# The use and outcomes of Dialectical Behaviour Therapy for Forensic Populations and Non-Forensic Adolescent populations

## VOLUME ONE: RESEARCH COMPONENT

By

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## Overview

This thesis contains two volumes and is submitted as a requirement for the degree of Doctorate of Clinical Psychology (Clin.Psy.D) at the University of Birmingham.

### Volume One

Volume one consists of three parts. The first is a systematic literature review investigating the use of Dialectic Behaviour Therapy in Forensic services. The second part presents an empirical study, which explored adolescents' and parents' experiences of Dialectic Behaviour Therapy. Lastly, this volume comprises a public domain briefing document, which offers an accessible summary of the empirical study and systematic literature review.

### Volume Two

Volume two contains five clinical practice reports (CPR). The first CPR presents a cognitive behavioural formulation and a psychodynamic formulation of a 71-year-old female's physical health anxiety. The second CPR details a qualitative service evaluation assessing nurses' experience of completing a dementia-training workbook within an older adult psychology service. The third CPR outlines a single case experimental design used to assess the effectiveness of a cognitive behavioural intervention for a 26 year-old female experiencing symptoms of low mood, anxiety and post-traumatic stress. The fourth CPR presents a case study of a 55-year-old female referred to psychology services for an assessment of learning disability. Finally, the fifth CPR is documented with an abstract from an oral presentation presenting the case study of work undertaken with an adopted 2-year-old girl and her parents.

*N.B Any identifying information of individuals in this document have been changed to maintain confidentiality.*

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# VOLUME ONE: RESEARCH COMPONENT

## *LITERATURE REVIEW*

# How has Dialectical Behaviour Therapy been used within Forensic Services and what are the outcomes? : A Systematic Review


## Abstract

*Background:* The identification of effective therapeutic treatment for individuals within criminal justice systems is imperative. As the prevalence of personality disorder and parasuicidal behaviour is significantly increased within forensic populations it is important to give consideration to Dialectical Behaviour Therapy (DBT) as it may be a viable intervention due to its strong, developing evidence base for individuals from non-forensic populations, with similar presentations (e.g. self-harming/impulsive behaviour).

*Aims:* This review provides a comprehensive account of research published between 2001 and 2015 reporting on how DBT has been adapted/delivered within various forensic services. This review also set out to explore and conclude about the outcomes for forensic populations that have engaged with DBT to date.

*Method:* EMBASE, PsychINFO and Medline were systematically searched to identify research reporting on the use of DBT within any type of forensic service and for any type of forensic population. A total of 21 studies were included for review and appraised for quality.

*Key Findings:* The prominent conclusion of this review is that the quality of research assessing DBT within forensic services requires much improvement. Consequently, this review outlines specific recommendations to support future research in producing more robust, dependable findings/conclusions. Having acknowledged this, a secondary conclusion is that published studies to date, contain no contra-indicators for the use of DBT within forensic populations, and also indicate that DBT, on a practical level, can be delivered/adapted within a variety of forensic services.



*Keywords:* Dialectical Behaviour Therapy, Forensic

# 1.0 Introduction

## 1.1 Background to DBT

Marsha Linehan published the first Dialectical Behaviour Therapy (DBT) manual in 1993 (Linehan, 1993). Originally, DBT was developed as a treatment specifically for individuals presenting with chronic suicidality and diagnosable borderline personality disorder (BPD) symptomatology. The publication of the manual came after the first randomised clinical trial (RCT) of DBT showed promising findings (Linehan, Armstrong, Suarez, Allmon & Heard, 1991), females with BPD who engaged in a one year DBT program made significantly fewer suicide attempts, spent significantly fewer days accessing support from inpatient services and had significantly better treatment attendance, as compared to a 'treatment as usual group'. Subsequent RCTs have produced comparable findings supporting the effectiveness of DBT within similar populations (Bohus, Haaf, Simms, Limberger, Schmahl, Unckel et al., 2004; Linehan, McDavid, Brown, Sayrs, & Gallop, 2008; van den Bosch, Koeter, Stijnen,Verheul & van den Brink, 2005); some of these included shorter DBT programs lasting six months (Koons, Robins, Lindsey Tweed, Lynch, Gonzalez, Morse et al., 2001). Furthermore, a meta-analysis collating data from five RCT's on DBT concluded the intervention had a moderate effect-size for individuals with BPD (Kliem, Kröger & Kosfelder, 2010).

Whilst less research has focused on non-adult populations, research assessing DBT outcomes for adolescent populations has produced promising findings, showing improvements with depression and self-injurious behaviour (Fleischhaker, Böhme, Sixt, Brück, Schneide, & Schulz, 2011; James, Taylor, Winmill & Alfoadari, 2008). The use of DBT skills training for older adults with personality disorder has also produced positive outcomes, when compared to control groups (Lynch, Cheavens, Cukrowicz, Thorp, Bronner & Bever 2007).

Principally, three theoretical frameworks underpin DBT (Linehan, 1993; see also Lynch, Chapman, Rosenthal, Kuo & Linehan, 2006; Rizvi, Steffel & Carson-Wong, 2013). The first is the biopsychosocial model, which posits that 'BPD difficulties' stem from a person's experience of growing up in an 'invalidating environment', and extreme sensitivities in a person's emotion regulation system at a biological level (Crowell, Beauchaine & Linehan, 2009). DBT is also influenced by behavioural theory and principles of operant/classical conditioning and modelling. Behaviourism helps facilitate the non-judgemental stance of DBT as it conceptualises people's behaviour as always having a cause (Rizvi et al., 2013). Finally, dialectical theory also underpins DBT. Linehan (1993; 2014), places major importance on the dialectical synthesis between acceptance and change, asserting that many therapies are unsuited to individuals with BPD as they focus too strongly on changing a person's cognition/emotion/behaviour; for people with BPD this may increase their propensity to feel invalidated. Subsequently, DBT attempts to synthesise this dialectic by teaching skills that encourage realistic acceptance of self/ others whilst also teaching practical skills that empower individuals to make positive behavioural changes.

In terms of the practical delivery of DBT, a comprehensive program incorporates four modes of treatment: [1]

1. One-to-one individual therapy sessions with a DBT therapist in which a hierarchy is employed to address clients' most problematic/risky behaviours (e.g. self-harm/suicide attempts) before focussing on other issues such as low self-esteem.

2. Clients also attend group-DBT skills training sessions split across four modules: mindfulness, distress tolerance, emotion regulation and interpersonal effectiveness.

[1] For a complete breakdown of the components of DBT, please refer to Linehan's (2014) updated manual.

3. To help broaden generalisation of skills, a 24-hour phone based coaching system is used in DBT so that clients can seek therapeutic support outside therapy appointments.

4. The final component of comprehensive DBT is therapists' attendance at 'consult', where they can discuss therapeutic issues in line with DBT principles.

Comprehensive DBT is intensive and requires practitioners to undertake some form of training alongside regular supervision/consult (for more information on DBT training see Rizvi et al., 2013). The growing wealth of research supporting the efficacy of DBT has resulted in practitioners using and adapting it across different types of services (inpatient and outpatient) for people with varying mental health difficulties (DiGorgio, Glass & Arnkoff, 2010).

As well as focusing on outcomes for offenders, this review will also consider the adaptations made to DBT within forensic services. An illustration of the type of modifications made for offenders is given by the Colorado Mental Health Institute at Pueblo (CMHIP) (McCann, Ball & Ivanoff, 2000). CMHIP tailored DBT to have an intensified and additional focus on offenders' experiences. For example, using a core DBT principle of being non-judgemental, people are asked to describe their offence, and the events that precipitated it, in a factual manner. In addition, individuals are asked to outline the consequences of their offence to victims to enhance their emotional literacy and empathy.

### 1.2 Why use DBT in Forensic Services?

As compared to the general population, the prevalence of personality disorder and parasuicidal behaviour is up to ten times higher within the criminal justice system (NICE, 2014). In prisons, 25 – 50% of individuals are reported to have BPD (Sansone & Sansone, 2009) and recently the Ministry of Justice (2016) reported there were 359 incidents of self-harm for every 1000 prisoners. Much research has posited that difficulties with emotion regulation may underpin offending behaviour (Davidson, Putnam & Larson, 2000; Day, 2009), potentially illuminating the link between criminogenic risk and BPD (Nee & Farman, 2005). The identification of effective treatment methods for offender populations is imperative, considering the affect treatment may have on rates of reoffending, crisis management within prisons, successful community reintegration for offenders, and a reduction in criminal justice staff burn-out (Berzins & Trestman, 2004; McCann et al., 2000). Since there is a strong evidence base for DBT as a treatment for BPD it is unsurprising that DBT is understood to be a viable intervention option within forensic services. Further support for the use of DBT in forensic services, comes from findings that clients with BPD from forensic services are highly comparable with clients with BPD from general mental health services in terms of epidemiology and clinical symptoms (van den Bosch, Hysaj & Jacobs, 2012). Moreover, often individuals from forensic services present with intense emotional/behavioural regulation difficulties and can be hard to engage - the highly structured nature of DBT and its emphasis on therapists developing a sound non-judgemental rapport with individuals and improving people's ability to regulate, helps to contain and manage this type of presentation (Berzins & Trestman, 2004).

Effective treatment for this population is stressed further in light of reports that the societal costs of BPD are considerable (NICE, 2009). Low, Jones, Duggan, MacLeod and Power (2001a) report the annual cost for self-harm within a high security service in England to be £227,000. However, cost ramifications are likely to be underestimated as risky behaviours

common in BPD will undoubtedly affect individuals' advancement through services and hence the amount of resource required (Low et al., 2001a). It has been asserted that DBT has potential to offer cost effective therapy (Brazier, Tumur, Holmes, Ferriter, Parry, Dent-Brown et al., 2006).

### 1.3 The evidence base for using DBT in Forensic Services

Systematic reviews have supported the use of DBT for aggression/aggressive behaviour (Frazier & Vela, 2014) and for treating BPD within inpatient settings (Bloom, Woodward, Susmaras, & Pantalone, 2012). Warren, McGauley, Norton, Dolan, Preefy-Fayers, Pickering et al. (2003) undertook a comprehensive review of treatments for severe and dangerous personality disorder and concluded that DBT appeared most promising across outpatient and low security services. This review, however, did not include studies undertaken in prison settings.

Specific to forensic services, Berzens and Trestman (2004) consolidated information from six correctional institutions implementing DBT within their services. Despite a consensus that DBT was useful across the institutions, unfortunately, many of the sites did not collect sufficient outcome data. Quinn and Shera (2009) reviewed DBT as a treatment for young offenders, again the conclusions noted DBT as a promising treatment and authors advocated for it to be more widely implemented across adolescent correctional facilities. More recently, an unpublished systematic review by Etchells (2014) reviewed thirteen research papers assessing the efficacy of DBT for forensic populations; across the papers no consistent treatment improvements were identified, this again was due, in part, to deficits in studies' methodological quality. The need for studies to be more robust was echoed by Dixon-Gordon, Harrison and Roesch's (2012) review, which concentrated on non-suicidal self-harm within offending populations.

### 1.4 Aim/Rationale of this Systematic Review

This review aimed to collate, and provide an inclusive account of papers assessing the use of DBT in a wide range of forensic services. It is hoped this review will be utilised as a reference point for clinicians/professionals to illustrate the ways in which DBT, or components of DBT, have been adapted and delivered within forensic services - and what outcomes/implications can be made from the research base assessing the use of DBT in forensic services, at present. The present review will add to existing literature by offering a more holistic, expansive account of the use and application of DBT across various forensic services, for individuals with different presentations. To the knowledge of the author, this review will include the largest number of papers (n=21) reporting on the use of DBT within forensic services.

A preliminary search of pertinent literature showed that the use of DBT in forensic services is varied and developing, papers differed widely in terms of their study design, included outcome measures, implementation/delivery/modification of DBT and the level of training provided to DBT practitioners. To capture the flexibility of DBT within forensic settings, this review's inclusion criteria are intentionally broad. Due to methodological issues in many of the studies within this research area (e.g. unclear/incomplete reporting of recruitment processes, the use of unreliable outcome measures and/or a lack of control of confounding variables etc.) a meta-analysis was not as appropriate or useful as a systematic review providing a narrative of the papers. Furthermore, since the preliminary search identified the methodological issues described above, this review was also justified, as it would enable the provision of specific recommendations that would promote the quality and consistency of reporting on the use of DBT in forensic settings; this will help facilitate the future undertaking of a meta-analysis. A clear set of such recommendations is considered timely since many papers highlight research quality issues to limit the certainty of their conclusions.

It is noted that Etchells (2014) undertook a comparable, unpublished, systematic review, however the current review was justified as its broader inclusion criteria encompassed a wider range of papers. This review will report on all twenty-one papers (compared to Etchells' thirteen) identified through systematic searches.

In conclusion, the primary aims of this review are:

1) To provide a comprehensive account of how DBT has been modified and delivered across a variety of forensic services.

2) To identify what outcomes and implications can be determined for forensic populations who engage in DBT, based on current research.

3) To provide specific recommendations for future research to advance the robustness of research reporting on the use of DBT within forensic settings

## 2.0 Method

### 2.1 Search Strategy

Three databases were searched for this review: EMBASE, PsychINFO and Medline. The last search was completed in January 2017. All databases were searched using keyword terms to find peer-reviewed empirical papers looking at the use of DBT interventions within forensic populations/services. Database functions were used to map search terms to subject headings using the databases' thesaurus; searches also included free text words utilising the "*" truncation function, which broadened the search to include words with different spellings. Table 1 shows a list of all search terms used.

***Table 1 - Search Terms used for database searches***

| ***Search Group 1*** | ***Search Group 2*** |
|---|---|
| **Forensic Psychiatry** | DBT |
| **Offender** | Dialectic* behavio* therap* |
| **Probation** | |
| **Juvenile Delinquency** | |
| **Prison** | |
| **Prisons** | |
| **Prisoner** | |
| **Crime** | |
| **Criminals** | |
| **Criminal Justice** | |
| Maximum Security Facilities | |
| Mentally Ill Offenders | |
| Female Criminals | |
| Male Criminals | |
| Forensic* | |
| High Secur* | |
| Medium Secur* | |
| Low Secur* | |

Search terms in group 1 and group 2 were combined independently within their group using the Boolean operator "OR". Subsequently, the Boolean operator "AND" was used to

combine searches across the two groups. Reference lists of papers identified in searches were also examined and papers were included against this review's inclusion criteria.

### 2.2 Inclusion Criteria

The inclusion criteria for this review (Table 2) were structured against the Preferred Reporting Items for Review and Meta-analyses [PRISMA] guidelines (Moher, Liberati, Tetzlaff & Altman, 2009), which advise for criteria to specify Participants, Intervention, Comparators, Outcomes and Study design [PICOS].

***Table 2 - PICOS Inclusion Criteria***

*Participants:* Papers had to report an empirical study that included a forensic sample of participants who were engaging in DBT as a result of their offending behaviour. Participants could be receiving the intervention within a prison, a secure hospital or within an outpatient community or probation service. No age or other demographic restrictions were made.

*Intervention*:* Studies were included if they outlined any use of a DBT-informed intervention. Variations on the use of DBT were categorised as either:

1. Comprehensive DBT, defined as:

A DBT programme where participants received individual one-to-one therapy sessions and general skills training sessions covering all four DBT skill modules (Mindfulness, Distress Tolerance, Interpersonal Effectiveness and Emotion Regulation). Studies were classified as 'Comprehensive DBT' even if participants were engaging in DBT alongside other treatment modalities (e.g. another therapy etc.)

OR 2.Partial DBT Intervention, defined as:
Intervention programmes that only taught DBT skills (often in a group format), or employed DBT strategies within a forensic service, but did not state their participants engaged in individual sessions with a DBT therapist. Studies were classified as 'Partial DBT' if the reporting of intervention suggested participants had not completed all four DBT skills modules.
** N.B. DBT therapists' training or consultation attendance was not considered when classifying intervention type, as many studies did not provide sufficient information. The use of a 24-hour telephone coaching system was also not used to classify studies, as this mode of therapy is often unfeasible within forensic services.*

*Comparators:* Studies with and without comparison control groups were included.

*Outcomes:* Studies had to include at least one statistical analysis of outcome data, but could also contain qualitative feedback/outcome data.

Study Design: Empirical research papers that employed at least one quantitative measure assessing the effectiveness of a DBT-informed intervention (case study examples were included) within a forensic sample/service. To ensure quality, only peer-reviewed studies were included.

### 2.3 Search Results

A total of twenty-one papers are included in this review. PRISMA guidelines were followed for the systematic search (Figure 1). Table 3 presents the reasons for studies exclusion following the initial screening stage. The search produced one German paper unavailable in English text (Pein, Klieman, Schläfke, Kupke, Wettermann, Tardel et al., 2012) this paper was translated by a research colleague, fluent in German.

## Figure 1 - Search Process PRISMA Flow Diagram

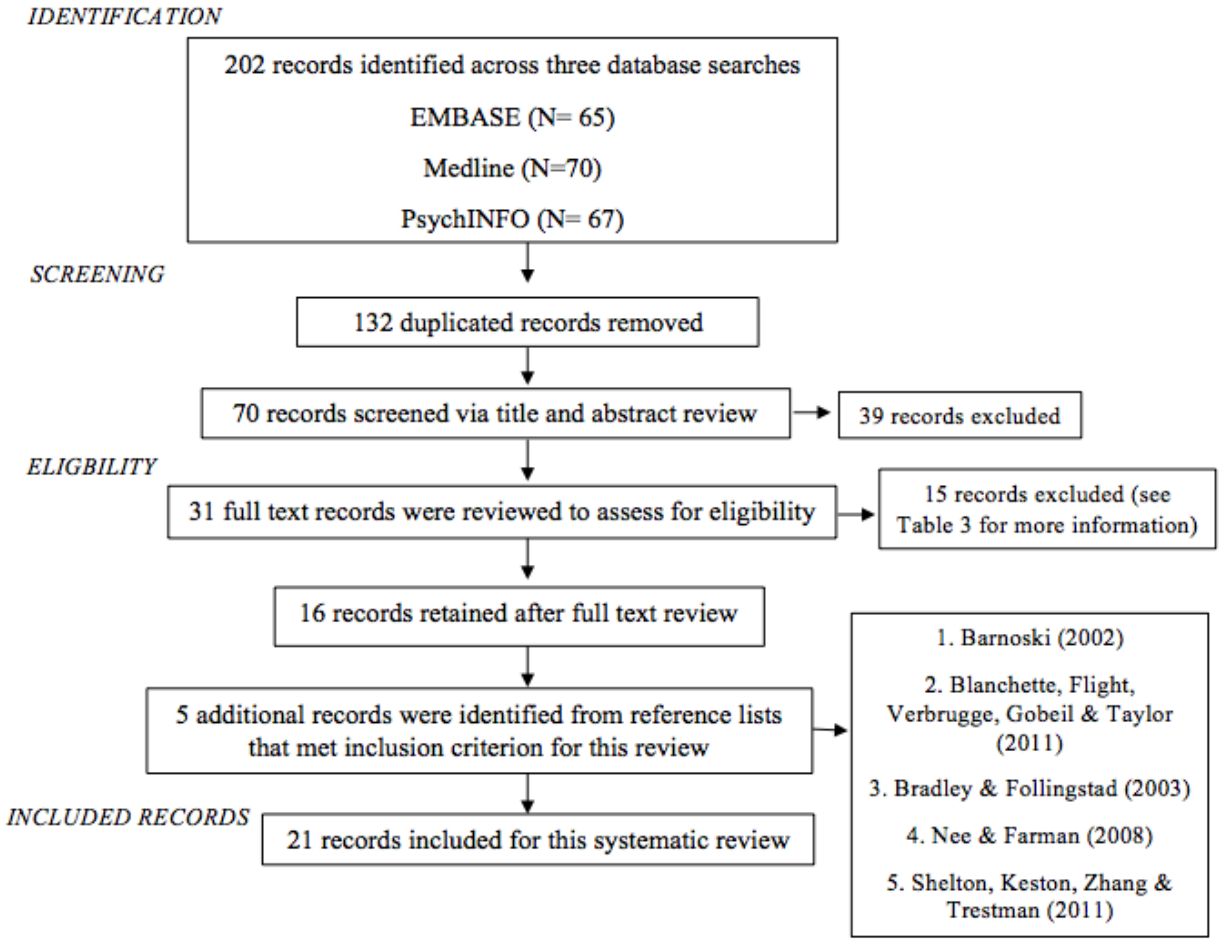

*Table 3 - Reasons for exclusion of 15 records post-screening stage*

| ***Reason for Exclusion:*** | ***Reference:*** |
|---|---|
| **Non-empirical record**<br>**N = 7** | Berzins & Trestman (2004); Chancey, Jones & Walsh (2012); Galietta, Fineran, Fava & Rosenfeld (2010); McCann, Ivanoff, Schmidt & Beach (2007); McCann, Ball & Ivanoff (2000); Schwartz (2011); Wix (2003) |
| **Not a peer reviewed record *(N.B. All dissertation texts)***<br>**N = 3** | Belfi (2003); Quigley (2000); Wahl (2012) |
| **Record assessed engagement of forensic staff with DBT**<br>**N = 2** | Ashworth, Mooney & Tully (2016); Gordon & Tennant (2002) |
| **Record assessed demographic differences between forensic and non-forensic populations receiving DBT - it did not report the efficacy of DBT intervention itself**<br>**N = 1** | van den Bosch, Hysaj & Jabocs (2012) |
| **Records only reported qualitative data**<br>**N = 2** | Banks & Gibbons (2016); Galietta & Rosenfeld (2012) |

### 2.4 Quality Appraisal of Studies in this Systematic Review

The Effective Public Health Practice Project (EPHPP) quality assessment tool for quantitative studies by Thomas, Ciliska, Dobbins and Micucci (2004) was used to appraise all but three of the research papers included in this review. The EPHPP meets accepted reliability and validity standards and has improved inter-rater reliability judgements for methodological bias ratings as compared to Cochrane review tools (Armijo-Olivo, Stiles, Hagen, Biondo, & Cummings, 2012). The use of the EPHPP also enabled a cross-comparison of papers' appraisals with Etchells (2014). To further credit appraisal ratings, the reviewer randomly selected three papers and asked an experienced research colleague to appraise them using the EPHPP framework, comparing and discussing any differences in ratings thereafter.

For each research paper, the EPHPP (Appendix 1) provides an overall ranking of quality according to ratings on the following six areas: selection bias, study design, confounders, blinding, data collection methods, and withdrawals and dropouts. Research papers achieve an

overall mark of STRONG if four of these areas are rated as strong and none as weak; MODERATE if less than four areas are rated as strong and only one area is rated weak; and WEAK if more than two areas are rated as weak.

Papers reporting case study data were appraised using the Department for International Development [DID] (2014) framework (Appendix 2). This was selected as it is reported to be appropriate for this type of research design. The DID gives overall ratings of: high (if principles are *comprehensively addressed*), moderate (if there are *some attention deficiencies* to quality principles) or low (if there are *major attention deficiencies* to quality principles). For this review, the DID's classification of high, moderate or low was changed to strong, moderate or weak, respectively, to maintain consistency across all papers' quality ratings. No specific guidelines are given for the DID in terms of defining how many quality principles a paper would have to meet to be deemed 'comprehensive' or as having 'some' or 'major' deficiencies. In the absence of this detail, under supervision, the reviewer legitimised a case study paper to be: STRONG if 75% of the quality principles were met, MODERATE if more than 50% were met and WEAK if less than 50% were met.

# 3.0 Results

## 3.1 Description of Studies

Table 4 provides a summary of the extracted information from the twenty-one included papers, presented in alphabetical order. The first column references papers and uses colour-coding to show their overall quality appraisal rating (green = strong, yellow = moderate and orange = weak). A summary statement of the outcomes/findings for each paper is presented in Table 4, alongside the p-values of any findings that were statistically significant, within the table it is also noted if studies did not report/run statistical analyses since particular caution should be taken when interpreting the conclusions/implications of such studies.

*Table 4 - Information from Papers included in this Review*

| Study & Quality Rating<br>Strong<br>Moderate<br>Weak | Population & Setting | Study Design & Data Collection* | Use of Controls? Sample Size (N) | Intervention Description *Comprehensive or Partial DBT; DBT Therapist Training* | Outcomes & Conclusions | Other Comments |
|---|---|---|---|---|---|---|
| **1. Aspche & Ward (2003)** | Male adolescent sex offenders from a residential treatment centre in America.<br><br>(Age range: 12 – 19 years old, mean age: 16.62 years)<br><br>Diagnoses not clearly reported. | Scores across intervention group and treatment as usual (TAU) group were compared post intervention only.<br><br>*Measures:*<br>Child Behaviour Checklist; Devereux scales of mental disorder; Juvenile Sex Offender Adolescent Protocol; Fear Assessment<br><br>Data collected post intervention only. | Yes - TAU group who received CBT.<br><br>N = 14. | *Partial DBT*<br>Intervention is called 'Mode Deactivation Therapy [MDT]' which is based on DBT, CBT and Functional Analytic Therapy.<br>DBT techniques used in intervention included:<br>• Radical acceptance<br>• Validation<br>• Identifying 'dialectic' thinking<br>• Emotion regulation skills<br>• Behaviour goal setting<br><br>Therapists' DBT training/attendance to consult not clearly reported. | MDT/DBT treatment was reported to be more effective than TAU in reducing participants' distress and criminogenic behaviour, however the statistical significance of difference between groups was not reported / explored.<br><br>Across all measures MDT was reported to effectively reduce scores by at least one standard deviation. | At baseline the TAU group had higher clinical scores across measures, so the results need to be considered with caution, as it is not clear whether this difference was controlled for.<br><br>The MDT group were reported to engage better in treatment compared to the TAU group. |

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|---|---|---|---|---|---|---|
| **2. Barnoski (2002)** | Young males and females from a rehabilitation unit in America.<br><br>(Ages not reported)<br><br>Diagnoses not reported. | Case Control 12-month follow-up study.<br><br>Participants' reoffending rates were assessed at 12-month post-discharge follow up. | Yes – rates of reoffending were compared against control group receiving no intervention.<br><br>N = 158 (DBT Group: N = 42; Control Group: N = 116). | *Partial DBT*<br>Whilst the study described delivering comprehensive DBT, it was unclear if participants completed all DBT modules as some participants stayed a 'minimum of 14 days' only.<br><br>A DBT consultant was on-site and staff were described to be DBT trained. | Participants receiving DBT had 'favourable rates' of reconviction post-DBT. However, the statistical significance of these changes are not stated, though it does explain this is only a preliminary report.<br><br>10% of participants from the DBT group were re-convicted at 12-month follow-up compared to 24% of participants in the control group. | This was a preliminary report assessing the cost-effectiveness of a DBT program – no clear conclusions about cost are made. |

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|---|---|---|---|---|---|---|
| **3. Blanchette, Flight, Verbrugge, Gobeil & Taylor (2011)** | Females from four Canadian prisons.<br><br>(Mean age = 32.4 years)<br><br>Diagnoses not reported. | Cohort pre- & post- design.<br><br>*Measures:* Institutional Functioning Scale; Expanded Brief Psychiatric Rating Scale; Symptom Checklist – 90 – Revised; Ways of Coping Scale; Profile of Mood States; Self – Control Schedule; Beck Hopelessness Scale; The Paulhus Deception Scale Behavioural incidents on wards were also recorded.<br><br>Data collected pre-, mid- and post- therapy. | No control group. However, participants' reconviction rates were compared with previous offender groups who had not received DBT.<br><br>N= 94. | *Partial DBT* Therapy comprised DBT skill-training, individual sessions and 24-hour support/coaching within a therapeutic environment. However, some individuals could not have completed all DBT modules, as the period between pre and post –test was as low as 23 days for some participants. On average most women attended therapy for approximately 6 months.<br><br>Staff received DBT training and attended DBT consults. | DBT participants were described to show 'moderate to high' improvements across measures.<br><br>The DBT's group rate of self-harm reduced significantly after 3 months; however later analyses of self-harm were not undertaken –<br><br>The numeric/statistical outputs of the statistical analyses described above are not reported and so should be considered with caution.<br><br>The DBT group showed higher rates of recall to prison (57%), compared to other offender groups (38%). | The study discriminate self-harm data in isolation and their description of 'behavioural incidents' was unclear so the results are considered with caution.<br><br>Authors suggest DBT participants' increased recall can be explained by their mental health difficulties, as opposed to offending behaviour.<br><br>Both staff and female offenders completed measures, outcomes were consistent across groups. |

| | | | | | | |
|---|---|---|---|---|---|---|
| **4. Bradley & Follingstad (2003)**<br><br>***N.B This is described as a pilot-study.*** | Females from a medium security American prison.<br><br>(Age range: 34 – 54 years old, mean age: 36.67 years)<br><br>Diagnoses not reported. All women were victims of child abuse. | Controlled Clinical pre- & post-test, trial.<br><br>*Measures:*<br>Beck Depression Inventory [BDI]; Inventory of Interpersonal Problems [IIP]; Trauma Symptom Inventory [TSI]<br><br>Data collected pre- and post-therapy. | Yes – a no-contact comparison group.<br><br>N = 31 (DBT group: N = 13; No-contact comparison group: N = 18). | *Partial DBT*<br>Participants attended 18 sessions altogether. The first 9 sessions were based on the DBT model. In the second 'chunk' of 9 sessions, women participated in writing assignments about their life experiences.<br><br>One group leader was reported to have received DBT training. Attendance to consult is not clearly reported. | DBT group showed significant improvements compared to controls on the BDI ($p < 0.05$), the IIP ($p< 0.05$) and on all TSI subscales ($p < 0.05$) apart from the defensive avoidance TSI subscale ($p > 0.05$).<br><br>The effect sizes for DBT group were moderate - large, compared to small – average in no- contact comparison group. | 71% of women who dropped out of this study did so after the first 9 (DBT based) sessions were completed.<br><br>Study reports 45 – 75% of incarcerated women experience childhood physical and/or sexual abuse. |

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| **5. Eccleston & Sorbello (2002)** | Participants recruited from high-risk units in an Australian prison.<br><br>(Age & gender not reported)<br><br>Diagnoses not clearly reported. | Cohort pre- & post- design.<br><br>*Measures:* Depression, Stress and Anxiety [DASS] scale; Qualitative data also collected<br><br>Data collected pre- and post-therapy. | No control group.<br><br>N = 29. | *Partial DBT*<br>Intervention was named "The Real Understanding of Self Help Program". It made specific adaptations to DBT for offenders: e.g. simplified terminology, reordering of modules etc. Participants attended groups twice a week for two hours. Participants could access individual sessions as needed, however these were with counsellors not DBT therapists, hence the classification of Partial DBT.<br>Treatment lasted 20 weeks.<br><br>Therapists' DBT training unreported and they did not regularly hold consultation meetings. | The results were reported to show DBT had a 'positive impact' in reducing levels of distress (measured by their DASS scores). Results tables indicated however that some participant's mean anxiety and depression scores had deteriorated marginally post-therapy.<br><br>However, the statistical significance of findings was not explored so findings need to be approached with caution.<br><br>Participants gave positive qualitative feedback. | Paper only offers a preliminary evaluation of intervention.<br><br>Paper highlights issues with self-harm within forensic institutions, advocating the use of DBT. |

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| **6. Evershed, Tennant, Boomer, Rees, Barkham & Watson (2003)** | Males from a high security hospital in England.<br><br>(Age range: 25 – 52 years old)<br><br>Recipients of DBT had BPD diagnosis. All participants in control group had a PD diagnosis of some kind. | Cohort pre- & post- design.<br><br>*Measures:*<br>Buss-Durkee Hostility Inventory, Dutch Version; State – Trait Anger Exssion Inventory; Novaco Anger Scale. Behavioural incidents on wards were also recorded. Data collected pre-, mid- and post-intervention.<br><br>Data collected pre- mid- and post- therapy. | Yes -Treatment as Usual (TAU) group.<br><br>N = 17<br><br>(DBT group: N = 8; TAU group: N = 9). | *Comprehensive DBT*<br>Participants engaged in DBT for 18 months attending weekly skills groups and individual sessions.<br><br>This study describes the forensic adaptations made to DBT: e.g. violent behaviour urges were prioritised alongside suicidal/self-harm urges and some DBT terminology was altered to match with participants' experiences/vocabulary.<br><br>Facilitators attended consultation but not all had undertaken DBT training. | Post- treatment the DBT group's frequency of violent behaviour was not significantly improved compared to the control group ($p = 0.21$), who also made improvements after engaging in treatment as usual.<br><br>Nevertheless, the DBT group did make significant improvements, compared to controls ($p < 0.01$), in terms of the seriousness of their violent behaviour. | The DBT group had lower attrition rates than TAU group.<br><br>TAU group had spent significantly fewer years in prison and had more varied mental health difficulties as compared to the DBT group.<br><br>DBT participants engaged in other therapies available within the hospital, so treatment effects cannot be isolated. |

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| **7. Fox, Krawczyk & Staniford (2015)** | Females from a low secure unit in England.<br><br>(Age range: 18 – 45 years old, mean age = 29 years).<br><br>Recipients of DBT all met criteria for BPD diagnosis. | Cohort pre- & post- design.<br><br>*Measures:*<br>Overt Aggression Scale [OAS]; Global assessment of Functioning [GAF], Brief Psychiatric Scale [BPRS]; Camberwell Assessment of Need – Forensic Short Version [CAN-FS]; Health of the Nation Outcomes Scales for users of secure and forensic services [HoNOS-FS]; Zanarini Rating Scale for Borderline Personality Disorder [ZAN-BPD].<br><br>Data collected at admission and at 6 and 12-month follow-up. | No control group.<br><br>N = 18. | *Comprehensive DBT*<br>Participants attended individual sessions, a DBT skills group covering all four modules, and could access telephone counselling. Treatment lasted for a minimum of 1 year.<br><br>Clear descriptions of adaptations made to DBT for this forensic setting are given: e.g. DBT groups took place twice a week; instead of using a telephone participants asked for ad-hoc support from therapists if they saw them on the ward.<br><br>Therapists attended DBT training and weekly consultation meetings. | Participants showed significant improvements on all measures at the end of the 1-year treatment (see statistical output for each measure below). Most improvement was made between admission and 6-month period. No follow-up data is reported.<br><br>▪ OAS ($p<0.01$, moderate effect size of $r = 0.44$)<br>▪ GAF ($p < 0.01$, large effect size of $r = -0.62$)<br>▪ BPRS ($p < 0.01$, large effect size of $r = 0.54$)<br>▪ CAN-FS ($p < 0.01$, moderate effect size of $r = -0.45$)<br>▪ HoNOS-FS ($p < 0.01$, small effect size of $r = -0.23$)<br>▪ ZAN-BPD ($p < 0.01$, moderate effect size of $r = -0.49$) | Authors state DBT can reduce risk levels to the extent that services can meet commissioner guidelines.<br><br>Authors suggest DBT skills may also help people be more independent (e.g. self-medicate) and further reduce services costs.<br><br>78% of sample experienced childhood sexual abuse.<br><br>Participants received other interventions so their improvements cannot be isolated to DBT. |

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| **8. Gee & Reed (2013)**<br><br>***N.B This is described as a pilot-study.*** | Females from a prison in England.<br><br>(Age range: 18 – 55 years old).<br><br>Unclear if all participants met criteria for BPD diagnosis. | Evaluation of pilot project. Study design not clearly described.<br><br>*Measures:*<br>Clinical outcomes in routine evaluation measure [CORE]; Matrix evaluation and client satisfaction questionnaires were also completed.<br><br>Data collected pre- and post-therapy, and every 4 weeks in-between. | No control group.<br><br>N = 85 | *Partial DBT*<br>This study delivered The Holloway Skills Therapy [HoST] programme - a shortened form of DBT that allowed those with shorter sentences to participate. HoST provided group training and individual therapy. Participants attended two DBT skill groups per week and a one-to-one therapy session. Whilst all DBT modules are taught, females could participate in this study if they completed only one module (hence why it was classified as partial DBT).<br><br>The therapy team attended consultation meetings; Specific DBT training is not described. | CORE scores showed 68% of sample made improvements and decreased their suicide risk. The statistical significance of results were not explore/reported, however scores are described to improve and approach clinical thresholds.<br><br>Younger offenders (aged 18 – 21) showed most improvement.<br><br>Client satisfaction forms showed 98% found the programme useful in some way. | Paper argues that incarceration offers a unique chance for sustained therapeutic engagement for people with BPD who may struggle to access community services. However, they feel the "churn" of a prison population makes the length of DBT programmes impractical, hence their adaptations in the HoST program. |

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| **9. Long, Fulton, Dolley & Hollin (2011)** | Females from a medium secure unit in England<br><br>(Mean age = 31.7 years old).<br><br>Participants had dual diagnosis of BPD and Psychotic disorder. | Cohort pre- & post- design.<br><br>*Measures:*<br>Barratt Impulsiveness Scale; Dealing with Feelings Questionnaire; Coping Responses Inventory [CR-I]; The Anxiety [BPRS-A], Depression [BPRS-D], Suicidality [BPRS-S], Hostility [BPRS-H], Guilt [BPRS-G] and Tension [BPRS-T] subscales of the Expanded Brief Psychiatric Rating Scale; Generalized Self-Efficacy Scale [GSE-S]. Participant's risky behaviour was also recorded.<br><br>Data collected pre, mid- and post- therapy. | Yes- non-completers acted as a control group.<br><br>N = 44 (DBT Completers: N = 29; Non-completers: N = 15). | *Partial DBT*<br>The brief intervention description states that participants attended weekly group sessions (covering three modules: distress tolerance, emotional regulation and reducing emotional vulnerability). Women also engaged in individual skill practice sessions and completed relapse prevention plans.<br><br>Therapists' DBT training/attendance to consult is not clearly reported. | Completers had significantly improved scores on the majority of scale and post DBT (see bullet points below for reported statistical outputs).<br><br>▪ BPRS-A; BPRS-S ($p < 0.01$)<br>▪ BPRS-G ; BPRS-H ($p < 0.05$)<br>▪ CR-I ($p<0.01$)<br>▪ GSE-S ($p <0.05$)<br><br>Compared to non-completers, completers showed significant reductions in the number of incidents of self-harm ($p <0.05$), suicide attempts ($p < 0.01$) and number of physical assaults ($p< 0.01$). | This paper advocates that DBT holds potential, as a treatment option to meet the varying needs of individuals with complex histories and dual diagnoses. |

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| **10. Low, Jones, Duggan, MacLeod & Power (2001a)**<br><br>***N.B. Different quality appraisal tool used to other papers due to paper's case study design.*** | Females from a high security hospital in England.<br><br>(Age range: 19 – 34 years old. Mean age: 32.3 years old)<br><br>Participants met criteria for BPD diagnosis. | Cohort pre- & post- design.<br><br>*Measures:* Rosenburg Self-esteem scale; Beck's Hopelessness and Suicide Ideation scale; Beck Depression Inventory; Dissociative Experiences Scale; Reasons for Living Inventory; Impulsiveness, Venturesomeness and Empathy Scale. Incidents of self-harm on hospital ward were also recorded.<br><br>Data collected pre-, mid- and post- therapy, and at 6 month follow up. | No control group.<br><br>3 Illustrative Case Studies<br><br>N = 3. | *Comprehensive DBT*<br>Participants engaged in weekly individual therapy focussing on their risky target behaviours and weekly skill training sessions, which for practical reasons were undertaken on a one-to-one basis.<br><br>Participants could also use a telephone service in-between sessions. Participants engaged in DBT for one year.<br><br>Therapists' DBT training/attendance to consult is not clearly reported. | Improvements across the cases included reduced suicidal ideation, improved self-esteem and periods of reduced self-harm. One participant stopped self-harm for one-year and another's improvement enabled them to be moved to a lower secure setting.<br><br>However, when exploring the reported data in detail it appears participants' improvements fluctuated throughout therapy.<br><br>This paper reported case study data and does not explore/report any statistical analysis of quantitative data. | Paper gives rich detail of DBT's application for individuals experiencing severe difficulties and complex abuse histories.<br><br>Authors suggest that DBT holds much promise for complex cases, however it is likely such cases require longer than one year in therapy.<br><br>Participants also received additional interventions alongside DBT so treatment effects cannot be isolated.<br><br>Results are not generalisable due to papers' case study design. |

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| **11. Low, Jones, Duggan, Power & MacLeod (2001b)**<br><br>***N.B this study includes the 3 participants in the Low et al., 2001a study described in the above row and is described as a pilot-study.*** | Females from a High Security Hospital in England.<br><br>(Age range: 20 – 44 years old, mean age: 28.7 years)<br><br>Participants met criteria for BPD diagnosis. | Cohort pre- & post- design.<br><br>*Measures:* Irritability, Depression & Anxiety Scale, Dissociative Experiences Scale, Reasons for Living Inventory, Beck Hopelessness, Suicide Ideation & Depression Inventory scales & Eysenck Impulsiveness Scale. Rates of self-harm also collected.<br><br>Data collected pre-, mid- and post- therapy and at 6 month follow up. | No control group.<br><br>N = 10 | *Comprehensive DBT*<br>Each week participants received one-to-one therapy sessions and one hour of skills training (delivered on a one-to-one basis). Participants could also access telephone coaching.<br><br>Treatment lasted 1 year.<br><br>Therapists' DBT training/attendance to consult is not clearly reported. | Post- DBT dissociative experience had improved significantly ($p < 0.05$) as well as participants' survival and coping beliefs ($p < 0.01$). Suicidal intent had also significantly improved post-treatment ($p < 0.05$). Participants' self-harm significantly reduced; this was sustained at 6 month follow up ($p < 0.05$).<br><br>No significant changes were reported for irritability and anxiety measures.<br><br>However, authors state that the nature of study meant they could not isolate these effects to DBT treatment specifically. | Two participants dropped out due to 'limited cognitive ability'. Furthermore, 70% of the sample met criteria for other PD diagnoses. |

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| **12. Nee & Farman (2005)**<br><br>***N.B This is described as a pilot-study.*** | Females from prisons in England.<br><br>(Age range: 19 – 49 years old, mean age: 31 years).<br><br>All participants had BPD diagnosis and were recruited from 5 DBT projects (2 x 1 yearlong programs, 2 x 12-week programs, 1 x 16-week program) | Cohort pre- & post- design.<br><br>*Measures:*<br>Borderline Syndrome Index; Impulsivity, Locus of Control, Self-esteem, Emotionality, Suicidal Ideation and Quality of Life measures.<br><br>Data collected pre-, mid- and post- therapy, including a 6-month follow up. Qualitative feedback also collected. | Yes - a waiting – list control group.<br><br>N = 19<br>(DBT groups: N = 14. Waiting list control-group: N = 5). | *Comprehensive DBT for year-long programs*<br>This paper describes that participants in the yearlong programs received 'standard' DBT.<br><br>*Unable to determine DBT fidelity for shorter DBT programs*<br>The treatment description of participants engaging in the 12 or 16-week DBT programs is unclear<br><br>DBT programs were described to utilise an answer phone system instead of a 24-hour telephone coaching line.<br><br>Therapists received training, however the supervision is described as 'sparse'. | It was concluded overall that DBT completers had improved scores on many of the psychometric measures, however the overall change was not statistically significant ($p > 0.05$).<br><br>It was also reported that participants' rates of self-harm showed improvement, however again this was not statistically significant and on closer inspection of data a slight increase in self-harm at a 6-month follow-up was apparent.<br><br>It is noted that these results are taken from a pilot study and have been aggregated in a larger study by Nee & Farman (2008) detailed in row no.14 below. | The results of this study are described as tentative due to the small sample size.<br><br>'Most' of sample had a history sexual abuse.<br><br>Study provides helpful recommendations for prison setting and suggests that follow up support is important. |

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| **13. Nee & Farman (2007)**<br><br>***N.B. Different quality appraisal tool used to other papers due to paper's case study design*** | Females from three prisons in England.<br><br>(Age range: 19 – 26 years old, mean age: 21.6 years).<br><br>Participants had a diagnosis of BPD. | Cohort pre- & post- design.<br><br>*Measures:*<br>(please see the row below for Nee & Farman (2008) study as the same measures were used)<br><br>Data collected pre-, mid- and post- therapy, including a 6-month follow up. | No Control Group.<br><br>3 Illustrative Case Studies.<br><br>N = 3. | *Comprehensive DBT*<br>Participants engaged in standard one yearlong DBT program. This included: weekly one-to-one therapy, two-hour group sessions and the use of an answer phone system for access to 24-hour consultation.<br><br>Therapists received external consultation and supervision. Training of therapists is not clearly described. | All three participants showed improvements in their BPD symptoms and quality of life, alongside reducing their frequency of self-harm.<br><br>Measures also indicated that DBT could help reduce re-offending risk.<br><br>This paper reported case study data and does not explore/report any statistical analysis of quantitative data | Two participants had history of sexual abuse.<br><br>The rich case description of this paper illustrates how DBT can be applied across a variety of presentations.<br><br>Results are not generalisable due to papers' case study design. |

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| **14. Nee & Farman (2008)**<br><br>***N.B. This study includes data from the participant samples described in the Nee & Farman (2005; 2007) studies above.*** | Females from a prison in England.<br><br>(Age range: 19 – 49 years old)<br><br>Participants had a diagnosis of BPD. | Non-randomised control study.<br><br>*Measures:* Borderline Syndrome Index [BSI]; Custodial Adjustment Questionnaire [CA-Q); Dissociative Scale; Emotional Control Q.; Eysenck's Impulsivity Inventory [EI-I]; Locus of Control Q [LoC-Q]; Personal Feelings Q.; Reasons for Living & Rosenberg's Self-Esteem Inventory [RSE-I]; State Trait Anger Expression Inventory [STAE-I]. Rates of self-harm were also recorded.<br><br>Data collected pre- and post-therapy and at a 6- month follow-up for yearlong DBT group. | Yes – Waiting list control group<br><br>N = 27 (1-Year long DBT group: N=9, Shorter 16-week DBT group: N = 13, Waiting list control group: N = 5). | *Comprehensive DBT*<br>All participants received weekly individual therapy, attended group skills sessions covering all four modules of DBT and had use of an answerphone based telephone. Therapists also attended consultation meetings.<br><br>Training of therapists is not described.<br><br>One group engaged with treatment for a period of one year, the other group engaged with treatment for a period of 16-weeks only. | *1 Year Long DBT:*<br>Pre- and post- analysis within groups showed this DBT programme statistically improved borderline symptoms (BSI = $p < 0.01$), impulsivity (EI-I = $p < 0.01$), control (LoC-Q = $p < 0.01$), self-esteem (RSE-I = $p < 0.01$) and anger (STAE-I = $0.05 < p < 0.1$). These improvements remained at 6-month follow up. However these improvements were not significant when compared to controls.<br><br>*Shorter 16-week DBT:*<br>Within group analyses of this DBT program showed significant improvements for borderline symptoms (BSI = $p < 0.05$), coping (CA-Q Distress subscale = $p < 0.01$; RSE-I Survival and Coping belief subscale | Authors stipulate that the control group showed similar improvements to DBT groups due to the generalisation of DBT principles on the prison wing (where participants resided) by participants and staff.<br><br>Authors assert that for DBT to be "safe" in secure environments, practitioners must attend supervision, and that Linehan's DBT manual and that DBT groups should have up to only 6 participants. |

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| **14. Nee & Farman (2008)** *(Continued)* | | | = p < 0.01), impulsivity (EI-I = p < 0.01), control (LoC-Q = p < 0.05) and self-esteem (RSE-I = p < 0.01). Shorter DBT programs were not compared to control groups.<br><br>Both program lengths reduced rates of self – harm, however this was not statistically analysed. |

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| **15. Pein, Kliemann, Schläfke, Kupke, Wettermann,Tardel, & Fegert (2012)**<br><br>***N.B. This** paper was **unobtainable in English and was therefore translated by** a colleague **fluent in German.*** | Forensic Hospital in Germany<br><br>Gender of participants not reported.<br><br>(Age range: 21 – 36 years old)<br><br>Not all participants had personality disorder diagnoses. | Cohort pre- and post- design.<br><br>*Measures:*<br>Frankfurt Attention Inventory [FAI]; Tower of London [ToL]; Colour-word-interference test; Forensic Operationalised Therapy Risk Evaluation System [FORTES]; Cognitive Flexibility – Trail Making Test.<br><br>Data collected pre- and post-therapy. | Yes – Treatment as Usual (TAU) group.<br><br>N = 29<br><br>(DBT Group, N = 14; TAU Group, N = 15). | *Comprehensive DBT*<br>Participants attended individual therapy once a week and a skills training groups twice a week, covering the four DBT modules. Treatment lasted 12 months.<br><br>Therapists' DBT training/attendance to consult is not reported. | The DBT group only showed significant improvement ($p < 0.05$) on the risk measure (FORTES) and on ToL measure. Both the DBT and TAU group showed significant improvement on the attention measure (FAIR = $p < 0.05$).<br><br>Authors suggest DBT was more effective at reducing forensic risk scores as 50% of the DBT group's risk scores reduced compared to only one third of the TAU group. | Some participants also had history of substance misuse.<br><br>This paper included measures of executive function due to past research identifying offenders often present with difficulties in this area. |

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| **16. Rosenfeld, Galietta, Ivanoff, Garcia – Mansilla, Martinez, Fava, Fineran & Green (2007)** | Male stalking offenders from probation services in America.<br><br>(Age range: 17 – 70 years old, mean age: 36.7 years).<br><br>Participants had varying diagnoses (e.g. psychosis and mood/personality disorders). | Cohort pre- & post- design.<br><br>*Measures:*<br>Millon Clinical Multiaxial Inventory; Aggression/Empathy Questionnaires, Means Ends Problem Solving Scale; Paulhaus Deception Scales; State-Trait Anger Expression Inventory; White Bear Suppression Inventory [WBS-I]; Ways of Coping Checklist. Reoffending rates.<br><br>Data collected pre- and post-therapy. | Non-completers acted as a control group.<br><br>N = 29 (DBT completers: N = 14; DBT non-completers: N = 15). | *Comprehensive DBT*<br>Participants attended a 6 month adapted DBT program. Therapy comprised weekly one-to-one sessions, group skills training and telephone coaching was available. Adaptations were made such as framing DBT examples so they were more relevant to this population's experience.<br><br>Therapists received DBT training and attended a consultation group. | Completers were significantly less likely to make a *stalking* re-offence compared to non-completers ($p = 0.04$). However the rates of re-arrest for any other offences between groups was not significant ($p = 0.23$), although they were still significantly improved compared to general recidivism data ($p = 0.08$).<br><br>Only one of the self-report measures showed significant change - Completers were using thought suppression more post DBT (WBS-I = $p < 0.05$). | Participants had to exit DBT if they missed three sessions in a row. This study had a high attrition rate (>50%). |

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| **17. Sakdalan, Shaw & Collier (2010)**<br><br>***N.B This is described as a pilot-study.*** | Males and Females with an intellectual disability (ID) from forensic services in New Zealand.<br><br>(Age range: 23 – 29 years old. mean age: 26.1 years)<br><br>Paper only states formal diagnoses of an ID. | Cohort pre- & post- design.<br><br>*Measures:*<br>Short-term assessment of risk and treatability [START]; Vineland Adaptive Behaviour Scales [VABS-II]; Health of the Nation Outcome Scales for people with learning disabilities [HONOS-LD]. Incident reports collected.<br><br>Key workers completed measures pre- and post- therapy. Qualitative feedback also collected from participants. | No control group.<br><br>Described as a pilot study.<br><br>N = 6 | *Partial DBT*<br>Study described an adapted DBT coping skills training program, lasting 13 weeks.<br>All four DBT modules were covered. The environment was also structured to support therapy (residential and vocational staff received training).<br><br>DBT therapists received group supervision. DBT therapists training not clearly reported. | Pre and post analyses yielded significant improvements/changes on all but one measure (see bullet points below for reported statistics)<br>▪ START risk domain ($p<0.05$)<br>▪ START strength domain ($p < 0.01$)<br>▪ HONOS-LD ($p < 0.01$)<br>▪ VABS-II ($p > 0.05$).<br><br>The 'incident reports' data was stated to be insufficient for analysis. Uniquely this study devised a 'DBT assessment' to gauge participants' learning of DBT material, post-therapy – the majority of participants scored in the moderate – high range. Qualitative feedback indicated participants liked the group however wanted more visual aids. | Participants in this study were diagnosed with mild – moderate ID. Most had an offence history of physical harm.<br><br>Treatment focused on participants' offending and challenging behaviour, as opposed to self-harm. |

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| **18. Sakdalan & Collier (2012)**<br><br>***N.B. Different Quality Appraisal Tool Used to other papers due to paper's case study design*** | Male high-risk sex offenders with an intellectual disability (ID) from forensic services in New Zealand.<br><br>(Age: males reported to be in mid-twenties and mid-thirties).<br><br>BPD Diagnoses not reported. | Cohort pre- and post- design.<br><br>*Measures:*<br>Sexual Violence Risk – 20 ; Assessment of Sexual Knowledge; Adapted Sex Offender Self-Appraisal Scale; Adapted Sex Offender Self-Appraisal Scale; Questionnaire attitudes Consistent with Sex Offending; Victim Empathy Scale.<br><br>Data collected pre- and post-therapy and the SVR- 20 was completed at a one-year follow up. | No control group.<br><br>N = 3.<br><br>3 Illustrative Case Studies. | *Partial DBT*<br>Participants engaged in a seven-month program, guided largely by a sexual treatment program (SOTSEC-ID manual). However, treatment also incorporated DBT coping skills to target emotion regulation, frustration tolerance, and social skills. The DBT concept of 'wise mind' and 'emotion mind' were used, as well as DBT techniques such as validation.<br><br>Therapists' DBT training/consult is not clearly reported. | This was a case study design and data was not statistically analysed. Nevertheless, participants showed improvements across all measures post-treatment and at a 1-year follow up. Participants' sexual knowledge, victim empathy, and cognitive distortion all improved.<br><br>Behaviours such as masturbation, sexual excitability and abusive behaviour were reported to reduce. | Authors suggest DBT was especially helpful informing the way participants coped with their negative emotions when talking about their previous offences during treatment.<br><br>Results are not generalisable due to papers' case study design. |

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| **19. Shelton, Kesten, Zhang & Trestman (2011)** | Male adolescents from correctional facilities in America.<br><br>(Age range: 16 – 19 years old, mean age: 17.92 years).<br><br>BPD diagnoses not reported. | Cohort pre- & post- design.<br><br>*Measures:*<br>Buss- Perry Aggression Questionnaire [BPAQ]; Overt Aggression Scale Modified; Brief Psychiatric Rating Scale; Ways of Coping Checklist [WCCL]; Positive and Negative Affect Scales [PANAS]. Disciplinary ticket information was also collected from participants' records.<br><br>Data collected pre- and post-therapy. | No control group.<br><br>N = 26. | *Partial DBT*<br>This study used the DBT-Corrections Modified group program (developed by Trestman, Gonillo & Davis, 2004). Participants engaged in a 16-week group skill-training program, which covered the four DBT modules. The study does not state that participants received one-to-one therapy sessions.<br><br>DBT terminology was simplified to make information more accessible to adolescents. The real life examples were also changed to align with adolescents' experiences<br><br>Therapists' DBT training/attendance to consult is not clearly reported. | Overall, results suggested DBT had a positive impact. There was a significant reduction in the amount of disciplinary tickets participants received post-DBT ($p = 0.011$), there were also significant improvements on aggression (BPAQ = $p < 0.01$) and distance coping strategies (WCCL distancing subscale = $p < 0.05$).<br><br>No significant changes were found on the PANAS scale for negative effect, or other WCCL subscales. | This paper looked at the effectiveness of DBT at reducing offenders' aggression levels. 60% of participants had committed a violence offence, the remaining were charged with non-violent crimes such as drug possession or breach of peace. |

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| **20. Shelton, Sampl, Kesten, Zhang & Trestman (2009)** | Males and females from prisons in America.<br><br>(Age range 16 – 59 years old, mean age: 28 years).<br><br>BPD diagnoses not reported. | Controlled Clinical Trial.<br><br>*Measures:*<br>Buss- Perry Aggression Questionnaire; Overt Aggression Scale Modified; Brief Psychiatric Rating Scale; Ways of Coping Checklist [WCCL]; Positive and Negative Affect Scales [PANAS]. Disciplinary ticket information was also collected from participant's records.<br><br>Data collected pre-, post-therapy, and at 6 and 12 month follow-up. | Compared two groups. Both groups attended a DBT group. Only one group received additional individual DBT sessions, the other group received regular case management.<br><br>N = 63 | *All participants received Partial DBT (attended DBT groups) – One of the groups received Comprehensive DBT as they then went on to have individual DBT sessions.*<br><br>All participants attended a twice-weekly DBT group that ran for sixteen weeks and covered all DBT modules. Participants were then randomly assigned to groups where they received either eight individual weekly sessions of 'DBT coaching' or eight weekly sessions of regular 'case management'.<br><br>Therapists' DBT training/attendance to consult is not clearly reported. | The number of disciplinary tickets received by those attending DBT group had reduced significantly post-treatment ($p = 0.025$), however this change in score was not significant at 6-month follow up ($p = 0.084$).<br><br>Significant improvements at 6-month follow up were however reported for the BPAQ aggression measure ($p = 0.0005$). In addition, the following subscales of the WCCL showed significant improvement at 6 month follow-up (all = $p < 0.05$): seeking social support, accepting responsibility, planful problem solving and escape-avoidance. populations. | Authors concluded that DBT one-to-one sessions were potentially just as good as regular case management. |

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| **21. Trupin, Stewart, Beach & Boesky (2002)** | Young females from a rehabilitation facility in America.<br><br>(Approximate mean age of sample = 15 years old).<br><br>BPD diagnoses not clearly reported. | Cohort pre- & post- design.<br><br>*Measures:* Diagnostic Interview Schedule for Children; Child and Adolescent Functional Assessment Scale; Massachusetts Youth Screening Instrument; Behaviour logs were used to record number of incidents (e.g. self-harm, aggressive behaviour etc.); Rate of punitive behaviour by staff was also recorded<br><br>Data collected pre-, mid- and post- therapy. | Yes –study included two DBT groups and one treatment as usual (TAU) group.<br><br>N = 90<br><br>(DBT Groups: N = 45; TAU Group: N = 45). | *Comprehensive DBT* Participants attended DBT groups covering all skill modules. Participants also completed homework and DBT diary cards and could engage with DBT trained staff individually outside of group sessions. The treatment period of this study spanned 10 months.<br><br>Therapists attended DBT training and regular consult groups. However not all therapists received the same level of training. | The two DBT groups consisted of a DBT group for offenders with mental health conditions (MHC) and a DBT group for offenders without a MHC. Only the MHC DBT group showed a significant ($p = 0.01$) improvement in their behavioural difficulties such as self-harm, mood disturbance. However these improvements were not significant ($p = 0.27$) when compared to data collected from the previous year, prior to DBT's implementation<br><br>Results suggested DBT training reduced staff use of punitive action as the use of it significantly improved ($p = 0.04$) when compared to data from the previous year prior to staff receiving DBT training | DBT intervention only had significant impact upon group with MHC – however the therapists in this group received DBT training that was more intensive.<br><br>Since similar improvements were found in females' behaviour from the year before, prior to DBT being implemented, this may suggest behavioural changes are not due to DBT. |

### 3.2. Sample Characteristics

Across papers there is a combined sample of 773 participants. This total excludes the samples of Nee and Farman (2005; 2007) and Low et al. (2001a) to avoid double-counting (these samples were included in Nee and Farman (2008) and Low et al. (2001b)). The individual sample sizes of the papers ranged from 3 to 158 participants. Whilst not all papers reported the number of participants in their treatment groups, from those that that do it is approximated that 521 of the 773 participants were recipients of a DBT informed therapy, with the remainder of participants acting as controls. Of the 521 participants, it is approximated that 160 participants received 'Comprehensive DBT' as opposed to 'Partial DBT' (as defined in Table 2). Participant samples were recruited from forensic services from a variety of countries, of the eighteen papers (with double-counts removed) seven studies were undertaken in America, one in Canada, two in New Zealand, one in Australia, one in Germany and six in England.

### 3.3 Participant Characteristics

The reported mean age of samples ranged from 16 to 36 years of age. The majority of papers (n = 11) had entirely female samples, five had entirely male samples, three had mixed gender samples, and two papers did not clearly report participants' demographic information. The reviewer was able to ascertain that eight papers assessed the utility of DBT within forensic services specifically for individuals who met criteria for a diagnosis of BPD; however, one paper reported participants had dual diagnoses of BPD and psychotic disorder (Long et al., 2011).

In regards to papers assessing the use of DBT for specific offending populations, four reported findings for adolescent/juvenile samples, two reported findings for people with an intellectual disability, and two reported findings for the use of DBT with sex offenders. Furthermore, four papers noted that many individuals in their samples had experienced historic abuse - predominantly sexual (e.g. Fox et al., 2015).

### 3.4 Quality Appraisal of Studies

For each paper's appraisal see Table 5 for EPHPP quality ratings and Table 6 for case studies DID quality ratings. An overwhelming majority of papers (17 out of 21) received an overall weak quality rating; three papers were rated as moderate and only one case study paper received an overall strong rating.

*Table 5 – Quality Ratings for Quantitative Studies included in this review against the EPHPP Quality Assessment Tool (Thomas et al., 2004)*

| **Study:** | Selection Bias | Study Design | Confounders | Blinding | Data Collection Methods | Withdrawals & Dropouts | **Overall rating of Paper** |
|---|---|---|---|---|---|---|---|
| 1. Aspche et al., 2003 | Weak | Weak | Weak | Moderate | Weak | Weak | **Weak** |
| 2. Barnoski 2002 | Weak | Moderate | Weak | Moderate | Moderate | Weak | **Weak** |
| 3. Blanchette et al., 2011 | Moderate | Moderate | Weak | Moderate | Weak | Moderate | **Weak** |
| 4. Bradley et al., 2003 | Weak | Strong | Weak | Moderate | Strong | Moderate | **Weak** |
| 5. Eccleston et al., 2002 | Weak | Moderate | Weak | Moderate | Strong | Weak | **Weak** |
| 6. Evershed et al., 2003 | Weak | Moderate | Weak | Moderate | Weak | Weak | **Weak** |
| 7. Fox et al., 2015 | Weak | Moderate | Weak | Moderate | Moderate | Weak | **Weak** |
| 8. Gee et al., 2013 | Weak | Weak | Weak | Moderate | Weak | Weak | **Weak** |
| 9. Long et al., 2011 | Weak | Moderate | Weak | Moderate | Weak | Moderate | **Weak** |
| 10. Low et al., 2001b | Moderate | Moderate | Weak | Moderate | Strong | Moderate | **Moderate** |
| 11. Nee et al., 2005 | Moderate | Moderate | Weak | Moderate | Weak | Weak | **Weak** |
| 12. Nee et al., 2008 | Moderate | Moderate | Weak | Moderate | Weak | Weak | **Weak** |
| 13. Pein et al., 2012 | Weak | Moderate | Weak | Weak | Strong | Weak | **Weak** |
| 14. Rosenfeld et al., 2007 | Moderate | Moderate | Weak | Moderate | Weak | Weak | **Weak** |
| 15. Sakdalan et al., 2010 | Weak | Moderate | Weak | Moderate | Strong | Moderate | **Weak** |
| 16. Shelton et al., 2011 | Weak | Moderate | Weak | Moderate | Weak | Moderate | **Weak** |
| 17. Shelton et al., 2009 | Moderate | Strong | Weak | Moderate | Strong | Weak | **Weak** |
| 18. Trupin et al., 2002 | Moderate | Moderate | Weak | Moderate | Weak | Weak | **Weak** |

*Table 6 - Quality Ratings for Papers Presenting Case Studies included in this review against the DID framework (Department for International Development, 2014)*

| **Study:** | Low et al. (2001a) | Nee et al. (2007) | Sakdalan et al. (2012) |
|---|---|---|---|
| ***Conceptual Framing:*** | | | |
| Is existing research acknowledged? | Yes | Yes | Yes |
| Is a conceptual framework constructed? | Yes | Yes | Yes |
| Is there a research question/hypothesis? | No | No | Yes |
| ***Transparency:*** | | | |
| Is raw data linked to analyses? | Yes | Yes | Yes |
| Is the study's context described? | Yes | Unclear | Yes |
| Is funding declared? | Yes | Unclear | No |
| ***Appropriateness:*** | | | |
| Is a research design described and suited to the research? | Yes | Yes | Yes |
| ***Cultural Sensitivity:*** | | | |
| Are specific cultural factors considered? | Yes | Yes | Yes |
| ***Validity:*** | | | |
| Are measures valid? | Yes | No | No |
| Is the study externally, internally and ecologically valid? | No | No | No |
| ***Reliability:*** | | | |
| Are measures reliable? | Yes | No | No |
| Will findings change depending on analytical technique? | Unclear | Unclear | Unclear |
| ***Cogency:*** | | | |
| Is the reader signposted throughout? | Yes | Yes | Yes |
| Are limitations considered? | Yes | Yes | Yes |
| Are conclusions based on results? | Yes | Yes | Yes |
| **Overall Rating:** | **Strong** | **Moderate** | **Moderate** |

One of the three papers appraised against the DID (2014) had an overall rating of strong (Low et al., 2001a), the other two papers were rated as moderate (Nee & Farman, 2007; Sakdalan et al., 2012) with quality marked down as some of their psychometric measures did

not have reported validity or reliability. Furthermore, there was uncertainty over the funding and support agencies of these papers, making possible experimenter bias difficult to determine. A brief description of scoring of the quantitative papers (n = 18) against each section of the EPHPP quality appraisal tool is given below to illustrate how their robustness in the respective research areas could be improved in the future.

Selection Bias

Eleven papers received a weak selection bias rating due to unclear reporting of their selection processes or because their participant samples were recruited from one unit/ward within one service only. Six papers received a moderate rating as they collected data for participants engaging in DBT from multiple units within one forensic service, or across multiple forensic service sites - these papers could not be rated as strong as they did not report participation rates.

Study Design

Two papers (Bradley et al., 2003; Shelton et al., 2009) received a strong rating for study design as the researchers randomly assigned participants to groups. The majority of papers (n =14) received a moderate rating through utilising a cohort analytic pre- and post-test design. One paper (Aspche &Ward, 2003) received a weak rating as it only collected data post-intervention; Gee et al.'s (2013) study also scored weakly due to incomplete description of the study design. Five of the twenty-one papers defined themselves as pilot studies.

Confounders

Robust reporting of the control for potential confounding variables relative to a study's focus of interest was lacking in all of the papers included in this review. Whilst some papers allude to the control of confounders, specific details (e.g. the statistical methods by which confounders were controlled for at baseline) were not clearly reported. Some studies disclosed

their findings could not be isolated to DBT as participants engaged in other therapies during the same time period.

Blinding

Quality ratings for blinding were compromised due to papers under-reporting about this process. Some papers received weak ratings because measure completers were aware of participants' intervention status.

Data Collection Methods

Many studies utilised data with good face validity (e.g. participants' rates of self-harm). However, the reviewer was unable to determine whether some of the papers' (n = 9) psychometric measures were reliable and valid for the population they were administered to. Nevertheless, over a third of papers received strong ratings as they only included reliable and valid measures; these papers may act as good reference points for professionals undertaking future research in this area.

Withdrawals and Dropouts

Six papers received a moderate quality score for this section as 60 – 80% of their sample completed the study. Since high attrition rates and engagement issues are common within the forensic population it is perhaps not surprising that no papers received a strong rating. The remaining twelve papers received weak ratings due to either the absence of reported information or because more than 40% of their sample withdrew from the study.

### 3.5 Fidelity of Studies to DBT

The variation in the delivery of DBT between studies was notable. Using the descriptions in Table 2, studies were defined as delivering 'Partial DBT' or 'Comprehensive DBT'. Whilst fuller descriptions of DBT delivery are provided in Table 4, to give an overview: twelve papers were defined as delivering 'Comprehensive DBT', with the remainder delivering

'Partial DBT'. The duration of DBT programs in the papers reviewed ranged from 12 weeks (Nee & Farman, 2005) to 18 months (Evershed et al., 2003), however some of the studies included data from participants engaging in DBT for as little as 14 days (Barnoski, 2002), or for the minimum of one DBT module (Gee & Reed 2013).

Alongside one-to-one therapy and skills training sessions, modes of treatment in DBT also include a 24-hour telephone coaching system and therapists' attendance at DBT consultation sessions; only ten papers reported therapists' attendance to regular DBT consults. The feasibility of a 24-hour telephone coaching system within forensic settings is also limited due to increased security restrictions, nevertheless four papers (Low et al., 2001b; Nee & Farman, 2005; 2008; Rosenfeld et al., 2007) reported on treatment that incorporated a telephone or answer-phone based coaching line. One study (Blanchette et al., 2011) described offering 24-hour coaching support within a prison, whereby participants could approach certain staff members who were familiar with DBT as needed.

A final point relative to the integrity of DBT was the reporting of clinicans' DBT training. For instance, Evershed et al. (2003) stated 'DBT therapists had no adherence training and it is impossible to determine the extent to which the treatment delivered was truly DBT' (pp. 210). Again, the reporting of DBT training was mixed, the majority of papers did not report this information, and those that did gave sparse detail.

### 3.6 Outcome Measurements

A mixture of data recording methods were used by papers to assess DBT outcomes. Studies collected data at different time points; many papers noted that the nature of forensic services are not conducive to consistent/reliable data collection. In total, two papers collected data post-intervention only, ten papers collected data pre- and post-intervention, and nine papers collected data pre- and post-intervention and also at follow-up.

Comprehensive accounts of the measures and data collection procedures for each study are presented in Table 4; there was little consistency in the measures used, as outcome focus varied considerably. For the purpose of this review, papers' "outcome focus" was categorised across the two domains below:

1. Participants' offending/antisocial behaviour – this data included participants' rates of reoffending, their number of 'anti-social' incidents at prison or their scores on anger/hostility measures.

2. Participants' well-being and rate of parasuicidal behaviour – this data included participants' scores on depression/trauma/well-being measures and the number of incidents of self-harm/suicide attempt.

Some papers focused on both of these outcomes. The focus of each paper is shown in Table 7.

| *Table 7 - Outcome Focus of Studies* | |
|---|---|
| ***Main Outcome Focus:*** | *Paper Reference:* |
| **Participants' offending/anti-social/aggressive behaviour:**<br><br>***(N = 7 papers)*** | Barnoski (2002); Evershed, Tennant, Boomer, Rees, Barkham & Watson (2003); Pein, Kliemann, Schläfke, Kupke, Wettermann, Tardel, & Fegert (2012); Rosenfeld, Galietta, Ivanoff, Garcia – Mansilla, Martinez, Fava, Fineran & Green (2007); Sakdalan & Collier (2012); Sakdalan, Shaw & Collier (2010); Shelton, Sampl, Kesten, Zhang & Trestman (2009). |
| **Participants' well-being and rate of para-suicidal behaviour (self-harm and suicide attempts)**<br><br>***(N = 5 papers)*** | Bradley & Follingstad (2003); Eccleston & Sorbello (2002); Gee & Reed (2013); Low, Jones, Duggan, MacLeod & Power (2001a); Low, Jones, Duggan, Power & MacLeod (2001b). |
| **Papers focusing on both outcomes:**<br><br>***(N = 9 papers)*** | Aspche & Ward (2003); Blanchette, Flight, Verbrugge, Gobeil & Taylor (2011); Fox, Krawczyk & Staniford (2015); Long, Fulton, Dolley & Hollin (2011); Nee & Farman (2005); Nee & Farman (2007); Nee & Farman (2008); Shelton, Kesten, Zhang & Trestman (2011); Trupin, Stewart, Beach & Boesky (2002). |

### 3.7 Findings: The Effectiveness of DBT within Forensic Services

It should be noted that, in many studies, the weakness of their design profoundly limits the ability for any conclusive statements to be made about the utility/efficacy of DBT for forensic populations; thus, any inferences drawn from their findings are made with caution. Papers' findings will be summarised against the outcome domains of (1) participants' offending/antisocial behaviour and/or (2) participants' well-being and rates of parasuicidal behaviour. Within these sections, papers will also be organised as to whether they delivered 'comprehensive' or 'partial' DBT (see Table 2).

### 3.7.1 DBT Outcomes for Offending and Anti-Social Behaviour within Forensic Services

*Comprehensive DBT:*

Eight papers (Evershed et al., 2003; Fox et al., 2015; Nee & Farman, 2005; 2007; 2008; Pein et al., 2012; Rosenfeld et al., 2007; Trupin et al., 2002) reported on comprehensive DBT and outcomes of offending/anti-social behaviour. Rosenfeld et al. (2007) assessed re-offending rates of stalkers; DBT therapy completers were significantly less likely to reoffend when compared to treatment non-completers and to published data on reoffending. However, contrastingly, DBT completers showed a significant increase on anger measures post-therapy; authors present this as a positive finding that represents participants' improved expression of anger. Whilst this study was categorised as comprehensive DBT, it could be considered a reduced program (six months in length), as it was shorter than the standard yearlong therapy. Rosenfeld et al.'s (2007) data is also considered with caution since some participants scored highly on deception measures, casting doubt on the validity of their self-report.

Uniquely, Pein et al. (2012) assessed cognitions thought to underlie offending behaviour. Alongside measures of risk, participants' executive functioning was assessed across attention, cognitive flexibility, goal-setting and information-processing tasks. Compared to a TAU group, DBT completers significantly improved their deductive reasoning, however there was no significant difference between groups for attention performance or cognitive flexibility. In terms of their forensic risk, half of the DBT group made reliable improvements compared to only one third of the TAU group - this difference was not statistically significant.

Trupin et al. (2002) assessed anti-social behaviour by recording the frequency of punitive responses from staff to females in a juvenile rehabilitation facility; there was a significant improvement compared to the previous year when DBT had not been implemented. Staff who received intense DBT training (80 hours) applied DBT more successfully, compared

to staff who received less training (16 hours). Furthermore, there was a complete absence of some 'punishments' (e.g. room confinement) by DBT trained staff. DBT intervention also improved young people's engagement in educational and other therapeutic activities, however no statistical changes were found in participants' risk/behaviour. Nevertheless, authors concluded that DBT produced meaningful relational improvements for females with mental health conditions, though it is not clear how this was measured.

Some papers results suggested that DBT was effective in reducing levels of aggression (Evershed et al., 2003; Fox et al., 2015). The most recent of these studies by Fox et al. (2015) found females within a low secure inpatient unit, showed significant improvements in their physical/verbal aggression after engaging in DBT for a year, this included aggression to other people and aggressive acts (e.g. damaging furniture). Evershed et al. (2003) assessed DBT for males with BPD, specifically targeting their violence and aggression. Compared to unmatched controls, participants who engaged in DBT for 18 months showed significantly better management of violence and aggression as evidenced by their scores on relatable measures, however significant changes were not evident on all anger sub-scales and the difference in reduced frequency of violent behaviour was not significant between the DBT and control group. Evershed et al. (2003) suggest this is explainable by the study's small sample size (n = 17) and the varied nature of participants' difficulties. The perceived utility of DBT for this client group is perhaps illustrated by this paper's qualitative report that five of the eight males who engaged in DBT independently set up their own skills practice group after treatment ceased. Though Evershed et al. (2003) reported an encouraging low attrition rate (n = 1) this study was particularly confounded by methodological limitations, including non-equivalence of DBT and control groups at baseline, and DBT clinicians were not adequately trained thus compromising fidelity of the DBT treatment.

Rosenfeld et al. (2007) reported male stalking offenders had improved scores on anger measures which approached statistical significance post-DBT and indicated improved awareness of their anger expression, however more than half of their sample did not complete therapy, thus limiting the generalisability of results. Rosenfeld et al.'s (2007) and Evershed et al.'s (2003) contrasting attrition rates make it difficult to ascertain how effectively DBT conserves therapeutic engagement/attendance.

Nee and Farman's (2007) case study data on three women, though not statistically analysed, showed some improvements in women's scoring on anger measures post-DBT, though it is unclear whether improvements lasted at follow-up, as authors describe participants showing 'small deteriorations'. Qualitatively they explain that some women's behaviour, whilst still anti-social, was less violent than it had been previously. In a second study, Nee & Farman (2008) reported no significant difference on anger measures when comparing year-long DBT therapy completers' scores against wait-list controls. However, within group pre- and post-analyses found that the year-long DBT groups' anger scores did reduce significantly. Authors suggest significant differences were not found between DBT and control groups because all participants resided on the same unit with DBT trained staff, which potentially meant the control group indirectly benefited from DBT principles.

*Partial DBT:*

Eight papers (Aspche & Ward, 2003; Barnoski, 2002, Blanchette et al., 2011; Long et al., 2011; Sakdalan & Collier, 2012; Sakdalan et al., 2010; Shelton et al., 2009; Shelton et al., 2011) reported on partial DBT and outcomes of offending/anti-social behaviour. Whilst the description of DBT intervention indicated that Barnoski (2002) and Blanchette et al. (2011) offered a comprehensive DBT program, it was classed as partial DBT as data for the 'DBT group' included participants with a curtailed treatment period lasting less than one-month.

Therefore, it was felt that these data were not representative of people who had undertaken comprehensive DBT.

Barnoski (2002) found adolescent male and females who engaged in DBT had favourable re-conviction rates at 12-month follow-up compared to a control group, but these differences were not statistically significant. This paper achieved a weak quality rating owing to its limited and brief report; nevertheless a relative strength is its report that results were obtained after statistically controlling for group differences. Blanchette et al. (2011) also assessed prisoners' reconviction rates, and reported DBT participants had higher rates of recall to prison. However, the authors suggest that the actual rate of re-offence was low and 'technical' reasons surrounding women's mental health better explained why they had been recalled to prison. Blanchette et al. (2011) also highlight that staff required more training to provide follow-up support post-DBT and this may have affected outcomes for participants.

Salkadan and Collier (2012) assessed an intervention program mainly constructed from a sex-offender treatment manual; their intervention only included 'adapted DBT coping skills training' (pp.6). The additional material from another manual makes it difficult to separate the effects of DBT specifically. Nevertheless, findings showed a notable reduction in all participants' (n=3) level of risk, including reduced incidents of sexually abusive and aggressive behaviour; these improvements persisted at a one-year follow-up, although improvement throughout therapy was not reported. Authors speculated that improvements in participants' non-sexual, aggressive behaviours resulted from the DBT skills training intervention element, since this was targeted specifically to address frustration tolerance and emotional regulation. Aspche and Ward's (2003) sample also comprised sexual offenders; adolescent males engaged in an intervention program called Mode Deactivation Therapy (MDT), which integrates premises of DBT such as validation and dialectical thinking, the results showed recipients of MDT (incorporating DBT principles) had better behaviour as measured by the behavioural

consequences/restrictions they received compared to a control group receiving CBT, however the statistical significance of these findings were not reported.

Other papers (Long et al., 2009; Sakdalan et al., 2010; Shelton et al., 2011) looked at programs offering offenders DBT group skill sessions only. These papers found positive outcomes for many participants as measured by their behaviour within the forensic facility and also on measures of hostility and risk. Whilst identifying limits of their study to include a lack of comparison group and small sample size, Sakdalan et al. (2010) describe the delivery of DBT to individuals with an intellectual disability, results showed significant post-treatment improvements across participants' global functioning and risk levels. However, not all participant samples yielded statistically significant changes - Long et al. (2009) reported that one third of their sample made no improvement or did not complete therapy.

### 3.7.2 DBT outcomes on Well-Being and Parasuicidal behaviour within Forensic Services

*Comprehensive DBT:*

Seven papers (Fox et al., 2015; Low et al., 2001a; 2001b; Nee & Farman, 2005; 2007; 2008; Trupin et al., 2002) explored the delivery of comprehensive DBT and outcomes of wellbeing and parasuicidal behaviour. Low et al. (2001b) reported females' rates of self-harm within a high security hospital significantly reduced at the 6-month point in a year-long DBT programme; improvements were sustained at a 6-month follow-up. Low et al. (2001b) speculated that participants' significant improvement on certain measures and not others showed the distinct utility of some DBT skill, for example participants' improved dissociation scores could be linked specifically to mindfulness skills. Participants' scores on anxiety/irritability measures showed no significant improvement and the authors postulated that DBT skills map less clearly on to these psychological variables.

Trupin et al. (2002) compared DBT outcomes across groups of young female offenders, with only one group identified to comprise females with a mental health condition (MHC). Authors concluded that during a 10-month period of DBT, only the female MHC group showed a significant reduction in behaviour problems (which included self-harm and mood disturbance). Authors suggested the non-significant findings for use of DBT with females without a MHC was because this group had lower behaviour problems/distress at baseline. However, the implications of these findings are limited as data were analysed on the same residential unit for the previous year, prior to the implementation of DBT and similar improvements were found, perhaps indicating that improvements were not specific to DBT.

Nee and Farman (2008) - which included the data from Nee and Farman (2005;2007) - compared different comprehensive DBT intervention lengths (a one-year treatment period versus a 16-week treatment period) within a pilot DBT project for UK women's prisons. Authors concluded both treatment lengths led to positive outcomes for women receiving DBT. However, whilst a within group pre- and post-test analyses for female prisoners who engaged in year-long DBT therapy showed significant improvements for their borderline symptoms, self-esteem and locus of control (which lasted at six-month follow up), these improvements were not significant when compared to a control group. In the shorter, 16-week, programme analysis showed significant improvements post-DBT for self-esteem, dissociation, survival/coping beliefs and levels of distress. Self-harm data across the groups were not statistically analysed, but authors stated there was a general decrease in self-harm over both programs. Overall, the authors stated their results indicate that longer treatment length may be more beneficial, however no statistical analyses were used to determine this, furthermore the shorter programmes were reported to have lower attrition rates.

Fox et al. (2015) assessed DBT within a low secure inpatient service for women with BPD over a minimum treatment length of one year; results showed significant improvements

on self-harm, BPD symptomology and global functioning measures. Authors state that whilst their findings are promising, the set-up of inpatient settings makes it difficult to differentiate DBT effects from other intervention/rehabilitation input. Fox et al. (2015) also reported a high proportion (78%) of participants who appeared to benefit from comprehensive DBT, were victims of childhood sexual abuse.

Low et al. (2001a) reported that women's self-harm and wellbeing scores (on self-esteem, depression, anxiety, coping-belief scales etc.) fluctuated throughout DBT. While no statistical analyses were conducted on the data, an overall marked improvement was observed post-therapy, with the authors stating that Emotion Regulation and Distress Tolerance modules were the most useful. Low et al.'s (2001a) case study descriptions illustrate how DBT techniques can alleviate the distress of past abusive/traumatic experiences - DBT chain analysis of events between women's' flashbacks/thoughts/behaviour enabled them to identify points where they could use DBT skills to 'break' their 'chains' which often led to self-harm using techniques such as self-validation and mindfulness. Similarly, Nee and Farman's (2007) case study paper gives rich accounts of DBT implementation, with outcome measures showing some improvements on women's self-esteem and borderline symptom measures.

*Partial DBT:*

Seven papers (Aspche & Ward, 2003; Blanchette et al., 2011; Bradley & Follingstad, 2003; Eccleston & Sorbello, 2002; Gee & Reed, 2013; Long et al., 2011; Shelton et al., 2011) explored the outcomes of partial DBT for wellbeing and parasuicidal behaviour. Bradley and Follingstad (2003) assessed DBT for women in prison who had experienced childhood trauma and had clinically significant scores on trauma and depression measures (97 out of 165 incarcerated women met this inclusion criteria). Initially women engaged in sessions based on the DBT model, for the remainder of therapy women engaged in (non-DBT) therapeutic writing tasks. Reports suggest most participants dropped out of therapy after the completion of the DBT

informed phase. Whilst there are many reasons for therapy disengagement, this may reflect that women found the DBT part of therapy more tolerable/engaging. Compared to controls, level of depression in the DBT group was significantly improved, as well as some trauma related symptoms (dissociation, intrusive experiences and anxiety). Authors note a limitation of this study as being the "no - contact" comparison group, advocating that future research compares outcomes against participants receiving another active therapy as the improvements may stem from general supportive processes, as opposed to the specific therapy itself.

Some papers (Blanchette et al., 2011; Gee & Reed, 2013) were classified as partial DBT since participants in their data set had not undertaken all DBT modules. Gee & Reed (2013) adapted their program so women with shorter sentences could engage in DBT: people were included in the data set if they had completed at least one DBT module. Gee & Reed (2013) reported preliminary results, which indicated reliable reductions in female prisoners' global distress and parasuicidal risk; the authors do not report statistical significance but they described participants' scores reduced almost to clinical cut-off points. Blanchette et al. (2011) concluded that their study supported the use of DBT within a correctional facility, as it appeared to reduce female offenders' psychological distress and increased their coping skills; no adverse outcomes were reported post-DBT. However, again results of this study did not produce statistically significant improvements in women's rate of self-harm so the degree of certainty over DBT's impact is questionable. It is also considered that the statistical significance of Blanchette et al.'s (2011) results may have been influenced by the low rates of participants' self-harm pre-therapy. Lastly, this paper asserts the importance of follow-up support when considering the intense nature of DBT programs and the loss of support participants may experience when therapy ceases.

Long et al. (2011) offered DBT skill-training groups only and reported improvements, post-DBT across measures of anxiety, suicidality and guilt for DBT completers, as well as

significant reductions in para-suicidal behaviours, compared to treatment non-completers. Furthermore, this paper's sample included participants who had mixed diagnoses of BPD and at least one other psychotic disorder; authors conclude that findings suggest DBT is a viable treatment option for people with severe and complex presentations. Unfortunately, this paper did not collect follow-up data so the long-term effects of DBT were undetermined.

Recognising that many people within prison have experienced adversity in childhood (e.g. abuse, neglect, social deprivation), Eccleston and Sorbello (2002) promoted the use of DBT within this population signifying that perhaps therapy should prioritise adverse early life experiences over offence-focused work. Eccleston and Sorbello's (2002) paper gives tangible detail of how DBT was adapted for male prisoners, for instance module names were simplified to aid participants' comprehension (e.g. mindfulness and interpersonal effectiveness modules were changed to 'healthy mind, healthy body…and… getting the best out of yourself and your relationships' (pp.239), respectively). Eccleston and Sorbello (2002) reported that men's levels of distress reduced markedly post-DBT, however on inspection of reported scores, some participants' scores slightly deteriorated on anxiety/depression measures, and no formal statistical analyses were undertaken. The qualitative feedback reported in this study was positive; including the description that one participant had found DBT so useful he offered to translate DBT material so it could be used with other aboriginal prisoners.

### 3.7.3 Comprehensive vs. Partial DBT on Well-being and Parasuicidal/Antisocial behaviour within Forensic Services

One study (Shelton et al., 2009) undertook a controlled clinical trial comparing a group who completed comprehensive DBT against a group who only completed DBT skills training sessions (i.e. partial DBT) and then received one-to-one case management sessions as per the normal standard of service. Results showed both groups made improvements on some of the measures assessing anti-social behaviour and well-being; there were significant reductions in

the number of disciplinary tickets participants received for aggressive acts and significant improvements on 50% of coping measure subscales. Arguably these findings suggest that DBT skills groups alone can produce improved outcomes and/or that DBT one-to-one sessions are just as effective/no better than regular case management. Whilst externally, participants showed behavioural improvements, psychometric measures assessing their internal anger cognitions showed no significant change. This may be suggestive of DBT's particular efficacy in emotion regulation; perhaps DBT helps people manage their anger as opposed to reducing their proclivity to experience it. Lastly, Shelton et al. (2009) conclude that the resource used for DBT in prison is justified by its utility in reducing serious incidents and the associated costs (e.g. treatment of injury).

## 4.0 Discussion

For the readers ease, the aims of the present review are restated below alongside where further information of their fulfilment can be located:

*1) To provide a comprehensive account of how DBT has been modified and delivered across a variety of forensic services:* The descriptions in this review's results/discussion section, alongside the outline of the twenty-one papers in Table 4, provide readers with a cohesive account of the ways in which DBT has been applied in varying forensic services.

2) *To identify what outcomes and implications can be determined for forensic populations who engage in DBT, based on the research base at present:* The key findings and implications drawn from the 21 papers included in the present review, are presented respectively in sections 4.1 and 4.3, below.

*3) To provide specific recommendations for future research to advance the robustness of research reporting on the use of DBT within forensic settings:* Tables 8 and 9 in section 4.2 below provide a comprehensive description of recommendations for future research in this area.

### 4.1 Key Findings

This review, across its twenty-one papers, considered the outcomes for 521 participants who were recipients of a DBT informed therapy. Outcomes for a variety of forensic services were considered since this review's papers captured findings from residential treatment centres (1 paper), rehabilitation units (2 papers), prisons (6 papers), low-secure units (1paper), medium-secure units (1paper), forensic hospitals (4 papers), forensic intellectual disability services (2 papers) and outpatient probation services (1 paper). Whilst many of these papers concluded their findings showed promise for the use of DBT, no firm robust conclusions can be made in regards to DBT's utility within these settings. The inability to make firm conclusions is due to deficits in the studies' research methodology and insufficient reporting of information. Under

the acknowledged caution of jeopardised methodology in many papers, this review makes tentative conclusions about the outcomes of comprehensive/partial DBT on offending/anti-social behaviour and well-being/parasuicidal behaviours. These conclusions purposely lack specificity due to distinct inconsistency across papers (e.g. outcome measures they used, type/length of DBT intervention that was delivered) preventing the finding of dependable, homogenous results.

All papers conclude that their findings are encouraging about the outcomes of DBT on participants' antisocial/offending behaviour across comprehensive and partial DBT. When improvements on measured outcomes (e.g. anger scores, re-conviction rates) were not statistically significant authors still described trends towards improvement (e.g. Trupin et al., 2002) or gave clinical explanations positing the lack of significant findings were due to extraneous variables non-specific to DBT (e.g. Blanchette et al., 2011). Non-significant findings were also confounded by certain design factors (e.g. small sample sizes). Whilst the papers exploring outcomes for antisocial/offending behaviour generally present promising findings post-therapy, it should be noted that non-DBT related change may have accounted for some improvements; this was particularly pertinent to studies (Aspche & Ward 2003; Sakdalan & Collier, 2012) comprising other non-DBT intervention components for sexual offenders, the conclusions in regards to the outcomes of DBT for this population, therefore, are particularly unclear.

In regards to the outcomes of DBT on participants' well-being/parasuicidal behaviours, papers, for the most part, reported positive outcomes. However, in some studies while within group pre- and post-test analyses showed statistically significant improvements, when data for participant samples were analysed against control groups (Nee & Farman, 2008) or comparable data-sets (Trupin et al., 2002), improvements were no longer significant – perhaps suggesting the improvements may not have been due to DBT specifically. Generally there was consensus

among papers that self-harming behaviour improved through DBT, although again improvements were not always statistically significant. To give a gauge of this change: Low et al.'s (2001b) study, which had the highest quality rating of quantitative studies, reported participants' mean rate of self-harm reduced from approximately 8 attempts per three months at the beginning of DBT, to approximately 0.5 attempts per three months at a 6-month follow-up, post-therapy.

Papers varied in terms of the measures used to assess well-being, some reported self-harm improvements were mirrored by improvements in other well-being measures such as global functioning (Fox et al., 2015), however others reported participants' scores on anxiety/depression measures showed no significant change (Low et al., 2001b) – this finding mirrors findings of RCTs undertaken on non-forensic populations (Linehan et al., 1999; Panos, Jackson, Hasan & Panos, 2014). Papers focusing on well-being also highlighted that experiences of childhood trauma were not uncommon in some participant samples (Eccleston & Sorbello, 2002; Fox et al., 2015; Low et al., 2001a; Nee & Farman 2007). Whilst studies did not directly assess trauma symptoms, papers – case study papers in particular – identified/illustrated how DBT was applicable to individuals with these experiences. Childhood trauma may again be something for future research to consider, particularly since literature asserts that consideration of offenders' adverse early life experiences aids the understanding of their therapeutic need (Dudeck, Spitzer, Stopsack, Freyberger & Barnow, 2007; Sorbello, Eccleston, Ward & Jones, 2002).

Though concluding statements in all studies indicated positive outcomes for offenders post-DBT, many presented these statements as suggestive rather than conclusive. Furthermore, closer inspection of some studies' reported data indicated some participants may have deteriorated throughout DBT, e.g. Nee and Farman's (2008) participants showed increased self-harming behaviour, and Blanchette et al. (2011) reported recipients of DBT had increased rates

of reconviction compared to other populations, however again this change was not statistically significant. It is also acknowledged that papers may be biased to present/interpret their findings positively, as perhaps exemplified by Rosenfeld et al.'s (2007) interpretation that participants' increased anger scores reflected positive improvements in their expression of anger.

No consistent outcomes were reported across papers when considering the type/length of DBT programme that was delivered. Outcomes for comprehensive DBT and partial DBT were both described as positive. Conceivably, partial DBT programmes may be advantageous for forensic services since they require less resource. This suggestion is supported by more robust findings from a non-forensic RCT (Linehan et al., 2015), which found the skills training element of DBT was the therapy's most effective component in improving suicidal behaviour and other outcomes.

The versatility of DBT material for offenders was also notable since positive outcomes were reported for adapted DBT programmes which used simplified language and modified examples to fit with offenders' experience. Though many papers did not give sufficient detail about the level of staff training, some papers (e.g. Nee & Farman, 2008; Trupin et al., 2002) suggest that increased DBT training of staff affects outcomes for forensic populations.

Furthermore, the versatility of DBT extended in that it was delivered to, and evaluated across forensic samples of different genders; positive, statistically significant outcomes were reported for both male (e.g. Rosenfeld et al., 2007) and female (e.g. Fox et al., 2015) populations - though it is noteworthy that the majority of studies included in this review comprised entirely female samples (n=11), there were fewer studies comprising entirely male samples (n = 5) and therefore it could be argued there is a stronger evidence base for the use of DBT for females within forensic services at present. Lastly, it was also noted that some papers (n =4) in this review collected data from 'younger'/'adolescent' forensic populations who had participated in DBT, again the reported overall findings from papers comprising younger populations were

positive, as exampled by significant improvements in the number of disciplinary incidents adolescent participants received (Shelton et al., 2011) and significant improvements in staffs' use of non-punitive responses within forensic services for young people (Trupin et al., 2011). As described previously, whilst DBT was originally for people with BPD, none of the papers which included adolescents/young people in their participant samples described whether or not people in their sample had a BPD diagnosis. With regards to the use of the BPD label/diagnosis within younger population it is worth recognising the uncertainty within current literature as to whether the 'BPD label' is helpful or unhelpful for younger populations, since personality/behaviours are often changing/developing during adolescence, in addition to concerns about the negative stigma that can be attached to receiving a BPD diagnosis (for further regarding this topic, please see: Griffiths, 2011; Koehne, Hamilton, Sands & Humphreys, 2011; Silk, 2008).

Respectively, the key findings presented and discussed above are concordant with comparable reviews (Berzins & Trestman, 2004; Etchells, 2014; Quinn & Shera, 2009), which also ultimately infer that whilst studies report promising findings, the absence of robust quality evidence limits the conclusions that can be made. Since this review includes the most expansive account of research conducted in this area it offers specific recommendations for future research.

### 4.2 Recommendations for Future Research

To enhance research quality it is recommended that published quality frameworks are used to guide the design/facilitation of future research. While RCTs are considered the gold standard in determining treatment outcomes (Sibbald & Roland, 1998), it is acknowledged that opportunities to complete robust research may be particularly constrained within forensic services due to increased risk issues and high staff/patient turnover etc. (Nee & Farman, 2005). Cartwright (2007) argues for gold standard methodologies to be defined as whatever method can most reliably provide information about what practitioners do and understand within their

settings. This is applicable to the explanations given by papers in this review: that studies were embarked upon and data was collected as optimally as possible, situations permitting.

In regards to what can be learned from this review, the common reasons for papers' reduced quality ratings facilitated the production of recommendations (shown in Table 8) for future research in this area.

*Table 8 - Recommendations for the design of Forensic DBT Research*

**1.)** Wider recruitment to reduce bias: where possible researchers should recruit and accrue data from as many wards/sites/residential units/prisons/forensic services as possible, and across as many time periods that are available, including the use of follow-up data and the use of comparison or control groups.

**2.)** Clearer reporting of recruitment processes: researchers should report adequate detail of their recruitment initiatives, including and discriminating between rates of participation and therapy attrition (and reasons for attrition).

**3.)** Thorough consideration of data collection/outcome measures: researchers should utilise measures evidenced as valid and reliable for their population sample and, where possible control for bias by facilitating blinded completion of measures. Where possible researchers should collect longer-term follow-up data to ascertain whether, or for how long, changes post-therapy are sustained.

4.) Researchers should clearly define their primary outcome measures and associate them with the primary aim/focus of their research (e.g. stipulate if the study assessing DBT for aggression or DBT for self-harm?). Furthermore, researchers should report the power calculations and statistical outputs of their analyses for all outcome measures included in their method.

**5.)** More robust statistical analyses: researchers should employ statistical methods adept at identifying and controlling for confounding variables within/across participant samples to enable more definitive conclusions of therapy outcomes.

Moreover, to increase the potential for reliable, specific conclusions to be made, research would benefit from more consistent, meticulous reporting on the type of DBT intervention and the characteristics of individuals receiving it. On recognising the utility of certain information included in papers, Table 9 gives recommendations for what future, forensic DBT research should report on.

*Table 9 - Recommendations for what Forensic DBT research papers should report on*

**1.)** Participant Demographic Information: participant age, gender, BPD/other diagnoses, trauma history and type of forensic service.

**2.)** Intricacies of the DBT program: length of program, frequency of sessions, what DBT skill modules are taught, how/if DBT individual sessions are provided, how/if telephone or other out-of-therapy support is provided. Where possible, it is helpful for studies to describe any modifications they have made to their DBT programme.

**3.)** Clarification of a study's outcome focus: Is the study focusing on DBT's effect on participants' parasuicidal behaviour, emotional well-being and/or offending behaviour?

**4.)** Therapists' level of DBT training.

**5.)** Therapists' attendance to DBT consultations/supervision.

### 4.3 Recommendations for Clinical Practice

Though the majority of literature identified in this review is compromised in terms of its robustness, the outcomes of the included papers do not consistently indicate contra-indications for the use of DBT within forensic populations. Generally, studies do not report either discouraging or robust, statistically significant findings to indicate that DBT has adverse effects on individuals' engagement/outcome within forensic services. This observation, together with the more robust literature base (Linehan et al., 1991; 2015) evidencing DBT's utility in treating populations not dissimilar to forensic populations - in that treatment is delivered in secure in-patient settings and/or individuals exhibit BPD symptomatology - forms the foundation for a recommendation, albeit tentative, that DBT can be used and applied within forensic services. More simply, this review concludes that evidence to date does not indicate that DBT is ineffective in forensic services. There remains a need for further research however before it can be reliably considered to be more effective than other treatments for this population.

More robust future research will help determine the most effective mode of DBT delivery in forensic services, be it in comprehensive or partial form, delivered across longer or shorter periods or focusing on the anti-social behaviour and/or well-being of individuals. Separate to the uncertainty over the robustness of their findings, the papers in this review indicate that DBT programs can be practically delivered/adapted to fit with different forensic services for individuals with different offence histories.

### 4.4 Limitations

Alongside the weak quality of studies limiting this review's conclusions, its suppositions are also restricted due it only including papers reporting quantitative data. The inclusion of qualitative studies may have provided deeper insight in to the acceptability/suitability of DBT for forensic populations. Harden (2010) argues that too often systematic reviews conclude there is too little or lower-quality evidence to inform clinical practice and hence advocates that reviews employ mixed-method data to maximise their ability to answer such questions. The case study papers including some quantitative data facilitated the inclusion of certain qualitative data in this review; these papers' richer qualitative case description was credible as it increased insight into DBT's application to offenders with complex difficulties. Furthermore, papers in this review were culturally restricted as they were produced in westernised countries. That said, some studies described their samples to include individuals from diverse cultural backgrounds (Eccleston & Sorbello, 2002; Shelton et al., 2009). Again this may be an interesting focus for future research, particularly considering growing curiosity about the relationship between mental health and culture (Marsella & White, 2012).

Lastly, it is also considered that this review could have extended its search criteria to include sub-component terms of DBT (e.g. mindfulness, emotion regulation, distress tolerance

etc.) in ‘Search Group 2’ (see Table 1). Future reviews on this topic could benefit from broader such terms as this may enable a greater number of robust studies to be identified and may also help determine if - and if so which – components/modules of DBT are most beneficial to forensic populations.

**Word Count: 9,003 (excluding Abstract and Tables etc.)**

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# *EMPIRICAL RESEARCH PAPER*

## ‘You’re just floundering around…then suddenly, somebody switches the light on and gives you a map’: Experiences of Adolescents and their Parents in Dialectical Behaviour Therapy


### Abstract

*Background:* Dialectical Behaviour Therapy (DBT) has been adapted for adolescent populations presenting with symptoms of Borderline Personality Disorder (BPD) and/or self-harming/suicidal behaviour. Whilst DBT is an empirically validated treatment for adult women with BPD, the evidence base for its use within adolescent populations is developing. There is a paucity of qualitative studies in this area; this type of research may provide novel understanding of adolescents’ and parents’ experiences of DBT.

*Aim:* To gain insight in to how adolescents and parents experience DBT. Particular focus is placed on participants’ perception of ‘change’ they experienced from engaging in DBT, and also how dual engagement (of a parent and child) contributes to the experience of DBT.

*Method:* Eleven semi-structured interviews were conducted with five adolescents and six parents, all of whom had completed the adapted DBT program for adolescents (Rathus & Miller, 2015) designed to support adolescents experiencing symptoms of BPD, and their caregivers. All interviews were analysed using Interpretative Phenomenological Analysis.

*Key Findings:* Overall, adolescents’ and parents’ reflections in interview indicated their DBT experiences were effective in reducing distress and improving their interpersonal relationships. Four superordinate themes were identified: *1) A Good Fit; Feeling Safe and Contained at Last*, 2*) Acceptance: A New Way of Relating to Problems, 3) Acquiring DBT Skills* and *4) Learning Together,* and provide insight as to how DBT facilitated these improvements.



*Keywords: Dialectical Behaviour Therapy, adolescent, child mental health, caregivers*

# 1.0 Introduction

## 1.1 Background

Dialectical Behaviour Therapy (DBT) was developed by Linehan (1993) to meet the specific therapeutic needs of women with borderline personality disorder (BPD). The Diagnostic Statistical Manual of Mental Disorder (5th ed.; DSM-5; American Psychiatric Association [APA], 2013) describes BPD as 'a pervasive pattern of instability of interpersonal relationships, self-image and affects, and marked impulsivity that begins by early adulthood and is present in a variety of contexts' (APA, 2013, p.663). Whilst this states that BPD symptoms must be present from early adulthood, it also legitimises the diagnosis of BPD in adolescents – though acknowledging that particular caution needs to be taken when diagnosing younger populations as 'personality' may still be evolving during this stage of development (APA, 2013). The diagnosis of BPD in adolescents is also complicated by conflicting research reporting 'personality' to be both stable and changeable across an individual's transition from adolescence to adulthood (Donnellan, Conger & Burzette, 2007; Griffiths, 2011). Furthermore, the label of BPD is associated with negative stigma that exceeds that of other mental health conditions (Avriam, Brodsky & Stanley, 2006), adding further hesitance among some clinicians, to diagnose young people with BPD.

Nevertheless, a review by Miller, Muehlenkamp and Jacobson (2008) concluded that the assessment of BPD in adolescence was justified through the opportunity it provided: to offer accurate/effective treatment (e.g. Dialectical Behaviour Therapy) for the set of specific difficulties associated with BPD, which often include risky para-suicidal behaviours. Moreover, early effective treatment in adolescence may prevent difficulties maintaining and exacerbating into adulthood, improving adolescents' well-being whilst also potentially reducing the resource they require from services (Chanen, Jovev, McCutcheon, Jackson & McGorry, 2008; Miller at al., 2008).

To give an idea of prevalence, in a large sample (n=1363) of adolescents (aged 13 – 20), rates of diagnosable BPD were reported as high as 18% for girls, and 10% for boys (Chabrol, Montovany, Chouicha, Callahan & Mullet, 2001). In addition to the amount of people directly experiencing symptoms of BPD, as noted in the DSM-5 definition, BPD difficulties are largely relational in nature and thus impact upon the distress/challenges experienced by others who are in regular contact with, or care for, individuals with BPD. Relevantly, Bailey and Greyner (2013) undertook a systematic review representing 465 carers of people with BPD; carers were found to experience elevated depression, anxiety, grief, disempowerment and burden - furthermore, BPD carers' levels of distress were higher than those of carers of people with other serious mental health difficulties. Included within Bailey and Greyner's (2013) review was a study (Goodman, Patil, Triebwasser, Hoffman, Weinstein & New, 2010) concentrating specifically on parents of daughters with diagnosed BPD; results showed parents experienced burdens in many life domains and had associated difficulties with their emotional well-being, marital relationships and physical health. Goodman et al. (2010) stated that the more destructive actions/characteristics associated with BPD such as acting out, delusional ideation and property damage correlated with parental distress/burden.

Conceivably, caregivers/parents of adolescents with BPD may experience heightened levels of distress compared to carers/parents of adults with BPD. Parents of young people with BPD may feel more accountable for their child's difficulties and/or feel responsibility for 'solving' them; this is perhaps reflected culturally in England (and other westernised countries) by parents being 'legally' responsible for their child up to the age of eighteen. Furthermore, Schuppert, Albers, Minderaa, Emmelkamp and Nauta (2012) identified that adolescents with BPD characteristics are prone to experience their parents as over-protective or less warm emotionally, additionally mothers of adolescents with BPD tendencies have reported anxiety/depression symptoms in excess of controls (mothers of children without mental health

difficulties). Schuppert et al.'s (2012) findings support the argument for family members to be included in intervention/therapy efforts for adolescents with BPD.

### 1.2 DBT for Adolescents and their Carers

Acknowledging the needs of adolescents experiencing BPD and their parents/caregivers, the DBT manual has been adapted for adolescents (see Miller, Rathus & Linehan 2006; Rathus & Miller, 2015). Whilst upholding the theoretical basis of Linehan's (1993) original DBT manual, the adolescent manual had modified its content to align more specifically with adolescents' experiences, e.g. it considers the level of cognitive/emotional development, as well as practical issues such as adolescents' attendance at school and their inhabitancy within a family system (Rathus & Miller, 2015).

Table 10 gives a brief overview of the modules taught in adolescent DBT skill groups and how they correspond with the symptoms/characteristics that adolescents with BPD often experience. The latest adolescent comprehensive DBT program by Rathus and Miller (2015) contains all four original DBT modules (mindfulness, distress tolerance, interpersonal effectiveness and emotion regulation) and an additional module entitled 'walking the middle path' (Rathus, Campbell, Miller & Smith, 2015). Helpfully, the 'walking the middle path' module by Rathus et al., (2015) distinguishes how 'typical' adolescent behaviours differ from non-typical behaviours that may be considered as a symptom of BPD, for example they state that 'increased moodiness' in adolescence is often 'typical' and distinguish that mood/behaviour changes such as: major/intense depression, panic attacks, suicidal thinking or intense, long-lasting and changeable moods, are not as 'typical' and hence may be a cause for concern. For a comprehensive list of how other 'typical' behaviours in adolescence can be distinguished from atypical behaviours, see Rathus et al's (2015) adolescent DBT manual.

Furthermore, the adolescent DBT program differs by its inclusion of caregivers (often parents) of adolescents and facilitates a separate DBT skills training group for them, covering

the same modules/skills that adolescents experience in a DBT skill group (for more information on the family-skills DBT training component please see: Miller, Glinski, Woodberry, Mitchell & Indik, 2002; Hoffman, Fruzzetti & Swenson, 1999). Adolescents also attend their individual DBT therapy sessions (without their caregiver); these sessions focus on adolescents' personal challenges that week. The inclusion of caregivers in DBT skills groups was vindicated by observations that many adolescents experiencing BPD difficulties perceive their parents to invalidate their experience (King, Segal, Naylor & Evans, 1993) - unlike adults with BPD, adolescents often still live with family members, therefore to limit the effects of invalidation within family systems, other family members are included in therapy (Rathus et al., 2015).

***Table 10: Characteristics of BPD and the Corresponding DBT Modules (adapted from Rathus & Miller, 2015, pp. 5)***

| **Dysregulation Characteristics:** | DBT Skill Module: |
|---|---|
| *Self-Dysregulation:*<br>Reduced awareness of thoughts/emotions/actions; Dissociation; Attention difficulties; Inability to manage feelings of suffering/pleasure; Identity confusion | *Mindfulness* |
| *Cognitive Dysregulation & Familial conflicts:*<br>Inability to take perspective and resolve disagreements with others (family members); Polarised/non-dialectic thinking; Invalidating others and self | *Walking the Middle Path* |
| *Interpersonal Dysregulation:*<br>Erratic relationships; Relational conflicts; Continual dispute within family; Acts to escape feeling abandoned; Difficulty getting needs met within relationships; Social withdrawal; Maintaining self-dignity in relationships. | *Interpersonal Effectiveness* |
| *Behavioural Dysregulation:*<br>Impulsive actions (e.g. acting out, spending money); Risky behaviours (e.g. drug/alcohol use, para-suicidal behaviour, binging/purging); Acting aggressively | *Distress Tolerance* |
| *Emotional Dysregulation:*<br>Reduced ability to modulate emotions; Emotional reactivity; Outbursts of anger; Prolonged negative emotional states – e.g. depression, shame, guilt, anxiety; Reduced experience of positive emotion | *Emotion Regulation* |

### 1.3 Evidence for effectiveness of DBT with Adolescents

Groves, Backer, van den Bosch and Miller (2011) reviewed twelve studies assessing DBT for adolescents and concluded that that whilst DBT is an empirically verified treatment for adult women with BPD and parasuicidal behaviour, more robust research (i.e., randomised controlled trials) is required before the same conclusion can be made explicitly for adolescents with BPD. Nevertheless, research within Groves et al.'s (2012) review of 12 studies reported that DBT significantly improved adolescent functioning across a variety of measures and within a variety of treatment settings. Groves et al. (2011) also stipulated that adolescents in DBT programmes were more likely to complete treatment compared to control groups, for example in one study (Goldstein, Axelson, Birmaher & Brent, 2007) adolescents and their family members attended 90% of sessions with participants stating that they were highly satisfied with the visible improvements made throughout DBT. Research has reported positive outcomes for adolescents engaging in DBT across programmes that have included adolescents' families (Fleischhaker, Munz, Böhme, Sixt, & Schulz, 2006; Rathus & Miller, 2002) and those that have not (James, Taylor, Winmill, & Alfoadari, 2008; Katz, Cox, Gunnasekara & Miller, 2004). The review by Groves et al. (2011) did not distinguish any difference in outcomes for adolescents between DBT programs that did include family members and those that did not. Furthermore, improvements in adolescent- and family- functioning post-DBT have been maintained at a 3-month follow up (Hoffman et al., 2005).

Responding to the need for more robust literature, a randomised trial was undertaken (Mehlum, Tørmoen, Ramberg, Haga, Diep, Laberg & Grøholt, 2014) and found that a DBT program for adolescents - which included family members - was more effective than 'treatment as usual' (which included a mixture of psychodynamic therapy, cognitive behavioural therapy and medication) at reducing symptoms of depression and para-suicidal behaviour, the effect sizes for adolescents in DBT treatment were large, whereas they were small for adolescents

receiving usual care. Furthermore, outcomes for adolescents receiving DBT remained superior to controls at a one-year follow up (Mehlum, Ramberg, Tørmoen, Haga, Diep, Stanley et al., 2016), such findings suggest DBT may possibly be comprehended as a favourable treatment option for adolescents with BPD/parasuicidal behaviour.

Despite the growth of quantitative research assessing the utility of DBT for adolescents, there is a dearth of published, qualitative literature exploring experiences of either adolescents or their parents/caregivers engaging in DBT. To date, only one study, using a mixed-methods design to assess the experiences of "significant others" of children (aged 13-18) with BPD symptoms, engaging in a 12-week DBT- family skills training (DBT-FST) in Sweden, has been published (Ekdahl, Idvall and Perseius, 2014). Whilst no significant changes were found quantitatively on anxiety/depression measures, the qualitative data which was collected from ten group interviews and analysed using content analysis, reported that "significant others" (defined as adults who had a paternal relationship with the young person) experienced much distress/anxiety pre DBT-FST, felt uncertain of how they should respond to children's self-harm, and highlighted adults often felt underwhelmed by previous therapeutic input for their child. After engaging in DBT-FST "significant others" reported experiencing reduced isolation and felt they had learned useful strategies that assisted them daily in reducing their distress. Ekdahl et al. (2014) did not report on young people's wellbeing, however it was suggested that improvements in "significant others" would lead to improved well-being of adolescents.

### 1.4 Aim & Rationale

This study will use qualitative methods to explore and describe the experiences of adolescents, and their supporting parents[2], who have undergone DBT and completed all of its modules. The qualitative methodology of the present study will elicit adolescents'/parents' perceptions of, and reflections on, the therapy; providing insight as to whether 'change' has been experienced and if so, how this change elicited by DBT, has impacted upon their lives and levels of distress.

Whilst quantitative research has statistically supported the effectiveness of DBT, these analyses are limited in their illustration of how DBT facilitates positive change. To the knowledge of the researcher there are no published studies that have used qualitative methods to explore the experiences of both adolescents and parents who have undertaken DBT. It is important that adolescents' and parents' perspectives of their DBT engagement are explored together as any convergence / divergence in their experiences may provide an understanding as to how the inclusion of family members may affect the outcomes of DBT. The present study will explore outcomes on an individual level and also relating to any impact of dual-engagement in influencing the adolescent-parent relationship and therapeutic experience. Furthermore, this study's participant sample, containing both parents and their children, will add uniquely to the literature base on DBT, since the majority of research has been undertaken with recipients of adult DBT programs - for which the manual does not stipulate the inclusion of a family members DBT group.

[2] The terms caregiver/carer/parent are used interchangeably to describe a person who is a key member in an adolescent's life, often it is someone they live with. Appropriate to this study's participant sample, and to maintain consistency from here on, this report will use the terms 'parent' / 'parents'.

## 2.0 Methodology

### 2.1 Design

This qualitative study employed Interpretative Phenomenological Analysis (IPA) in a multiple perspective design. Undertaking IPA requires the collection of in-depth, reflective descriptions of participants' experiences (Smith, Flowers & Larkin, 2009). IPA is a phenomenological approach that interprets participants' first-person descriptions with the aim of comprehending (making sense of) their relatedness to, and perception of, the world and their experience (Larkin & Thompson, 2011).

Since there is a paucity of research focusing on the experiences of adolescents and their parents dual engagement in DBT, IPA was deemed suitable for this study since it does not require research to be undertaken with pre-set hypotheses and is exploratory in nature (Smith, 2003). Furthermore, the utility of understanding 'what' a person's experience is, before comprehending 'why' or 'if' this experience is beneficial is recognised (Barker, Pistrang & Elliot, 2015). The use of IPA enabled the exploration of 'what' adolescents' and their parents' subjective experiences of DBT were: participants making reflective accounts of these experiences may subsequently offer insight as to if, or why, these experiences were conceptualised as being helpful/unhelpful.

### 2.2 Ethics

This research project was approved by the University of Birmingham (Appendix 3 and 4). Since the research included participants actively engaging in NHS services, ethical approval was also granted from the West Midlands National Health Service (NHS) Health Research Authority (Appendix 5), and finally from two NHS trusts in the West Midlands from which participants were actually recruited. All participants received an information sheet and gave informed consent prior to being interviewed (separate, age-appropriate, versions were used for adolescents and caregivers; Appendices 6 - 9).

All participants were informed that anonymised extracts from interviews would be included in a write-up of the research and potentially published in peer-reviewed journals. In light of this, participants were contacted two-weeks after their respective interview to discuss any concerns/questions; all had up to one-month after their interview to withdraw parts or all of their transcript. No participants opted to do this.

**2.3 Recruitment**

Participants were recruited from two different NHS DBT services both of which offered a community DBT program to adolescents and their caregivers, and structured their DBT programs similarly (each delivered the same five DBT skill modules for adolescents/caregivers, and offered adolescents individual one-to-one sessions). Furthermore, both programs were set up so that service users could join a DBT group every four to six weeks. Potential research participants were identified by DBT clinicians across both services (see Table 11 for participant inclusion criteria) and eligible service users were first introduced to the research by their DBT clinician. The researcher was then forwarded the details of interested service users who had agreed to be contacted. Upon receiving this, the researcher then gave further information about the research to potential participants and arranged interviews as appropriate. Unfortunately, it is unknown to the researcher how many service users were informed about the research and declined to be contacted, however of the service users who agreed to be contacted, only one parent-child dyad did not respond to email, and only one participant declined interview after the initial contact with the researcher had been made.

As advised for qualitative research by Corbin, Strauss and Strauss (2014), the recruitment of participants for this study ceased when interview data showed saturation. More specifically, no further participants were recruited after a review of the eleven interviews collected for this research study, indicated that the on-going interviews were not rearing any distinct, new qualitative data and furthermore, across the interviews, emergent themes could

be established and corroborated.

***Table 11 - Participant Inclusion Criteria***

1. Both adolescents and caregivers to have completed all five DBT modules taught in a group format. These include: Emotion Regulation, Distress Tolerance, Interpersonal Effectiveness, Mindfulness and Walking the Middle Path. Adolescents will have also engaged in one-to-one sessions with a DBT clinician.

2. Individuals will have completed all DBT modules no longer than six months ago.

3. Prior to being informed about the study, a potential participant's DBT therapist approved that it was appropriate for the individual to be approached about the research.

4. Individuals must still be in contact with clinicians from their DBT service, adolescents must have an identified professional acting as their responsible clinician.

5. Individuals fluent in English.

## 2.4 Participants

Though there are no stipulated sample size requirements for the undertaking of IPA, Smith et al. (2009) recommend four to ten participant interviews are completed for professional doctorate research. This study collected eleven participant interviews; this included five adolescents and six parents (see Table 12 for participant information). Within the sample there were four adolescent-parent dyads, of whom all were mothers and daughters. One young person was interviewed singularly since she declined the opportunity for her parents to attend DBT. The remaining two participants were a mother and father who had engaged in DBT with their daughter, however on the day of interview their daughter declined to participate in this study. Whilst this research was interested in capturing the DBT experience of adolescent-parent dyads, regardless of whether they were a complete dyad or not, all participants who consented to an interview were included in this study to maximize exploration of individuals' DBT experiences.

In order to access the DBT service all adolescents underwent an assessment to determine if DBT was suitable for them and the difficulties they were experiencing. Adolescents did not require a diagnosis of BPD in order to receive DBT, however part of the DBT suitability assessment would have deemed their experiences to stem from characteristics associated with BPD. All adolescents that had been accepted as 'suitable' for DBT were then given the option to invite their parent to attend the carers' DBT skills group.

## 2.5 Data Collection

Semi-structured interviews were conducted with each participant (adolescents and parents) either in a private NHS room or in a private room in participants' homes; all interviews were conducted separately.

In accordance with IPA guidance (Smith et al., 2009), a semi-structured interview schedule (see Appendix 10) guided the questions participants were asked. The schedule was

informed by the DBT model for adolescents (Rathus & Miller, 2014) and was also reviewed by an experienced IPA research supervisor. The schedule was not used inflexibly: where appropriate the researcher asked follow-up questions to inquire further about participants' experiences, whilst these questions could not be prepared in advance, questions were asked appropriately in accordance to the topic and emotional tone of the interview. All interviews were audio-recorded and transcribed verbatim for the eleven participants, transcripts were subsequently analysed using IPA (Smith et al., 2009). The mean duration of adolescents' interviews was 44 minutes and for parents' interviews was 40 minutes.

***Table 12 - Participant Information***

| **Name*[3]** | **Age (Years) Gender** | **Ethnicity** | **Residence** | **Length of time in DBT** | **Still in DBT at time of interview?** | **Age first referred to Mental Health Services (MHS)** |
|---|---|---|---|---|---|---|
| ***CHARLOTTE (Adolescent)*** | 18, Female | White | Live together | 8 months | Yes – four months left of DBT | Charlotte first accessed MHS aged 12 |
| ***Carole (Parent)*** | 45, Female | White | | | | |
| ***FARRAH (Adolescent)*** | 17, Female | Asian | Live together | 6 months | No - finished DBT four months ago | Farrah first accessed MHS aged 12 |
| ***Fatima (Parent)*** | 47, Female | Asian | | | | |
| ***MOLLY (Adolescent)*** | 18, Female | White | Live together | 12 months | Yes – two weeks left of DBT | Molly first accessed MHS aged 8 |
| ***Michelle (Parent)*** | 47, Female | White | | | | |
| ***SOPHIE (Adolescent)*** | 16, Female | White | Live together | 6 months | No – finished DBT two months ago | Sophie first accessed MHS aged 11 |
| ***Sandra (Parent)*** | 57, Female | White | | | | |
| ***Delia (Parent)*** | 50, Female | White | Live with daughter who declined interview | 6 months | No – left DBT one month ago | Parents were uncertain when daughter first accessed MHS |
| ***Darren (Parent)*** | 53, Male | White | | | | |
| ***LAYLA (Adolescent)*** | 18, Female | White | Lives with parents but did not opt for them to attend DBT | 12 months | Yes – two months left of DBT | First accessed MHS aged 11 |

****Participants have been given pseudonyms to maintain their anonymity***

[3] To ease the reader's identification of participants, adolescent-parent dyads have pseudonyms starting with the same letter, furthermore adolescents are identifiable by their whole pseudonym being capitalised (e.g. MOLLY).

## 2.6 Analysis

IPA was used firstly to analyse participants' interview transcripts individually. In addition, since eight participant interviews comprised four adolescent-parent dyads, pairs of interviews within these four dyads (i.e. the adolescent transcript and corresponding parent transcript) were then analysed together to gain insight into participants' reciprocal accounts of dual engagement in DBT.

The undertaking of analysis followed Smith et al.'s (2009) advised procedure for IPA: initially, all interview transcripts were read in full at least twice, following this, notes of the initial impressions gained from interview extracts were made (see Appendix 11 for example). Continued re-reading of each participant's interview facilitated the clustering of extracts, which helped form preliminary themes within each individual interview (see Appendix 12 for example). In addition, extracts articulating the experience of dual engagement in DBT, within an adolescent-parent dyad were combined and reviewed collectively (see Appendix 13 for an example). On-going reviews of the interviews, and clusters of extracts, enabled identification of themes across the data-set as a whole. The continual re-checking of interview transcripts increased the internal validity of the final superordinate and subordinate themes. Furthermore, regular supervision with two experienced IPA researchers was utilised to undertake data triangulation, and to deliberate the appropriateness of themes according to the interpretation of the data-set as a whole.

## 2.7 Reflexivity

Below, the researcher offers a first person, reflexive account outlining her experiences, which may overlap with participants in this study. These are acknowledged to transparently attend the reader to the potential influences on the researcher's analysis/sense-making of the interviews.

*I am a 28-year–old White-British, female in my final year of a Clinical Psychology doctorate. Once qualified I hope to work within a psychology service for adolescents and their families, which in part motivated my undertaking of this research as it was pertinent to this field. Whilst I am the same ethnicity and gender as the majority of participants, I am at least 10 years older or younger than each participant, furthermore I have never engaged personally with a mental health service, and I do not have any children. I believe this helped foster an unbiased stance when I reviewed interview data.*

*Conversely, the experience of working for one year as an assistant psychologist in one of the DBT services from which some of the participants in this study were recruited may have influenced the analysis. However, I left this post 32 months ago and did not engage as a DBT clinician with any participants included in this study. I acknowledge that I enjoyed my time working within the DBT service, and left with an impression that, overall, DBT was both appreciated by, and beneficial to, clients. Aware that this increased my propensity to interpret a participant's experience of DBT similarly (positively) to me, I utilised supervision with experienced IPA researchers, to reflect and confer on the assumptions I made from interview transcripts to minimise this. Furthermore, on balance, my professional experience/knowledge of DBT was also beneficial as I was able to understand/recognise some of the DBT-nuanced language used by participants and ask appropriate follow-up questions.*

## 3.0 Results

Four superordinate themes, three of which had subordinate themes, emerged from the interview data (Table 13).

***Table 13 - Superordinate and Subordinate Themes***

| **Superordinate Theme** | Subordinate Theme | Brief Example Extracts |
|---|---|---|
| ***1. A Good Fit; Feeling Safe and Contained at Last*** | ➢ 1.1 Belonging<br>➢ 1.2 DBT's intensity and structure: notable and necessary<br>➢ 1.3 Not-judged: I am not bad / mad | ▪ *SOPHIE: 'I ticked all the boxes…oh my god, that's me'*<br>▪ *Carole: 'It takes time…Rome wasn't built in a day'*<br>▪ *Michelle: 'No-one's frightened to hear it and you're not frightened of being judged'* |
| ***2. Acceptance: A New Way of Relating to Problems*** | *No subordinate themes* | ▪ *LAYLA: 'I am free to be different from others'*<br>▪ *MOLLY: 'It's not actually about fixing the problem, they'll always be there'*<br>▪ *Delia: 'If something gets broken…what can you do? It's almost like saying don't cry over spilt milk…I'm a lot calmer'* |
| ***3. Acquiring DBT Skills*** | ➢ 3.1 Finally, something I can work with<br>➢ 3.2 Speaking in DBT | ▪ *FARRAH: 'They've given you skills…you can put them in practically straight away'*<br>▪ *Sandra: '[Daughter] was using the DBT language, before she had no frame to…explain how she feels'* |
| ***4. Learning Together*** | ➢ 4.1 Being in the company of peers like me<br>➢ 4.2 Becoming a DBT Family | ▪ *Darren: ' You think, oh, I'm not on my own'*<br>▪ *CHARLOTTE: 'It's someone to hold me accountable'*<br>▪ *Fatima: 'It's something we did together…you're talking on that same level'* |

A narrative account for each theme is presented below, alongside illustrative extracts[4]. Due to the large amount of data collected not all pertinent extracts could be reported, however Appendix 14 provides a fuller list of participants' quotes for each theme. The reader is reminded that adolescent-parent dyads are identifiable by their pseudonym names having the same initial, furthermore young people are identifiable by their whole pseudonyms being capitalised (e.g. MOLLY – adolescent and Michelle – Molly's parent).

### 3.1 Superordinate Theme One – A Good Fit; Feeling Safe and Contained at Last

*Subordinate Theme 1.1 – Belonging*

Some participants became aware of DBT following the discovery that their, or their adolescent's experience was akin to the symptoms associated with BPD. Participants' discovery that BPD symptoms aptly fitted with their struggles appeared to provide relief since it not only encapsulated their experience but also identified it as something that others must have been through too, in order for it to stand as a recognised, diagnosable disorder. Molly's and Sophie's comments below illustrate that their identification with BPD was positive as it fostered a sense of belonging with others who had experienced similar difficulties, meaning they were not isolated or 'wrong' in having these struggles. For Carole, as a parent, the label of BPD enabled her to name and grasp both her own and her daughter's experiences, which assisted her to access more, relevant information.

> *MOLLY: I remember when the doctor said I had BPD…I was like yeah, that's definitely me and then I found DBT…straight away I was like yeah this will definitely help me…I actually felt quite good because all of my life I thought there was something wrong with me*
>
> *SOPHIE: [when asked how she felt when she discovered BPD] I was kind of relieved…I wasn't alone…wasn't just me being an absolute psycho*

[4] To assist with illustration of extracts, unrequired text within quotes has been replaced with '…', and [text] provides extra information to clarify the context of a quote to the reader.

*Carole: For the first time someone actually said to me this is what we think is wrong with your daughter…I know people can get themselves in to a state about a label…sometimes that's useful to you at least…it's something to take hold of…you can swot up…and actually learn about what you're dealing with*

As alluded to in Molly's comment above, the uncovering of 'BPD' was also useful as it enabled the specific identification of DBT as an intervention. Participants' appreciation of the precision with which DBT could address their struggles was evident. The descriptions given by Charlotte and Sandra below illustrate how they finally felt they were receiving appropriate input from DBT that was competent enough to help them; the use of the word 'fit' by Sandra suggests that being a recipient of DBT felt comfortable and right as it was directly addressing issues pertinent to her in a way no other therapy had before. It was also considered that participants might have felt relieved that their needs were recognisable and substantial enough to require this bespoke therapy.

*CHARLOTTE: [DBT] felt more personalised to you…it's specialised to a particular group of people...if you've got a specific problem, you can't fix it with something else, like you can't fix a broken leg with cancer treatment*

*Sandra: Good to be starting something that we had read about as being the thing to help with difficulties that really fit [my daughter]…the only therapy that is available, it just seemed to fit*

Participants' sense of security (belonging) within DBT, and their perception that it was a therapy specific for them, seemed to be aided by their experience of having to undertake an assessment that permitted them access to DBT, this also appeared to increase their feelings of hope for what DBT therapists might be able to offer.

*SOPHIE: Counselling…so many people have it…they are just giving you the same treatment as everyone…whereas DBT…I felt…I've been chosen to do this, so they know how to deal with me*

*Michelle: We went in to DBT and they assessed [daughter] and said yes we think this is the right thing for you…at that moment me and [daughter] were like yes, yay, this could be really good, this could be the thing*

Farrah was the only adolescent who did not affiliate with the label of BPD at the time she was engaging with DBT, conceptualising her experiences to be depression instead. Because of her different experiences/affiliation with a different label, Farrah felt disconnected from others in her DBT group.

> *FARRAH: I did feel…the odd one out because the others had…similar issues...it was just at that point I had the standard kind of depression*

Although Farrah's feelings of belonging within DBT may have been reduced compared to other participants in this study, this did not obstruct her benefitting from DBT. In contrast to other participants' comments about the specificity of DBT to a particular set of difficulties, Farrah felt all difficulties, including hers, could be contained and addressed by DBT.

> *FARRAH: I'd honestly say it doesn't matter what…illness you have…it's [DBT] literally just to help you cope…with whatever is going on*

*Subordinate Theme 1.2 – DBT's Intensity and Structure: Notable and Necessary*

It was notable that participants experienced DBT to be intense, as it required much effort and commitment. As illustrated by Layla's comments below, the length and intensity of DBT each week seemed to increase her inclination to apply DBT skills outside of therapy, perhaps Layla felt more able to use DBT skills due to the substantial effort/time she had put in to them and/or to prevent her spent effort/time in therapy from going to waste. Additionally, the length/intensity of DBT felt balanced and containing, against the amount of support Layla felt she needed.

> *LAYLA: Those three hours [of DBT therapy]…. have repercussions for your whole week…it honestly requires you to care and invest your time and effort*
>
> *LAYLA: It's very intense, I'd say that's great because living with mental illness is hard and having intense support is really helpful*

Similarly, the intensity of therapy appeared to help DBT material resonate more deeply for Charlotte as suggested by her use of the word 'drilled' in the extract below. Charlotte's acknowledgement that this experience made a difference, suggests that she experienced the intensity of DBT to be worthwhile.

> *CHARLOTTE: It's intense and I think that makes a difference because it's drilled in to you*

In regards to length of time in therapy, Fatima spoke negatively about her previous experiences with mental health services which felt too rushed to adequately contain and assist her distress as a parent. Similarly, other parents' comments, such as Carole's below, suggested that the length of time provided by DBT services was experienced favourably and allowed the therapy/support to take effect.

> *Fatima: It was like... [Daughter would] self-harm…and it was straight to CAMHS…and then home treatment… it was so quick, you didn't have the time or information*
>
> *Carole: I think we need the length of time [in therapy] …Rome wasn't built in a day was it? It takes time for the changes to go on…and that's why you need that supported amount of time*

Another aspect that added to the intensity of participants' experiences appeared to be the structure DBT had which directly addressed their main problems. This directness seemed to contain participants somewhat because it helped them to get to the crux of their issues. This made therapy feel more valuable compared with less structured/direct discussions that adolescents had experienced in previous therapies.

> *MOLLY: In CBT I would just…talk about my week in general…whereas in DBT you…pick…the worst day…it's just really to the point, it actually feels like I'm getting something done*
>
> *SOPHIE: When someone points it out to me and tells me what I'm doing wrong and how I should do it…then I can make changes, it didn't work when I was having to…figure that out for myself in counselling, there wasn't as much guidance*

Furthermore, a sense of structure was familiar to adolescents; many of them likened DBT group to their experience of school, as exampled in Layla's quote below. This structure also seemed to reduce (contain) apprehension to attend therapy, since the familiar repetitive structure of DBT provided a sense of what could be expected from therapy sessions each week.

> *LAYLA: I never had group therapy before…the thing that persuaded me was the sense of structure…like a classroom feel…you know you're not passing a teddy bear around to talk to, you're going okay we're going to learn dadedadeda*
>
> *FARRAH: I liked the structure of it…wasn't like you were turning up there and you didn't know what you were gonna do*

Farrah's fondness of the structure of DBT was also mirrored by her mother's experience:

> *Fatima: You could stay focused…the structure of it was…good…rather than just saying what should we talk about today?*

*Subordinate Theme 1.3 – Not-judged: I am not mad/bad*

When beginning DBT some participants felt anxious and vulnerable to being judged negatively by professionals/other users of the DBT service. Carole's extract indicates her anxiety was carried over from past experiences and was to such a level that it prevented her engagement with DBT initially. This anxiety was also experienced by adolescents, as evidenced by the quote from Carole's daughter below. Charlotte emphasises how conscious the worry of being judged was for her which, similarly to her mother's experience, may have reduced her conscious attention to the information being covered in the DBT program.

> *Carole: I was so used to being judged, I was feeling like I was being judged again, so I wasn't taking it in*
>
> *CHARLOTTE: Being judged by others, I was so conscious of that*

DBT appeared to contain and free Carole from her anxiety by allowing her not to feel judged; this eventually enabled her to engage with material being covered, as evidenced by another quote from her interview.

> *Carole: [DBT] totally changed everything for me…once I picked it up…I felt like I flew then*

Insight is given as to how DBT prevented people from judging themselves, or being judged by others, by excerpts from Sophie and Sandra. Sophie explains that DBT helped her make sense of her feelings by drawing her attention/appreciation to the factors from which her feelings emerged. Sophie's improved awareness of her feelings seemed to alleviate her negative self-appraisal that she was abnormal. Sophie's mother Sandra similarly highlighted the importance of understanding someone's experience/feelings and how this could prevent her or her daughter from feeling at fault.

> *SOPHIE: DBT you actually look at the factors that are building up to you feeling a certain way…they show you why it's happening…instead of you thinking you're mad…even though the exact same stuff is happening, it just makes it feel a bit more normal and less painful*
>
> *Sandra: DBT doesn't try and change someone…it more provides an understanding…it's not blaming you for anything, it's not saying you're wrong*

### 3.2 Superordinate Theme Two – Acceptance: A New Way of Relating to Problems

Acceptance emerged as the most prominently referred to DBT term across participant interviews. This theme indicates the importance of acceptance within DBT by illustrating how it helped transform the way participants related to both their problems and their distressed feelings.

It was apparent that participants experienced a shift during therapy that enabled them to accept that DBT, or other interventive efforts (i.e. medication or other therapies), might not be

able to resolve their difficulties completely. Participants' comments suggested that during DBT they had novel realisations that experiencing problems/difficulties in life was inevitable, and furthermore that this made the search for a fix/cure redundant. Paradoxically, this had sometimes increased their distress, as illustrated by Sandra's use of the word 'battling' below.

> *Sandra: You as a parent have to stop battling things…there's a lot of things you have to let go of…it's not about a cure*
>
> *MOLLY: I've realised it's not actually about fixing the problem…problems are always going to be there*
>
> *LAYLA: Your problems can be complex…there's not always an easy fix…you need radical acceptance to tolerate that distress*

As a father, Darren explained that his masculinity felt compromised when he was not able to fix his daughter's difficulties. DBT appeared to help him feel calmer and more accepting of his, or others', inability to offer a quick fix.

> *Darren: It made us realise…take one day at a time…there's no quick fix. I'm very much if something's broken, what have I got to do to fix it? I think as a man, you know…like what do you mean you can't change this? ...with DBT you learn it just isn't going to happen overnight*

Correspondingly, Darren's wife Delia used the metaphor quoted below to illustrate that it was a waste of her energy to distress over incidents that had already occurred; this seems to fit with Darren's acceptance of things that are unable to be changed.

> *Delia: If something gets broken…it is annoying…but what can you do? It's almost like saying don't cry over spilt milk*

Similarly, Fatima also felt a responsibility as a parent to provide the solution for her daughter. Once she freed herself from trying to constantly find a solution she seemed more able to respond to her daughter's distress in a calm, open manner. Michelle also described a similar experience.

*Fatima: Sometimes you just listen…understand where your daughter is coming from and leaving it at that, whereas I thought being a parent I had to come up with a solution every time*

*Michelle: When [daughter] was in crisis, to have the ability to say 'okay well you've harmed yourself today', let's make sure you're safe and shall we talk about…what you could do or what I could do to help*

Extracts from adolescents' interviews (below) suggest that their experience of DBT helped them acknowledge novel understanding of their feelings in terms of what their primary feeling actually was, that these feelings were okay / did not have to be fought and also that their feelings would not be experienced permanently. This seemed to help adolescents feel more accepting and tolerant of their negative emotions.

*MOLLY: Before DBT I never thought that I felt anger…I've learnt that most of the time when I'm sad it's actually rooted in anger…it's shown me [my emotions] do make sense…and it's like OK, I understand what I feel now*

*SOPHIE: Before if I was jealous…I'd be so mean…now I just think OK, it's natural that you feel jealous…so I can just deal with the feelings nicely*

*SOPHIE: I stopped fighting my emotions…just let them pass*

*CHARLOTTE: You can kind of know that your feelings are OK and you can feel that*

The positive impact of these changes experienced throughout DBT for adolescents was also quite striking in some of their dialogue in interviews. For example, Molly shared that her feelings of contentment with life, which she now experiences on the majority of her days, was something she thought she would never be able to feel prior to starting DBT. The significance of this change is also highlighted by Molly's shift in experiential language from 'miserable' describing life pre-DBT to 'amazing' describing life after having engaged in DBT.

*MOLLY: A few years ago…my life was just so miserable…there was no sense of happiness at all…but now 90% of the time I actually feel happy…I do get bad days but I know they're not permanent…it's actually really quite amazing because I never thought this would happen and I think DBT has been the reason*

In a similar positive respect, in the context of explaining her revision for exams, Layla described that after trusting her feelings to be valid and reliable she was able to trust and accept her own instincts even if they opposed what others were doing. This positive experience seemed to increase Layla's self-esteem and confidence to be different from others.

> *LAYLA: Doing my exams…if I was in the headspace…to revise…I would go for it and if that wasn't every day…I would have to radically accept that…I came out…with really stable grades…that was like oh my goodness, that worked…I can trust myself…I can fully accept that I am different to other people*

### 3.3 Superordinate Theme Three – Acquiring DBT Skills

*Subordinate Theme 3.1 – Finally, something I can work with*

There was a consensus amongst participants that one of the most helpful aspects of DBT was its provision of concrete, practical 'skills', which could be implemented at once. Some participants had received other therapies, in various contexts - their comparisons of DBT against other therapies, alongside examples of how they utilised skills in their day-to-day lives, created the impression that participants experienced skill acquirement as gratifying and meaningful. Conceivably, participants' sense of immediately being able to learn practical 'skills' may have increased their proclivity to attend/engage in this intense therapy.

> *FARRAH: [DBT] seemed the most practical…CBT just didn't…they'd always tell me just change the way you think…you can't change the way you think that quick…whereas in DBT they give you skills and you can put them in practically straight away*
>
> *LAYLA: Something that really stands out for DBT is the emphasis 'and now go and do something' the practical emphasis really works*
>
> *SOPHIE: I used self-soothe in my exams…tangle things you can untangle if you feel stressed… that really helped me, I wouldn't have done that without my DBT therapist suggesting that as a practical option*

In Carole's excerpt below she uses the metaphor to explain how DBT enabled her to understand her daughter's behaviour in a clear way (turned the 'light on'), and developed skills that could successfully help her navigate (map) her responses.

> *Carole: I know how to manage it now…it's like being left in a building with no lights, no map…you're just floundering around…then suddenly, somebody switches the light on and gives you a map, you know what you're doing, and it's the same for me now since DBT, I understand her and what's going on, and how to get her out of it*

The actual performing of skills in DBT sessions also appeared to positively build participants' confidence and ownership of a skill.

> *MOLLY: For a self-harming tip, we actually all [DBT group] went and put ice cubes on our wrists, then you feel like you've actually learnt a skill*
>
> *SOPHIE: Counsellors told me about mindfulness…they didn't make me do it…instead of them just talking about it…[DBT therapist] actually make yourself do it…with them there*

The perception of DBT skills being practically utile was corroborated by parent interviews. Whilst parents attended DBT to assist their child, they reflected that DBT skills had also been useful to them personally. Parents' first-hand experience of the utility of DBT skills may have assured them that their child would benefit similarly and hence increase their inclination/capacity to support their child with DBT. Furthermore, as alluded to by Michelle below, if other aspects of parents' lives improved through DBT skills use, this would help reduce the secondary effects of these burdens on their child.

> *Darren: it's even benefited…my life… like wise mind…in the past I've had emails or road rage in the car…when I get really 'ahhhh'…but now I stop and think about it*
>
> *Michelle: At work I use my skills…before I might just think my boss is being a pain …I use my skills…I'll say to him…can we talk about this. Interviewer: How has that affected your relationship with [daughter]? Michelle: She's not faced with a mother that's you know 'oh my god'…she's got a mother who's calmer and can deal with things in different way to previously*

Parents' reflections about the direct advantages of DBT skills in their handling of distressing situations with their daughters were also distinct, particularly in the way learning of skills enabled them to firstly regulate their frightened feelings before assisting their daughters practically. Michelle's description of shifting from being panicked to being practical suggests she was able to pull on her DBT knowledge unconsciously, in a natural/automatic way.

> *Carole: With the tools…I've been given, I can now understand…what I need to do…I don't feel scared…her behaviour used to scare the absolute bejeebus out of me, because I used to think she'd kill herself*
>
> *Michelle: [Daughter] was in such a state [after self-harming]…because of my skills…and this was still quite early days…I was able to say OK try not to panic…I know what to do, this is where we have to go from here…having the DBT skills…got me to a place where the shock aspect was taken away…you have to park those feelings and go in to skills mode…you don't even realise they're there until after*

*Subordinate Theme 3.2 – Speaking in DBT*

The words/phrases ascribed to DBT skills made an impression on participants and appeared to be implicated in skill acquisition. During interview Layla exclaimed some DBT words felt unnecessary as they renamed things that could be described with simple every-day language, whilst she found this frustrating, her comment below implies that the different language of DBT helped form a substantial alternative perspective on a cognitive level, which was helpful.

> *LAYLA: Whilst I think DBT language is awful… discussing those kind of things…when you're in crisis there's another point of view there that's strong…there's a healthier battle*

Molly illustrates how a word for a DBT skill enabled her to appreciate/acknowledge her actions as relating to what she had learnt in therapy. Having a particular name for a skill seemed to foster participants' belief in it.

*MOLLY: [Talking about being at a festival] I just had like a 'vacation', so I went back to the tent and just slept … I was fine after…it's actually really comforting to name it as a DBT skill, it's like 'oh I'm helping myself'*

*Fatima: [DBT therapists] need to tell you…this is what the skill is…it has more weight to it because they're explaining it and it's proper…you have more confidence in it if it's a named skill*

The DBT language also enabled adolescents and parents to be signified to the changes that were being made. Furthermore some participants implied the using of new DBT language was experienced jovially within family relationships, almost as if the terms were shared in-jokes.

*Sandra: [Daughter] was using the DBT language…it was different…before she had no frame to help explain how she feels…it helps…the whirlwind*

*SOPHIE: I'd say 'hey mum, we just walked the middle path here [laughs]'*

*Carole: It was so funny because part way when she was doing this I thought 'my god you're DEAR MANNING me'… at the end I said I've been DEAR MANNED*

### 3.4 Superordinate Theme Four – Learning Together

*Subordinate Theme 4.1– Being in the company of peers like me*

This subordinate theme captures participants' experiences of others in their DBT group. Three prominent reflections emerged in regards to this, which were echoed across both adolescent and parent interviews. Firstly, being in the presence of peers with relatable experiences, whilst daunting initially, was experienced very profitably. Participants' descriptions illustrate the substantiality of the unique comfort the company of their peers provided.

*LAYLA: Just as you change the people around you do…I find that really grounding...that 1) I'm not the only one…and 2) oh look they were in this situation a month ago and now this has changed, I know how much of a deal this is…you know that people around you are aware of the importance of what you are saying*

*Carole: It's the only time you actually get to speak to somebody else who knows how it feels…you'd have your peers being your cheerleaders saying it does get better… they're kind of giving you the hope… you can be taught all you like really by professionals, that's lovely, but you want to hear it from someone who's actually living with it*

Secondly, it was clear that peer group discussions in DBT facilitated the learning of participants practically through their sharing of skill use and interpretation, which conceivably may have predisposed participants to apply them. Moreover, an interesting extract from Delia, illustrated how others modelled how she could talk about feelings, perhaps through their use of expressive language, but also perhaps by showing her that group was a safe place to share these feelings, either way Delia's observation of others enabled her to off-load her feelings/experiences more easily.

*MOLLY: If another girl is talking about a bad situation, I'll often say why don't you try this skill I've tried before and it's really helpful…. feels really nice, like I'm helping someone else*

*Delia: To get things off my chest… felt like a weight off my shoulders…there were a couple of people [in group] …going through very similar things…and I listened and they were able to express how they felt…and I was able to do that as well, so it was nice*

Something that was distinctive in adolescents' interviews however was that DBT groups were sometimes experienced as overwhelming, with some adolescents feeling uneasy with the level of affect in the therapy room. Furthermore, some participants found details from others' past difficulties increased their impulse to engage in unhelpful behaviours.

*FARRAH: Things can get pretty intense…you just felt really uncomfortable at times…people would bring things up that kind of hit home…I struggled with that*

*MOLLY: Sometimes [group] can be a bit dangerous…there's one girl that is really, really thin…I would just sit there and compare myself…and I would pick up and think you know, if I was in the wrong state of mind…oh maybe I should starve myself like that*

However, in the extract above, Molly demonstrates her ability to reflect on her unhelpful impulses/thoughts during group by using something that is taught in DBT – to consider the

effect of her 'state of mind'. Furthermore, any difficulties Molly experienced during group appeared overshadowed by its overall benefit, as suggested by her later comment:

*MOLLY: I feel like I probably could've got better if I just had group sessions*

Moreover, the perspective of other people's disclosures sometimes ameliorated participants' distress as they could appreciate their position more with the knowledge that other people were in more adverse positions.

*Fatima: You'd say oh God I've had a tough week and then you heard that somebody else actually had it worse it just made you feel like oh…maybe things are not that bad*

Lastly, the rolling format of DBT groups, which meant new peers would enter as DBT novices regularly, appeared helpful as it rewardingly drew participants' attention to the progress they had made.

*MOLLY: Towards the end [of group] I've become more stable...sometimes I felt really out of place… made me feel proud of myself…like look how far I've come*

*LAYLA: Every time a new person comes in [to DBT group]…it reminds you that something you struggled with now you don't*

*Subordinate Theme 4.2 – Becoming a DBT Family*

What emerged from the data was that dual engagement in DBT helped participants' learning; adolescents and parents appeared motivated to make sense of, and apply their 'DBT knowledge' to their shared experiences outside of the therapy room. This joint process of learning eased the 'load' of learning as it enabled parents and adolescents to depend on one another, safe in the awareness that the other person had a background of DBT knowledge. Shared knowledge, between adolescent and parent, seemed to help legitimise the support/suggestions offered by one another.

*SOPHIE: I found it [the Distress Tolerance Module] really difficult…but then mum would actually point out…because she's learning the same skills…she'd tell me that I was doing it [a Distress Tolerance skill] right now…like stroking one of the dogs*

*FARRAH: Mum learned what I learned…so she'd be able to kind of like hint at it back home…like oh you should try this*

*CHARLOTTE: I think with [mum's] background of knowing about DBT… it just gives her [mum] some kind of validity*

Charlotte also expressed feeling relieved of the responsibility to inform her mum about therapy material; easing the post-session pressure she may have experienced in previous therapies. Furthermore, her mum's (Carole) comments suggest that her grasp on therapy material was sufficient and fostered her confidence to almost act as DBT co-therapist for Charlotte outside of therapy sessions, as exampled by her 'chaining' an incident for Charlotte, which is something that adolescents often do in individual sessions with their DBT therapist.

*CHARLOTTE: I think going to therapy appointments was quite isolating…[mum would] always ask what was happening and that was infuriating but now that she's in on [DBT]…it just makes it so much easier because I've got someone I can rely on*

*Carole: I was trying to get [daughter] to do the chain of events and label all these feelings…it worked a treat...it brought her right down and pulled her out of this spiral*

The experience of learning DBT together, as well as practically spending more time together in order to attend DBT, seemed to develop parent-child relationships sentimentally. Such sentiment was evident in participants' profound descriptions of change in their relationships; the descriptions also posited DBT as the 'mechanism' that facilitated this change. This is exampled in excerpts from the adolescent-parent dyad of Charlotte and Carole below.

*CHARLOTTE: Just going to DBT…it's something we have to do together…just spending quality time, it's…set up every Tuesday… it's just something to bond over*

*Carole: I can't begin to tell you, this child absolutely hated me [before DBT]…there was a black cloud over our whole house…and now totally and utterly because of DBT…we're best of mates, absolutely fabulous, I cannot tell you*

Alongside examples of improved 'feeling' within relationships, participants spoke of reformed changes in their behaviour/communication on a relational level. Again these changes were described to be meaningful, and quite monumental to participants, reflecting their positive impression of the utility of DBT to them and their parent/child.

> *SOPHIE: I am just a lot more open to talking with my mum…she is just a lot more understanding of what I do…say I go and smoke weed… she'll be more understanding of what led me to do that…instead of just being like oh you're grounded…and I'm like oh cool she understands, or even she's helped me understand…and I don't have to be a rebel anymore…I don't have to do it in her face*
>
> *Fatima: I was just telling her no don't do it, don't do it [self-harm] …whereas that's not really right …they taught us in DBT to sort of say this looks very difficult for you, I understand why you're doing it, but let's work through it together…I realise how wrong I was but I didn't know any better*

## 4.0 Discussion

To the knowledge of the researcher this study contributes novel perspectives to the literature focussing on the use of DBT within adolescent populations, since it is the first qualitative, IPA study that has been undertaken to capture/interpret both adolescents' and parents' experiences of DBT. Interviews were conducted with a total of five adolescents and six parents, from which four complete parent-child dyads participated.

### 4.1 Key Findings

Overall, the findings from interviews indicate that DBT as a therapy is perceived to be profoundly useful to adolescents and parents on both an individual level, and also within adolescent-parent relationships. This overall conclusion is supported by previous qualitative research (Ekdahl et al., 2014) and through the four superordinate themes that emerged from interview data. The themes identified in this study are discussed and interpreted in more detail below, to provide insight as to how DBT achieved its usefulness. Moreover, since four (i.e. Sophie and Sandra; Farrah and Fatima) of the eleven participants, who contributed positive data about DBT, completed therapy and left DBT services up to four months previously, the data in the present study adds further value in indicating that the positive outcomes of DBT are sustainable over such periods of time.

*1) A Good Fit; Feeling Safe and Contained at Last*

Excerpts from interviews evidenced that both adolescents and parents perceived the diagnosis of BPD, or an awareness of the label, as helpful. The 'helpfulness' appeared to be twofold: 1) the BPD label and its symptom description encapsulated/contained adolescents'/parents' experiences, which up until that point had felt quite disorderly and 2) 'BPD' enabled the identification of DBT as a specific treatment. The direct construction of DBT to meet the needs of BPD bolstered adolescents' and parents' belief that DBT would be 'right' for them. DBT appeared to meet these expectations, as participants' expressions showed

that it was able to contain their needs practically in terms of the way it offered/required intense input and sympathetically in that the 'intense' DBT material (e.g. discussions about self-harm) was facilitated by DBT clinicians in a non-threatening, practical, sense-making manner. The findings from this theme support literature advocating the usefulness of educating adolescents about BPD and DBT as a treatment option (Chanen, 2015; Chanen et al., 2008), and research advocating that the resource/intensity required by DBT is worthwhile for its recipients and so may subsequently 'contain' their need from escalating within service provisions, thus reducing service costs (Richter, Heinemann, Kehn & Steinacher, 2014).

Lastly, participants' reflections under this superordinate theme indicate that the label of 'BPD' can be experienced as acceptable and validating by adolescents/parents and hence supports literature supporting the diagnosis or use of the 'BPD' label in younger populations (Miller et al., 2008) – this finding however is balanced against literature advocating for caution to be taken by clinicians who use the 'BPD' label for younger population as personality in adolescence can alter as people transition in to adulthood, and the negative impact of the stigma attached to 'BPD' is recognised (Silk, 2008). Furthermore, literature has also identified that with the label of 'BPD' in particular, clinicians prefer and find it more useful to talk to young people about their problems/symptoms, behaviours and psychological formulations, as opposed to focusing on a label/diagnosis (Kohene, Hamilton, Sands & Humphreys. 2013).

2) *Acceptance: A New Way of Relating to Problems*

Reflecting and supporting the utility of the core principle of 'acceptance' within DBT, the findings from interviews show that the inclusions of DBT notions about 'acceptance' facilitated improvements in both adolescents' and caregivers' perceptions of themselves, their problems and the associated distress. Participant interview extracts evidenced that DBT elicited change that enabled individuals to be more approving of themselves and their experiences/feelings. In essence, participants' 'acceptance' of problems is also somewhat reflective of another core

DBT principle called ‘validation’, through acknowledging and accepting their difficult experiences participants appeared more able to self-validate their distress. Validation is recognised within DBT as an effective ‘skill’ as it helps offset the negative effects of invalidating environments (Lau & McMain, 2005).

Furthermore, participants’ resolve to be more ‘accepting’ of difficulty/distress was helped by reflections within DBT that facilitated awareness of ‘problems’ being inevitable within life and to some extent out of individuals’ control. Adolescents’ and caregivers’ improved relation to ‘problems’, predominantly on a cognitive level, illustrated how DBT can increase a person’s resilience to adversity. Improved resilience following engagement in DBT is corroborated by other studies (Haghayegh, Neshatdoost, Adibi & Shafii, 2017; McCay et al., 2015); furthermore, such improvements provide insight as to how DBT enables people to require reduced support from services.

*3) Acquiring DBT Skills*

DBT appeared successful at supplying participants with skills they could retain or ‘own’ and thus take away from sessions and productively ‘use’ to alleviate problems/distress in their everyday lives. This was evident in both adolescent and parent transcripts and within descriptions of the observable changes a parent could see in their child, or vice versa. The supply of ‘skills’ that could be applied instantly from DBT emerged as a distinguishably valuable feature of the therapy, particularly by adolescents who had experienced disappointment during other therapies when they had not offered them ‘knowledge’ or ‘skills’ as tangibly or practically as DBT had done.

Though not always experienced positively, the distinctiveness of DBT language appeared significant to skill acquisition perceivably because the ‘newness’ of DBT words was experienced to provide adolescent/caregivers with something different and unique/exclusive to help them and their family member. The shared learning of DBT language between adolescents

and their parents helped them identify/label, understand and use DBT skills within their relationship, it also appeared helpful at giving participants a language whereby they felt more confident to communicate with their child/parent about emotive topics such as self-harm.

*4) Learning Together*

This study found that adolescents' and parents' interactions with peers who had similar experiences, within a DBT group setting, were markedly beneficial. This finding supports literature identifying peer support as a central element of 'support' for people with mental health difficulties (Turner & Turner, 1999; Solomon, 2004). Moreover, participants' quotes in this study corroborate with literature (see Solomon, 2004) positing the underlying psychological mechanisms that make social support groups useful to include: peers' experiential knowledge offers unique, pragmatic and specific input; individuals validate one another's shared past attempts at problem solving which increases people's confidence in their reaction to distress; peers learn from one another when they have had positive outcomes; through social comparison peers feel increased optimism and normalcy of their experiences; lastly, providing peer support is rewarding/empowering as it enables people to help others – this is termed the helper-therapy principle (Skovholt, 1974).

Fulfilling its aim to capture experiences of adolescents' and parents' dual engagement in DBT, this study's findings demonstrate that including parents in DBT was perceived as greatly useful across all four adolescent-parent dyads in the present sample; no qualitative data indicated adverse outcomes from parents' attendance at DBT skills group. The distribution of DBT knowledge across both parents and adolescents eased learning of DBT material, whilst also enabling each member of a dyad to feel secure in the other's use of DBT skills, this was particularly pertinent for parents who felt more 'skilled' to understand and respond to their child's risky behaviour. Furthermore participants' reflections indicated parent-child relationships were strengthened through their joint engagement in DBT. Again, this theme's

findings corroborate with other literature advocating for inclusion of parents in both treatment initiatives and research on BPD in adolescence (Infurna et al., 2016).

*Processes in DBT*

The themes presented above are intentionally ordered from one to four; it was felt when interpreting data that the process of participants' DBT experience was important and could be captured in terms of their progression through the four themes as ordered above. More specifically, it is speculated that participants' sense of containment, belonging and 'fit' (theme one) within the DBT service enables them to feel safe and open to novel DBT concepts which shift their understanding of, and relationship to, their problems (theme two). An improved understanding of their problems provided participants with a sense of relief and decreased their sense of self-blame, these improved feelings appeared to facilitate and potentially motivate both adolescents and parents to acquire/apply the DBT skills they were being taught (theme three) to further, and more practically alleviate their distress. The final fourth theme of 'Learning Together' sits slightly separate, however it was considered that participants' 'journey' through DBT is enhanced through it being shared and meaningfully progressed through, with peers and family members. The benefit of positive/constructive experiences of 'togetherness' in DBT through interacting with peers in DBT skill groups and its inclusion of family members, is perhaps unsurprising if we again consider that relational difficulties are central to the distress of people with BPD.

It is also considered that attachment theory (Bowlby, 2005) may provide insight as to why the inclusion of parents in DBT skills training improves the parent-child relationship. Liotti (2007) explains that attachment systems develop so that a person can regulate when they need to seek care/soothing from someone they perceive to be knowledgeable and strong in their social group. Therefore, since the adolescent knows their parent has covered the same DBT material as them, this may increase their propensity to seek 'care' or 'soothing' from their parent,

as they likely perceive them to be the only 'knowledgeable' other in their social group, in terms of them being the only other who has engaged with DBT and thus understands its principles. Extended further, adolescents having a 'knowledgeable' other in their parent, may explain how improved outcomes post-DBT are sustained, as adolescents can rely and feel secure that their parent can understand and apply the DBT principles they have both learned to soothe any present or future distress.

Moreover, the results of this study provide much evidence of collaboration between parents and adolescents when using DBT concepts. This collaboration appeared to be facilitated by the novel DBT vocabulary that enabled better communication/understanding within parent-adolescent relationships, and also by DBT's toolkit of skills which enabled shared problem-solving and diffused distressing cognitions/emotions within the relationship. Participants' accounts suggest that DBT almost facilitated them to remodel their relationships; parent-adolescent dyads appeared to relate to one another in a different and more helpful way by using the distinct vocabulary and toolkit provided by DBT. The present study's findings suggest that parents' and adolescents' new way of relating allowed them to collaboratively engage with each other without activating problematic attachment systems (Bowlby, 2005), which they may have experienced prior to DBT; all participants alluded to feeling more comfortable with their interpersonal relations after applying DBT concepts.

### 4.2 Clinical Implications

The findings of this study contribute to the developing literature base supporting the acceptability of DBT programs for younger, adolescent populations experiencing symptoms associated with BPD within mental health services. Whilst it is acknowledged that IPA methodology does not enable large generalisations to be made, the unique qualitative data presented in this study demonstrates the utility of the DBT adolescent program in terms of its

structure, content, and inclusion of adolescents' family members, in helping alleviate adolescents' levels of distress.

Reflecting again that BPD symptoms often link with inter-personal and intra-family difficulties, the present study's findings that dual engagement in DBT can improve parent-child relationships forms perhaps the basis of a justification for DBT programs for adult populations, to give also the option for caregivers in the adult context to receive similar therapy material too, to see if the same improvements occur. Furthermore, the strong complementary accounts between adolescents and their parents found in this study, enhances confidence that DBT skills/material can be transferable from a therapy to home setting within a dyad/relationship.

The inclusion of caregivers in DBT for adult populations is further supported by research evidencing the increased burden caregivers of people with BPD across populations of varying ages, experience (Bailey & Grenyer, 2013), and by research that has shown psycho-education of family members of adult populations with BPD to be beneficial (Gunderson, Berkowitz & Ruiz-Sancho, 1997). Increasing the understanding/well-being of caregivers may potentially further reduce service costs: recent reports have shown that unpaid caregivers save the NHS £132 billion per year (Valuing Carers, 2015).

### 4.3 Considerations for Future Research

Considering findings that 10% of adolescents experiencing BPD symptoms are male (Chabrol et al., 2001), the findings of the present study were based only on female adolescents which therefore potentially limits the scope of any conclusions drawn. The absence of males in this sample perhaps reflects a wider issue within mental health services: that men consistently show reduced proclivity to seek help from supportive services as compared to women (Addis & Mahalik 2003; Vogel & Wester, 2003). Research on DBT would benefit from further exploration of both adolescent males, and their parents experiences of DBT, to test any divergence from findings presented in this report. Gender as a potential factor in determining

the efficacy of DBT in the treatment of BPD is suggested by findings that males with BPD have both increased risk of certain behaviours (e.g. substance misuse) and narcissistic, schizotypal and antisocial personality disorder traits (Johnson et al., 2003).

It is noted that the resulting themes from this piece of research are collectively positive, it was considered that non-participation bias may have also affected the generalisability of this study's findings; no participants included in this study opted out of participating in DBT since all eleven participants completed all DBT training modules. Individuals who disengaged with DBT mid-therapy may have contributed deviating data if interviewed. Again this may be an area for future research to explore. In addition, it is plausible that during recruitment processes DBT clinicians may have referred participants to this study, with whom they had a good rapport with, this again may jeopardise the bias of this study's findings. Future research would benefit from recruitment processes that reduce the likelihood of bias (e.g. random sampling) from affecting their results.

Lastly, though the present study illustrated the positive impact DBT can have for adolescents and their parents, studies with larger participant samples, which control for confounding variables and include an analytic cost-effective component should be undertaken. More robust research will indicate with increased precision the effectiveness of DBT and further comment on its status as a first-line intervention to assist young people experiencing BPD symptoms, and their support networks.

**Word Count: 8,539 (excluding Abstract, Tables and Interview Excerpts)**

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# *PUBLIC DOMAIN BRIEFING DOCUMENT*

## The use and outcomes of Dialectical Behaviour Therapy for Forensic Populations and Non-Forensic Adolescent populations.

Presented in this document is an overview of the thesis contributing to a Doctorate of Clinical Psychology (Clin.Psy.D.) from the University of Birmingham. This overview contains contextual background information about DBT and two summaries of: 1) A systematic review of research assessing and reporting on the use of DBT across a variety of forensic services and 2) A research paper exploring experiences of adolescents and parents involved in a Dialectical Behaviour Therapy program designed to support adolescents.

### 1.0 Contextual / Background Information

Dialectical Behaviour Therapy (DBT) is a type of "talking therapy", developed from cognitive behavioural therapy, it has been adapted to help people who experience emotions very intensely and was initially developed as a treatment for suicidal females experiencing chronic distress - often diagnosed with Borderline Personality Disorder (BPD). Marsha Linehan (1993) developed DBT on the simple consideration that people's attempts at suicide stemmed from their belief that life was not worth living anymore. Dialectical Behavior Therapy was developed to help people build skills, so they could not just tolerate distress but also establish a life they felt was valuable and worthwhile (Robins & Rosenthal, 2011). Typically, people who receive DBT attend weekly group therapy sessions where they are taught a wide range of 'DBT skills' alongside peers experiencing similar difficulties. In addition, weekly individual sessions with a DBT therapist are provided so that people can review their problems over the past week and consider how they have or can use their set of DBT skills to alleviate their distress.

Since many people with BPD experience longstanding difficulties managing their emotions and commonly present to mental health services as 'at risk' (due to self-harm and/or aggressive/impulsive behaviours), professionals often find it challenging to effectively support individuals with these struggles (Lieb, Zanarini, Schmahl, Linehan & Bohus, 2004). However,

since DBT was first developed it has gained much popularity amongst professionals. A DBT manual (Linehan, 1993) provides a structured framework that informs mental health services how they can support and meet the needs of people with BPD. With its growth in popularity, DBT has been adapted and used with other populations - not just adult females with BPD – to include forensic populations (i.e. people who are in contact with services due to criminal behaviour) and adolescent populations.

A number of research studies have evaluated how useful DBT has been within forensic services for people with risky and aggressive behaviours, but there is no current, published review that gathers this information together. The systematic review in this thesis brings together outcomes from these studies and considers what learning they provide about DBT within a forensic setting.

DBT is also offered to support young people in a community, rather than forensic, setting who present to mental health services with self-harm and/or other reckless behaviours. Some services that offer DBT to young people also include their parents in the therapy, however, it appears no research to date has used interviews to explore both young people's and their parents' experiences of receiving DBT. Therefore, the research study in this thesis used interviews to see if a more in-depth understanding could be gained about young people's and parents' experiences of DBT.

## 2.0 Summary One: Literature Review

*Introduction:*

It is important that effective therapies are identified for use in criminal justice services to ensure that offenders receive well-evidenced treatment to aid their recovery. Rates of personality disorder and associated self-destructive behaviours (including self-harm) are high in forensic populations; since similar types of behaviour have been shown to improve when people from non-forensic populations have engaged in DBT, DBT has been considered as a possible treatment option for forensic populations also.

*Method:*

Literature searches found 21 studies evaluating the outcomes of DBT across different types of forensic institutes (e.g. prisons, secure units etc.) for different types of forensic populations (e.g. juvenile offenders, sex-offenders etc.). Both the quality of studies and their findings/conclusions about the use of DBT within forensic services were combined and summarized in the present review.

*Key Findings:*

The main finding of this review was that the quality of research evaluating DBT within forensic services is inadequate to support definite conclusions about its effectiveness. Most of the papers evaluated (18 out of 21) scored weakly in regards to their methodological quality. Nevertheless, this review concluded, more tentatively, that none of the papers reported any significant negative outcomes that suggested DBT was unsafe for use in forensic services. The descriptions in the 21 papers indicated that DBT could be delivered/adapted within a variety of forensic services.

## 3.0 Summary Two: Research Study

*Introduction:*

The original DBT program (Linehan, 1993) has been adapted for use with adolescent populations (Rathus & Miller, 2015) who present with symptoms of BPD or risky/self-harming behaviour; an important aspect of this adaptation is that it offers parents of the adolescents an opportunity to learn about DBT, in a separate DBT skills group for caregivers. Whilst a growing number of studies, including some randomised controlled trials, report that DBT significantly improves outcomes for adolescents with these types of behaviours, there is a lack of qualitative research exploring how or why this is achieved. The collection of data through interviews may provide a more in-depth understanding of the experiences of adolescents and parents taking part.

*Method:*

Eleven individual interviews were conducted with five adolescents and six parents, all of whom had completed an adolescent DBT program. During interview all participants were asked questions both about their DBT experiences and how they experienced engaging in DBT with their parent/child. Interview data were analysed using Interpretative Phenomenological Analysis, which aims to explore individuals' understanding of their unique lived experiences.

*Key Findings:*

This study concluded that DBT was experienced as useful by both adolescents and parents as it enabled them to better manage their own and others' distress. Joint engagement in DBT was also stated to improve parent-child relationships. Four main themes emerged during analysis, these included: 1) Feeling Safe and Contained, 2) Acceptance: A new way of relating to problems, 3) Procuring DBT Skills and 4) Learning alongside others. These themes provided an understanding as to how DBT facilitated improvements.

**Word Count: 1,027**

## 4.0 References

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Robins, C. J., & Rosenthal, M. Z. (2011). Dialectical behavior therapy. *Acceptance and mindfulness in cognitive behavior therapy: Understanding and applying the new therapies*, 164-192.

**Appendix 1 - The quality framework used for all non-case study quantitative studies included in this review: The Effective Public Health Practice Project (EPHPP) quality assessment tool for quantitative studies, and its instructions (Thomas, Ciliska, Dobbins & Micucci, 2004).**

*Rate each section as STRONG, MODERATE or WEAK*

**A) SELECTION BIAS**

(Q1) Are the individuals selected to participate in the study likely to be representative of the target population?

Very likely

Somewhat likely

Not likely

Can't tell

(Q2) What percentage of selected individuals agreed to participate?

80 - 100% agreement

60 – 79% agreement

less than 60% agreement

Not applicable

Can't tell

**B) STUDY DESIGN**

Indicate the study design

Randomized controlled trial

Controlled clinical trial

Cohort analytic (two group pre + post)

Case-control

Cohort (one group pre + post (before and after))

Interrupted time series

Other specify _____

Can't tell

Was the study described as randomized? If NO, go to Component C.

No Yes

If Yes, was the method of randomization described? (See dictionary)

No Yes

If Yes, was the method appropriate? (See dictionary)

No Yes

**C) CONFOUNDERS**

(Q1) Were there important differences between groups prior to the intervention?

Yes

No

Can’t tell

The following are examples of confounders:

Race

Sex

Marital status/family

Age

SES (income or class)

Education

Pre-intervention score on outcome measure

(Q2) If yes, indicate the percentage of relevant confounders that were controlled (either in the design (e.g. stratification, matching) or analysis)?

80 – 100%

60 – 79%

Less than 60%

Can’t Tell

**D) BLINDING**

(Q1) Was (were) the outcome assessor(s) aware of the intervention or exposure status of participants?

Yes

No

Can’t tell

(Q2) Were the study participants aware of the research question?

Yes

No

Can’t tell

**E) DATA COLLECTION METHODS**

(Q1) Were data collection tools shown to be valid?

Yes

No

Can’t tell

(Q2) Were data collection tools shown to be reliable?

Yes

No

Can’t tell

**F) WITHDRAWALS AND DROP-OUTS**

(Q1) Were withdrawals and drop-outs reported in terms of numbers and/or reasons per group?

Yes

No

Can’t tell

(Q2) Indicate the percentage of participants completing the study. (If the percentage differs by groups, record the lowest).

80 -100%

60 - 79%

less than 60%

Can’t tell

**GLOBAL RATING FOR THIS PAPER**

1 STRONG (four STRONG ratings with no WEAK ratings)

2 MODERATE (less than four STRONG ratings and one WEAK rating)

3 WEAK (two or more WEAK ratings)

Instructions for Quality Assessment Tool for Quantitative Studies

The purpose of this dictionary is to describe items in the tool thereby assisting raters to score study quality. Due to under-reporting or lack of clarity in the primary study, raters will need to make judgements about the extent that bias may be present. When making judgements about each component, raters should form their opinion based upon information contained in the study rather than making inferences about what the authors intended.

**A) SELECTION BIAS (Q1)** Participants are more likely to be representative of the target population if they are randomly selected from a comprehensive list of individuals in the target population (score very likely). They may not be representative if they are referred from a source (e.g. clinic) in a systematic manner (score somewhat likely) or self-referred (score not likely).

**(Q2)** Refers to the % of subjects in the control and intervention groups that agreed to participate in the study before they were assigned to intervention or control groups.

**B) STUDY DESIGN**

In this section, raters assess the likelihood of bias due to the allocation process in an experimental study. For observational studies, raters assess the extent that assessments of exposure and outcome are likely to be independent. Generally, the type of design is a good indicator of the extent of bias. In stronger designs, an equivalent control group is present and the allocation process is such that the investigators are unable to predict the sequence.

**Randomized Controlled Trial (RCT)**
An experimental design where investigators randomly allocate eligible people to an intervention or control group. A rater should describe a study as an RCT if the randomization sequence allows each study participant to have the same chance of receiving each intervention and the investigators could not predict which intervention was next. If the investigators do not describe the allocation process and only use the words ‘random’ or ‘randomly’, the study is described as a controlled clinical trial.

See below for more details.

Was the study described as randomized?

Score YES, if the authors used words such as random allocation, randomly assigned, and random assignment.

Score NO, if no mention of randomization is made.

Was the method of randomization described?

Score YES, if the authors describe any method used to generate a random allocation sequence.

Score NO, if the authors do not describe the allocation method or describe methods of allocation such as alternation, case record numbers, dates of birth, day of the week, and any allocation procedure that is entirely transparent before assignment, such as an open list of random numbers of assignments. If NO is scored, then the study is a controlled clinical trial.

Was the method appropriate?
Score YES, if the randomization sequence allowed each study participant to have the same chance of receiving each intervention and the investigators could not predict which intervention was next. Examples of appropriate approaches include assignment of subjects by a central office unaware of subject characteristics, or sequentially numbered, sealed, opaque envelopes.

Score NO, if the randomization sequence is open to the individuals responsible for recruiting and allocating participants or providing the intervention, since those individuals can influence the allocation process, either knowingly or unknowingly.

If NO is scored, then the study is a controlled clinical trial.

Controlled Clinical Trial (CCT) An experimental study design where the method of allocating study subjects to intervention or control groups is open to individuals responsible for recruiting subjects or providing the intervention. The method of allocation is transparent before assignment, e.g. an open list of random numbers or allocation by date of birth, etc.

Cohort analytic (two group pre and post) an observational study design where groups are assembled according to whether or not exposure to the intervention has occurred. Exposure to the intervention is not under the control of the investigators. Study groups might be non-equivalent or not comparable on some feature that affects outcome.

Case control study A retrospective study design where the investigators gather ‘cases’ of people who already have the outcome of interest and ‘controls’ who do not. Both groups are then questioned or their records examined about whether they received the intervention exposure of interest.

Cohort (one group pre + post (before and after) the same group is pretested, given an intervention, and tested immediately after the intervention. The intervention group, by means of the pre-test, act as their own control group.

Interrupted time series a time series consists of multiple observations over time. Observations can be on the same units (e.g. individuals over time) or on different but similar units (e.g. student achievement scores for particular grade and school). Interrupted time series analysis requires knowing the specific point in the series when an intervention occurred.

**C) CONFOUNDERS**

By definition, a confounder is a variable that is associated with the intervention or exposure and causally related to the outcome of interest. Even in a robust study design, groups may not

be balanced with respect to important variables prior to the intervention. The authors should indicate if confounders were controlled in the design (by stratification or matching) or in the analysis. If the allocation to intervention and control groups is randomized, the authors must report that the groups were balanced at baseline with respect to confounders (either in the text or a table).

**D) BLINDING**

(Q1) Assessors should be described as blinded to which participants were in the control and intervention groups. The purpose of blinding the outcome assessors (who might also be the care providers) is to protect against detection bias.

(Q2) Study participants should not be aware of (i.e. blinded to) the research question. The purpose of blinding the participants is to protect against reporting bias.

**E) DATA COLLECTION METHODS**

Tools for primary outcome measures must be described as reliable and valid. If 'face' validity or 'content' validity has been demonstrated, this is acceptable. Some sources from which data may be collected are described below:

Self-reported data includes data that is collected from participants in the study (e.g. completing a questionnaire, survey, answering questions during an interview, etc.).

Assessment/Screening includes objective data that is retrieved by the researchers. (E.g. observations by investigators).

Medical Records/Vital Statistics refers to the types of formal records used for the extraction of the data.

**Reliability and validity can be reported in the study or in a separate study. For example, some standard assessment tools have known reliability and validity.**

**F) WITHDRAWALS AND DROP-OUTS**

Score **YES** if the authors describe BOTH the numbers and reasons for withdrawals and drop-outs. Score **NO** if either the numbers or reasons for withdrawals and drop-outs are not reported. The percentage of participants completing the study refers to the % of subjects remaining in the study at the final data collection period in all groups (i.e. control and intervention groups).

*Component Ratings of Study: For each of the six components A – F, use the following descriptions as a roadmap.*

**A) SELECTION BIAS**

**Strong:** The selected individuals are very likely to be representative of the target population (Q1 is 1) **and** there is greater than 80% participation (Q2 is 1).

**Moderate:** The selected individuals are at least somewhat likely to be representative of the target population (Q1 is 1 or 2); **and** there is 60 - 79% participation (Q2 is 2). 'Moderate' may also be assigned if Q1 is 1 or 2 and Q2 is 5 (can't tell).

**Weak:** The selected individuals are not likely to be representative of the target population (Q1 is 3); **or** there is less than 60% participation (Q2 is 3) **or** selection is not described (Q1 is 4); and the level of participation is not described (Q2 is 5).

**B) DESIGN**

**Strong:** will be assigned to those articles that described RCTs and CCTs.

**Moderate:** will be assigned to those that described a cohort analytic study, a case control study, a cohort design, or an interrupted time series.

**Weak:** will be assigned to those that used any other method or did not state the method used.

**C) CONFOUNDERS**

**Strong:** will be assigned to those articles that controlled for at least 80% of relevant confounders (Q1 is 2); **or** (Q2 is 1). **Moderate:** will be given to those studies that controlled for 60 – 79% of relevant confounders (Q1 is 1) **and** (Q2 is 2). **Weak:** will be assigned when less than 60% of relevant confounders were controlled (Q1 is 1) **and** (Q2 is 3) **or** control of confounders was not described (Q1 is 3) **and** (Q2 is 4).

**D) BLINDING**

**Strong:** The outcome assessor is not aware of the intervention status of participants (Q1 is 2); **and t**he study participants are not aware of the research question (Q2 is 2).

**Moderate:** The outcome assessor is not aware of the intervention status of participants (Q1 is 2); **or** the study participants are not aware of the research question (Q2 is 2); **or b**linding is not described (Q1 is 3 and Q2 is 3).

**Weak:** The outcome assessor is aware of the intervention status of participants (Q1 is 1); **and** the study participants are aware of the research question (Q2 is 1).

**E) DATA COLLECTION METHODS**

**Strong:** The data collection tools have been shown to be valid (Q1 is 1); **and** the data collection tools have been shown to be reliable (Q2 is 1).

**Moderate:** The data collection tools have been shown to be valid (Q1 is 1); **and** the data collection tools have not been shown to be reliable (Q2 is 2) **or** reliability is not described (Q2 is 3).

**Weak:** The data collection tools have not been shown to be valid (Q1 is 2) **or** both reliability and validity are not described (Q1 is 3 and Q2 is 3).

**F) WITHDRAWALS AND DROP-OUTS -** A rating of **Strong:** will be assigned when the follow-up rate is 80% or greater (Q2 is 1). **Moderate:** will be assigned when the follow-up rate is 60 – 79% (Q2 is 2) **OR** Q2 is 5 (N/A). **Weak:** will be assigned when a follow-up rate is less than 60% (Q2 is 3) or if the withdrawals and drop-outs were not described (Q2 is 4).

**Appendix 2 - Quality Framework used for Case Studies included in this review: The Department for International Development (2014) Principles of High Quality Research Studies (Department for International Development, 2014)**

i. **Conceptual framing**: high quality studies acknowledge existing research or theory. They make clear how their analysis sits within the context of existing work. They typically construct a conceptual or theoretical framework, which sets out their major assumptions, and describes how they think about the issue at hand. High quality studies pose specific research questions and may investigate specific hypotheses.

ii. **Transparency**: High quality studies are transparent about the design and methods that they employ, the data that has been gathered and analysed, and the location/geography in which that data was gathered. This allows for the study results to be reproduced by other researchers, or modified with alternative formulations. Failure to disclose the data and code on which analysis is based raises major questions over the credibility of the research. Transparency includes openness about any funding behind a study: research conducted with support from a party with vested interests (e.g. a drug company) may be less credible than that conducted independently.

iii. **Appropriateness:** There are three main types of research design (see above), and many types of methods. Some designs and methods are more appropriate for some types of research exercise than others. Typically, experimental research designs tend to be more appropriate for identifying, with confidence, the presence of causal linkages between observable phenomena. The implementation of an experimental design is not, in itself, a sign of good quality. The diverse array of observational (or 'non‐experimental' designs) may be more appropriate for questions that either cannot be explored through experimental designs due to ethical or practical considerations, or for the investigation of perspectives, people and behaviours that lie at the heart of most development processes.

iv. **Cultural sensitivity:** Even research designs that appear well‐suited to answering the question at hand may generate findings that are not credible if they fail to consider local, cultural factors that might affect any behaviours and trends observed. For example, take a study that investigates efforts to boost girls' enrolment rates at schools in a religiously conservative country. If the study fails to explicitly consider the socio‐cultural factors which influence parental support for girls' education, it is likely to miss the real reasons why the intervention worked or didn't work. High quality studies will demonstrate that they have taken adequate steps to consider the effect of local cultural dynamics on their research, or on a development intervention.

v. **Validity**: There are four principal types of validity.

*Measurement validity*: Many studies seek to measure something: e.g. agricultural productivity, climate change, health. Measurement validity relates to whether or not the specific indicator chosen to measure a concept is well suited to measuring it. For example, is income a valid measure of family welfare, or are specific measures of individual health and happiness more appropriate? Identifying valid measures is especially challenging and important in international development research: just

because an indicator is a valid measure in one country or region does not mean it will be equally valid in another.

*Internal validity*: Some research is concerned with exploring the effect of one (independent) variable on another (dependent) variable. It can do so using a range of designs and methods. As described above, some designs and methods (e.g. experiments and quasi‐experiments) are better able than others to determine such cause and effect linkages: they will minimise the possibility that some 'confounding', unseen variable is affecting changes in the dependent variable, and consequently they are said to demonstrate strong internal validity. Take the example of a study that explores the relationship between levels of corruption and firm efficiency. An internally valid study would employ a technique capable of demonstrating that corruption does indeed cause firms to become more inefficient. A study lacking in internal validity, on the other hand, might employs a technique which leaves open the possibility of reverse causality: i.e. that a firm is actually more likely to engage in corrupt behaviours because it is inefficient, and to compensate for its inefficiency.

*External validity*: This describes the extent to which the findings of a study are likely to be replicable across multiple contexts. Do they apply only to the subjects investigated during this particular study, or are they likely to apply to a wider population/country group? Quantitative researchers typically seek to address issues of external validity by constructing 'representative samples' (i.e. groups of subjects that are representative of a wider community/society).

*Ecological validity:* this dimension of validity relates to the degree to which any research is really able to capture or accurately represent the real world, and to do so without the research itself somehow impacting upon the subjects it seeks to study. Any time a researcher carries out an investigation in the field (asking questions, measuring something), s/he introduces something artificial into that context. Ecolocically valid studies will explicitly consider how far the research findings may have been biased by the activity of doing research itself. Such consideration is sometimes referred to as 'reflexivity.'

vi. **Reliability**: Three types of reliability are explored here. *Stability*: if validity is about measuring the right 'thing', then stability is about measuring it 'right'. Assume that a study seeks to investigate the health of newborn children. Assume that 'birth weight' is a valid measure. For birth weight to be measured reliably, the investigator will require a reliable instrument (e.g. accurate weighing scales) with which to gather data. Alternatively, consider data which is gathered on the basis of questionnaires or interviews being conducted by multiple researchers: what steps, if any, have been taken to ensure that the researchers are consistent in the way they ask questions and gather data? *Internal reliability*: many concepts can be measured using multiple indicators, scales and indices. For example, corruption could be measured by recorded incidence of embezzlement from public sector organisations, *and* with the use of a corruption perceptions index. If very significant discrepancies exist between indicators (e.g. if a country appears to experience low levels of corruption when embezzlement is measured, but high levels of corruption when perceptions are explored), then the internal reliability of one or other of the measures is open to question. High quality research will consider such issues, with specific attention to whether or not particular measures are well‐suited to the cultural context in which they are taken. *Analytical reliability*: the findings of a research study are open to question if the application of a

different analytical technique (or 'specification') to the same set of data produces dramatically different results.

vii. **Cogency**: A high quality study will provide a clear, logical thread that runs through the entire paper. This will link the conceptual (theoretical) framework to the data and analysis, and, in turn, to the conclusions. High quality studies will signpost the reader through the different sections of the paper, and avoid making claims in their conclusions that are not clearly backed up by the data and findings. High quality studies will also be self‐critical, identifying limitations of the work, or exploring alternative interpretations of the analysis.

A really rigorous review of the evidence on a given topic should give due consideration to all seven of these aspects of study quality.

The Department for International Development (2014) combines these seven aspects in to a table (see table 1). This table was used to help ascertain papers quality ratings for this review. The questions included in the table were answered for each paper as either yes (green), unclear (yellow) or no (red). After the reported answers to these questions were considered the reviewer gave each paper an overall rating of strong, moderate or weak using the study quality-rating key shown below:

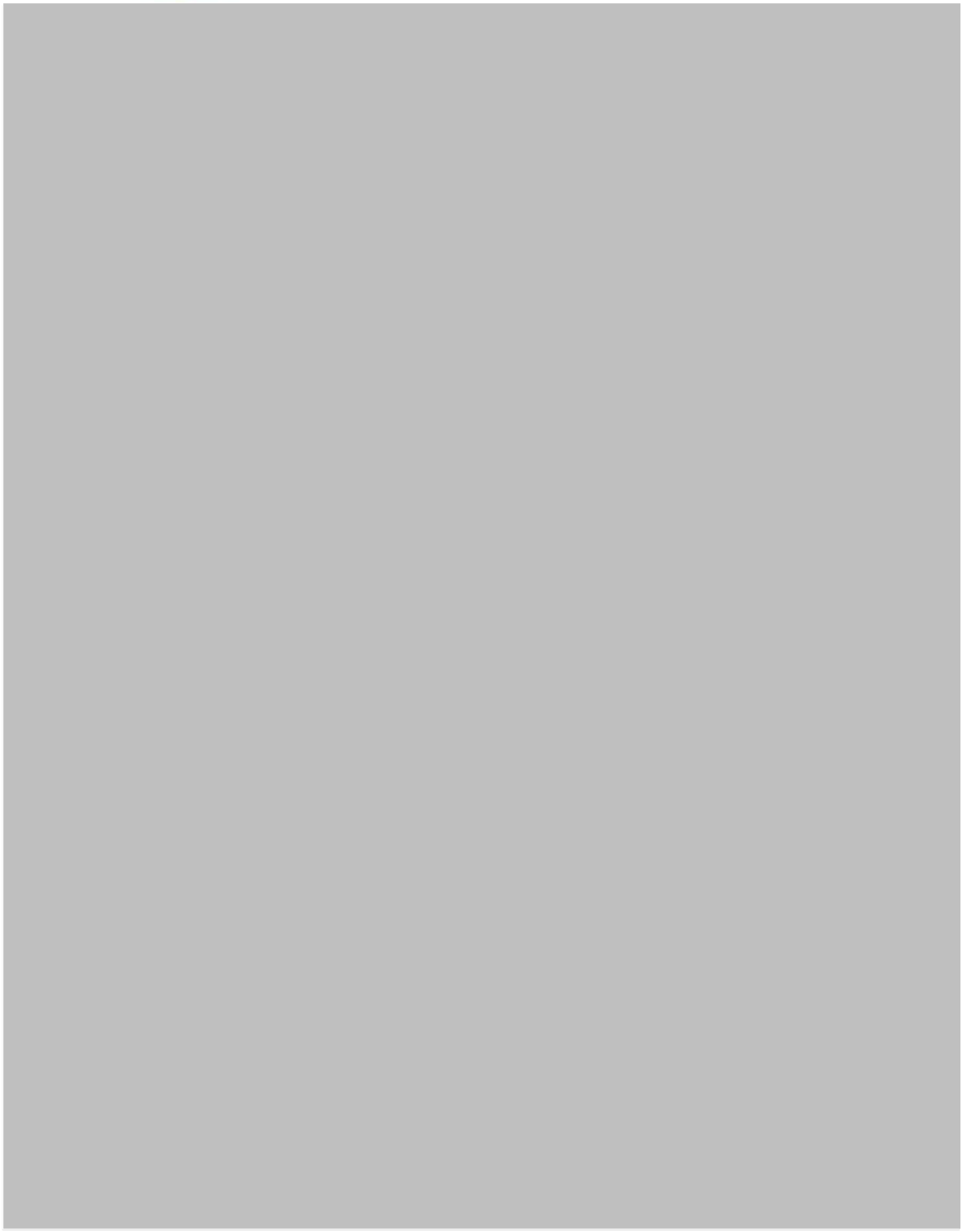
**Study Quality Rating Key:**

| **Study Quality:** | **Definition:** |
|---|---|
| Strong | Comprehensively addresses multiple principles of quality (more than ten of the fifteen quality principles were met). |
| Moderate | Some deficiencies in attention to principles of quality (more than half of the fifteen quality principles were met). |
| Weak | Major deficiencies in attention to principles of quality (less than half of the fifteen quality principles were met). |

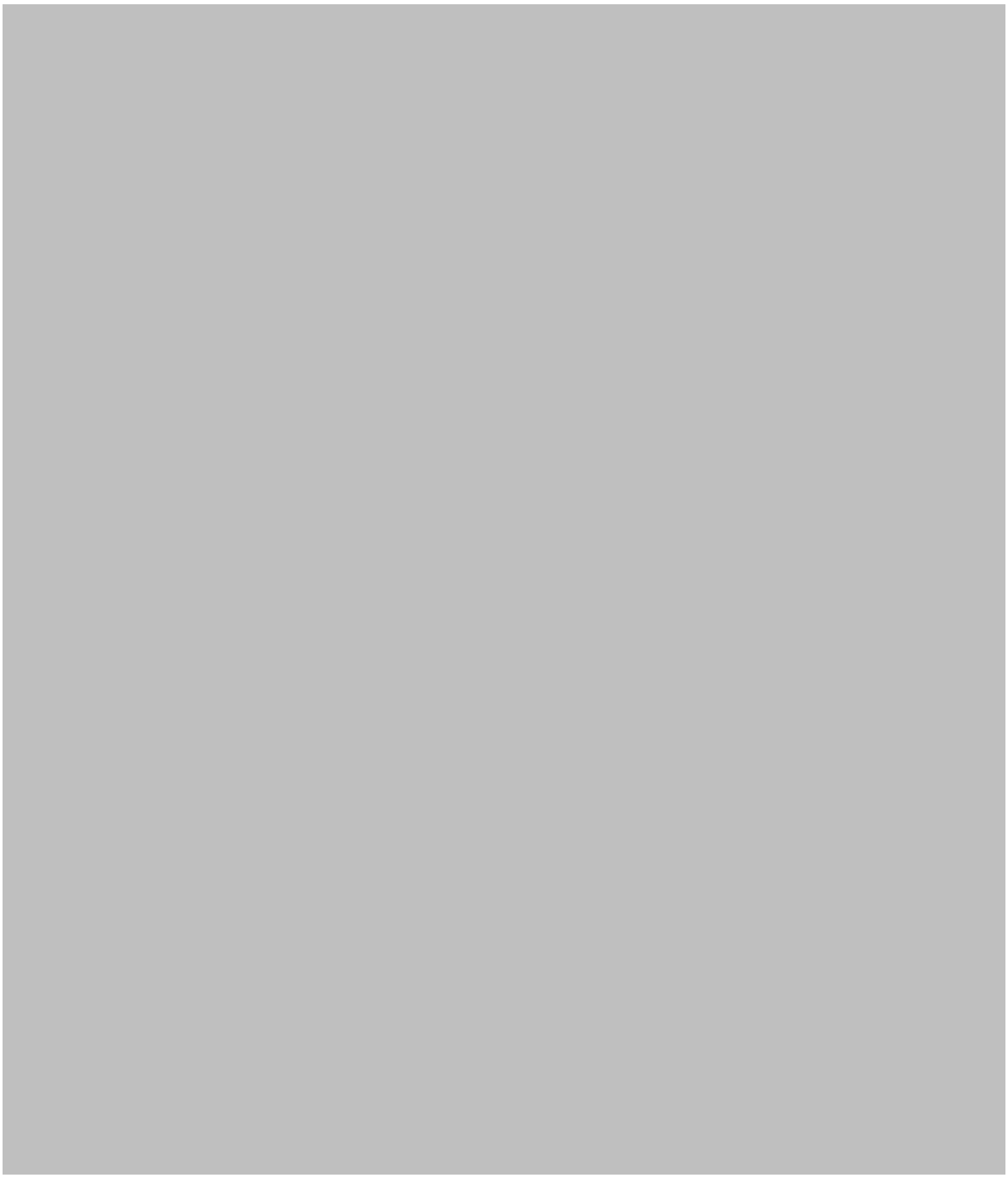
**Table 1: DID (2014) Principles of Research Quality**

| |
|---|
| **Conceptual Framing** |
| **1. Is existing research acknowledged?** |
| 2. **Is a conceptual framework constructed?** |
| 3. **Is there a research question/hypothesis?** |
| **Transparency** |
| 4. **Is raw data linked to analyses?** |
| 5. **Is the study's context described?** |
| 6. **Is supporting/funding declared?** |
| **Appropriateness** |
| 7. **Is a research design/method described and suited to the research question?** |
| **Cultural Sensitivity** |
| 8. **Are context-specific cultural factors considered?** |
| **Validity** |
| 9. **Are the measures valid?** |
| 10. **To what extent is the study internally, externally and ecologically valid?** |
| **Reliability** |
| 11. **Are the measures reliable?** |
| 12. **Are the findings unlikely to change depending on analytical technique?** |
| **Cogency** |
| 13. **Is the reader signposted throughout?** |
| 14. **Are limitations/alternative interpretations considered?** |
| 15. **Are conclusions clearly based on the results?** |

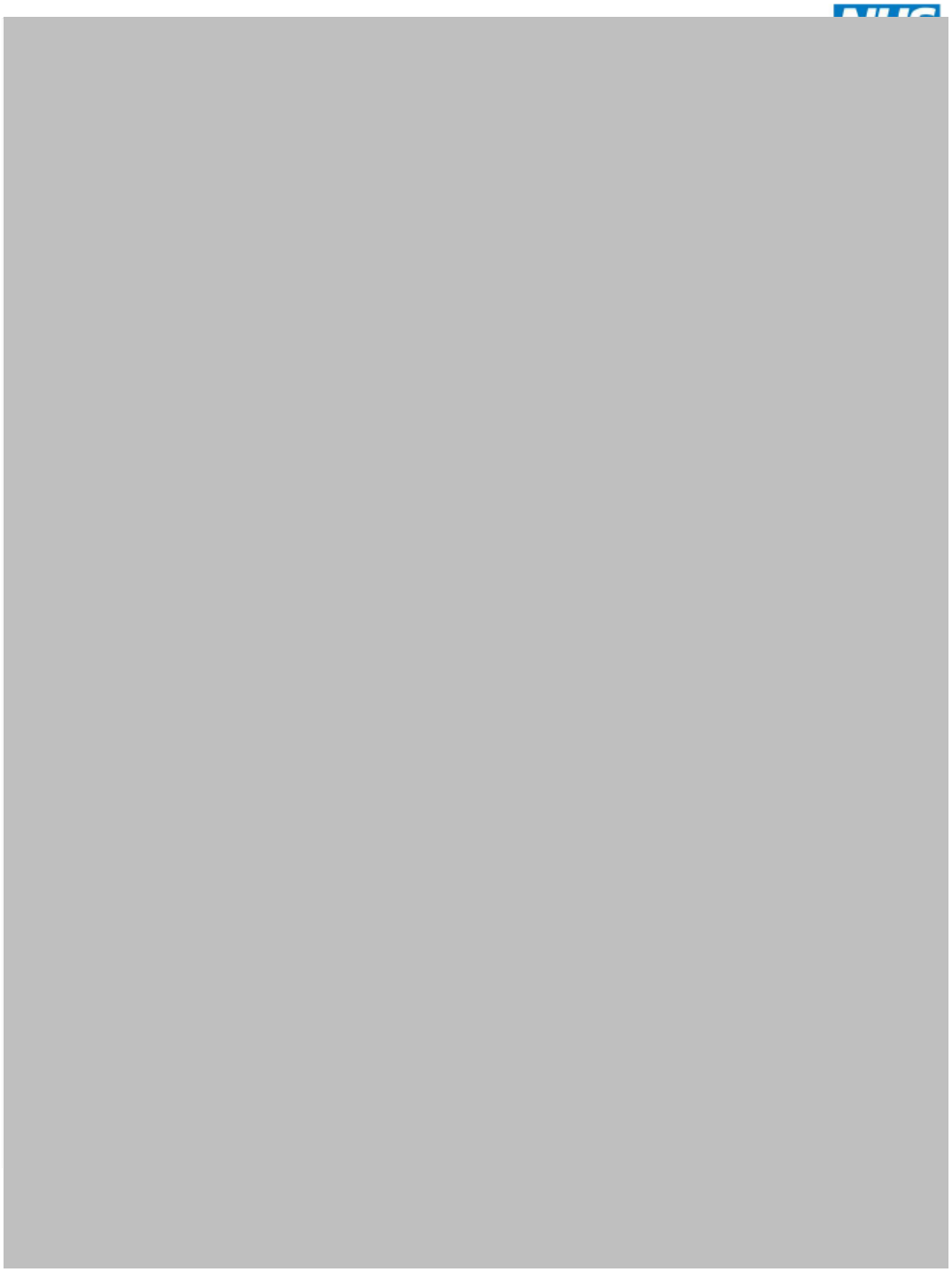
**Appendix 3 - Confirmation of Sponsorship for Research Project from the University of Birmingham**

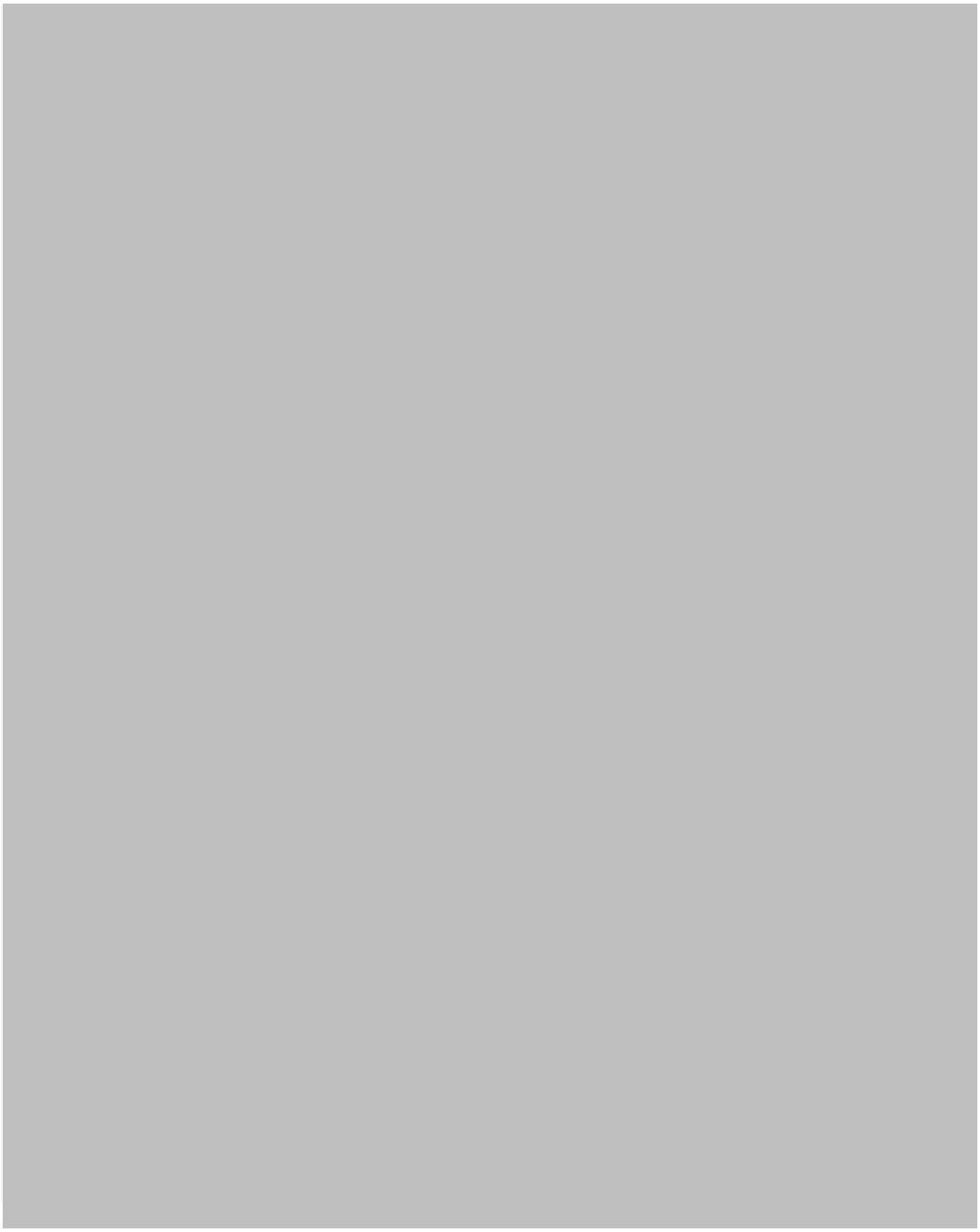


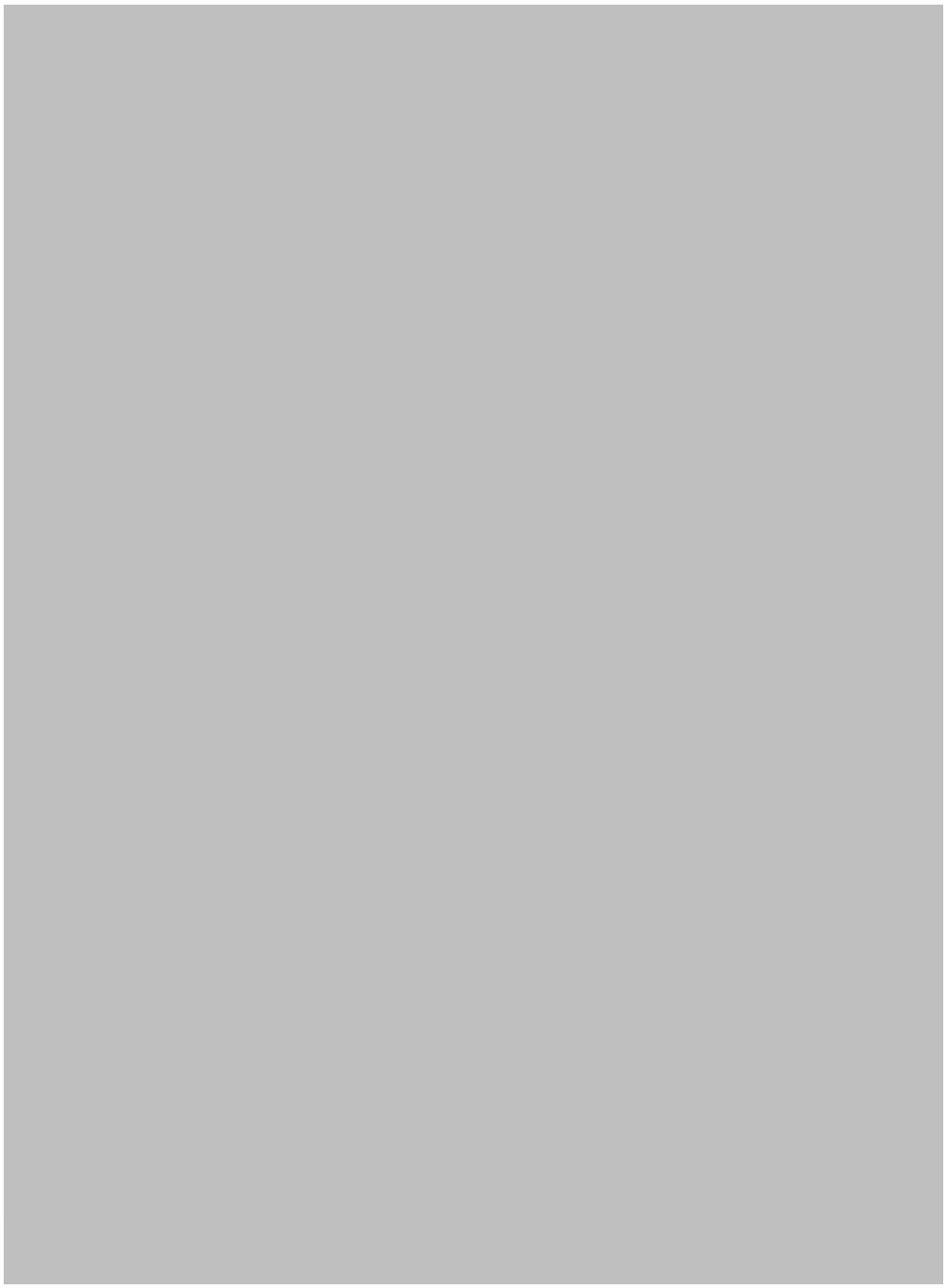
**Appendix 4 - Confirmation of Insurance for Research Project from the University of Birmingham**

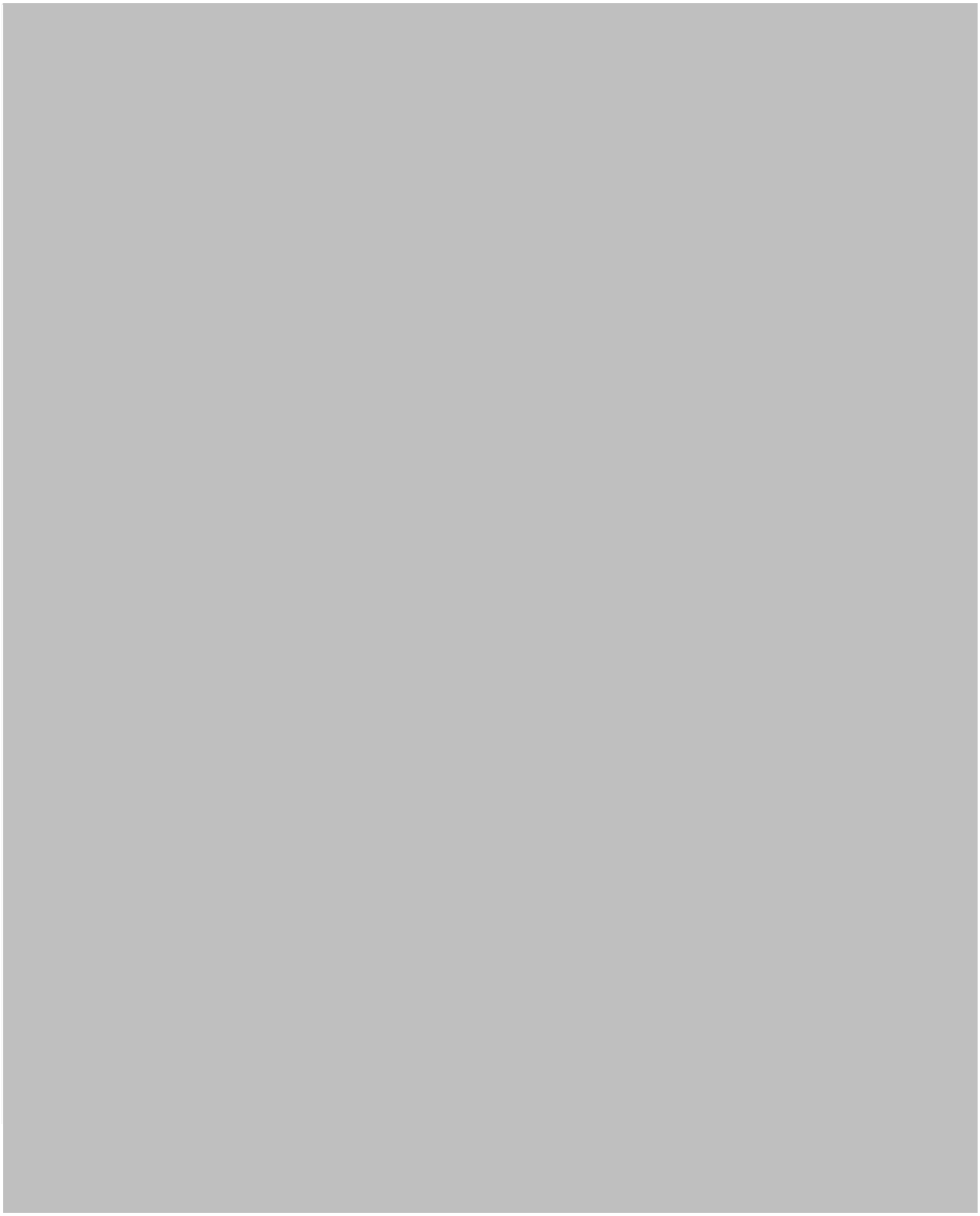


**Appendix 5 - NHS Health Research Authority (West Midlands – South Birmingham Research Committee) Ethical Approval Letter for Research Project**









**Appendix 6 - Young Person / Adolescent Information Sheet**

Title of Project: Dialectical Behavioural Group Therapy: A qualitative exploration of the experiences of adolescents and their carers

Lead Researcher: Ellen Westwood (Trainee Psychologist); Academic Supervisors: Dr Michael Larkin and Dr Gary Law; Clinical Supervisors: Dr Satbinder Bhogal and Dr Sian Allen

*Ellen Westwood works at the University of Birmingham. Ellen is training to be a Clinical Psychologist and is doing some research on Dialectical Behaviour Therapy. This therapy is often called DBT for short.*

*You have been invited to take part in Ellen's research because you have completed all the skill modules that are taught in the DBT groups at least once. Ellen is doing this research because she is interested in learning about what it was like for you to take part in the DBT groups. She is also hoping to find out about what it was like having someone else you know (e.g. your parent or carer) learn these skills too, in a separate DBT group.*

*It is completely up to you whether you decide to take part in this research. If you are interested, please have a look over the rest of this sheet, which will tell you about what you will be asked to do if you agree to take part. If you have any questions that you want to ask about this research after reading this sheet, you can contact Ellen to talk more using the contact details on the last page. Or, if it's easier, you can speak to your DBT therapist who also knows about this project.*

**Why is Ellen doing this research?**

- To understand people's experiences of DBT groups
- To help people understand what it is about DBT that young people find helpful or unhelpful
- To help improve our understanding of DBT and how it works

**What will happen to me if I agree to take part?**

If you agree to take part, then Ellen will arrange to meet with you. She will ask you some questions about your experiences of DBT. Some examples of questions you might be asked are given below:

1. Which DBT skills have you found most / least helpful? How do you use these skills in your day-to-day life e.g. at home or at school / work?
2. What do you think helped you to attend your DBT sessions?
3. What things did you like / dislike about DBT?
4. What changes have you noticed in your parent / carer after they started going to DBT groups?
5. What changes have you noticed in yourself since starting DBT?
6. How have you found engaging in the same DBT program as your parent /carer? How has it affected your relationship with this person?

There are no right or wrong answers to these questions. Ellen just wants to learn from your experience.

Whether you take part or not, it will not change your care plan or your treatment with the DBT service. This interview is unlikely to last longer than one hour, and you can choose to end it at any time or take a break if you feel you need to. So that Ellen can remember everything you talk about she will record your interview using an audio recorder. Ellen will be the only other person who will listen to the tape, and she will keep the recorder and the sound recording on it, in a secure place, so it is kept safe.

After your interview with Ellen, she will listen through the recording, and write out everything that you and she have said. Ellen will not tell anyone your name and the recording will be destroyed once the research has finished. If – after the recording - you decide you do not want Ellen to use some or all of the things that you have said, you can contact her within two weeks of the recording to let her know.

Once she has had interviews with about ten different people, Ellen will then write up a report of this research. This report will include things that people have said in their interviews with Ellen, but no one reading the report will know who took part. No real names will be used in the report. All the information from interviews will be stored on a secure password protected computer system. Once Ellen has been awarded her degree, all of this information will be deleted so no one can access it.

Also, Ellen will contact you about two weeks after your interview to see if there is anything about your interview you are worried about. If you are worried about any of the things that you have said to Ellen, or you are worried about how they might look if they are used in the report you can contact Ellen up until one month after you have completed your interview with her, and she will be happy to discuss this with you.

It is important you know that Ellen will only tell your DBT therapist about something you have said in your interview if she is worried that you or someone else is unsafe or at risk of potential harm. Ellen has to share this information as part of her job to make sure people are safe, however if she does feel she has to share something you have said with your DBT therapist, if possible she will make sure she talks to you about this beforehand.

**Do I have to do this?**

No, it is completely up to you, you can decide. If you say yes, you will be asked to sign a consent form to say that you will talk to Ellen about your experience of DBT. After this Ellen will arrange a time to come and talk to you. If you are below the age of 16, Ellen will also ask your parent or carer to sign a consent form saying they agree for you to take part in this research. They will not know what you say to Ellen in your interview about DBT.

If you say no, that is completely fine, and Ellen will not in contact with you.

If you say yes or no, and then change your mind, this is also fine! You can inform Ellen or someone who works in the DBT service of your decision. Again it is important you know your decision to take part in this research will not affect your treatment with the DBT service in any way. You can talk to Ellen or a member of staff from the DBT service about your decision to take part in this research. Ellen's contact details are given on the last page of this sheet.

*Thank you very much for taking the time to read through this!* **Ellen Westwood (Lead Researcher)** – [redacted] address: University of Birmingham, Psychology - Frankland Building, Edgbaston, Birmingham, B15 2TT

If you want to talk to someone who is not involved in this research project for general information about the project or for information about your participation, you can contact Dr Biza Kroese who has a lot of experience carrying out research, on the details below:

**Dr Biza Kroese –** email: [redacted] address: University of Birmingham, Edgbaston, Birmingham, B15 2TT, [redacted]

**Appendix 7 - Parent / Carer Information Sheet**

Title of Project: Dialectical Behavioural Group Therapy: A qualitative exploration of the experiences of adolescents and their carers

Lead Researcher: Ellen Westwood (Trainee Psychologist); Academic Supervisors: Dr Michael Larkin and Dr Gary Law; Clinical Supervisors: Dr Satbinder Bhogal and Dr Sian Allen

*You are invited to take part in a research study, which aims to interview young people and their parents / carers, who have completed all modules of a Dialectical Behavioural Therapy (DBT) Group Program.*

*My name is Ellen and I am interested in understanding young peoples' and their parents' / carers', experiences of a DBT group. Before deciding whether you wish to take part in this research please take your time to read through this sheet, which explains what your participation would involve, and why this research is being undertaken.*

*If you have any questions after reading this information you can contact the researcher (Ellen Westwood – see details below). Additionally, you can speak to your DBT therapist or one of the people working in the service who also know about this research.*

- What is the purpose of this research?
  This research hopes to gain an understanding of young peoples' and their carers' experiences of a DBT group program, by asking people like you, about your experiences of DBT. We hope to get a clearer understanding of what aspects of DBT are particularly helpful or unhelpful, and what changes you have made in your day-to-day life, outside of therapy after engaging with DBT. This will be the first time that research has included both the perspectives of young people and their parents / carers in interviews about their experiences of a DBT group, and to explore to what degree this dual engagement influenced their relationship and / or their experience of therapy.

- Why have I been invited to take part?
  You have been invited to take part because you and your child / young person have completed all modules of a DBT group program. These modules include: Distress Tolerance, Mindfulness, Emotion Regulation and Interpersonal Effectiveness. I am interested in asking you some questions about your experience of the therapy program.

- What will happen to me if I agree to take part?
  1. If you wish to take part in this research you can contact me directly on the details provided below, or you can ask your DBT therapist to inform me (Ellen Westwood) of your interest. Once informed of your interest I will contact you to arrange a time that is convenient for you to meet and discuss any queries you have about the research. Once you feel you understand the information about the research, and are happy to take part in it, I will ask you to sign an informed consent form stating that you agree to participate in this study.

2. Please note I will also be asking parents / carers of young people under the age of 16 who have stated they would like to take part in this research, to also sign an informed consent form on behalf of their child / young person.

3. Once I have your consent, I will arrange a time with you to complete a one-to-one interview. I would be happy to arrange the interview at a time that is convenient for you. If possible and appropriate these interviews can take place at your home or at an NHS site (which would most likely be in the building where you attend the DBT service). It is estimated that the interview will take no longer than one hour to complete.
4. After this the interview will take place. Overall, the aim of the interviews is to gain an understanding of your experiences with DBT. It is important you know there are no "right" or "wrong" answers to any of the questions you will be asked, and you can choose to skip any that you do not feel comfortable answering. The interview will be recorded using an audio device. Once the interview has finished I will be happy to discuss with you any queries or concerns you may have.

Here are some examples of the types of things you might be asked about in the interview:

1. Which DBT skills have you found most / least helpful? How do you use these skills in your day-to-day life? How did you use the skills you learnt at DBT at home / school / work etc.?

2. What do you think helped you to attend your DBT sessions?

3. What things did you like / dislike about DBT?

4. What have you noticed about your child / young person since starting DBT?

5. What have you noticed about yourself since starting DBT?

5. How have you found engaging in the same DBT program as your child / young person? How has it affected your relationship with your young person?

There are no right or wrong answers to these questions. This research just wants to learn more about people's experience.

- <u>What will happen to information from my interview?</u>
  Interviews are recorded and then typed up so the researcher can look at the content of interviews more easily. Things said by people in their interviews are looked over to draw out the different points made by people taking part. There is some more information below about what you can do if you are worried or unsure about comments you have made in your interview.

  All of the audio recordings and typed out transcripts will remain anonymous. Fake names will be used to refer to participants in the project reports. Only I (Ellen Westwood) will be aware of participant's false names. All the transcripts will be kept safe on a password protected computer system, in a secure location at the University of Birmingham. Other professionals helping with this research may also look over the interview transcripts using the fake names, to help with the analysis of the interviews. All interview transcripts and

recordings will be safe until I have been awarded my degree, they will then be deleted from this system so no one can access them.

After all the interviews have been looked at, a written report will be produced. This report may include quotations from your interview to help illustrate the research findings. This written report may also be published in peer-reviewed journals, which would be accessible to the public, but no one will know who has taken part in the research.

I would like to assure you that the quotations included in the report would be anonymous and written up under fake names. Also, I will contact you about two weeks after your interview to see if there is anything about your interview you are worried about. If you are worried about any of the things that you have said, or you are worried about how they might look if they are used in the report you can contact me (Ellen) up to one month after you have completed your interview, and I will be happy to discuss this with you.

Lastly, it is important you know that I will only inform relevant professionals from your DBT service about something you have said in your interview if I am concerned that you or someone else is unsafe or at risk of potential harm. I have to share this information as part of my job to make sure people are safe, however if I do have to share any information with a DBT therapist, if possible I will let you know beforehand that I am doing this and explain my reasons for this decision.

- <u>Are there any disadvantages to taking part in this study?</u>
  You may find it upsetting or stressful to talk or think about your past experiences of therapy; if this does happen I will ensure to the best of my ability that this is limited and manageable. If at any point you wish to have a break or end the interview, you can do so without having to give an explanation. You can also choose to skip questions you do not want to speak about during the interview.

- <u>Are there any benefits to taking part in this study?</u>
  There are no direct benefits to taking part in this study but some people may find the opportunity to think and talk about their experiences of therapy useful. It is hoped this study will provide new and useful information about the experience of DBT from young peoples and their parents'/carers' perspectives.

- <u>What will happen if I do not want to carry on with the study?</u>
  If you wish to withdraw from this research, you are allowed to do so. You can do this by contacting me (Ellen Westwood) on the details provided on the last page or you can tell a DBT therapist who can contact me on your behalf. Your decision to withdraw from the study would not affect you attending the DBT service. If you decide you want to withdraw after already completing your interview you will be asked what you would like to happen to the interview information: it can either be included in the study with your consent or destroyed. After completing the interview you will have a two-week period to reflect on things you said in your interview - at the end of this two weeks I will contact you and at this point you can choose keep your information in the study or withdraw your interview entirely or in part, without having to give a reason.

If you have any further concerns or would like to discuss any aspect of this research please do not hesitate to contact me. Contact details are given below.

*Thank you very much for taking the time to read through this information sheet.*

**CONTACT INFORMATION:**

**Ellen Westwood (Lead Researcher) –** email: address: University of Birmingham, Psychology - Frankland Building, Edgbaston, Birmingham, B15 2TT

If you want to talk to someone who is not involved in this research project for general information about the project of for information about participation, you can contact Dr Biza Kroese who has a lot of experience carrying out research, on the details below:

**Dr Biza Kroese** – email:, address: University of Birmingham, Edgbaston, Birmingham, B15 2TT,

**Appendix 8 - Young Person / Adolescent Consent Form**

Title of Project: Dialectical Behavioural Group Therapy: A qualitative exploration of the experiences of adolescents and their carers

Lead Researcher: Ellen Westwood (Trainee Psychologist); Academic Supervisors: Dr Michael Larkin and Dr Gary Law; Clinical Supervisors: Dr Satbinder Bhogal and Dr Sian Allen

**Your Name:** **Participant Identification Number:**

*Please put your initial on the dotted lines at the end of each sentence written below to show you have read and understood each point. If you have any questions, please ask either the researcher (Ellen Westwood) or a DBT therapist from your service. Once you are happy and understand all of the information below please sign the form to give your informed consent to participate in this research.*

1. I confirm that I have read and understood the information sheet for this research project. I have been given the chance to think about this information and have any of my questions about this answered. **……**

2. I understand my agreement to take part in this research is completely up to me (voluntary), and that I am free to withdraw at any time during my interview with the researcher, without having to give a reason. I know this decision would not affect my use of the Dialectical Behaviour Therapy (DBT) service. **……**

3. I understand that Ellen will only tell a DBT therapist about something I have said in my interview if she is worried about my safety, or someone else's safety. **……**

4. I understand that I will have a two-week period after completing my interview to think about what I said in the interview. After this time, Ellen will contact me to see if I am happy for my interview to be used for this research project. If I am not happy for it to be included, I know I can choose to withdraw my interview, without having to give a reason. If I have worries about some of the things I have said in my interview and am unhappy with any or some of the comments I made in the interview I know I can ask for them to be removed and they will not be used for this research project. I am aware that none of these decisions will affect my use of the DBT service in any way. **……**

5. I understand that my interview with Ellen will be recorded using an audio device. I know this recording will then by typed up by Ellen and looked over by her and some other researchers from the University of Birmingham to help with the analysis. Parts of my interview might also have to be shared with a DBT therapist - this will only happen if there are concerns about my own safety or the safety of others. **……**

6. I understand that a written report may be published for this research project. This write-up may include quotes from my interview, but my name and any other identifying information will not be included in these quotes. I understand that I will be offered the chance to look over the quotes taken from my interview that have been included in the written report. If I am not happy for them to be included in the written report, I can ask for them to be removed before they are published for others to see. **……**

7. I agree to take part in the above study. **……**

**Name of Participant:** **Date:** **Signature:**

**Name of Researcher:** **Date:** **Signature:**

**Appendix 9 - Parent / Carer Consent Form**

Title of Project: Dialectical Behavioural Group Therapy: A qualitative exploration of the experiences of adolescents and their carers

Lead Researcher: Ellen Westwood (Trainee Psychologist); Academic Supervisors: Dr Michael Larkin and Dr Gary Law; Clinical Supervisors: Dr Satbinder Bhogal and Dr Sian Allen

**Your Name:** **Participant Identification Number:**

*Please put your initial on the dotted lines at the end of each sentence written below to show you have read and understood each point. If you have any questions, please ask either the researcher (Ellen Westwood) or a DBT therapist from your service. Once you are happy and understand all of the information below please sign the form to give your informed consent to participate in this research.*

1. I confirm that I have read and understood the information sheet for this research project. I have been given the chance to think about this information and have any of my questions about this answered. **……**

2. I understand my agreement to take part in this research is completely up to me (voluntary), and that I am free to withdraw at any time during my interview with the researcher, without having to give a reason. I know this decision would not affect my use of the Dialectical Behaviour Therapy (DBT) service. **……**

3. I understand that Ellen will only tell a DBT therapist about something I have said in my interview if she is worried about my safety, or someone else's safety. **……**

4. I understand that I will have a two-week period after completing my interview to think about what I said in the interview. After this time, Ellen will contact me to see if I am happy for my interview to be used for this research project. If I am not happy for it to be included, I know I can choose to withdraw my interview, without having to give a reason. If I have worries about some of the things I have said in my interview and am unhappy with any or some of the comments I made in the interview I know I can ask for them to be removed and they will not be used for this research project. I am aware that none of these decisions will affect my use of the DBT service in any way. **……**

5. I understand that my interview with Ellen will be recorded using an audio device. I know this recording will then by typed up by Ellen and looked over by her and some other researchers from the University of Birmingham to help with the analysis. Parts of my interview might also have to be shared with a DBT therapist - this will only happen if there are concerns about my own safety or the safety of others. **……**

6. I understand that a written report may be published for this research project. This write-up may include quotes from my interview, but my name and any other identifying information will not be included in these quotes. I understand that I will be offered the chance to look over the quotes taken from my interview that have been included in the written report. If I am not happy for them to be included in the written report, I can ask for them to be removed before they are published for others to see. **……**

7. I agree to take part in the above study. **……**

**Name of Participant:** **Date:** **Signature:**

**Name of Researcher:** **Date:** **Signature:**

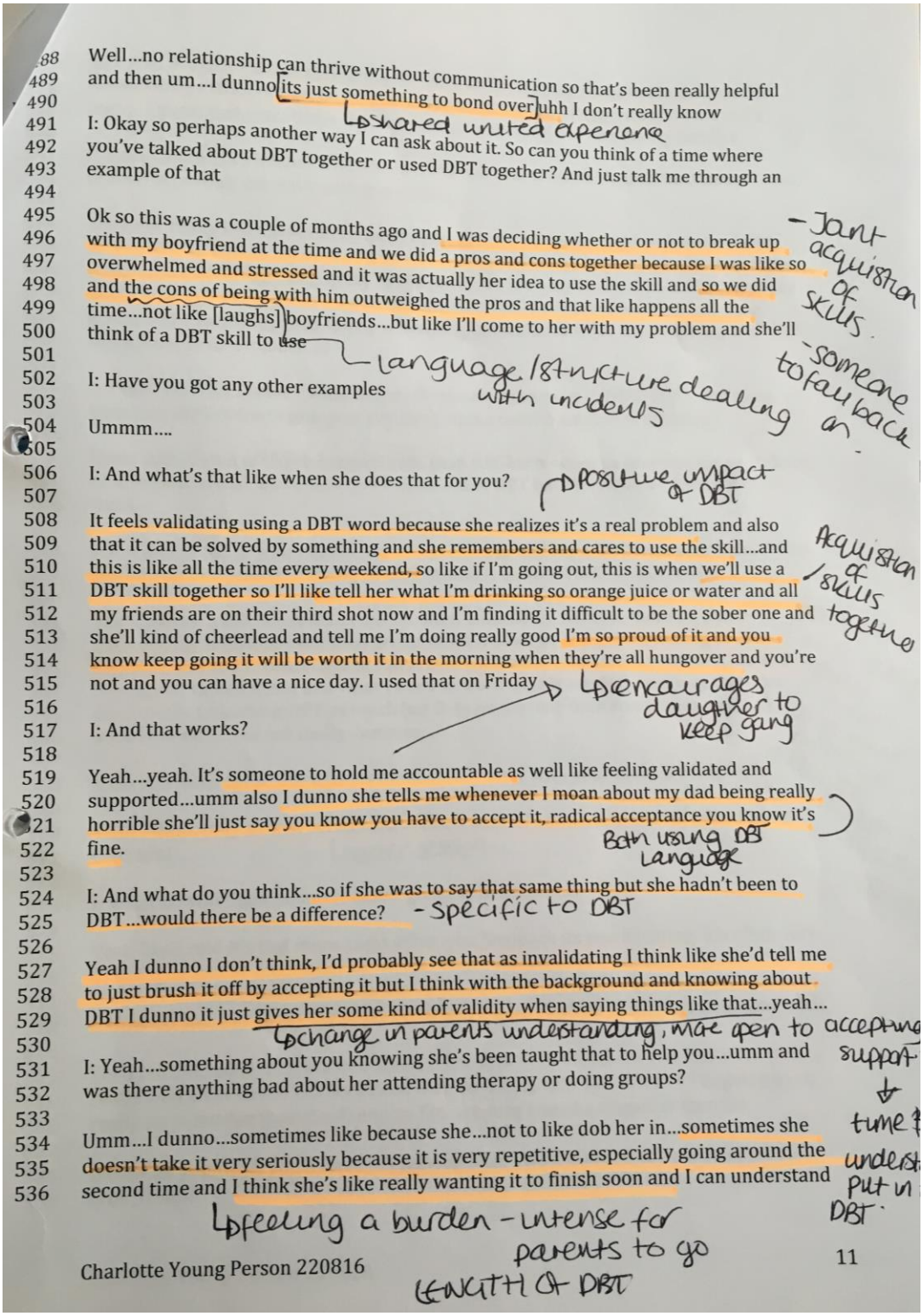
**Appendix 10 - Semi-Structured Interview Schedule**

1. How did you come in to contact with DBT services?
2. Can you tell me about your experience of DBT?
3. How has DBT compared to your experience of therapies?
    a. Follow-up questions: What was different / similar or better/worse?
4. Could you describe in as much detail as possible things you have found helpful in DBT?
5. Could you describe to me in as much detail as possible things you have struggled with or found unhelpful in DBT?
6. How have you found the structure of DBT in terms of the way it covers modules and skills?
    a. Follow-up Questions: Are there any particular modules you found most / least helpful? Could you tell me more about this?
    b. What do you remember from the following DBT modules: 1) Mindfulness, 2) Distress Tolerance, 3) Interpersonal Effectiveness, 4) Emotion Regulation and 5) Walking the middle path?
7. How do you use DBT skills in your day-to-day life e.g. at home or at school / work?
    a. Follow- up Questions: Do you have an example of this? Could you say something more about that?
8. What things did you like / dislike about DBT?
    a. Follow-up Questions: Do you remember how that impacted your engagement with therapy at the time?
9. What have you noticed about yourself since starting DBT?
10. How has DBT been useful to you?

*I would like to introduce a bit of a new topic, and think about how you have found your young person or parent / carer attending a similar DBT group?*

11. Can you tell me about how you have found this experience?
12. What have you noticed about your parent / carer since they have done DBT groups?
    a. Follow- up Questions: Do you have an example of this? Could you say something more about that?
13. How have you found engaging in the same DBT program as your parent /carer? How has it affected your relationship with this person?
    a. Follow- up Questions: Do you have an example of this? Could you say something more about that?

**Appendix 11 - Example of initial stage of IPA: Reading & Highlighting of Interview Transcript (using Charlotte's (Young Person) Interview**



Well...no relationship can thrive without communication so that's been really helpful and then um...I dunno its just something to bond over uhh I don't really know

↳ shared united experience

I: Okay so perhaps another way I can ask about it. So can you think of a time where you've talked about DBT together or used DBT together? And just talk me through an example of that

Ok so this was a couple of months ago and I was deciding whether or not to break up with my boyfriend at the time and we did a pros and cons together because I was like so overwhelmed and stressed and it was actually her idea to use the skill and so we did and the cons of being with him outweighed the pros and that like happens all the time...not like [laughs] boyfriends...but like I'll come to her with my problem and she'll think of a DBT skill to use

- Joint acquisition of skills
- someone to fall back on

↳ language/structure dealing with incidents

I: Have you got any other examples

Ummm....

I: And what's that like when she does that for you?

↳ positive impact of DBT

It feels validating using a DBT word because she realizes it's a real problem and also that it can be solved by something and she remembers and cares to use the skill...and this is like all the time every weekend, so like if I'm going out, this is when we'll use a DBT skill together so I'll like tell her what I'm drinking so orange juice or water and all my friends are on their third shot now and I'm finding it difficult to be the sober one and she'll kind of cheerlead and tell me I'm doing really good I'm so proud of it and you know keep going it will be worth it in the morning when they're all hungover and you're not and you can have a nice day. I used that on Friday

Acquisition of skills together

↳ encourages daughter to keep going

I: And that works?

Yeah...yeah. It's someone to hold me accountable as well like feeling validated and supported...umm also I dunno she tells me whenever I moan about my dad being really horrible she'll just say you know you have to accept it, radical acceptance you know it's fine.

Both using DBT language

I: And what do you think...so if she was to say that same thing but she hadn't been to DBT...would there be a difference?

- specific to DBT

Yeah I dunno I don't think, I'd probably see that as invalidating I think like she'd tell me to just brush it off by accepting it but I think with the background and knowing about DBT I dunno it just gives her some kind of validity when saying things like that...yeah...

↳ change in parents understanding, more open to accepting support ↓ time ? understand put in DBT.

I: Yeah...something about you knowing she's been taught that to help you...umm and was there anything bad about her attending therapy or doing groups?

Umm...I dunno...sometimes like because she...not to like dob her in...sometimes she doesn't take it very seriously because it is very repetitive, especially going around the second time and I think she's like really wanting it to finish soon and I can understand

↳ feeling a burden - intense for parents to go

LENGTH OF DBT

Charlotte Young Person 220816

11

**Appendix 12 - Example of secondary stage of IPA: Clustering excerpts and noting initial interpretations (using Fatima's (Parent) Interview)**

| **Discussion Topic & Preliminary Interpretation** | **Extra (Line number / Page)** |
|---|---|
| **Pre-Therapy Experience / Expectations**<br><br>Worried about being accepted in to this DBT – potentially makes it more desirable / appear more specialist?<br><br>CAMHS – input was too quick, not enough to contain distress / take in information; Family therapy helpful but DBT stuff more tangible and generalisable skills. | • 'They were saying they had to see whether we could get on the program or not…so it was like OK what if not' (24-27/1)<br>• 'In our case anyway it was like you know the self-harm, attempts to end her [daughter] life and it was straight to CAMHS…CAMHS medication and then home treatment and it was so quick like you didn't have time or information' (56-59/2)<br>• 'In family therapy everybody got to sort of say you know…this is how I felt…this is what I was feeling…you just did the bare necessity…you forgot about general other things you could do...you could sit and watch a movie together…so family therapy was like…why don't you do that, so you're getting yourself back together…DBT more [helpful]…because that's giving you the skills of how to deal with a situation. Family therapy was good don't get me wrong but from a different end' (277-300 /6&7) |
| **What DBT did / What parent learned**<br><br>Containment of reassurance given by DBT therapists help increase Fatima's confidence in new ways of interacting /communicating with her daughter.<br><br>Fatima positively experienced personal benefits outside of parent-child relationship, helped reduce her own distress. Distress also reduced from feeling less pressure to 'solve everything'.<br><br>Fatima's daughter had quite a complex history with mental health services…Fatima, as mum asserts DBT's utility by reflecting that they would have benefitted as a family from it if they'd received it a lot sooner – DBT could have been proactive to prevent problems | • 'To me [DBT] is mindfulness…more factual, it teaches you what the facts are…that's what I understand anyway' (37-40/1)<br>• 'When we go to DBT…I felt that I understood it more for a start…so about the whole mental health situation…yeah self-harm and all that…no one understood the reasons why you see…we only got that once we got in DBT…when we spoke you know and we could ask questions' (51-64/2)<br>• 'You know I would come home [from DBT] and I would tell my husband this is what we need to do' (88-89/2)<br>• 'Interviewer: What you found most helpful with DBT? Fatima: It is mindfulness validation and listening…sometimes you just listen and sort of I understand where you're [daughter] coming from and leaving it at that – whereas I thought being a parent I had to come up with a solution…every time' (105-107/3)<br>• 'Some times as parents you can't solve everything' (112 /3)<br>• 'Mindfulness really it's …being in the moment, if your mind or your thoughts are going quite crazily it just sort of bring yourself back' (130 – 132 /3)<br>• 'Just that reassurance…you say okay this is what we're doing and they [DBT therapists] say okay that's fine' (257-259/6) |

| | |
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| exacerbating within family and for Fatima's daughter. | • 'If I'm stressed then I use it [DBT skills]…I just try and calm myself…lets say somebody says something…even if it's about me…before I would think why did that person say this, why did they say this…whereas now I think well if that's their opinion, that's their opinion' (351-358 / 8)<br>• 'They [DBT Therapists] actually showed videos and they were really good because those are the things you particularly remember…the videos even though they were short, they were brilliant and it remind you' (456-460 /10)<br>• 'I think if somebody comes to you with mental health and those issues…I think that's [DBT's] something they need to try first…rather than wait 'til your desperate…it may be very costly but I think that it will be cost effective…because you know if we had that probably we wouldn't have had the second or even first admission to hospital' (462 – 471 /10) |
| **Emotions of Parent**<br><br>Prior to DBT Fatima and others in family system experienced intense emotions - desperation; confusion; shock; worry | • 'We [Fatima's family] were quite desperate…. Interviewer: What do you think you were desperate for? Fatima: Just some explanation some answers' (43-48/1)<br>• 'I mean you're in shock yourself when these things happen [when daughter self harms]' (95-96/2)<br>• 'I just used to think [before DBT] oh my god, you know? What if, you know?' (160-161/4) |
| **DBT Parent Group**<br><br>Support from parents and learning of skills were both important/useful. Fatima had confidence in therapist's suggestion/educating of DBT skills, this was backed up by other parents experience of using skills and suggesting skills when 'difficulties' were discussed in the parent group.<br><br>During group Fatima took perspective from others situations, this helped her appreciate her situation at home a bit more and reduced distress. | • 'We spoke to other parents and they explained their experiences and then you realise ok…this is why people do it [self-harm]' 64-65/2)<br>• 'You could stay focused…I thought the structure of it was quite good…rather than saying what should we talk about today' (117-120 /3)<br>• 'You know you'd say oh god I've had a tough week and then you heard that somebody else actually had it worse it just made you feel like oh…maybe things are not that bad' (198-200/5)<br>• 'Let's say I had a difficult week and then they [other parents /carers] would say…try this…we all got on really well…we all supported each other' (203-207 / 5)<br>• 'When you're having a general discussion and you're saying this happened to us…it's different but you know they [DBT therapists] need to tell you…this is what the skill is…it has more weight to it because they're explaining it and it's proper…you have more confidence in it if it's a named skill' (446-451 /10) |
| **Length & Commitment of DBT**<br><br>Comments suggest Fatima wanted longer in DBT that 6 months, so | • 'I never thought of the duration of it…the 6 months went really quick' (28-30 /1) |

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| this amount of time/therapy input didn't feel too much?<br><br>Compared to CAMHS, DBT length was favorable. | • 'Most people by the time they get to DBT…are quite desperate for some results or some support…by the time you get to change things and you're getting in to the swing of it your 6 months is nearly up' (216-217/5) |
| **DBT Language**<br><br>Fatima remembered some of DBT terminology after having left DBT. Something about the new DBT language is memorable. The names of skills help you recognise/appreciate their utility. | • 'Emotion regulation…we did the wise mind' (153-154/4)<br>• 'You have more confidence in it if it's a named skill' (451 / 10) |
| **Acquisition / Implementation of DBT**<br><br>Takes time to feel comfortable and pick up skills in group – skills went against Fatima's usual way of acting so she had to implement them consciously. Use of 'we' suggests post-DBT the partnership between Fatima and her daughter has helped maintain skills implementation. | • 'I had to consciously remind myself because you know you're used to how you were as a parent…so I had to remind myself' (184-186/4)<br>• 'You're getting in to the swing of it, your 6 months is nearly up' (217/5)<br>• '[Applying skills after leaving DBT]…it was difficult...I had to sort of tell myself you know…you know nobodies going to be with you all the time…but it is quite scary…but luckily we managed' (246-250/6) |
| **Fears / Frustrations**<br><br>Scared about leaving therapy after such intense input – felt isolated/lonely after leaving? | • '[On recently leaving DBT] I was quite sad actually…I think oh no we're on our own again…whereas before you know I thought I had that support' (239-241/5) |

**Appendix 13 - Example of secondary stage of IPA across interview transcripts within a dyad (using Sophie's (Young Person) and Sandra's (Parent) Interviews)**

| **Topic & Initial Interpretation** | **Extra (Line number / Page)** |
|---|---|
| **Partnership use of DBT**<br><br>Having the 'other' helped identification of change – increased motivation /hope for DBT? Sophie did not feel apprehensive about her mum's inclusion.<br><br>Mum helped acknowledge skill use that went unmissed by Sophie– their shared DBT knowledge enabled this.<br><br>Experienced DBT to improve their already strong relationship – Sophie felt relieved for mum being there – eased therapy for her somewhat.<br><br>Sophie felt comfortable to invite mum in to her 1-1 sessions, this helped improve mum's understanding even more of self-harm and enabled mum to appreciate Sophie's input to her therapy. Suggests Sophie was proud of this work?. Mum's experience of this was positive also / eye opening and had admiration for her daughter – their experience was reciprocated.<br><br>Partnership helped motivation and was actually enjoyable and their relationship strengthened over it (use of the word | *Sophie (Young Person)*<br><br>• 'At first I was like this [DBT] isn't doing anything… but my mom would be saying you've improved so much...she'd noticed that I'd calmed down…but it took me a while to realise that I'd actually change a lot' (170 – 177 /4)<br>• '[Talking about Distress Tolerance Module] I find that really difficult…if I'm really negative, I want to feel that…so when they give you all these activities…there's loads…like take a bath or play some music…I found it really difficult…but then my mum would actually point out…because she's learning the same skills…she'd tell me that I was doing it [distress tolerance] right now…like stroking one of the dogs…I do it naturally and mum and DBT helped me realise what I was doing' (255 – 265 /6).<br>• 'Interviewer: How you found doing the therapy with your mum learning about it too? Sophie: I was really relieved because me and my mum are really close…good to have both of us learn stuff because we could remind each other…I wouldn't have to have the responsibility of telling her what I'd been doing…took some of the pressure of us both…it's definitely built on our relationship, I actually thought we were fine before, but I do think we've improved a hell of a lot' (404 – 409 /9)<br>• 'I'd talk through a chain of my self harm with her [Mum] which was really helpful...it made us both understand and she could see the work I was putting in, my therapist would help explain and support me' (455 – 457 / 10).<br>• 'We'd both do our homework together. Interviewer: What was that like? Sophie: it was like bonding…it was really cute' (475 /10)<br>• 'She [mum] would push me and help me and nudge me…she knew what I needed to do because we'd learn the same so it was just easy' (477 – 479 / 10).<br><br>*Sandra (Mother)* |

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| ‘ bonding’). Helped through DBT practically meaning they had to spend more time together.<br><br>Shared language is meaningful and positive / light-hearted / reduces tension of a situation. Reflected by Sandra laughing during interview but also laughing when she says it with Sophie. | • ‘I find it an amazing insight in to Sophie when she invited me in to her one-to-one sessions and showed me a chain analysis’ (116 /3)<br>  ○ Follow-up comment: ‘I was amazed to see how far she had come…how her language and the use of DBT language had developed…I was in awe of her really, of how she’d come’ (122 – 125 /3)<br>• ‘We got in a pattern of going in to town before the sessions…have something to eat or a little shop…make a bit of a day out of it…it was our little routine, it brought us a lot closer because we were spending more time together’ (273 – 276 /6).<br>• ‘I say well that’s not finding the middle ground [laugh] Interviewer: And is that helpful? Sandra: Yeah because we laugh about it, Interviewer: Why do you think that’s helpful? Sandra: because we both know, Sophie’s not just like…you’re just saying that because you’re my mother it’s something we’ve both learned about that can help...we’ve both been taught this as a thing that helps’ (326 – 337 /7) |
| **<u>Parent-Child Relationship</u>**<br><br>**<u>Parent – Parent Relationship</u>**<br><br>Helped build on relationship foundations that were already present in relationship. DBT not just helpful in repairing relationships.<br><br>Sandra was experienced as more empathic / aware of Sophie’s emotions she didn’t have to ‘act out’ to get Sandra’s attention - this is what helps reduce urge to act recklessly.<br><br>Sandra was able to be more ‘practical’ when Sophie self-harmed. She could manage her emotions and better meet Sophie’s needs. This was corroborated by both Sandra & Sophie’s comments. | *Sophie (Young Person)*<br><br>• ‘Me and my mom have an amazing relationship so we were like oh cool, we’re already doing some of this stuff…maybe we just need to notice it a bit more’ (282 -284 /6)<br>• ‘I am just a lot more open to talking with my mum…she is just a lot more understanding of what I do…say I go and smoke weed… she’ll be more understanding of what lead me to do that…instead of just being like oh you’re grounded…and I’m like oh cool she understands, or even she’s helped me understand…and I don’t have to be rebel anymore…I don’t have to do it in her face to notice that I’m not OK’ (413 – 425 /9)<br>• ‘If I self-harmed now…she [mum] wouldn’t have a go…she wouldn’t be upset…she’d just help me clean it up and ask me why…and that’s what I need, instead of an argument’ (463 – 465 /10)<br><br>*Sandra (Mother):*<br><br>• ‘I did stop freaking out about it (self-harm)…when it first happens it’s a natural reaction as a parent to be really upset about it…it had been going on for such a long time, it’s just a matter of dealing with it…definitely…even more so with DBT…thinking about my responses…how to talk about it…where as before I might have just jumped in’ (288 - 294 /6&7). |

| | |
|---|---|
| **<u>DBT Language: Both speaking the same tongue</u>**<br><br>Playfulness / Light-heartedness when using DBT language, helps acknowledge what they're doing. Unity over what a term means.<br><br>Talking about Sophie, Sandra suggests that the DBT language played a quite a big role in facilitating change for Sophie.<br><br>LANGUAGE – allowed identification of the change | *Sophie (Young Person)*<br><br>• 'I'd say 'hey mum, we just walked the middle path here [laughs], she'd be like oh yeah we are' (288 – 289 – 6)<br><br>*Sandra (Mother)*<br><br>• 'Sophie was using the DBT language you know, it was different to how she would talk about situations before…before she had no frame to help explain how she feels' (129 -131 /3) |

## Appendix 14 - Master Table of Themes and Extracts from Participant Interviews

*(N.B. Extracts' transcript line numbers are shown in brackets)*

### Superordinate Theme One – A Good Fit; Feeling Safe and Contained at Last

*Subordinate Theme 1.1 - Belonging*

CHARLOTTE: It [DBT] felt more personalised to you…it's specialised to a particular group of people...if you've got a specific problem, you can't fix it with something else, like you can't fix a broken leg with cancer treatment (325 -330)

SOPHIE: Counseling…so many people have it…they are just giving you the same treatment as everyone…whereas DBT felt a bit more specific to me and how I felt…I've been chosen to do this, so they know how to deal with me (222 – 226)

Michelle: We went in to DBT and they assessed [daughter] and said yes we think this is the right thing for you…at that moment me and [daughter] were like yes, yay, this could be really good, this could be the thing (100 -102)

Carole: For the first time someone [DBT Therapist] actually said to me this is what we think is wrong with your daughter…I was like why has it taken so long for anybody to say to me…I know people can get themselves in to a state about a label…sometimes that useful to you at least…it's something to take hold of…you can swot up…and actually learn about what you're dealing with (217 – 222)

Sandra: Good to be starting something that we had read about as being the thing to help with difficulties that really fit [daughter]…the only therapy that is available, it just seemed to fit (207 – 209)

*Subordinate Theme 1.2 – DBT's Intensity and Structure: Notable and Necessary*

LAYLA: Discussing those kind of things for three hours a week...and then when you're in crisis, there's another point of view there that's strong (560 – 561)

CHARLOTTE: Oh my goodness a year, like three hours a week, that's so much, but I knew it'd be worth it' (44)

CHARLOTTE: It feels like school… I'm used to that (184 – 185)

MOLLY: DBT makes me feel like I have the control…they give you the skills…you have the power to use them…it gives me a lot of structure, which is what I need (375 -378)

SOPHIE: It's a bit like school because they ask you to learn all these skills and key words (115)

Michelle: You felt quite safe knowing that you'll go to DBT every week (451)

Fatima: It was like...[daughter would] self-harm…and it was straight to CAMHS…and then home treatment… it was so quick, you didn't have the time or information (56-59)

*Subordinate Theme 1.3 – Not-judged: I am not bad/mad*

CHARLOTTE: Being judged by others, I was so conscious of that (404)

Michelle: You really don't mind sharing that your child has done something this week…and how it's affected you, it's nice that you're in that environment…nobody's frightened to hear it…and you're not frightened of being judged (271 – 275)

Delia: I thought this is somewhere I can let my hair down…because when I feel comfortable…I am okay (37-38)

Delia: If you don't understand…had questions…they were absolutely fine…sometimes when you go places, some people look at you like why didn't you know that…but there was none of that (47 – 52)

**Superordinate Theme Two – Acceptance: A New Way of Relating to Problems**

FARRAH: I don't think it gets rid…of the problem but it gives you a way of dealing with whatever is going on (45 – 48)

FARRAH: I used to blame myself…but that [DBT] kind of helped me accept the fact it had happened but know that it wasn't necessarily my fault (218 – 222)

LAYLA: This is out of my hands…I've got to accept that is how it is…I can only be responsible for me…I think that is what really clicks (80 – 83)

Sandra: You as a parent have to stop battling things…there's a lot of things you have to let go of…it's not about a cure…[daughter] is always going to be [daughter] but [daughter] and I will be able to understand things better (245 – 254)

Delia: You don't want it to happen [daughter's self-harm] but you can't change it…this is where DBT comes in because it's a situation you've got…you think how are you going to handle that…I can resolve a situation…rather than going in with steam coming out of your ears (236 – 254)

Michelle: Because I'm mum, I wish it could be a case of [daughter's] well and…okay 'bye' [to mental health services], you know we [Michelle and daughter] had this conversation…[daughter] said 'mum my therapist said I will forever…probably have to work on this, but I know now how to deal with my emotions' (441 – 444)

**Superordinate Theme Three – Acquiring DBT Skills**

*Subordinate Theme 3.1 – Finally, something I can work with*

CHARLOTTE: [on mindfulness skill] sometimes I binge eat…and just not think about it…now…I'm really taking the time to eat and think about every bite and chew slowly and savouring it, it makes a huge difference' (153-155 /4)….'sometimes I just forget it and I don't want to mindfully eat I just want to have a conversation but I try to practice it whenever I can (163 – 164)

CHARLOTTE: I have my skills diary by my bed so when I look at it in the morning I just run through it in my head… and then I kind of just have a routine of skills so they become quite normal, like mindfulness with eating (277 – 280)

MOLLY: I would often think about it…during the session…so like OK am I meeting Dad this week? Can I use the skill...I want to speak to him...and often when I can feel my increase of adrenaline, I can notice and then I'll think okay what state of mind am I in and what skill can I use and I just kind of go through the list in my head (227 – 233)

Darren: It [DBT] gives you the tools…trains you to deal with situations you'd normally react really, really quickly to (16-17)

Fatima: If I'm stressed then I use it [DBT skills]…I just try and calm myself…lets say somebody says something…even if it's about me…before I would think why did that person say this, why did they say this…whereas now I think well if that's their opinion, that's their opinion (351-358)

Carole: I'm a typical woman, I'm a very emotional person…If I'm getting angry or I'm upset or I'm crying I know I have to wait till I get in to WISE MIND…so I don't do the spur of the moment things that I used to…I'm much more rational (695 – 701)

Carole: It's [DBT] actually given me something to finally work with…it's completely changed the way I parent (117 – 118)

*Subordinate Theme 3.2 – Speaking in DBT*

CHARLOTTE: She's [mum] in on it now… I've got someone I can rely on and know what I'm saying when I'm talking about DEAR MAN or the weird lingo and things (435 – 436)

FARRAH: There was like *GIVE*…being gentle and stuff, I remember that one and *ACCEPT*...they just use different letters (74-79)

SOPHIE: I'd say 'hey mum, we just walked the middle path here [laughs], she'd be like oh yeah we are (288 – 289)

LAYLA: You think why are you…using ridiculous words [DBT language] to describe simple things (126 – 127)

Darren: if [daughter] is upset…you're in that circle of panicking…you can cut it by saying…you're in emotional mind…let's think what we would do if we were in wise mind…it stops the cycle of panic (62 -67)

Darren: It would really validate, oh you see there I go using a word – validate (253 -254)

**Superordinate Theme Four – Learning Together**

*Subordinate Theme 4.1– Being in the company of peers like me*

FARRAH: Originally [group] was really scary…I never used to talk…the therapists kind of push you a little bit to try talking…and then eventually it kind of felt like a little family (113 - 115)

FARRAH: You got ideas off other people and that kind of helps (152 – 153)

CHARLOTTE: I really enjoyed group because I met some really nice people and I know that's not specific to DBT but it was helpful…to be with people that had basically had the same struggles that was helpful in itself (392 – 394)

SOPHIE: It can feel very intense…obviously the people in DBT haven't been through very nice things, and you've got to…talk…and hear about that (122 – 124)

MOLLY: Because I've had such awful thoughts from a young age and to hear someone else saying they've had those same thoughts…it's like oh my god, I'm not actually as crazy as I thought I was…it's just really nice (293 – 295)

Delia: They [people in group] always tried to keep your spirit up (162)

Darren: The main, main thing…fantastic to sit with other parents that are having the same…or worse issues…nine times out of ten it's reassuring…the other parents they say they'd have done the same or they offer other ideas that you wouldn't have thought about (28-34)

Sandra: You saw these new people [join the DBT group]…when you first coming in, I remember…thinking OK this is going to solve everything…. it isn't like that, it's about finding skills to take forward (239 – 242)

Carole: It's like any negative experience that you go through in life it's really, really useful to meet somebody who's been through a similar experience because whatever that negative experience is it's incredibly isolating because most people don't understand' (615-618)

Michelle: Some of the other girls they've had horrible experiences, so it makes you realise my situation isn't so bad (297 – 298)

*Subordinate Theme 4.2 – Becoming a DBT Family*

LAYLA: Some of me feels perhaps I am barring them [parents] from potential benefits…other people say oh my goodness my parents love this…they know they're not alone…also the language they can discuss the language at home because that person has been taught it…but I think on balance it was worth it for me (467 – 473)

Interviewer: How you found doing the therapy with your mum learning about it too? SOPHIE: I was really relieved. Because me and my mum are really close…good to have both of us learn stuff because we could remind each other…I wouldn't have to have the responsibility of telling her what I'd been doing…took some of the pressure of us both…it's definitely built on our relationship, I actually thought we were fine before, but I do think we've improved a hell of a lot (404 – 409)

Sandra: I did stop freaking out about it [daughter's self-harm]…when it first happens it's a natural reaction as a parent to be really upset about it…it had been going on for such a long

time, it's just a matter of dealing with it…definitely…even more so with DBT…thinking about my responses…how to talk about it…where as before I might have just jumped in (288 – 294)

Delia: If [daughter] didn't know anything at the end of the session, we could go through it together (211 – 212)

Delia: Things are a lot calmer [since DBT]…not all the time…but 80% calmer (184)

Darren: Rather than being a parent and sitting talking to a young person…both of us being in DBT…obviously they've done the same lessons…it's like it jogs the memory…which helps her [daughter] use the skill (111-114)

Darren: It's a lot easier to communicate as a family…[daughter] always had an issue and I'd say 'I know' and she'd always say, no, but you don't know...with DBT I learned to say 'Okay you're right, I don't know but let's talk about it (167-171)

MOLLY: Last time I did take an overdose…mum was…on holiday…obviously she was really upset but she stayed really calm and just thought things through, like okay you can go to your aunties…she was just thinking things through for me practically, instead of stressing out…it was just exactly what I needed because often…she would freak out and then I would freak out…so it was just a spiral, so now when I freak out and she's calm, it gives me stability and then I calm down from that (608 -621)

Michelle: Classic example…[daughter says] 'mum I'm going out tonight'…[I say] 'you need to be back early'…learning to find a middle ground and sort something out together, doing it together, rather than one extreme and the other completely clashing (164-167)

Michelle: Slowly but surely the skills come in from both of us, and they just work, it just works' (203 -204)

Michelle: I can spot them [Daughter's use of DBT skill] because I know about them I guess...I will say oh you've just used this skill (437 – 439)

FARRAH: Thank god we did it [DBT] because before she'd never really do it…she would kind of flip it and say you shouldn't be thinking this…thank god we did it (274-285)

FARRAH: Before [DBT] she'd [mum] be kind of nickity…she didn't really know what to do wen I had a breakdown or if I'd get angry…she just didn't really know how to cope and I think after DBT…my self-harm behaviour…she knows now how to deal with it when it happens so it's a lot better now than it was (338-350)

Fatima: I was learning the same thing [as daughter] so if she was slipping up or vice versa we could remind each other…like what about this or why don't you try this…whereas if she went on her own and I didn't have a clue, I wouldn't be able to support her (316-319)

Fatima: I mean we were close before but somehow we are closer now…it was something we did together (363 – 365)

CHARLOTTE: it's been so good that she's [mum's] been doing it… I think going to therapy appointments was quite isolating…she'd always ask what was happening and that was

infuriating but now that she's in on it [DBT]…it just makes it so much easier because I've got someone I can rely on (432 – 435)

CHARLOTTE: I've got someone [mum] I can rely on and knows what I'm saying when I'm talking about *DEAR MAN* or the weird lingo and things (435 – 436)

CHARLOTTE: I used to blame [mum] for it completely…DBT has taught me that yeah it is difficult for parents so they need support as well (639)

Carole: Because we've gone through DBT together she knows that I know how she's feeling and what we need to do about it…that makes my life 100 times easier (141-144)

Carole: [Daughter] knows you know, 'cos i've sacrificed so much time and energy, it's been really hard going…as a single parent with four children who worked full time, this has been really tough but don't get me wrong, this has been the best thing I could have possibly done. She [daughter] knows I'm invested in this, and she knows she can call on me (160-168)