if something goes wrong?

If you wish to make a complaint about the conduct of the study you can contact the research supervisor for further advice and information:

Hefin Francis

School Manager

School of Psychology

Bangor University

BANGOR

LL57 2DG

Tel: +44 (0)1248 388339

E-mail: h.francis@bangor.ac.uk

What happens next?
If you are happy to be involved in the project, could you please sign the consent form to confirm this.

Other support:

If you feel that you would like advice relating to your wellbeing please contact:

CARE - **C**onfidential **A**dvice **R**elating to **E**mployees (Part of the Betsi Cadwaladr University Health Board Occupational Health and Wellbeing Service)
Self referral for general health and wellbeing information and advice.
Contact: 01745 448787 (Monday - Friday, 8:00am-5:00pm)

Thank you for reading this information – please ask any questions if you are unsure about what is written here.

Taflen Wybodaeth i'r Rhai sy'n Cymryd Rhan

Enw'r Adran: Rhaglen Seicoleg Glinigol Gogledd Cymru, Ysgol Seicoleg, Prifysgol Bangor

Teitl yr astudiaeth: Effeithiolrwydd rhaglen hyfforddi sgiliau DBT dau ddiwrnod ar y canlyniadau i staff sy'n gweithio yn Iechyd Meddwl ac Anableddau Dysgu BIPBC

Hoffwn eich gwahodd chi i gymryd rhan yn y prosiect ymchwil hwn sy'n rhan o fy ymchwil Doethuriaeth Seicoleg Glinigol. Dim ond os ydych eisiau cymryd rhan y dylech wneud; ni fydd dewis peidio â chymryd rhan yn eich rhoi mewn anfantais mewn unrhyw ffordd. Cyn i chi benderfynu a ydych am gymryd rhan ai peidio, mae'n bwysig eich bod yn deall pam y cynhelir yr ymchwil a beth fydd yn ei olygu i chi. Darllenwch y wybodaeth ganlynol yn ofalus.

Beth yw pwrpas y prosiect hwn?
Mae gennyf ddiddordeb dadansoddi effeithiolrwydd yr hyfforddiant 2 ddiwrnod hwn ar nifer o fesurau canlyniad ar gyfer staff yn cynnwys:

- Lles seicolegol (llosgi allan/chwythu plwc yn benodol)
- pa mor ddefnyddiol yw'r sgiliau yn y gwaith
- mabwysiadu sgiliau yn y gwaith
- agwedd y sefydliad tuag at weithredu arferion newydd
- agweddau ar weithio gyda grwpiau cleientiaid
- sgiliau ymdopi.

A oes rhaid i mi gymryd rhan?
Mae cymryd rhan yn wirfoddol. Nid oes rhaid i chi gymryd rhan. Dylech ddarllen y daflen wybodaeth hon, ac os oes gennych unrhyw gwestiynau dylech ofyn i mi neu Dr Michaela Swales (Goruchwyliwr Ymchwil). Gallwch dynnu'n ôl ar unrhyw adeg, heb reswm. Os nad ydych eisiau cymryd rhan neu eisiau tynnu'n ôl ar unrhyw adeg, ni fydd yn effeithio ar unrhyw agwedd arall o'r cwrs hyfforddiant.

Beth fydda i yn ei wneud yn y prosiect?

Os ydych chi'n penderfynu cymryd rhan, byddwch yn cael y daflen wybodaeth hon i'w chadw a gofynnir i chi arwyddo ffurflen gydsynio. Yna gofynnir i chi gwblhau cyfres o holiaduron byr a fydd yn cymryd oddeutu 10-15 munud i'w cwblhau. Byddwn yn gofyn i chi wneud hyn ar dri chyfnod gwahanol:

- ar ddiwrnod cyntaf yr hyfforddiant
- ar ail ddiwrnod yr hyfforddiant
- tri mis ar ôl hyfforddiant - byddwn yn cysylltu â chi un ai drwy e-bost neu'n cael copi papur o'r pecyn holiadur drwy'r post (byddwch yn gallu nodi pa un fyddai orau i chi).

Hyd yn oed os ydych wedi penderfynu cymryd rhan, rydych yn rhydd i roi'r gorau i gymryd rhan ar unrhyw adeg, ac i dynnu'n ôl unrhyw ddata ymchwil/gwybodaeth amdanoch chi heb roi unrhyw reswm hyd at Orffennaf 2017.

Pam rydych chi wedi cael gwahoddiad i gymryd rhan?

Rwy'n gwahodd holl staff Iechyd Meddwl ac Anableddau Dysgu BIPBC sydd wedi derbyn yr hyfforddiant hwn.

Beth ydy'r manteision a'r peryglon posibl o gymryd rhan?

Bydd y wybodaeth rwyf yn ei chael o'r astudiaeth yn helpu i benderfynu a fyddai digwyddiadau hyfforddi pellach yn fanteisiol i staff BIPBC. Yn ogystal â hynny, byddaf yn rhoi crynodeb i chi o adroddiad terfynol yn disgrifio'r prif ganfyddiadau. Y brif anfantais o gymryd rhan yn yr astudiaeth yw y byddwch yn gorfod rhoi awr o'ch amser i gymryd rhan.

Nid oes unrhyw risgiau rhagweladwy o gymryd rhan yn yr astudiaeth.

Fydd fy rhan yn yr astudiaeth hon yn cael ei gadw'n gyfrinachol?

Mae beth rydych yn ei roi yn yr holiaduron yn gwbl gyfrinachol, a bydd yn cael ei gadw'n ddiogel nes bydd yr ymchwil wedi ei orffen. Rydym yn gofyn am eich enw a'ch manylion cyswllt er mwyn anfon yr holiadur dri mis ar ôl yr hyfforddiant orffen, ac er mwyn olrhain newidiadau, er hynny, bydd yr holl ddata ar gyfer ei ddadansoddi yn ddienw, h.y. bydd yr holl enwau yn cael rhif adnabod pan maent yn cael eu rhoi ar y gronfa ddata gyfrifiadurol, a bydd gwybodaeth bersonol yn cael ei dinistrio.

Wrth adrodd ar ganfyddiadau'r ymchwil, ni fyddaf yn datgelu enwau unrhyw un o'r cyfranogwyr neu'r lleoliadau y maent yn gweithio ynddynt. Ni fydd posibilrwydd i chi fel unigolyn gael eich cysylltu â'r data ar unrhyw adeg, ac ni fyddaf yn cysylltu â'ch rheolwr llinell i drafod ymatebion unigol.

Bydd Deddf Diogelu Data 1998 Deyrnas Unedig yn berthnasol i holl wybodaeth a gesglir yn y cyfweliadau, a bydd yn cael ei chadw ar ffeiliau cyfrifiadurol â chyfrinair a chypyrddau dan glo ym Mhrifysgol Bangor. Ni fydd unrhyw un cael mynediad at y data heblaw amdanaf i a'r goruchwyliwr ymchwil. Ni fydd posibl i unrhyw ddata gael ei gysylltu'n ôl ag unrhyw unigolyn sy'n cymryd rhan yn yr astudiaeth.

Sut mae'r prosiect yn cael ei ariannu?

Mae'r prosiect yn cael ei ariannu gan Ysgol Seicoleg, Prifysgol Bangor. Mae'r astudiaeth wedi cael ei chymeradwyo gan Bwyllgor Moeseg Ymchwil Prifysgol Bangor.

Beth fydd yn digwydd i ganlyniadau'r astudiaeth?

Byddaf yn cynhyrchu adroddiad terfynol yn crynhoi'r prif ganfyddiadau, a fydd yn cael ei anfon atoch. Rwyf hefyd yn bwriadu rhannu canfyddiadau'r ymchwil drwy gyhoeddiadau ac mewn cynadledda o fewn y Deyrnas Unedig.

Pwy ddylwn i gysylltu â nhw am wybodaeth bellach?

Os oes gennych unrhyw gwestiynau neu os ydych angen mwy o wybodaeth am yr astudiaeth hon, cysylltwch â mi gan ddefnyddio'r manylion cyswllt canlynol:

Caryl Roberts

Rhaglen Seicoleg Glinigol Gogledd Cymru

Ysgol Seicoleg

Adeilad Brigantia

BANGOR

LL57 2DG

Rhif Ffôn: 01248 388365

E-bost: psp6dc@bangor.ac.uk

Beth pe bai rhywbeth yn mynd o'i le?

Os ydych yn dymuno gwneud cwyn am ffordd mae'r astudiaeth yn cael ei chynnal, gallwch gysylltu â'r goruchwyliwr ymchwil am gyngor a gwybodaeth bellach:

Hefin Francis

Rheolwr Ysgol

Ysgol Seicoleg

Prifysgol Bangor University

BANGOR

LL57 2DG

Rhif Ffôn: +44 (0)1248 388339

E-bost: h.francis@bangor.ac.uk

Beth sy'n digwydd nesaf?

Os ydych chi'n hapus i fod yn rhan o'r prosiect, a allwch chi arwyddo'r ffurflen gydsynio i gadarnhau hyn.

Cefnogaeth arall:

Os teimlwch yr hoffech gyngor yn ymwneud â'ch lles cysylltwch â:

CARE - **Cyngor Cyfrinachol sy'n Ymwneud** â **Gweithwyr** (Rhan o Wasanaeth Iechyd Galwedigaethol a Lles Bwrdd Iechyd Prifysgol Betsi Cadwaladr)
Hunan gyfeirio am wybodaeth a chyngor iechyd a lles cyffredinol.
Cysylltwch â 01745 448787 (Dydd Llun- Dydd Gwener, 8:00am-5:00pm)

Diolch am ddarllen y wybodaeth hon- gofynnwch unrhyw gwestiynau os nad ydych yn sicr o beth sydd wedi cael ei ofyn ohonoch.

Appendix VI - Permissions from authors

From: Fruzzetti , Alan E.
<AFRUZZETTI@MCLEAN.HARVARD.EDU>
Sent: 14 November 2016 12:40:59

To: 'Annie Haynos'; Caryl Parry Roberts

Subject: RE: ABPDQ

Hi, Caryl.

Great that you are interested in using the questionnaire. I have attached it, along with the scoring. Are you working with Michaela Swales? Please give her my warm regards.

Please let me know if you have any questions. Warmly,

Alan

Alan E. Fruzzetti, Ph.D. Director, Boys DBT Program

Director, Training in Family Services McLean Hospital &

Department of Psychiatry Harvard Medical School

email:
AFRUZZETTI@MCLEAN.
HARVARD.EDU Tel: 617
855 4394

From: Aarons, Gregory <gaarons@ucsd.edu> **Sent:** 14 November 2016 04:43:25

To: Caryl Parry Roberts

Subject: RE: Evidence-Based Practice Attitude Scale Dear Caryl,

This email provides permission to use the EBPAS in your research. I have attached files with the EBPAS and scoring instructions. Best of luck with your project.

Best regards, Greg Aarons

Gregory A. Aarons, PhD

Professor of Psychiatry **|** Director: Child and Adolescent Services Research Center University of California, San Diego **|** 9500 Gilman Dr. (0812) **|** La Jolla, CA 92093-0812

+1 858-966-7703 x3550 **|** http://psychiatry.ucsd.edu/About/faculty/Pages/gregory-aarons.aspx

Submission (ID: 443688843) receipt for the submission of /fac/med/research/platform/wemwbs/researchers/register

no-reply@warwick.ac.uk

Sun 11/02/2018 13:52

To: Caryl Parry Roberts <psp6dc@bangor.ac.uk>;

Thank you for completing this registration. You now have permission to use WEMWBS in the manner detailed in your submission.

Question: Name: Answer:

Caryl Roberts

Question: Email address: Answer: psp6dc@bangor.ac.uk

Question: Institution/Organisation Answer:

Bangor University

Question: Name: Answer:

Question: Email address: Answer:

Question: Institution/Organisation Answer:

Question: Type of Study Answer: Intervention study (WEMWBS before and after)

Question: Description of proposed project:

(For translations, please state the language concerned) Answer: The efficacy of DBT Skills training on improving outcomes for NHS Mental Health staff and patients

Question: Description of participants Answer:

NHS staff working in the mental health and learning disability division.

Question: Location Answer: North Wales

Question: Gender Answer:

Males and females

Question: Ages Answer:

18+

Question: Approximate Start Date Answer:

23/01/2017

Question: WEMWBS version Answer:

7 items

Question: Expected number of people to be studied Answer:

150

Question: Other information as relevant Answer:

Question: Are you willing for us to share top level details of your research Answer:

Yes

Appendix VII - Questionnaire Booklet

Demographics

About you:

Forename :_____   Surname:_____

(your name is only used to match your future responses)

1. Gender (Please circle):   Male   Female   Do not wish to disclose
        Other:_____

2. Age in years (Please Specify): _____

3. What is your job title (please specify i.e. CPN, Social Worker etc):_____

4. How long have you been in this role approximately (please specify):__ years ___ months

5. How long have you worked for the Health Board: ____ years ____months

6. Where do you work (please specify):_____

7. What kind of setting is this (please specify i.e. inpatient, CMHT etc):_____

8. Please specify how we can contact you in the future in order to send you a follow up questionnaire (**please use block capitals**): *

Work Address (we will send you a pre-paid envelope):

_____

_____

Post code: _____

Work E-mail address: _____

*We will only send you the questionnaire; your details will not be passed to any third parties.

Date (please specify):_____

Thank you!

Organizational Readiness for Implementing Change (ORIC)

1	2	3	4	5
Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree

	1	2	3	4	5
1. People who work here feel confident that the organization can get people invested in implementing this change.	1	2	3	4	5
2. People who work here are committed to implementing this change.	1	2	3	4	5
3. People who work here feel confident that they can keep track of progress in implementing this change.	1	2	3	4	5
4. People who work here will do whatever it takes to implement this change.	1	2	3	4	5
5. People who work here feel confident that the organization can support people as they adjust to this change.	1	2	3	4	5
6. People who work here want to implement this change.	1	2	3	4	5
7. People who work here feel confident that they can keep the momentum going in implementing this change.	1	2	3	4	5
8. People who work here feel confident that they can handle the challenges that might arise in implementing this change.	1	2	3	4	5
9. People who work here are determined to implement this change.	1	2	3	4	5
10. People who work here feel confident that they can coordinate tasks so that implementation goes smoothly.	1	2	3	4	5
11. People who work here are motivated to implement this change.	1	2	3	4	5
12. People who work here feel confident that they can manage the politics of implementing this change.	1	2	3	4	5

BPD Questionnaire

For purposes of this questionnaire, BPD means Borderline Personality Disorder or with significant features of BPD (e.g., several of the criteria for or features of BPD).

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Please write the corresponding number of how much you agree or disagree with each of the following statements:

I find working with clients with BPD rewarding. __

One disruptive client often ruins an entire treatment program. __

My clients with BPD are generally attentive and hard working. __

I am very satisfied with my job __

I have sufficient skills to manage clients with BPD. __

Most clients with BPD suffer more than clients with other problems. __

I have confidence in my ability to manage just about any therapeutic situation. __

I welcome the challenge of working with a diverse group of clients. __

When clients are disruptive, I get very frustrated or angry. __

It is my job to socialize clients so that they act according to my expectations and the expectations of our treatment program. __

I have felt very burned out in my job over the past week or so. __

I especially look forward to the part of my day I spend working with BPD clients. __

Having even one disruptive client with BPD in a treatment group or in the treatment milieu ruins my day. __

Virtually all clients with BPD appreciate the work I put in to their treatment. __

Clients with BPD cause problems among our staff. __

I have a variety of techniques that I can use to rein in a difficult client before

he or she interferes with others in a group or in the milieu. __

Having clients with BPD increases my job burnout. __

I feel fulfilled by, and enjoy, working with clients with BPD. __

I get very judgmental of a client when he or she doesn't show me respect. __

I spend a significant part of my work week with clients with BPD. __

I am likely to get into power struggles with difficult clients. __

I would prefer a job with no or significantly fewer clients with BPD. __

My attitude toward clients has a significant impact on their attitudes toward me. __

I am likely to appreciate and support the effort or enthusiasm of even the most

difficult client. __

I can manage my own reactions to difficult clients and still stay focused. __

There are more disruptive clients in the treatment program now than in years past. __

People with BPD tend to be whiny and complain a lot about even insignificant problems. __

I am generally effective at managing my clients even when they are distressed.   __

I generally feel very positive about my job.   __

I would prefer to have no clients with BPD in my caseload   __

The items below represent ways that you may have coped with stressful events in your life. We are interested in the degree to which you have used each of the following thoughts or behavior to deal with problems and stresses.

Think back on the **LAST ONE MONTH** in your life. Then check the appropriate number if the thought/behavior

is: never used, rarely used, sometimes used, or regularly used (i.e., at least 4 to 5 times per week). Don't answer on the basis of whether it seems to work to reduce stress or solve problems—just whether or not you use the coping behavior. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

0	1	2	3
Never Used	**Rarely Used**	**Sometimes Used**	**Regularly Used**

1. Bargained or compromised to get something positive from the situation.	0 1 2 3
2. Counted my blessings.	0 1 2 3
3. Blamed myself.	0 1 2 3
4. Concentrated on something good that could come out of the whole thing.	0 1 2 3
5. Kept feelings to myself	0 1 2 3
6. Made sure I'm responding in a way that doesn't alienate others.	0 1 2 3
7. Figured out who to blame.	0 1 2 3
8. Hoped a miracle would happen.	0 1 2 3
9. Tried to get centered before taking any action.	0 1 2 3
10. Talked to someone about how I've been feeling.	0 1 2 3
11. Stood my ground and fought for what I wanted.	0 1 2 3
12. Refused to believe that it had happened.	0 1 2 3
13. Treated myself to something really tasty.	0 1 2 3
14. Criticized or lectured myself.	0 1 2 3
15. Took it out on others.	0 1 2 3
16. Came up with a couple of different solutions to my problem.	0 1 2 3
17. Wished I were a stronger person — more optimistic and forceful	0 1 2 3
18. Accepted my strong feelings, but not let them interfere with other things too much.	0 1 2 3
19. Focused on the good things in my life.	0 1 2 3
20. Wished that I could change the way that I felt.	0 1 2 3
21. Found something beautiful to look at to make me feel better.	0 1 2 3
22. Changed something about myself so that I could deal with the situation better.	0 1 2 3
23. Focused on the good aspects of my life and gave less attention to negative thoughts or feelings	0 1 2 3

24	Got mad at the people or things that caused the problem	0	1	2	3
25	Felt bad that I couldn't avoid the problem.	0	1	2	3
26	Tried to distract myself by getting active.	0	1	2	3
27	Been aware of what has to be done, so I've been doubling my efforts and trying harder to make things work.	0	1	2	3
28	Thought that others were unfair to me.	0	1	2	3
29	Soothed myself by surrounding myself with a nice fragrance of some kind.	0	1	2	3
30	Blamed others.	0	1	2	3
31	Listened to or played music that I found relaxing.	0	1	2	3
32	Gone on as if nothing had happened	0	1	2	3
33	Accepted the next best thing to what I wanted.	0	1	2	3
34	Told myself things could be worse.	0	1	2	3
35	Occupied my mind with something else.	0	1	2	3
36	Talked to someone who could do something concrete about the problem	0	1	2	3
37	Tried to make myself feel better by eating, drinking, smoking, taking medications, etc.	0	1	2	3
38	Tried not to act too hastily or follow my own hunch.	0	1	2	3
39	Changed something so things would turn out right.	0	1	2	3
40	Pampered myself with something that felt good to the touch (e.g a bubble bath or a hug)	0	1	2	3
41	Avoided people	0	1	2	3
42	Thought how much better off I was than others.	0	1	2	3
43	Just took things one step at a time.	0	1	2	3
44	Did something to feel a totally different emotion (like gone to a funny movie).	0	1	2	3
45	Wished the situation would go away or somehow be finished.	0	1	2	3
46	Kept others from knowing how bad things were.	0	1	2	3
47	Focused my energy on helping others.	0	1	2	3
48	Found out what other person was responsible.	0	1	2	3
49	Made sure to take care of my body and stay healthy so that I was less emotionally sensitive.	0	1	2	3
50	Told myself how much I had already accomplished.	0	1	2	3
51	Made sure I respond in a way so that I could still respect myself afterwards.	0	1	2	3
52	Wished that I could change what had happened.	0	1	2	3
53	Made a plan of action and followed it.	0	1	2	3
54	Talked to someone to find out about the situation	0	1	2	3
55	Avoided my problem	0	1	2	3
56	Stepped back and tried to see things as they really are	0	1	2	3
57	Compared myself to others who are less fortunate.	0	1	2	3
58	Increased the number of pleasant things in my life so that I had a more positive outlook.	0	1	2	3
59	Tried not to burn my bridges behind me, but leave things open somewhat.	0	1	2	3

Evidence-Based Practice Attitude Scale

EBPAS$^{©}$

Gregory A. Aarons, Ph.D. Reference:

Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The Evidence-Based Practice Attitude Scale. *Mental Health Services Research, 6*(2), 61-74.

The following questions ask about your feelings about using new types of therapy, interventions, or treatments. Manualized therapy refers to any intervention that has specific guidelines and/or components that are outlined in a manual and/or that are to be followed in a structured/predetermined way.

Fill in the circle indicating the extent to which you agree with each item using the following scale:

0	1	2	3	4
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

	0	1	2	3	4
1. I like to use new types of therapy/interventions to help my clients…………..	○	○	○	○	○
2. I am willing to try new types of therapy/interventions even if I have to follow a treatment manual…………………………………………………………………...	○	○	○	○	○
3. I know better than academic researchers how to care for my clients………..	○	○	○	○	○
4. I am willing to use new and different types of therapy/interventions developed by researchers..	○	○	○	○	○
5. Research based treatments/interventions are not clinically useful......................	○	○	○	○	○
6. Clinical experience is more important than using manualized therapy/treatment.	○	○	○	○	○
7. I would not use manualized therapy/interventions………………………………	○	○	○	○	○
8. I would try a new therapy/intervention even if it were very different from what I am used to doing………………………………………………………………....	○	○	○	○	○

For questions 9-15: If you received training in a therapy or intervention that was new to you, how likely would you be to adopt it if:

	0	1	2	3	4
9. it was intuitively appealing?...…………………………………………..........	○	○	○	○	○
10. it "made sense" to you?………………………………………..........	○	○	○	○	○
11. it was required by your supervisor?…………………………………..........	○	○	○	○	○
12. it was required by your employer i.e. BCUHB or the Council.........…............	○	○	○	○	○
13. it was required by the government?………………………………...........…	○	○	○	○	○
14. it was being used by colleagues who were happy with it?………………...	○	○	○	○	○
15. you felt you had enough training to use it correctly?..	○	○	○	○	○

The Short Warwick-Edinburgh Mental well-being Scale (SWEMWBS)

Below are some statements about feelings and thoughts.

Please tick the box that best describes your experience of each over the last 2 weeks

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future					
I've been feeling useful					
I've been feeling relaxed					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling close to other people					
I've been able to make up my own mind about things					

Appendix VIII - Research Protocol

1.   Project title

The efficacy of DBT Skills training on improving outcomes for Mental Health staff and patients

2.   Supervision

Dr Michaela Swales

3.   Background

The National Institute for Health and Care Excellence (NICE) recommends Dialectical Behaviour Therapy (DBT; Linehan, 1993) as an effective treatment for Borderline Personality Disorder (BPD), particularly as a priority for females with a history of repetitive self-harm (NICE, 2009). DBT is derived from Cognitive-Behavioural Therapy and strongly emphasises the teaching of new and effective coping skills for managing emotions and relationships (Linehan, 2015). The evidence-base for DBT has expanded considerably over the last two decades, with research suggesting its effective application across a number of clinical disorders and settings, including in the treatment of BPD, substance dependence, depression, PTSD, eating disorders and in inpatient settings (Dimeff & Koerner, 2007).

The original request for this proposal came from staff at a local inpatient unit who trained in DBT in 2013-14. After implementing DBT in the medium secure unit, staff were keen to increase the opportunities for their patients to practise and generalise their skills learned in treatment on the wards and to change the inpatient culture away from a focus on medical interventions to one focused more on increased skilful coping.

A recent study in an inpatient CAMHS service reported that brief DBT skills and coaching techniques training for psychiatric nursing staff produced significant benefits, including reduced staff burnout and stigma towards patients with BPD-related problems (Haynos et al. (2016). Furthermore, the findings suggested that the reduction in BPD stigma may have driven the reduction in burnout.

4.   **Research question**

Does training reduce staff burnout?
Does training change attitudes towards BPD?
Does training change attitudes towards applying evidence-based practices in the workplace?
Does training increase self-reported coping skills?
Does training lead to the increase of the implementation of skills with clients on the unit?
Does training lead to fewer incidents (specifically physical and verbal abuse) on the unit (if possible to obtain the data - risk incident reporting?)

5. Overlap with previous assessments

DAP - Substance misuse
Academic presentation - Complex Trauma
SRRP - Evaluation of North West Wales Psychology DBT group
EBB - The effectiveness of CRT for eating disorders.

6. Participant recruitment

The workshop will run in each of the three geographical areas (East, Central & West) from January 2017 to March 2017. Staff from any of the four units can attend any of the workshops for 2 days consecutively.
Managers will need to proactively release staff and plan for coverage of the ward during the training.
55 places available in each workshop.
Participants will be included in the study if they specify they work for the Mental Health & Learning Disability Division.

7. Design and Procedures

Mainly Questionnaire design, and possible extraction of risk incident records from DATIX (risk incident recording program). Possibility of some qualitative analysis (from training evaluation) - content analysis.

8. Measures

The workshops will be evaluated by assessing for changes on the following:

- Staff burnout - Oldenburg Burnout Inventory (Demerouti & Bakker, 2008)
- Attitudes towards BPD - Attitudes toward Borderline Personality Disorder (Fruzzetti, 2004)
- Attitudes towards applying evidence-based practices in the workplace - Evidence-based practice attitude scale (Aarons, 2004)
- Self-reported coping skills
- Incidents on the unit (Extraction from DATIX-information provided by ward managers)
- Measure of organization readiness for change - Organizational Readiness for Implementing Change (ORIC) (Shea et al, 2014).

Assessments will take place before and after training and three months after completion of the workshop. Participants will be asked to provide their BCUHB e-mail address and personal e-mail address in order to be contacted for follow up.
An e-mail will be sent in 3 months time with the option of asking for a paper format (including a pre paid envelope to return the questionnaire) of the survey or clicking on an online version of the survey (via Survey Monkey or similar).

9. Data management and analysis

Password protected Microsoft Excel and SPSS documents and each participant will be assigned a specified research identification number, to uphold their anonymity and no identifiers will be stored on the computer. Returned questionnaires will be anonomyised. Data will be kept and stored on record in accordance with Bangor University procedures.

Repeated measures ANOVAs will be used to examine changes in skills application, burnout, and BPD stigma pre- to post-training. Cohen's d analyses were used to estimate effect size. Pearson's correlations will be conducted between DBT skill knowledge, MBI scores, and ABPDQ scores at pre- and post- and follow up training assessment points in order to examine the relationship between these variables. Mediation analysis will be considered using hierarchical linear regressions to further examine the relationship between variables.

Power analysis calculation: to gain an appropriate effect size of d=0.37 (as referenced in Haynos at al, 2015), with an alpha level set to 0.05 (a=0.05), the chance of finding an effect would be 0.8, requiring 49 participants for the study.

10.   Diversity The diversity of the sample will inevitably be defined by the sample of participants available for the project, any limitations of which will be addressed in the write-up of the project.

11.   Proposed journals

Journal of Hospital Administration
J Psychiatr Ment Health Nurs
Behav Cogn Psychother.
Contemp Nurs
Journal of Mental Health

12.   Ethical/Registration issues

Ethical approval will be requested from Bangor University School of Psychology Ethics Committee and local Health Board R&D board, if appropriate.

13. Feedback Following data analysis and write up, the primary researcher will send participants and stakeholders a summary of the research findings and clinical implications.

14. Risk Assessment Participants - psychological distress caused by training can be discussed with training facilitators and in supervision. List of places to gain help and support on information sheet including occupational staff wellbeing service.

15. Data storage Each participant will be assigned a research identification number and information will therefore be anonymised on the computer. Information

will be password protected on an encrypted zip drive. Questionnaire will be anonymised and kept in a locked filing cabinet. Once the project is completed, we aim to delete all data in accordance with Bangor University and Data Protection policies.

16. Financial information*

Estimations calculated for 200 participants
University Headed Paper for Consent forms, Participant Information Sheets, Cover letters, Questionnaires, & Feedback Sheets:
200 participants*, 25 sheets per participant (pre and post)
5000 sheets @ £2.20 per ream = £22.00
Photocopying 5000 @ 2p = £100

(MBI Manual $50
MBI License to reproduce 50 x $2.40 = $120) - Looking for free alternatives

Postage to send out study information and feedback letters
Stationary: 2 box of A4 envelopes = £11

400 x Freepost return Standard letter size (up to 100g) @0.41p= £164

Other
Travel expenditure claimed via the standard BCUHB mileage form. To my knowledge (if required), translation is free of charge.
Survey Monkey subscription 3 month x £18 = £54.
Total estimated cost of study**: £351**

17. Literature Review

Predictors of burnout

18. Timetable

Tentative Timetable

September 2016	Submit Proposal
November 2016	Register for School of Psychology ethics approval
December 2017	Register for BCUHB ethics approval
January –March 2017	Data collection (Pre)
April - June 2017	Data collection (Post)
July 2017	Data collection
July 2017 - September 2018	Analysis and write up
September 2017	Submit drafts to supervisors for feedback
June 2018	Submit reports

July 2018	Revise for Viva
August 2018	Complete any revisions
August/Sept 2018	Send official feedback to participants and stakeholders

19. References

Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The evidence-based practice attitude scale. *Mental Health Services Research, 6*(2), 61-74.

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Shea, C. M., Jacobs, S. R., Esserman, D. A., Bruce, K., & Weiner, B. J. (2014). Organizational readiness for implementing change: a psychometric assessment of a new measure. *Implementation Science*, *9*(1), 1.

Word Counts

Thesis Abstract – 282 words

Chapter 1 –Systematic literature review

Abstract – 197 words

Main text (excluding tables, figures and references) – 6,000 words

References, tables and figures – 6,565 words

Chapter 2 – Empirical research paper

Abstract – 199 words

Main text (excluding tables, figures and references) – 3,993 words

References, tables and figures – 2,085 words

Chapter 3 – Contributions to theory and clinical practice

Main text (including figure) – 4,520 words

References – 703 words

Total

Main text - 15,191 words

Appendices (references, tables and figures) -9,353 words

Other appendices (not including IRAS form and R&D letter) - 7,262