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Main Research Project…….6370

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Please note all word counts exclude abstracts, figures, tables and references.

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Abstract – Literature Review

Child maltreatment is associated with elevated risk of post-traumatic stress disorder (PTSD). Whilst treatments for PTSD in young people already exist, some argue that trauma-related mental health outcomes for maltreated children are more complex and not appropriately targeted via standard treatments. This systematic review focuses on trials post- 2011 to provide an update on a previous review of psychological treatments for PTSD in maltreated young people. Fifteen randomized controlled trials and five non-randomized controlled clinical trials satisfied the inclusion criteria. Studies incorporated a range of maltreatment (e.g. domestic violence, sexual and physical abuse). Most studies focused on treatments underpinned by cognitive behavioural models, however several other interventions also demonstrate promising findings worthy of further investigation. In line with the previous review, trauma-focused cognitive behaviour therapy remains the best supported treatment for older children and adolescents following child maltreatment with new evidence since the previous review of improvements maintained at follow up. Gaps in our knowledge remain including which interventions are most effective for young children who have experienced significant neglect, how maltreatment related characteristics influence treatment effectiveness and drop-out, and the impact of existing interventions on difficulties associated with complex trauma. Limitations and future research directions are discussed.

Keywords: systematic review, child maltreatment, PTSD treatment, youth

Abstract – Service Improvement Project

The period of transition from child to adult services brings many challenges. Despite this, evidence for effective service models or interventions remains sparse. The current study aimed to evaluate a recently implemented transition policy based on “Ready, Steady, Go” principles in an NHS trust within the South West. All transitions during a one-year period since the policy had been implemented were audited to see if guidelines were being adhered to. Six young people were interviewed on their lived experience of transitioning under this policy. Thematic analysis identified four themes from the data: timing of transition, loss of support, building relationships and importance of preparation and communication. Results showed that the new transition policy had not yet been successfully implemented but, most importantly, highlighted what factors are important in developing transition policies or programs. These findings add to the small body of literature in mental health transitions. More research is needed to explore the effectiveness of interventions aimed at improving transitions; however, the challenges of implementing them must be understood in the first instance and this paper concludes with a discussion of the potential barriers and recommendations for the improving transitions.

Keywords: transitions, qualitative, mental health, young people

Abstract – Main Research Project

Objective: Research suggests that the experience of betrayal may be an important dimension contributing to trauma-related distress. This study utilised a clinical sample in an attempt to replicate the association between betrayal trauma and borderline personality disorder (BPD) found by Kahler & Freyd (2009; 2012) whilst also examining the role of betrayal trauma age. Secondary aims examine whether mental contamination (MC) is relevant to individuals with BPD and explore the role of appraisals. **Method:** Using a cross-sectional design, 122 adults were recruited to one of three groups: BPD, clinical controls or non-clinical controls. **Results:** The BPD group reported a greater number of high and medium, but not low, betrayal traumas than controls and a greater number of childhood betrayal traumas. As predicted, MC scores were higher in the BPD group than controls. Using multiple regression, we found appraisals predicted BPD symptoms above cumulative betrayal trauma, with high betrayal trauma and appraisals the only significant predictors. Exploratory analyses were conducted to consider betrayal trauma characteristics. Appraisals, number of adulthood betrayal traumas, repeated adulthood betrayal trauma and number of childhood betrayal traumas significantly predicted BPD symptoms, with childhood betrayal trauma the largest predictor. **Conclusions:** Findings provide support for betrayal trauma theory highlighting that perpetrator closeness and age of betrayal may help explain the relationship between trauma and BPD. This emphasizes the need for future research to focus on the consequences of childhood interpersonal trauma for survivors. Future research is needed to understand the relationship between MC and BPD, however clinicians should consider MC when working with individuals who have experienced betrayal traumas.

Keywords: Betrayal trauma, borderline personality disorder, appraisals, mental contamination

Critical Review of the Literature

A systematic review of controlled-trials for PTSD in maltreated children and adolescents.

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Target Journal for Submission:

Child Maltreatment (IF: 2.984)

This journal was chosen for its relevant to project content and project design methodology.

Child maltreatment is defined as the abuse or neglect of a person under the age of 18 in the context of a relationship of power, trust or responsibility (World Health Organisation [WHO], 2016). The last survey of children and young people in the UK indicated that 1 in 5 reported having experienced severe maltreatment (Radford et al., 2011). Maltreatment is considered a key risk factor for psychopathology across the lifespan (Fergusson, McLeod, & Horwood, 2013; De Bellis et al., 1999; Rasmussen, Arefjord, Winje & Dovran, 2018). It has also been linked to several poor outcomes including lower grades, absenteeism from school (Evans, 2001) and severe academic and cognitive problems (De Bellis, Hooper, Woolley & Shenk, 2010). Poor psychological wellbeing is a key pathway between maltreatment and these outcomes (Stone, 2007) therefore identifying efficacious psychological treatments remains important.

While maltreated youth are at risk of developing a range of psychological difficulties (Azar & Wolfe, 2006; Éthier, Lemelin & Lacharité, 2004), a trauma-specific mental health outcome is post-traumatic stress disorder (PTSD). PTSD is a cluster of symptoms that are considered a reaction to direct experience of, or witnessing of, a traumatic event, like maltreatment (American Psychological Association [APA], 2013). PTSD is characterised by the following symptom clusters: re-experiencing (e.g. intrusive memories), avoidant coping, negative changes in thinking and mood and changes in physical and emotional reactions (APA, 2013). The rates of reported PTSD are significantly higher in maltreated youth than the general population varying from 20-90% (Pecora, White, Jackson, & Wiggins, 2009). In children who have been removed from their family home and placed in care, where rates of maltreatment are high, they are 12 times more likely to meet criteria for PTSD compared to their peers (Ford, Vostanis, Meltzer & Goodman, 2007). Whilst the prevalence rates of PTSD vary according to type of trauma, they are generally higher in individuals who have experienced multiple forms of maltreatment, been exposed to trauma at a younger age and have experienced sexual or physical maltreatment (Kearney et al., 2010; Wechsler-Zimring & Kearney, 2011; MacDonald, Danielson, Resnick, Saunders & Kilpatrick, 2010). If left unaddressed, PTSD can have substantial consequences for wellbeing and future outcomes, including high rates of comorbidities and an impact on school, relationships and general wellbeing. Thus, a strong evidence-base is essential for guiding practitioners in treatment approaches to support children and young people to overcome PTSD.

The National Institute of Health and Care Excellence (NICE, 2018) recommend individual trauma-focused cognitive behavioural therapy (TF-CBT) as the first-line treatment for children aged 6 or older presenting with symptoms of PTSD after a traumatic event, with eye movement desensitization and reprocessing (EMDR) recommended if young people have not responded to TF-CBT. Although there are recommended therapies for PTSD, clinically, there remains scepticism about whether these treatments have been trialled with more complex groups, like maltreated children. Although some children may experience a single incident of maltreatment, it is widely recognised that most experience multiple and repeated forms of abuse which is sometimes referred to as developmental trauma or complex trauma (Price-Robertson, Higgins, & Vassallo, 2013; van der Kolk, 2005). This enduring and pervasive abuse and/or neglect means that, unlike single incident traumas, there is often no 'pre-trauma period' which poses a potential challenge to applying existing models of PTSD treatment to maltreated youth. In line with this, evidence suggests that comorbid symptoms in maltreated young people can complicate diagnosis and treatment of all symptoms, including those specific to PTSD (Ariga et al., 2008) and that PTSD may persist due to the repetitive and abusive nature of the trauma stressor (Cook et al., 2005). NICE (2018) suggest that interventions for complex trauma should include more sessions for building trust, the safety of the person and issues related to engaging. Whilst these guidelines recognise the impact of complex trauma on the brain and associated difficulties with affective regulation, negative self-concept and relational safety (Maercker et al., 2013), they also indicate that there is a lack of evidence to show what treatments are effective for complex trauma in children and indeed in adults (McFetridge et al., 2017).

Previous reviews investigating the effectiveness of interventions for children who have experienced trauma have either focused on one specific form of maltreatment (e.g., violence or sexual abuse; Miller-Graff & Campion, 2016; Macdonald et al., 2012) or incorporated a range of trauma exposures not limited to maltreatment (Wetherington et al., 2008; Gillies et al., 2016; Stallard, 2006). At present, guidelines for older children who have experienced abuse and neglect recommend TF-CBT for PTSD following sexual abuse (NICE, 2017), however they do not refer to other forms of maltreatment which might result in PTSD.

Leenarts and colleagues (2013) attempted to address some of these issues via their systematic review of psychological interventions for trauma-related psychopathology in maltreated young people (Leenarts, Diehle, Dorelijer, Jansma & Lindauer, 2013). From their review of the available literature (30 papers), they concluded that TF-CBT was the best supported intervention for PTSD in maltreated children. In total, they identified four randomised controlled trials for TF-CBT for maltreated youth, all of which showed the superiority of this treatment approach, including when compared to active treatments such as child centred therapy, non-directive supportive therapy and supportive counselling. However, in terms of the generalisability of findings, a potential limitation of this review was their focus on interventions that employed cognitive behavioural elements and on children aged over 6 years old.

Since this review, the DSM-5 now specifically recognises that PTSD can also present in younger children below the age of 6 (APA, 2013), although the presentation may differ slightly reflecting developmental differences (e.g. re-experiencing in forms of frightening dreams, repetitive play or re-enactment; Scheeringa, Zenah & Cohen, 2011; Lonigan et al., 2003). Whilst NICE (2017) guidelines for children who have experienced abuse and neglect recommend that younger children are offered attachment-based interventions, there are no guidelines on which interventions are effective for this age group where PTSD is the primary diagnosis. Due to developmental differences in younger children's language and cognitive abilities, it is largely unclear whether TF-CBT would still be the most effective treatment for this age group (Scheeringa, 2016; Grave & Blissett, 2004).

In broader clinical practice, across all age ranges, clinicians are also frequently using non-CBT based approaches with maltreated children, such as those based on attachment theory (Hughes, 2014). Thus, understanding the broader intervention evidence base is particularly necessary for guiding practice. Focusing exclusively on cognitive behavioural interventions ignores more creative, physical or play based approaches that exist and are commonly used in clinical practice.

Since the Leenarts et al. (2013) review there has been a large increase in focus on child maltreatment. Furthermore, there has also been a recognition of the differential effects of prolonged exposure to interpersonal trauma (e.g. maltreatment) to single traumas, resulting in complex PTSD being introduced as a distinct disorder into the ICD-11 (WHO, 2018). Thus, providing an update on the evidence since this review is

not only useful for understanding how the evidence-base has progressed, but also in providing an objective overview of the evidence-base for broad psychological approaches that may be used in practice.

The primary aim of this review was therefore to provide an update on the evidence-base for psychological interventions for maltreatment-related child PTSD. The review particularly builds on Leenarts et al. (2013), but also considers interventions beyond CBT and with children under 6 to provide a broader update on the current evidence base and visions for future work in this field.

Method

Once initial scoping searches had been conducted; the review was registered as a protocol (PROSPERO 2017: CRD42017084727) and conducted according to PRISMA reporting guidelines (Moher, Liberati, Tetzlaff, Altman & Group, 2009).

Search strategy

A search of three electronic databases (PsychNET, PubMed and PTSDpubs, formally known as PILOTS) was completed. As this review aimed to partially update the Leenarts et al (2013) review, search terms were developed based on this review and with guidance from the University librarian to identify appropriate synonyms and controlled terms within each database. Free text terms were also included to account for articles that may have been indexed incorrectly. The final search strategy (see Appendix A1 for full search strategy) combined words related to maltreatment (e.g. maltreatment OR abuse OR neglect) with PTSD (e.g. post-traumatic stress OR emotional trauma OR acute stress disorder OR complex PTSD), treatment (e.g. treatment OR therapy OR intervention) and children (e.g. child OR adolescent). The searches were limited to studies published between 01/01/2011 and 15/12/2018 due to a previous review by Leenarts et al. (2013). This start date was selected to allow some overlap between this review and Leenarts, to ensure papers were not missed. Age filters were used in PubMed and PsychNET. References of relevant review papers and included papers were hand screened to search for any overlooked papers not identified in the initial search. This resulted in the identification of 2,730 papers.

Study Selection

Titles and abstracts were imported into COVIDENCE and duplicate papers were removed (leaving 2,247 papers; see Figure 1.1). Titles and abstracts were screened by the lead author and excluded if they did not meet the following PICO criteria:

Participants. Studies met inclusion criteria if participants were children and adolescents ≤ 18 years old and the majority, defined as ≥ 50%, of the sample experienced maltreatment. Maltreatment was operationalised according to the WHO's (2016) definition: "all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power. Exposure to intimate partner violence is also sometimes included as a form of child maltreatment." Studies focusing on war related, community violence and traumatic grief exposure were therefore excluded.

Intervention and comparison. Studies met inclusion criteria if they included a psychological intervention; defined as any psychosocial intervention targeting mental health. No restrictions were placed on the format of delivery. Studies in which parents/caregivers were the sole recipients of treatment were only included if PTSD symptoms of the maltreated children were reported. The treatment group had to be compared to a control population, which could be a waitlist (WL), treatment-as-usual (TAU), or any active intervention. RCTs and non-randomised controlled trials (quasi experiments and case-control studies) were included provided the above criteria were met whilst single case and cross-sectional designs were excluded. Studies published as books, book chapters or theses were considered provided they met the criteria above.

Outcome. Studies had to include a measure of PTSD as an outcome of intervention effectiveness to be included, with a minimum of two assessment points (pre and post). The measure could be an established symptom measure or diagnostic interview.

Papers not written or translated in to English were excluded due to the unavailability of resources for translation.

Screening Procedure. Of the 2,247 papers identified 50% were screened based on the abstract by a second independent reviewer, with 99.8% agreement. Where there was disagreement, papers were kept in for further screening. This left 180 papers, where the full-text was reviewed for inclusion. Of these 180 papers, 16.1% were reviewed by a second rater, with 72.4% agreement. Where there was disagreement, discussion between the two raters was held and remaining disagreements were discussed at a consensus meeting with a third researcher. Where it was unclear if the majority of the sample experienced maltreatment, authors were contacted. If no reply was received within one month the study was excluded. This left a total of 20 studies that were eligible for

inclusion in this review; two of which were follow-ups, of which one (Jensen et al., 2017) was a follow-up for a paper already included as part of this review.

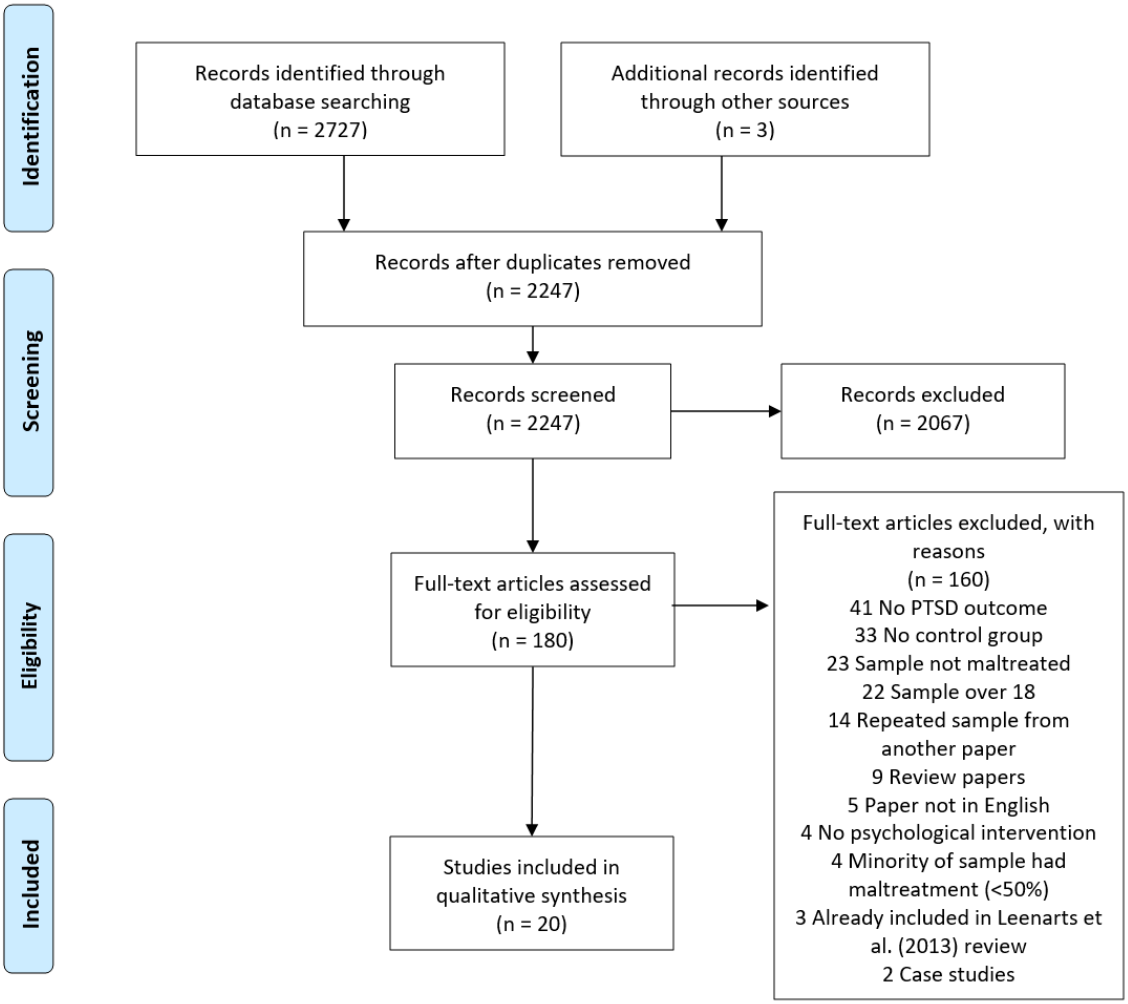

Figure 1.1. PRISMA diagram for study inclusion process.

Data extraction and quality assessment

Data extraction forms were developed to retrieve information regarding publication details, study design, sample characteristics, maltreatment characteristics, outcome measures, intervention and comparator characteristics, outcomes and limitations. Full details of included studies are presented in Appendix B1 and C1. The quality of randomised studies was assessed using the Cochrane collaboration's risk of bias tool version 2 (ROB-2; Higgins et al., 2016). Non-randomised studies were assessed using risk of bias in nonrandomised studies- of interventions (ROBINS-I; Sterne et al., 2016). Papers were assessed by the lead author according to information reported in the original paper and available trial protocols registered by the author (see

Appendix D1 and E1). ROB-2 assesses bias resulting from five domains: randomization process, deviations from intended interventions, missing outcome data, measurement of the outcome and selection of the reported result. Each of these domains is judged on a three-point rating scale: 'low risk of bias', 'some concerns' or 'high risk of bias'. ROBINS-I has seven domains, with those domains from ROB-2 (except randomisation process) and three additional domains of bias: confounding variables, selection of participants into the study pre-intervention and classification of intervention. Each domain is judged as "low risk", "moderate risk", "serious risk", "critical risk" or "no information". Studies judged as low risk are comparable to a well-performed RCT in that domain whilst those judged as critical risk are considered too problematic to provide useful evidence about the effect of the intervention.

Results

The search generated 2244 studies (after excluding 483 duplicates) and 3 additional papers were identified from hand screening reference lists of included studies and review papers. 180 studies remained after title and abstracts were screened and a further 160 studies were excluded after being assessed at full text stage. Three (Cohen Mannarino & Iyengar, 2011; Danielson et al., 2012; Deblinger, Mannarino, Cohen, Runyon & Steer, 2011) of which were excluded as they overlapped with studies already included in Leenarts et al. (2013). Primary reasons for exclusion were the absence of either a control group (21%) or PTSD measure (26%). This resulted in a sample of 20 studies that were included in the final analysis, two of which were follow up studies (Jensen et al., 2017; Mannarino, Cohen, Deblinger, Runyon & Steer, 2012) and one of which presents data from a paper already part of the existing review (Jensen et al., 2017). Thus, where details between the two studies are the same, N = 19 will be used.

Seventeen studies had been published since Leenarts et al. (2013) review with the three other studies pre-2012 based on the broader criteria implemented in this review (e.g. non-CBT interventions and participants <6). Of the 20 studies, ten were derived from the US, five from Europe, two from Africa, two from Asia and one from South America.

Study design. Fifteen studies were RCTs (Murray et al., 2015; Mannarino et al., 2012; Jensen et al., 2014; Jensen et al., 2017; Carpenter, Jessiman, Patsios, Hackett & Phillips, 2016; Foa, McLean, Capaldi & Rosenfield, 2013; Gosh Ippen, Harris, Van Horn & Lieberman, 2011; Goldbeck, Sachser, Tutus & Rosner, 2016; Barron, Mitchell & Yule, 2017; Auslander et al., 2017; Church, Piña, Reategui & Brooks, 2012;

O'Callaghan, McMullen, Shannon, Rafferty & Black, 2013; Overbeek, de Schipper, Lamers-Winkelman & Schuengel, 2013; Razuri et al., 2016; Shein-Syzdlo et al., 2016) and five studies were non-randomised controlled trials (Dietz, Davis & Pennings, 2012; Brillantes-Evangelista, 2013; Bartlett et al., 2018; Pernebo, Fridell & Almqvist, 2018; Hamama et al., 2011). Two of the studies used a matched control group who received no treatment (Hamama et al., 2011; Razuri et al., 2016), four studies utilised a treatment as usual control group (Auslander et al., 2017; Brillantes-Evangelista, 2013; Jensen et al., 2014; Murray et al., 2015), six studies included a waitlist control (Barron et al., 2017; Carpenter et al., 2016; Church et al., 2012; Goldbeck et al., 2016; O'Callaghan et al., 2013; Shein-Szydlo et al., 2016) and seven studies utilised an active intervention as a comparison group (Bartlett et al., 2018; Mannarino et al., 2012; Dietz et al., 2012; Foa et al., 2013; Gosh Ippen et al., 2011; Overbeek et al., 2013; Pernebo et al., 2018).

Nature of sample. Collectively studies recruited 2,714 children and young people who had experienced maltreatment (excluding the two follow-up studies). The age of children varied between 3-18 years old, although most (75%) studies included children 6 years old and over. Eight studies recruited teenagers (aged 12-18) (Auslander et al., 2017; Barron et al., 217; Brillantes-Evangelista, 2013; Church et al., 2012; Foa et al., 2013; Hamama et al., 2011; O'Callaghan et al., 2013; Shein-Szydlo et al., 2016). Two studies focused on school aged children (aged 4-13) (Pernebo et al., 2018; Razuri et al., 2016) with the mean ages 9-11 (when reported) and one focused exclusively on pre-school children (age <5) (Gosh Ippen et al., 2011). Six studies had a wide age range including both children and teenagers (Murray et al., 2015; Jensen et al., 2014; Goldbeck et al., 2016; Dietz et al., 2012; Carpenter et al., 2016; Bartlett et al., 2018). Of the collective number of participants recruited across all studies included in the review, most participants were females (61.9%). Four studies had all-female samples whilst only one study had an entirely male sample. Nine studies reported a majority of participants who self-identified as White or Caucasian, three reported majority of participants who identified as Black, one reported majority Hispanic and one majority Latino or White/Latino. Six studies did not describe the ethnicity of the sample.

Nature of maltreatment. Studies included a range of different types of maltreatment with 74% of studies (N = 14 of 19) reporting more than one form of maltreatment. A further four studies reported sexual abuse or sexual assault as the primary maltreatment (Mannarino et al., 2012; Dietz et al., 2012; Foa et al., 2013;

O'Callaghan et al., 2013) and one study reported exposure to domestic violence (DV) as primary form of maltreatment. Of the fourteen studies reporting more than one form of maltreatment, two specifically refer to psychological/emotional abuse alongside another form of abuse (Church et al., 2012; Barron et al., 2018). The majority of studies assessed maltreatment through interviews or checklists (N = 13 of 19), five were verified by child protection services, judge orders or reports, and one study had no information on how maltreatment history was obtained (Brillantes-Evangelista, 2013).

Method of PTSD measurement. Most studies (N = 14 of 20) measured post-traumatic stress symptoms solely through self-report including follow-up assessments in Jensen et al. (2017). The top three most commonly used measures were: Trauma Symptom Checklist for Young Children (TSCYC; Briere, 2005, N = 4), PTSD Reaction Index (PTSD-RI; Steinberg, Brymer, Decker, & Pynoos, 2004, N = 4) and the Child PTSD Symptom Scale (CPSS; Foa, Treadwell, Johnson & Feeny, 2001, N = 5). All self-report measures in the included studies (see Appendix B1) are well validated. Two studies (Mannarino et al., 2012; Gosh Ippen et al., 2011) used solely structured diagnostic interviews. Four studies used a combination of self-report measures and diagnostic interview (Bartlett et al., 2018; Foa et al., 2013; Goldbeck et al., 2016; Jensen et al., 2014). The most commonly used diagnostic interviews were the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS; Kaufman et al., 1997, N = 2) and Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA; Nader et al., 1996, N = 3). All studies employed the same measures across control and treatment groups but those with a wide age range utilised different measures according to age (e.g. caregiver versions rather than child or adolescent versions). Eight studies included a further follow-up after the post-intervention assessment, with time frames ranging from 3 to 18 months.

Interventions. Intervention length varied from 1-50 sessions. The majority of studies (N = 11 of 19) delivered interventions underpinned by cognitive behavioural theory (Auslander et al., 2017; Barron et al., 2018; Mannarino et al., 2012; Goldbeck et al., 2016; Jensen et al., 2014; Murray et al., 2015; O'Callaghan et al., 2013; Overbeek et al., 2013; Church et al., 2012; Foa et al., 2013; Shein-Szydlo et al., 2016), Of these, six studies delivered TF-CBT, two delivered exposure therapy and three delivered general cognitive behavioural therapy (CBT) interventions that incorporated elements of TF-CBT. Of the remaining studies (N = 8), two studies delivered Child Parent Psychotherapy (Bartlett et al., 2018; Gosh Ippen et al., 2011) although Bartlett et al.

(2018) also delivered TF-CBT as comparison intervention. Two studies provided animal assisted psychotherapy (Dietz et al., 2012; Hamama et al., 2011), one combined TF-CBT with play and drama therapy (Carpenter et al., 2016), one employed art therapy (Brillantes-Evangelista, 2013), one offered psychotherapy (Pernebo et al., 2018) and one offered a trauma informed attachment-based parenting intervention (Razuri et al., 2016). Ten delivered interventions in individual format, eight were delivered as groups and one offered an intervention online via the web.

Due to the heterogeneity between studies and study designs, we will discuss the findings according to interventions used and the effect on PTSD for children who have experienced maltreatment. Findings for individual studies are displayed in Appendix C1.

CBT

TF-CBT was evaluated in six studies (Bartlett et al. 2018; Goldbeck et al., 2016; Jensen et al., 2014; Murray et al., 2015; O'Callaghan et al., 2013; Shein-Syzdlo et al., 2016) with two studies focused on evaluating longer term effects through follow up (Jensen et al., 2017; Mannarino et al., 2012). The number of sessions ranged from 10-21 (mean: 14) and duration ranged from 60-90 minutes per session. Five of the studies included caregivers in the intervention either through parallel or conjoint sessions, except Bartlett et al. (2018) where the format is unclear. Furthermore, Murray et al. (2015) reported that most caregivers were not involved in the intervention despite being invited. Between group effect sizes are reported for five of the six studies and range from 0.40 - 2.41 for self-report measures, representing small to large effects on PTSD symptoms from baseline to post treatment. Between group effect sizes for PTSD symptoms assessed via interviews ranged from 0.46 – 0.50. Studies included a range of maltreatment types, however the majority of studies seemed to have primarily been made up of teenagers. Three studies compared TF-CBT to an active treatment condition (Murray et al., 2015; Bartlett et al., 2018 and Jensen et al., 2014); these included child parent psychotherapy, Attachment, Self-regulation, and Competency (ARC) program, counselling, support groups and psychological therapy as usual. These studies all found that TF-CBT was superior to the comparison treatment, except for ARC (Bartlett et al., 2018) where direct comparisons were not made but comparing effect sizes across treatments (d = 0.68 for PTSD severity in ARC and d = 0.53 in TF-CBT) indicates that ARC was as effective as TF-CBT. The two studies with the largest effect sizes (Murray

et al., 2015; Shein-Syzdlo et al., 2016) did not have blind post treatment assessments as PTSD was measured using self-report. Both studies suggest TF-CBT is effective in low- and middle-income countries and the large effect sizes may reflect the use of WL (i.e. no treatment) and TAU where professions had limited or no mental health education and offered services with no established effectiveness on trauma symptoms. Larger effect sizes may also be seen due to children independently developing support groups to practice techniques (Murray et al., 2015) and remaining in institutions post treatment offering safety from traumatic environment (Shein-Syzdlo et al., 2016).

It is worth noting that the studies assessed as at lowest risk of bias found a small to moderate effect size (d = 0.40 - 0.54) in favour of TF-CBT compared with WL (Goldbeck et al., 2016) and similar effect sizes (d = 0.46 - 0.51) when TF-CBT was compared to TAU (Jensen et al., 2014). Only one study (O'Callaghan et al., 2013) delivered TF-CBT in group format and found a large effect size ($\chi_p^2 = 0.52$) suggesting that TF-CBT can be effective in group format. However, the sample size was small (N = 52) and consisted of all females who had been sexually-abused. Four studies investigated whether treatment effects are maintained (Mannarino et al., 2012; Jensen et al., 2017; O'Callaghan et al., 2013; Shein-Syzdlo et al., 2016) at follow up. Findings from these studies suggest that effects were maintained at 3-month follow ups and at 12-month follow ups. The longest follow up was 18 months later and although those who received TF-CBT were less likely to score above clinical cut offs than TAU, this was not significant. However, the confidence in findings from these studies is limited by the high attrition rate resulting in small sample sizes with low power and potential confounders (e.g. safety away from abuse).

Three studies evaluated more general CBT interventions and all three incorporated elements of TF-CBT (e.g. psychoeducation, coping and expressing emotions) but two were more closely aligned using Cognitive Behavioural Intervention for Trauma in Schools (CBITS; Auslander et al., 2017) and relaxation, cognitive restructuring and brief exposure (Barron et al., 2018). All three studies were RCTs and delivered the intervention in groups (9-14 sessions lasting 40-90 minutes). All three reported reduction in PTSD symptoms despite different control groups (TAU, WL, active control). Compared to WL control, CBT demonstrated a small effect size for self-reported PTSD and large effect size for subjective units of distress (SUDS; Barron et al., 2018). However, the quality assessment identified some concerns of risk of bias in this study (see Appendix D1) including no follow up and indirect exposure to

intervention in comparison group. CBT based group was demonstrated to be comparable to active control group at post-test and follow up (Overbeek et al., 2013), with lower scores in CBT group likely reflecting higher PTSD scores in control group at baseline. Auslander et al. (2017) included a follow up and found a 44.6% reduction in proportion of those with scores in clinical range (baseline to 6-month follow up) in CBITS group compared to 4.2% reduction in TAU. The quality of all three studies prevents definite conclusions being drawn on effectiveness of these group programs.

Exposure therapy

Exposure therapy was evaluated in two studies, both of which were RCTs. Church et al. (2012) found that a single session of exposure therapy reduced PTSD symptoms into the non-clinical range compared to WL. Whilst findings are limited by WL control and lack of follow up, Foa et al. (2013) found that prolonged exposure therapy (PET) was more effective than supportive counselling in improving PTSD based on clinician's ratings post treatment (d = 1.01; large effect). Self-reported PTSD severity was lower post treatment and at twelve-month follow up in PET than supportive counselling with significantly more individuals in PET group having lost the diagnosis of PTSD. One study had an all-male adolescent sample and the other an all-female sample of sexually abused adolescents, therefore findings may not be generalisable. Whilst Foa et al. (2013) was considered at low risk of bias across most domains, outcomes from some timepoints were not reported suggesting a risk of bias in the selection of reported results.

Child Parent Psychotherapy (CPP)

Two studies evaluated CPP, an intervention approach focused on improving the parent-child attachment relationship (Bartlett et al., 2018; Gosh Ippen et al., 2011). One study found that CPP was effective in reducing rates of PTSD amongst treatment completers than an active treatment comparison in children who experienced 4+ traumatic events (d = 1.79; large effect) and in those who experienced fewer than 4 events (d = 0.66; moderate effect). The different effect sizes may reflect greater PTSD symptoms at baseline in the 4+ group. These results must be interpreted in light of the small sample size (N = 75) and paucity of information to determine whether assessors were blind to intervention received. Although Bartlett et al. (2018) employed CPP, no between group effect sizes are reported due to the sample size of those receiving CPP being too small for analysis. The study has a serious risk of bias across several domains

(see Appendix E1) but both TF-CBT and ARC intervention program were deemed superior to CPP.

Animal Therapy Interventions

Two studies evaluated animal assisted therapy, both of which were non-randomised control studies, and use animals to assist the therapeutic process. CBT components are part of the intervention in both studies: 'safe place' imagery and sharing feelings with others (Hamma et al., 2011) and disclosing abuse stories and related feelings (Dietz et al., 2012). Hamama et al. (2011) found a small effect size (d = 0.42) for post treatment PTSD symptoms between groups with canine assisted therapy more effective than no treatment but this difference was not significant. Dietz et al. (2012) report that storytelling with dogs was more effective than without dogs or dogs without storytelling in reducing self-reported PTSD symptoms after controlling for baseline differences between groups. However, effect sizes are not reported. Both studies were rated as being at serious risk of bias in at least one domain. Neither utilised a gold standard treatment as a comparison group and findings may not generalise as the samples were primarily females who had experienced sexual abuse.

Art Therapy Interventions

One study evaluated eight sessions of creative art interventions (Brilliantes-Evangelista, 2013); the visual arts group had large effect on PTSD symptoms post treatment (r = .65) and was superior to the poetry or control group. However, the study was assessed as at serious risk of bias and interventions were not compared to a gold standard treatment or active comparison.

Trauma Informed Parenting

One study evaluated trauma informed attachment-based parenting intervention (Razuri et al., 2016) and found that this was more effective (small effect) than control at reducing caregivers reported PTSD symptoms in their child (n_2^p = .02). Although the study was an RCT, it was compared against no treatment rather than known efficacious treatments and assessed as having some concerns or high risk of bias across most domains (see Appendix D1).

Other Psychotherapy Interventions

We grouped remaining studies here as although interventions were heterogenous, they were all underpinned by attachment/psychodynamic theory. One study found a medium effect size of ARC group intervention on child rated PTSD

severity (Bartlett et al., 2018) and small to medium effect sizes on caregiver reports of child PTSD.

Another study (Pernebo et al., 2018) compared a group trauma focused psychotherapy intervention in a child and adolescent mental health service (CAMHS) to a psychoeducation community-based group intervention. Interventions were not found to differ in effectiveness except for PTS anger and dissociation where larger reductions were found in the CAMHS psychotherapy intervention (d = 0.73 - 0.75). It is worth noting that the intervention appeared more favourable for younger children exposed to DV, for those with higher PTSD symptoms at baseline and low maternal PTSD. The study was assessed as at low risk of bias and although it has a small sample size of 5-12-year olds, future research should compare trauma focused psychotherapy with play to TF-CBT to improve the evidence base for younger children. One study compared 'letting the future in' (LTFI) intervention which combined components of attachment, psychodrama, play therapy and TFCBT (Carpenter et al., 2016) with WL. The study did not report between group effect sizes but found significant improvements in self-reported PTSD at 6-month follow up in LTFI group. However, at 12-month follow up there was a greater increase in clinical scores among older children in LTFI group than WL. Whilst the study has high ecological validity, it also has a high risk of bias with the WL beginning interventions before measurements were taken for the intervention group. Given that LTFI integrates interventions including TF-CBT, future research might seek to understand if the program offers additional benefit to standard TF-CBT.

Quality Assessment

Overall, studies of cognitive-behavioural approaches, particularly trials of TF-CBT, tended to be the higher quality studies (see Appendix D1) whilst studies of art or animal assisted based interventions tended to be poorer in quality. The majority of RCTs were rated as at low risk of bias for randomisation, deviation from intended intervention and missing outcome data (see Appendix D1). All but one study (Church et al., 2012) used an age appropriate validated measure of PTSD. The greatest risk of bias came from measurement of PTSD; this generally reflected difficulty blinding participants to receipt of an intervention and assessing outcomes solely through self-report. Several of the non-randomised trials had confounding variables (e.g. baseline differences in PTSD severity, trauma exposure between groups and WL group beginning treatment) that were not sufficiently controlled for, however two studies were

judged to be of sound quality for non-randomised design scoring low or moderate across most domains (Dietz et al., 2012; Pernebo et al., 2018, see Appendix E1).

Discussion

Despite maltreated children being at increased risk of PTSD, there remains ongoing debate about the relevance of cognitive behavioural interventions for complex trauma. Although a previous review concluded that TF-CBT was the best supported treatment for PTSD in maltreated children based on three well conducted RCTs, they also indicated that there were other potentially effective treatments requiring further research (Leenarts et al. 2013). Questions surrounding the long-term effectiveness of TF-CBT and the most effective interventions for maltreated pre-school children remained unanswered. This review aimed to synthesise the literature to provide an update of the evidence for the effectiveness of psychological interventions for PTSD in maltreated children and adolescents since Leenarts et al. (2013).

A review of the literature since 2012, identified 15 further RCTs and 5 non-randomised controlled trials of psychological interventions for PTSD in maltreated children, predominately using cognitive-behavioural techniques. Overall, based on the strength of study designs and replication of findings across studies, TF-CBT remains the best supported treatment for PTSD in maltreated children. Since the Leenarts et al. (2013) review, the evidence-base for TF-CBT now also includes evidence that treatment gains can be maintained one year later.

With regards to pre-school children, only two studies of TF-CBT incorporated children under the age of 6. The design of these studies prevents any conclusions being drawn about effectiveness of TF-CBT in maltreated pre-school children. This is due to an absence of details in the sample of the number of pre-school children and results not controlling for the effects of age. Only one study in our review focused exclusively on pre-school children, thus only child parent psychotherapy has been shown to be effective in this age group for maltreated PTSD. Findings need to be replicated before implications for clinical practice can be derived but our review highlights a gap in the field that needs to be addressed by future studies. We discuss the state of the evidence for each intervention across the two reviews and the implications for clinicians and researchers.

CBT Interventions

The previous review found five studies of TF-CBT, three of which were relatively high quality RCTs reporting small to moderate effect sizes that supported the

efficacy of TF-CBT for maltreatment-related PTSD. Since then, there have been six additional studies of TF-CBT, of which two were well conducted RCTs, reporting small to large effect sizes confirming the effectiveness of TF-CBT in reducing PTSD symptoms in this population. The larger effect sizes reported in the studies in our review come from low- or middle-income countries, which were absent from Leenarts et al. (2013) review. Thus, not only is there further evidence of the efficacy of TF-CBT for maltreated children in high income countries, but there is now growing evidence that it can also be an efficacious treatment option in non-Western cultures and in more resource-poor environments.

In Leenarts and colleagues (2013) review they concluded that there were "adequate between group effect sizes" (p.278) for the efficacy of diverse forms of CBT, such as Eye Movement Desensitisation Reprocessing (EMDR), prolonged exposure therapy (PET) and group programs. Despite the previous review indicating promising findings for EMDR in reducing PTSD, in our update we found no new studies of EMDR specifically with maltreated children in the last six years and therefore no new conclusions can be drawn about its effectiveness. Given that the three studies in Leenarts et al. (2013) all had small sample sizes, future studies are needed to inform clinical practice. The previous review identified one study of PET reporting a moderate effect size compared to time limited dynamic psychotherapy. In our update, we identified two further studies, in which large between group effects for PET compared to counselling were reported. The larger effect sizes may reflect differing active comparison treatments and method of PTSD measurement between studies. Even though both studies identified in our review faced methodological limitations (e.g. small sample sizes), the evidence so far suggests that PET merits further research to compare its effectiveness with TF-CBT. The previous review identified five studies delivering CBT-based interventions demonstrating adequate effect sizes to comparison groups, however these studies represent a heterogenous collection of studies We identified three additional studies in our update, however only one reported effect sizes and found a large effect between Teaching Recovery Techniques program and WL for subjective distress, but only small effects for PTSD symptoms (Barron et al., 2018). However, these small effects may be confounded by the comparison group receiving indirect exposure to the intervention.

At the time of the previous review, there was little evidence on whether symptom improvements from CBT could be maintained in the longer-term. In our update, we found four studies (Mannarino et al., 2012; Jensen et al., 2017; O'Callaghan et al., 2013; Shein-Syzdlo et al., 2016) that investigated the longer-term outcomes for TF-CBT and four that included follow-up for CBT-based interventions (Foa et al., 2013, Carpenter et al., 2016., Auslander et al., 2017; Overbeek et al., 2013). Across all studies TF-CBT outperformed comparison groups (WL, TF-CBT without narrative exposure and treatment as usual incorporating other psychological interventions) at follow up, although these differences were not significant in the longest follow up period of 18 months (Jensen et al., 2017). Across studies of CBT-based interventions, the most promising findings, considering the low risk of bias, were demonstrated for prolonged exposure therapy (Foa et al., 2013) where large between group effects on PTSD severity were found compared to counselling twelve months later. In general, studies with follow up periods experienced difficulties with high attrition rates resulting in small sample sizes with low power. Whilst findings are promising, future research is needed to overcome these methodological limitations.

Summary. Overall, studies testing cognitive behavioural approaches tended to be the higher quality studies, supporting NICE-recommendations that they are the best evidence-based interventions for child PTSD, including in the context of maltreatment.

Other interventions

In Leenarts and colleagues (2013) review, one study investigated child parent psychotherapy (CPP) and found a small effect. In our update, we found two further studies comparing CPP to other active treatments, with large effects when CPP was compared to individual psychotherapy for pre-school children with multiple traumatic events in reducing trauma related symptoms and these remained six months later (Gosh Ippen et al., 2011). The difference in effect smaller effect size in the study identified in the Leenarts et al (2013) review may reflect two key differences. Firstly, the use of gold standard comparison of TF-CBT compared to psychotherapy and secondly, the TF-CBT group consisted primarily of school aged children whilst CPP consisted of pre-school children. The other study (Bartlett et al., 2018) has multiple methodological limitations that prevent conclusions being drawn, including a small sample size for CPP thus comparisons for most outcomes are missing. Future research needs to compare CPP to other efficacious interventions that incorporate CBT to help guide clinicians in choosing interventions for children under 6.

We found one further study of arts-based therapy to add to the two previous studies identified in the previous review (Leenarts et al., 2013). Similarly, to the study in Leenarts et al. (2013), the study in this review reported a large effect size. However, the presence of confounding variables and not reporting between group comparisons limit confidence in findings and therefore no new conclusions can be drawn for art-based interventions since it was suggested they may be a useful tool to aid trauma focused work by Leenarts et al. (2013). The lack of identified studies is likely to reflect art-based interventions employing case study designs and providing descriptive reports (van Westrhenen & Friz, 2014).

Some studies identified in the current review reported on less well known and less well investigated treatments. The previous review did not identify any animal assisted interventions, perhaps reflecting the narrower inclusion criteria of CBT-based interventions. In our update, we identified two studies of animal assisted therapy (Hamama et al., 2011; Dietz et al., 2012). Effect sizes were only available for one of the studies showing a small between group effect. Both studies are hampered by numerous methodological concerns and were judged to be at serious risk of bias. It is worth noting that both studies used principles of CBT within the animal assisted interventions. Future research should therefore consider comparing animal assisted interventions to standard CBT to determine whether animal assisted intervention provide any benefits, for example in engagement, above and beyond CBT in treating PTSD maltreated youth.

A number of other interventions were also evaluated in studies in this review including group trauma focused psychotherapy, Attachment, Self-regulation and Competency and Letting the Future In. Group psychotherapy demonstrated moderate to large effects on PTSD symptoms but showed little advantage over community-based psychoeducation in reducing PTSD for those who experienced DV. This adds to the findings for psychotherapy in Leenarts et al. (2013) review whereby individual psychotherapy resulted in greater PTSD symptom reductions than group psychotherapy. Whilst the Attachment, Self-regulation and Competency intervention program revealed promising findings when compared against TF-CBT, which is currently the recommended intervention.

Summary. Overall, although creative therapeutic approaches and psychotherapy may be popular in clinical practice, the evidence base for such approaches remains very poor. Currently, the evidence would suggest that group psychotherapy offers little

benefit to PTSD over group psychoeducation. However, the findings for the ARC intervention are promising and warrant further research, particularly ascertaining whether benefits are maintained.

Parental role

Previous research has indicated that parental involvement in TF-CBT is most effective when a non-offending parent or caregiver participates in treatment with the child who has experienced sexual abuse (Deblinger, Lippmann & Steer, 1996; Cohen, Deblinger, Mannarino & Steer, 2004). The majority of studies in this review included parents within interventions, with the exception of PET and art/animal-based therapies. However, none of the studies in this review examined the effect of different forms of parental involvement and therefore the optimum form of parental involvement remains unclear.

Limitations

Limitations of this review largely reflect general limitations in the literature including the heterogeneity amongst studies in measures used, nature of maltreatment across samples and small sample sizes. There are more studies investigating sexual abuse and fewer studies of neglect and emotional/psychological abuse. That said, it is generally accepted that children who experience maltreatment will experience more than one form of maltreatment. Most studies relied primarily upon self-report to measure PTSD symptoms, however all studies used at least one validated measure. Only one study had a sample which consisted of entirely pre-school children and other studies including pre-school children did not consider differential effects of interventions between younger and older children. Conclusions regarding effective interventions for pre-school children therefore remain unclear despite there being different developmental considerations for this population, highlighting the need for further research. There is a lack of well-conducted studies of maltreated children in the UK. There were no studies in the current review that measured the newly proposed complex PTSD diagnosis or relevant outcomes (e.g. affect dysregulation and interpersonal difficulties) which are pertinent to maltreated young people. Current guidelines and evidence from the broader child PTSD field, suggest TF-CBT remains the best evidenced treatment for complex PTSD (see Sachser, Keller & Goldbeck, 2017). This is an area that will no doubt receive further attention in coming years. Although not the focus of the current review, it is worth noting that there was a sparsity research exploring the impact of potential predictors of treatment effectiveness and

treatment drop-out. Only two studies explored predictors of treatment non-completion, with older age and exposure to greater number of traumatic events as predictors of treatment non-completion being identified as predictors in both (Jensen et al., 2014; Murray et al., 2015). Future research is therefore required to help guide clinicians in treatment decisions. The experiences of maltreated children may vary enormously based on age, gender, ethnicity, education, comorbidities and the current circumstances of these children (e.g. still living at home vs. in care) and such factors may have important implications for clinical practice and warrant further research attention.

In addition to the limitations of included studies described above, this systematic review has some limitations. Firstly, it was beyond the scope of this review to apply our expanded search criteria to cover the date period by Leenarts et al. (2013). As a result, studies pre-2011 that included children under six may be missed as measures for PTSD in young children have been available prior to the start period of the present review (Briere, 2005). Similarly, there may be non-CBT interventions from pre-2011 missed by this review, although this is unlikely as broader reviews included relatively few non-CBT interventions (Goldman Fraser et al., 2013; NICE, 2017). Secondly, while this review focused on PTSD it is important to note that maltreatment can result in diverse difficulties (e.g. depression, behavioural problems, relationship problems) for which other interventions may be more effective. Finally, there is a risk of publication bias across studies because of the decision to exclude non-English papers. This review attempted to reduce bias as much as practically possible by structured selection and appraisal method and inclusion of unpublished studies (e.g. theses) if the study met the inclusion criteria.

Conclusions

In sum, findings from this systematic review show that TF-CBT remains the best supported treatment for maltreated children and adolescents with evidence of effects being maintained at follow up. Other cognitive behavioural based interventions were also identified as promising (e.g., prolonged exposure) and worthy of further investigation. More creative-based interventions were less well-studied and generally poorer in quality, including lacking comparisons to the gold-standard treatment. Future research would benefit from examining the effectiveness of intervention for maltreated pre-school children experiencing PTSD, assessing for complex PTSD and incorporating measures that capture the additional difficulties associated with this diagnosis, as well

as the identification of predictors of treatment outcomes and adherence (i.e. gender, age, characteristics of abuse). Such information would be useful for clinicians in guiding their decision making around supporting children with maltreatment-related PTSD.

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Service Improvement Project

Supporting transitions from child to adult mental health services: are we getting it right for young people?

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This journal was chosen for its relevant to project content and project design methodology.

Mental health (MH) problems are prevalent in young people (YP): studies show that as many as 10% of individuals aged 5-16 have a clinically diagnosable MH problem (Children's Society, 2008) and 20% of adolescents experience MH problems (Bor, Dean, Najman & Hayatbakhsh, 2014). Whilst up to 50% of MH problems are established by age 14, this rises to 75% by age 24 (Kessler et al., 2005) highlighting the importance of effective support in this period. However, this is also a period of transition for YP, a term with separate but overlapping meanings in this context of moving from childhood to adulthood and moving between services. From a developmental perspective, transition is the process of moving from adolescence into emerging adulthood (Arnett, 2000) involving physiological, emotional and social changes to become an independent adult. YP with MH problems undergo greater challenges in navigating the path to adulthood (Davis & Vander Stoep, 1997). This process varies between individuals (Arnett, 2001) and requires reorganisation by the family as outlined in the family life cycle model (McGoldrick & Carter, 1982, updated by Dallas and Veter, 2009). 'Transition' in this article also encapsulates the purposeful process in healthcare when YP move from child to adult services at certain age milestones (typically age 16-18). This can be disruptive for YP and is associated with higher risk of psychosocial problems (Patton & Viner, 2007).

Service approaches to transitions

One of the challenges for services is the different provisions and thresholds between child and adult mental health services (AMHS) resulting in a lack of integration and collaboration between systems (McLaren et al., 2013). Many AMHS adopt payment by results (PBR) whilst many child and adolescent mental health services (CAMHS) do not (Singh et al., 2010). Although some CAMHS services have piloted PBR (Wolpert et al., 2015) differences between services will remain. This lack of integration means YP with ongoing MH difficulties can fall through the gap and be left without a service, particularly looked after children and those with emotional, neurodevelopmental or emerging personality disorders (Royal College of Paediatrics and Child Health, 2003; Paul et al., 2013).

Many individuals are not well supported during transitions (Paul et al., 2013) and up to 60% of YP disengage (Harpaz-Rotem, Leslie & Rosenheck, 2004). Disengagement is associated with deterioration in physical and MH (Campbell et al., 2016). Furthermore, individuals who disengaged have a significantly higher risk of developing more enduring MH problems (Richards & Vostanis, 2004; O'Brien, Fahmy

& Singh, 2009). In recognition of the risks associated with transitions for YP, NICE (2016) guidance emphasizes the important role of services in supporting YP to successfully navigate these coinciding transitions. Supporting transitions can affect the lifetime trajectory of MH (McGorry, Bates & Birchwood, 2013) by improving clinical, educational, economic and social outcomes for YP (Department of Health, 2011).

Professionals interviewed about transitions voiced that AMHS are not age appropriate or adapted to YP's needs (Paul et al., 2014). This developmental period is a time of identity exploration and formation (Arnett, 2004) whereby YP are not yet in traditional adult roles. Age specific services working with YP up to the age of 25 might help overcome these challenges (Davis, 2003), however this approach could also arguably just delay the transition boundary.

A recent review of current transition service models concluded that evidence for the service user, health and economic effectiveness is lacking (Paul, Street, Wheeler & Singh, 2015). One of the difficulties facing researchers is the use of different outcome measures by CAMHS and AMHS preventing direct comparisons and the absence of a measure to evaluate the effectiveness of transitions, however one was under development (Cleverley, Bennett & Jeffs, 2016) and has since identified 26 core components of healthcare transitions but concludes a lack of measurable indicators remains (Cleverley, Rowland, Bennett, Jeffs & Gore, 2018). Understanding the facilitators to an effective transition for YP will help inform service structure, delivery and pathway development.

There are several theories and models relevant to services effectively supporting transitions in mental healthcare. Attachment theory (Bowlby, 1969) postulates that there is a biological need for a baby to seek proximity to their caregiver. They argue that this relational experience between parent-child influences a child's internal working model and their future interactions in relationships. Given that the transition from CAMHS to AMHS requires the forming of new relationships and sense of safety, it is perhaps unsurprising that attachment theory has been applied to transitions in physical healthcare (Nathan, Hayes-Lattin, Sisler & Hudson, 2011), education (Carr, Colthurst, Coyle & Elliott, 2013) and MH (Rich, 2017). The first model, The Transition to Independence Process (TIP; Clark, Deschenes & Jones, 2000; Burnham Riosa, Preyde & Porto,2015), focuses on person centred planning and YP's social support and functioning in supporting transitions. The second, Schlossbergs's transition model

(Schlossberg, 1981, updated by Anderson, Goodman & Schlossberg, 2012), proposes clear phases of transition (moving in, moving through and moving out) with adaptation dependent on four factors: situation, self, support and strategies. Schlossberg's model has previously been applied to children's transitions within education and social care (Winter, 2014; DeVilbiss, 2014) but not MH.

What makes a good transition?

An audit of existing transition protocols across multiple centres identified the following criteria for an 'optimal' transition: at least one transition planning meeting, a period of parallel care, information about the transfer and continuity of care (Singh et al., 2010). However, less than 5% of youth who transitioned in these services had experienced an 'optimal' transition and individuals with "emotional/neurotic disorders" were less likely to experience continuity in care (Singh et al., 2010).

Singh et al. (2010) interviewed eleven YP about their experiences of transition from CAMHS to AMHS. Whilst many reported improved MH since transition, they did not credit their transition process. YP in the study reported preparation and consistency in key workers promoted positive experiences but preferred minimal parental involvement in their care. This contrasts with parents who reported frustration at AMHS for not recognising their involvement in supporting their children (Swift et al., 2013). Other life transitions (e.g. physical health, housing and pregnancy) were also powerful extraneous influences on transition experiences (Hovish et al., 2012). Burnham Riosa et al. (2015) interviewed YP who were likely to transition or currently transitioning from CAMHS to AMHS. They found the following themes: 'fears of uncertainty and not knowing', 'trusted relationships and the exposed self', 'mental illness and a vulnerable, isolated self' and 'a person first, patient second'. This study interviewed YP transitioning or anticipating transition; it is therefore not clear whether YP's views of transition might change over time if interviewed once they had completed transition.

Service context

Within this South West UK county, YP transition from the Children and Young People Service (CYPS) to AMHS or primary care at eighteen. CYPS implemented a new policy for supporting transitions, based on NICE (2016) guidance, involving a joint working approach aimed at improving the interface between services. This included the implementation of mandatory training on transitions, a jointly owned transition electronic database and joint meetings to discuss YP's continuing care. The policy was based on principles from the widely adopted, freely available, "Ready, Steady, Go"

("RSG") healthcare transition program (Southampton's Children's Hospital, 2015) that emphasises empowering YP by making plans with them. One diabetes service demonstrated that the approach led to greater attendance at adult appointments and improved clinical outcomes (Cable & Davis, 2015). To our knowledge, the implementation and effectiveness of the "RSG" approach and resources has not yet been evaluated within MH. The current study aimed to address the following research questions:

1. Are services in the trust adhering to the new policy and protocols around transition?
2. How do YP experience transitioning within these services and how could transitions be improved?

Ethical approval was given for the study by the University of Bath Psychology Research Ethics Committee and Research and Development department of the NHS trust.

Method

Design

Cross-sectional mixed methods. Quantitative data was collected via an audit of existing practice against the service's transition protocol. Qualitative data was collected through semi structured interviews to gain feedback on YP's experience of transitioning in this service.

Participants

YP who had transitioned from CYPS to AMHS during the study period (June 2016 – June 2018) were eligible. Based on the guide for a small sized qualitative study (Braun & Clarke, 2013), a target of 6-10 participants was set for recruitment. Nine of the twenty-two eligible YP gave consent to be contacted. Of these nine, six YP agreed to take part and were interviewed. Sample demographics and transition details are presented in Table 2.1 and 2.2.

Table 2.1

Demographic information for participants interviewed (N = 6).

Gender	**Age**	**Ethnicity**	**Marital Status**	**Accommodation Status**	**Employment Status**
Male (N=1)	Mean: 17y 6m	White British (N=6)	Single (N=4)	Living with parents (N=3)	Unemployed (N=2)
Female (N=5)	Range: 17y 6m – 19y 8m		In a relationship (N=1)	Living on own (N=1)	F/T student (N=2)
			Not disclosed (N=1)	Living with friends (N=1)	Employed F/T (N=1)
				Living with other family members (N=1)	Employed P/T (N=1)

Note: F/T = full time, P/T = part time, y = years, m = months

Table 2.2
Relevant transition information (N = 6).

Time in services prior to transition		**Age first entered child services**	**Length of time between being informed they would transition and transitioning**	**Age when transitioned**	
Mean	Range	Range	Range	Mean	Range
38 m	10 m - 52 m	14 y -16 y	1 m – 6 m	18 y 2 m	18 y 0 m – 18 y 5 m

Note. y = years, m = months

Materials

An audit checklist (see Appendix A2) designed according to the agreed standards in the trust's policy and procedure for transitions implemented in 2016 (see Appendix B2).

A semi-structured interview schedule (see Appendix C2) was developed by a researcher in liaison with a clinician and young person with experience of this service. Follow up questions and probes elicited further information; these focused on YP's thoughts and feelings relating to the impact of the process on them.

Procedure

Audit. The audit was completed using the transition database kept by the service. The criteria for inclusion was based on the service's pathway:

1. Young person aged 17 years and six months or older
2. AMHS (Recovery) as receiving team
3. Transition handover meeting held between June 2016 – June 2017

Clinical care records were used to analyse the transition process against Appendix A2.

Interviews. AMHS care coordinators (CC) of the YP identified from the audit (16 cases) were asked to provide an information sheet to the young person at their next contact. Six additional YP who had completed transition handover between June 2017 and March 2018 (outside of the audit period) were also invited to take part by their CC. All YP who had disengaged since transition (not attending appointments with AMHS) were invited to take part by letter. YP who agreed to take part were contacted by the researcher, who was independent to the trust and young person's care. Face to face interviews were conducted between December 2017 and June 2018. Consent was gained prior to the interview; interviews were recorded and lasted 20-45 minutes. Participants were debriefed by the researcher and received a £5 voucher for their participation.

Data Analysis

Quantitative analysis: Univariate analysis was conducted to examine the service's adherence to the transition protocols.

Qualitative analysis: Braun and Clarke's (2006) guidelines for conducting thematic analysis were followed. The lead researcher (RB) transcribed audiotapes to increase familiarity with the data and anonymised identifiable information. Transcripts were read multiple times and coded by RB. Three transcripts were selected at random and coded by a second independent rater to compare and share codes. Final codes were agreed upon through review with the second researcher (CD). RB then reviewed the

codes to identify patterns and generate themes. Provisional thematic maps were created with themes and sub themes which were discussed and refined with CD at multiple points. Themes were further refined through credibility checks with an independent rater. Once established these themes were defined and named.

The analysis was underpinned by an essentialist / realist framework, which aims to report on the experience, meanings and reality of participants (Braun & Clarke, 2006), allowing themes to be identified at the semantic level. It is worth noting the benefits of the knowledge and skills inherent in all three researchers' profession as psychologists may also have brought an increased risk of pre-existing ideas impacting interviews and analysis (Mercer, 2007), although this is always a risk of qualitative analysis. This was considered throughout all aspects of the research and decisions were made to distance the research from previously held assumptions about models, theory and outcomes related to transitions. For example, although CD has experience of developing and implementing transition pathways across child and adult health services, she was careful not to let her previous experience and assumptions influence the research. It was also seen as essential by all researchers that RB (a trainee clinical psychologist), who undertook all data collection and analysis, held a consciously neutral position. RB kept a reflective log throughout the process to enable discussion throughout the analysis process, particularly with pre-conceived ideas on attachment and preparation.

Results

Quantitative

Sixteen cases met the criteria for inclusion in the audit. Findings are presented in Table 2.3. None of the transitions were planned six months or more before YP turned 18 and most did not adhere to the planned transition date either. The transition dates were primarily after the young person turned 18. Less than a quarter of those who had transitioned had a 'your transition plan' (see Appendix D2) completed. Almost half of the cases audited did not receive two Care Programme Approach (CPA) meetings.

Table 2.3
Summary of service performance against standards set out in their policy and pathway for supporting transitions.

Policy Standard	**Number of transitions adhering to standard (%)**
Allocation of care coordinator	13 (81.25)
Documented evidence of referral decision	14 (87.5)
Transition planning >6 months before 18	0 (0)
Trust transition referral form used	6 (37.5)
Response to referrals received within 14 days from adult team?	10 (71.4)*
Planned transition date kept?	2 (12.5)
Two CPA meetings held?	9 (56.25)
First CPA within 28 days of referral?	5 (31.25%)*
Second CPA within 28 days of first?	4 (44%)*
Documented 'your transition plan'?	3 (18.75%)
Number of cases with did not attend (DNA's) in transition process?	6 (37.5%)
Care records had headings	1 (6.25%)

Note. * represents when total is out of 14 as 2 cases audited had no documented evidence of referral which prohibited the time frame being assessed.

Qualitative

Four themes were identified to encapsulate all the data: 'Timing of transition', 'Loss of support', 'Building relationships' and 'Importance of preparation and communication'. Exemplar quotes from participants (P) to illustrate each theme are presented below.

Timing of transition. YP described the importance of the timing of transition and having an awareness of their context. YP reported that difficulties in other areas of their lives influenced their ability to cope with transitioning.

> "…timing for me was clashing with nearly Christmas, school, going back to school, like leaving hospital, well leaving day treatment…just felt like a bit too much in my head." (P2)

YP varied in their readiness for responsibility and transition, reflecting individual differences in the developmental process of becoming an adult. For example, some described being unsure how ready they were – reporting a resistance to make decisions, whilst others looked forward to responsibility and believed child services were restricted in their capacity to meet their needs.

> "I mean, I guess as you get older, independence is just a natural sort of step, so it's not been too difficult." (P1)
>
> "… I still felt like a child cause I was still at school …it's weird at first because the adult services is quite like 'it's all your own decisions now' like rather than at CYPS people just like choose for you… and I was like well I'm not the doctor, I don't know, just like tell me, what do you think is best?" (P4)

YP spoke of the numerous changes at 18 whilst becoming adults and continuity of care was valued with managing another change to a new service feeling too much for some.

> "…taking all this responsibility on, you know people can start going out to drink, and all this…if that [transitioning] is happening at exactly the same time, it's just *another* thing for someone to deal with... having that constant person in [ageless service] that I saw in the whole time was really helpful for me…something that was just continuing that was constant and didn't change." (P2)

YP wanted a personalised flexible approach to timing of transition that prioritises the individual and their health above an arbitrary strict cut off age.

> "Making sure people are getting the best support they can for their needs at that time regardless of whether they are not technically a child anymore or things like that because I think someone's health is always going to be more important than having something technically fit what it should be." (P2)

Loss of support. YP expected AMHS to be less supportive and "won't mollycoddle you", as well as expressing uncertainty over the accessibility and availability of future support which can be considered anticipated loss.

> "[AMHS] seems quite hard to get in to… there's nothing quite in-between… otherwise you're just kind of left with it, I know a lot of other people who weren't able to get into the adult services…it was good that I kind of had both [services] rather than just being completely cut off which I was worried about." (P6)

Some YP described actual loss of support in the form of resources and frequency of appointments as well as emotional support. They described feeling less cared for and a sense of being abandoned which impacted negatively on their wellbeing.

> "…you can only have an appointment once a fortnight…I used to see someone up to two or three times a week… I can't have what I should be having [talking therapy] like I would have gotten with CYPS…" (P3)

> "…I felt a bit more cared for by my CYPS worker but now I just feel like, just another person to my adult one… now I feel less supported and quite alone with everything, like I feel like I've got to deal with things more on my own." (P5)

Building relationships. This follows on from the previous theme of loss of support and all YP reported the importance of building a new relationship. YP described that there may be initial anxiety when meeting their new worker from AMHS.

> "I had someone [CYPS worker] familiar with me where if she wasn't there it would be just meeting like an unknown person and it would be a bit scarier." (P5)

YP stated that connecting with, trusting and liking their new worker was important to enable them to talk and open up.

> "so like actually having people that you feel like you can talk to…I think if you have one either side that you don't get on with, it's just not going to work, especially if someone you didn't like was in adults and something and you were transitioning from someone you get on really well with and can talk to, that would always be difficult." (P2)

YP felt it was important to have the opportunity and time to get to know their new worker.

> "…the care coordinator was a bit weird at first because it is someone coming to visit you who you literally don't know, they don't know you, so its awkward for them and for you, but there's no amount of sort of information that other people can tell you to help you get to know a person…I got to know them over time to be honest." (P1)

> "[if] I could have like met up with my adult worker and had a few more appointments with her to kind of get used to her before I left children's services" (P5)

One of the facilitators to building a new relationship was familiarity. YP felt this was achieved through direct experience of adult workers approach or opportunities for adult workers to learn from the way they worked in sessions with CYPS staff.

> "we had three sessions altogether, just to get to know my new care coordinator and get used to being in the building and just so I got the feeling of what the sessions, these new sessions would be like and what we would cover..." (P3)

> "…maybe if the adult worker was to come in and just like observe one of our sessions and then, so then she'd kind of get an idea of how we'd work and then she'd be able to try and do the same." (P5)

Importance of preparation and communication. YP described the importance of preparation and communication: they experienced the transition as sudden and reported wanting a slower, longer transition process.

> "I'm not overly happy with the, obviously the time period which it happened, as in, how, how quickly it happened and the big, cliff edge…just like having a transition period that's a bit longer and gives people chance to go from one to the other could be quite helpful." (P2)

Preparation and good communication with their worker helped the YP feel involved in the process. YP felt "shut down" and disempowered when they experienced sudden unanticipated changes to plans, poor communication and a lack of involvement in decisions.

> "[CYPS worker] was really good at kind of, getting, understanding what I wanted from it, and letting me voice my opinion…like looking at the weeks and going ok we've got this long left to do this much, we can start reducing the appointments around there if you feel comfortable with that, does this feel like an ok time to finish, I mean we can review this at the end of time sort of thing, and that was really helpful…" (P2)

> "I'd made a plan, so I didn't like the fact that the plan completely changed." (P2)

> "so I wasn't involved like in 'you can do this or this or this'. It was just like 'this is what you're given'." (P4)

> "I guess I could have just been asked really, 'this is what the care co-ordinator does, what do you guys really need from this?'" (P1)

YP would like better communication between services, to be provided more information about AMHS and professional's roles and to have a clear plan so that they know what to expect during transition.

"I don't think they [psychiatrist] both spoke to each other at all, only from like notes… there was so many questions in the assessment … just meant having to bring everything up again… so that was difficult." (P4)

"…quite weird was having this care coordinator, especially because I hadn't had one before, so I didn't really know why I had one…" (P1)

"there didn't seem to be much of a plan with the meeting…I wanted to know…what kind of thing would be happening at this meeting and they were like, 'not much really' and it *was* not much but I kind of wanted it to be a bit more… just having it a bit clearer… things set out kind of like, yeah transition care plan (laughs) I'd have one of those, I don't know if they have them but they probably should." (P6)

Discussion

The current study aimed to evaluate adherence to the existing trust policy for transitions and explore YP's experiences of transitioning to guide recommendations for improving services. The audit findings are somewhat consistent with previous research showing that many YP do not experience 'optimal' transitions (Singh et al., 2010). The audit indicated problems in the following areas of the pathway: collaboration between child and adult services, use of existing documentation and implementing planned transitions. The audit suggested that the new transition policy based on the "RSG" approach has not yet been successfully implemented. Research shows that it is difficult to implement NICE guidelines and clinical care pathways (Lowson et al., 2015; Evans-Lacko, Jarrett, McCrone & Thornicroft, 2010; NICE, 2007) and implementation of a new policy requires a transition for staff too (Bridges, 1991). The Health Foundation (2015) report many barriers to change in the NHS that span organisational, systems, individual and practical issues. Although a transition policy exists in this service, the YP in this study have indicated that a transition handover meeting alone is insufficient and a greater focus on processes within these meetings is required.

Four themes were identified from the interview data: 'timing', 'loss of support', 'building relationships' and 'importance of preparation and communication'. The themes from YP in our study replicate previous qualitative studies investigating MH transitions between generic CAMHS and AMHS (Singh et al., 2010; Burnham Riosa et al., 2015). Whilst YP have highlighted the importance of building relationships when asked prospectively about transition (Burnham Riosa et al., 2015), this study suggests that YP maintain this view retrospectively too. The themes that emerged from this study

highlight that transition is not a discrete event but a complex process requiring an individualised approach and planning to help prepare the young person.

Theoretical Implications

Previous qualitative research has explored the relevance of attachment theory (Rich, 2017) and TIP (Burnham Riosa et al., 2015) to YP's transition to AMHS. Although we did not code our data based on Schlossberg's transition theory (Schlossberg, 1981), we consider its applicability to understanding the views of YP transitions in MH. The themes 'timing', 'loss of support' and 'building relationships' overlap with three of the four factors (situation, self and support) postulated by Schlossberg to influence adaptation during the 'moving out stage'. Schlossberg's transition theory may therefore provide a useful framework for MH professionals to consider when supporting YP to transition to AMHS.

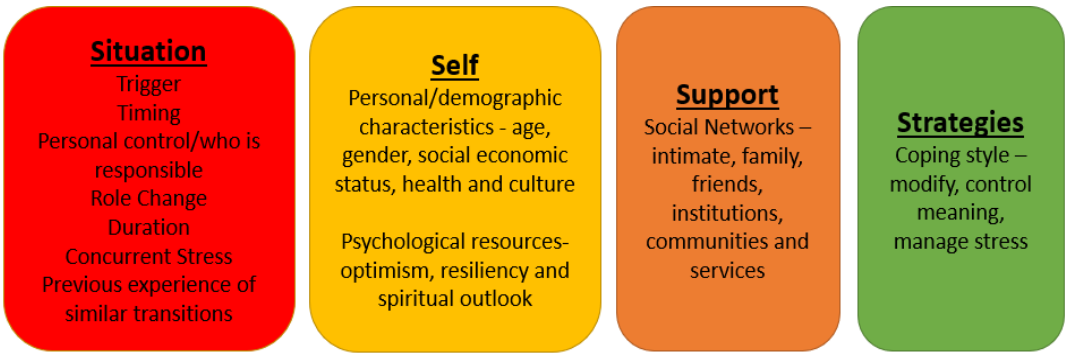

Figure 2.1. The Four S's from Schlossberg's transition theory.

Recommendations and Implications

A consultation with the team was held to feedback the initial findings from the study; staff expressed uncertainty over transition processes but were motivated to improve transitions for YP. Recommendations are made based on policy adherence, staff response and service user's experience.

A personalised approach involving YP. Staff should seek to understand YP's readiness to transition by considering their external context and developmental stage. This will help to determine whether the young person has the necessary skills, knowledge and motivation for developing responsibility for their treatment and clinical care. It is important for both services to recognise the emotional impact and understand what transition means to the young person, specifically addressing any anxieties that exist about transitioning. The sense of loss described by participants fits with attachment theory, indicating professionals should pay attention to relationships and

endings. YP may need slower and longer handovers to help support and foster a safe relationship, this may be particularly important if the YP has reduced sources of support elsewhere or an insecure attachment style that will make building a new relationship more difficult (Marmarosh, 2017). Child workers should acknowledge endings with the YP early on to help assess how they feel about transitioning and come to terms with any feelings of loss (Worden, 1991; Kubler-Ross, 1969). There should be increased joint working to facilitate a new relationship in which the young person feels safe before leaving CYPS (Bowlby, 1969).

Improved communication and preparation. The service should complete a transition plan together with the young person as part of "RSG" programme. It is recommended that this is an electronic document and that CYPS, AMHS and the YP have a copy. The "RSG" approach appears to begin at a younger age within health services, possibly because physical health conditions provide more certainty of transitioning to adult services than within MH services. The use of a transition plan can help YP know what to expect, how they will be supported, when they will transition and goals of future work with services or outside of services. McManus et al. (2015) showed that the use of care plans in health care transitions is helpful in planning personalised support and patients who reported having a care plan were more likely to report benefits from care planning discussions (Burt et al., 2012). Personalised care planning has led to positive improvements in physical and psychological health of people with long term conditions through increased levels of self-efficacy impacting self-care practices (Coulter et al., 2015; Arnett, 2000). Further ways to help prepare YP could include: creating a leaflet with key information about the process, holding a session for YP and parents on transitioning and providing videos on the service's website. These videos could utilise visual animations to depict key differences, incorporate talks from YP already in AMHS and talks from staff explaining AMHS (e.g. role of CC). To improve communication between services, there should be regular bi-yearly meetings between transition representatives to ensure the pathway is being followed on both sides and develop solutions to identified problems.

Consulting and supporting staff. It is recommended that further research is conducted to consult with staff in the service to understand the barriers and motivations to implementing "RSG" approach to transitions in MH. Given that YP perceived staff to be unsure on transition procedures, the service might benefit from supporting staff with implementing the policy by creating 'transition champions' who can guide staff through

the process. Their role would be to offer transition supervision, hold responsibility for maintaining the transition database and use their expertise and knowledge to help contain the uncertainty experienced by staff surrounding transitions for YP. They could also improve joint working by facilitating meetings between CYPS and AMHS and support adult workers to adapt approaches to work effectively with YP who are 'emerging adults'. Further support could be provided to staff using technology to flag points of action within the transition journey for a YP and having templates for documenting transition decisions.

Co-creation of transition pathway. CYPS and AMHS could also develop working groups to take a bottom up approach to transitions within the service. This would consist of staff and a small group of YP who are approaching transition or have transitioned. One function of the working group could be to develop a standard operation procedure to operationalise the process, which might include a checklist for staff. This would assist staff familiarity with the process and policy and should incorporate the themes from YP in this study.

Limitations and Future Research

Although the qualitative nature and sample size limits the generalisability of themes, it enables greater freedom and depth to explore experience. Across different studies, YP are providing a powerful and consistent message on transitions. Future research might utilise a longitudinal design to understand the experiences of YP who transition from CAMHS to primary care services and those who disengage from services. Our sample lacked diversity (all white British/primarily females) which prevents the ability to explore the contribution of the self (demographic characteristics) in adaptation (Schlossberg, 1981). It is interesting that the male in this study perceived fewer difficulties with transition or loss, however the sample size prevents any analysis of gender differences.

Dissemination

The audit data and themes were presented at a quality forum meeting in CYPS as preliminary ideas for staff to discuss and reflect on. The team felt that a transition champion in both CYPS and AMHS would be helpful and reflected that pressures to meet targets related to transition may overshadow the process. One of the psychologists agreed to take on the task of following up recommendations from this project. Support from management and commissioners will be necessary to ensure staff are provided with the time and resources required to support this initiative.

Conclusion

Transition is a complicated process that is influenced by multiple factors. The importance of supporting YP to move from a familiar context at a life stage involving multiple other transitions should not be over looked. YP want a personalised approach to the timing of transition, involvement in the planning process and preparation which includes good communication and building supportive relationships with new key workers earlier. A focus on understanding the difficulties in implementing policies and procedures that facilitate this experience for YP is needed. Recommendations are made for this service but can be generalised to other MH services seeking to improve transitions.

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Main Research Project

Examining experiences of betrayal trauma and mental contamination in borderline personality disorder

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This journal was chosen for its relevant to project content and project design methodology.

Borderline Personality Disorder (BPD)[1] is characterized by significant impairments in self-functioning, interpersonal functioning, negative affectivity and disinhibition (American Psychiatric Association [APA], 2013). A household study in the UK found that 2.4% of 16 – 64-year-olds screened positively for BPD (Moran, Rooney, Tyrer & Coid, 2016). Individuals with a diagnosis of BPD often engage in risk-taking behaviors that are associated with extensive use of services and high levels of support (Bender et al., 2001). Several potential risk factors for the development of BPD have been identified, one of the most commonly researched is a history of trauma. Whilst the link between trauma and BPD is well established, types of trauma experienced by individuals vary (Herman, Perry, van der Kolk, 1989; Fossati, Madeddu & Maffei, 1999). Due to the heterogeneity of trauma experiences, there is a need to consider categorizations of types of traumas (e.g. interpersonal vs. non-interpersonal) to further our understanding of the relationship. Childhood abuse is consistently linked to negative outcomes including impacting early attachments (Glaser, 2000), with BPD also linked to insecure attachment styles (Agrawal, Gunderson, Homes & Lyons-Ruth, 2004).

Kahler and Freyd (2009) suggested that Betrayal Trauma Theory (BTT) may offer a useful framework for understanding key risk factors linked to BPD due to its underpinning in attachment theory (Bowlby, 1988). BTT was first introduced by Freyd (1996) to understand observed 'misremembering' and memory loss as an adaptive response to abuse (DePrince et al., 2012). BTT predicts that the degree to which a negative event represents a betrayal by a trusted, needed other will affect the way it is processed and remembered. For example, a child who is experiencing maltreatment must remain blind to the betrayal to maintain their attachment with a caregiver that is essential for their survival. This may promote cognitive and emotional processing strategies that inhibit awareness and prevent development of effective emotional regulation skills.

Betrayal trauma has been defined as 'when a person's trust or wellbeing is violated by an individual or an institution that the person depends upon for survival' (Freyd, 2008, p.76). According to this definition, sexual abuse from someone close

[1] Whilst the construct of personality disorder is an area of debate, the term is still currently used in classification systems and across healthcare settings.

would be classified as a betrayal trauma whilst being in a car accident would not. To categorise traumas according to the level of betrayal (high/low/none), Goldberg and Freyd (2006) developed the Brief Betrayal Trauma Survey (BBTS). Until the introduction of BTT, betrayal as a psychological concept or domain had received relatively limited attention within clinically applied research. Higher rates of betrayal trauma have been found to be predictive of a range of negative psychological outcomes including depression, dissociation and physical health complaints (Cromer & Smyth, 2010; Freyd, Klest & Allard, 2005; DePrince, 2005; Goldsmith, Freyd & DePrince, 2012). Thus, focusing on the role of betrayal in psychological difficulties could further understanding of the development of difficulties and provide relevant targets for interventions.

Research investigating betrayal trauma in BPD found moderate associations between medium and high betrayal traumas and BPD characteristics in college students (Kahler & Freyd, 2009). In this study, high betrayal trauma was found to be the largest predictor of borderline personality features and women reported more high betrayal traumas. These findings were also replicated in a community sample, with the addition that low betrayal traumas also predicted borderline personality features and men reported more low betrayal traumas (Kahler & Freyd, 2012). However, these findings may not generalize to a clinical population with both studies reporting relatively few borderline traits and low rates of trauma. Previous research has shown BPD patients report high rates of childhood abuse (Zanarini et al., 1997; Zanarini, 2000) and that experience of childhood trauma was more common in BPD inpatients than depressed inpatients or non-clinical controls (Merza, Papp & Kuritárné Szabó, 2015). It is therefore plausible that, in addition to the level of betrayal, the age of traumatic experiences may be particularly pertinent to understanding the relationship between trauma and BPD due to the child's reliance on the betrayer.

Betrayal and Mental Contamination

Mental contamination (MC) is defined as feelings of dirtiness that arise in the absence of direct physical contact with a contaminant (Rachman, 2006). Research suggests that higher levels of perceived violation from unwanted sexual encounters and incidents with a breach of trust resulted in increased reports of MC (Ishikawa, Kobori & Shimizu, 2015; Warnock-Parkes, Salkovskis & Rachman, 2012). MC has primarily been related to obsessive compulsive disorder (OCD) with research demonstrating that the severity of MC is strongly related to OCD symptoms (Coughtrey, Shafran, Knibbs

& Rachman, 2012). Experimental work designed to evoke feelings of betrayal resulted in increased MC and urges to wash (Rachman, Radomsky, Elliot and Zysk, 2012). This suggests that the source of MC is moral violation by a human rather than physical contact, with betrayal proposed as a central component underpinning the experience of MC (Rachman, 2010). Rachman's (2010) definition of betrayal in MC is not dissimilar to Freyd's (2008) definition of BTT with betrayal defined as "a sense of being harmed by the intentional actions, or omissions, of a person who were assumed to be a trusted and loyal friend, relative, partner, colleague or companion" (Rachman, 2010, p.304). Anecdotally, individuals have reported using self-harm to rid feelings of contamination (Veale, Freeston, Krebs, Heyman & Salkovskis, 2009). It is unclear whether this contamination is the same construct as MC resulting from experiences of betrayal. To our knowledge this has not yet been investigated in individuals with BPD who we predict will have had high experiences of betrayal trauma.

Betrayal and Appraisals

Studies investigating the relationship between betrayal trauma and BPD are in their infancy, thus far research in non-clinical samples has examined poor relational health (Belford, Kahler & Birrell, 2012) and disorganized sense of self and psychological defenses (Yalch & Levendosky, 2014). Another possible mechanism that might explain different outcomes following experiences of betrayal trauma is an individual's appraisal of the betrayal. In other trauma related psychopathology, such as post-traumatic stress disorder (PTSD), the appraisal of the traumatic event is suggested to be central to emotional and behavioural responses (Ehlers & Clark, 2000). Negative trauma appraisals have been linked to several mental health difficulties, with shame being related to PTSD, self-blame to depression and betrayal to dissociation (DePrince, Chu & Pineda, 2011). This suggests that it might not be the number of betrayal traumas experienced that predicts subsequent difficulties but rather an individual's evaluation of the event that is important. In line with this, betrayal traumas have been associated with stronger negative appraisals and these appraisals were stronger predictors of outcomes than the total number of traumas experienced at each level of betrayal (Martin, Cromer, DePrince & Freyd, 2013). They also found women were more likely to report experiencing high betrayal traumas than men. However, this study was conducted with students and focused on depression and PTSD, thus research has not yet explored the role of trauma appraisals in BPD.

Aims and Hypotheses

The current study has three aims. Primarily we aim to investigate whether betrayal trauma and mental contamination are greater in a clinical population experiencing difficulties consistent with BPD compared to a) those with anxiety and/or depression and b) non-clinical controls. In addition, we will extend Kahler & Freyd's work (2009; 2012) by considering whether the age of betrayal differs between groups. If a relationship between betrayal and BPD is present, the secondary aim of this study is to explore the relationship between betrayal level, appraisals and BPD symptoms. Hypotheses are listed below:

1a. It is hypothesized that both the BPD group[2] and anxiety/depression group will have experienced more high and medium betrayal traumas than the control group, with the BPD group experiencing more high betrayal traumas than the anxiety/depression group.

1b. The BPD group will have experienced a greater number of high betrayal traumas in childhood than the anxiety/depression group or control group.

2. Mental contamination scores will be higher in the BPD group than the anxiety/depression group or control group.

3a. We predict that the cumulative effects of trauma will predict BPD symptoms, with high betrayal predicting symptoms above lower levels of betrayal and trauma appraisals contributing to BPD symptoms over and above betrayal trauma indices.

3b. Increases in cumulative trauma would be associated with stronger negative appraisals with high betrayal traumas the most predictive, followed by medium betrayals and low betrayals.

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[2] Patients did not receive a formal diagnosis due to being in a primary care service but had been assessed by clinicians to have symptoms consistent with BPD and were waiting to or accessing treatment designed for BPD thus will be referred to as the BPD group in this paper. The QUEST is used to measure BPD symptoms for those accessing STEPPS or MBT groups.

Method

Design

Between groups cross sectional design. The study was approved by the NHS North East-York Research Ethics review committee (18/NE/0262), the University of Bath Ethics committee and local trust (see Appendices A3-C3).

Participants

In total, 122 adults (aged ≥18 years) were recruited to the study which comprised of three groups:

BPD group. Participants (N=17) were recruited from primary mental health care services and had been screened by clinicians for suitability to attend Systems Training for Emotional Predictability and Problem Solving (STEPPS) or Mentalisation Based Therapy (MBT), both interventions designed for BPD. Participants were included if they scored ≥ 27.9 on Quick Evaluation of Severity Over Time (QUEST) and were waiting/attending STEPPS/MBT group.

Anxiety/Depression group. Participants (N = 39) were recruited from adverts at primary care services, the University of Bath and online (e.g. social media/websites) who scored ≥ 10 on Patient Health Questionnaire-9 (PHQ-9) and/or Generalized Anxiety Disorder-7 (GAD-7) and < 27.9 on QUEST.

Non-clinical control group. Participants (N = 66) who had no mental health difficulties (self-reported) were recruited from adverts at the University of Bath and online (e.g. social media/websites) who scored < 10 on PHQ-9 and GAD-7 and < 27.9 on QUEST.

One hundred and fifty-three respondents were excluded from the study at the screening stage due to not meeting the eligibility criteria. Of these, 21 were excluded due to self-identification of OCD, 116 were excluded due to scoring above required QUEST cut off score for anxiety/depression group and being ineligible for the BPD group because they were not recruited through primary care services, and 16 were excluded from the non-clinical group due to indicating they had a mental health problem yet scoring below the cut offs required for the anxiety/depression group.

Measures

Participants completed the following questionnaires via Qualtrics online survey system:

PHQ-9 (Spitzer, Kroenke, Williams & Primary Care Study Group, 1999). A 9-item self-report measure of depression severity with total scores ranging from 0-27. PHQ-9 is a reliable and valid diagnostic measure of depression (Kroeneke, Spitzer &

Williams, 2001). A cut off score of >10 is considered to indicate that further evaluation and treatment be sought; this was used to differentiate clinical and non-clinical groups. Internal consistency in the current sample was good (α = .89).

GAD-7 *(*Spitzer, Kroenke, Williams & Löwe, 2006). A 7-item self-report measure of anxiety symptoms with total scores ranging from 0-21. GAD-7 is a reliable and valid tool for screening and assessing severity of generalized anxiety (Spitzer et al., 2006). A cut off score of >10 is considered to indicate that further evaluation and treatment be sought; this was used to differentiate non-clinical and clinical groups. Internal consistency in the current sample was excellent (α = .92).

QUEST *(*Blum, Pfohl, St. John, Monahan & Black, 2002*).* This is a 15-item self-report measure with three subscales: A) typical thoughts/feelings, B) negative behaviours and C) positive behaviours. Subscale A and B are rated on a 5-point likert scale (1 = none/slight to 5 = extreme) according to distress caused. Items in subscale C require the person to rate how often they use each behavior (1 = almost never to 5 = almost always). Total scores range from 12-72. It has moderate retest reliability, excellent internal consistency and high discriminant validity (Pfohl et al., 2009)[3]. Individuals with a diagnosis of BPD as assessed by structured clinical interview who attended a STEPPS group had total mean score of 39 (Blum et al., 2008) and 39.1 with a standard deviation of 11.2 (Pfohl et al., 2009). A cut off of 27.9 was therefore used to differentiate groups. Internal consistency in the current sample was acceptable (α = .79).

Vancouver Obsessional Compulsive Inventory – Mental Contamination Scale (VOCI-MC; Rachman, 2006). This is a 20-item self-report scale assessing aspects of MC. Each item is rated on a five-point scale with higher scores indicating greater levels of MC. Scores of 40 are considered to indicate clinical levels of MC (Coughtrey et al., 2012). The measure has been found to have excellent validity and reliability (Radomsky, Rachman, Shafran, Coughtrey & Barber, 2014). Internal consistency in the current sample was excellent (α = .92).

[3] The QUEST has also been named the BEST (Borderline Evaluation of Severity over Time) and the two measures are identical. Whilst there are no reported publications on the psychometric properties under the name of QUEST, the psychometric properties of the BEST therefore apply to the QUEST.

Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006). This is a 12-item self-report measure assessing the experience of major traumatic events in which the individual's physical safety and survival may be at risk. Participants are asked about traumas before and after the age of 18 and to select the frequency of the trauma from three response choices "never", "one or two times" or "more than that". Each item is classified according to three levels of betrayal: low, medium and high. Non-interpersonal traumas (e.g. being in a vehicle or industrial accident) are viewed as low betrayal whilst interpersonal traumas are categorised as medium or high depending on closeness of the perpetrator (e.g. you were made to have some form of sexual contact with whom you were very close). The measure does not have a clinical cut off but has been demonstrated to show good construct validity (DePrince & Freyd, 2001) and test-retest reliability (Goldberg & Freyd, 2006). Scores are summed to produce a total number for each betrayal indices: low (0-3), medium (0-6) and high (0-3). If the event was experienced in both childhood and adulthood, this did not augment the total number of traumas experienced and was counted as single trauma type for total betrayal index. Separate indexes for total childhood and adulthood betrayals at each level (e.g. high betrayal experienced before 18 and high betrayal experienced after 18) were calculated. Repeated experiences (e.g. answering 'more than that') were coded yes/no for each level of betrayal trauma. Internal consistency in the current sample was good (α = .80).

Trauma Appraisal Questionnaire (TAQ; DePrince, Zurbriggen, Chu & Smart, 2010). A 54 item self-report measure of self-evaluations of beliefs, emotions and behaviours in relation to trauma events experienced. The measure asks about a traumatic event that happened a year ago. Responses are made on 5-point likert scale (1 = strongly disagree to 5 = strongly agree) yielding a total score between 54 – 270 with higher scores reflecting more negative trauma appraisals. Subscales include; betrayal, self-blame, fear, alienation, anger and shame. There are no clinical cut offs for the measure, however it has good convergent validity, discriminant validity and test retest reliability (DePrince et al., 2010). In this study, participants were asked about the event that caused the most distress/impact, as used by Martin et al. (2013). Internal consistency in the current sample was excellent (α = .97).

Procedure

All participants gave informed consent and participation was voluntary and anonymous. Participants completed screening questions including "Do you have a diagnosed mental health problem or consider yourself to currently have difficulties with

your mental health?" and "Have you ever been given a diagnosis of obsessive-compulsive disorder or consider yourself to currently have difficulties consistent with this diagnosis?" Answers to these questions were combined with scores on the PHQ-9, GAD-7 and QUEST to determine study eligibility and assign participants to groups. Participants who did not meet the criteria for one of the three recruitment groups or who had a diagnosis/difficulties consistent with OCD were excluded. Eligible participants then answered routine demographic questions, followed by the VOCI-MC and BBTS. If participants reported at least one trauma on the BBTS, they were asked to complete the TAQ. On completion of the study, participants had the option to undertake a guided video grounding exercise before selecting a charity to receive a £2 donation on their behalf for their participation.

Data Analytic Plan

An a priori power analysis was conducted to determine sample size required. To detect a medium effect size, 159 participants were needed ($\beta = 0.8$, $\alpha = .05$), approximately 53 per group. Fewer participants were required for planned MANOVA. Difficulties recruiting from primary care services to the clinical groups prevented the intended sample sizes required per group being met. Statistical analyses were performed using SPSS. Full details of analyses are provided in Appendix D3.

To test whether betrayal trauma indices differed between groups, we conducted a MANOVA. Assumptions were tested; due to violations of homogeneity of variances and normal distribution, we used a conservative alpha level of .01 and report Pillai's Trace as a more robust value (Tabachnick & Fidell, 2013). Dunnett T3 tests were used to investigate group differences.

To test whether childhood betrayal trauma and VOCI-MC scores differed between groups, we used Kruskal-Wallis tests due to data violating assumption of normality. Dunn's pairwise comparisons were used to determine individual differences between groups with adjusted p-values to account for multiple comparisons.

Pearson's Correlation was used to assess the relationship between gender, betrayal, appraisals and BPD symptoms. To test whether betrayal traumas predicted appraisals and whether appraisals predicted BPD symptoms, we conducted linear hierarchical multiple regression. The final sample (N = 84) for hypothesis 3a and 3b reflects 35 participants who reported experiencing no traumas on the BBTS and therefore, as per the procedure, were not asked to complete the TAQ. Data was missing for a further three participants, who had not answered any items on the TAQ, and

therefore the decision was made to exclude these three participants from the analysis. Appraisal subscales showed multi-collinearity, therefore only total appraisal score was used. Additional exploratory regression was run due to childhood betrayal trauma differing between groups. Bootstrapping was applied to regression analyses when data violated homoscedasticity.

Results

Sample Characteristics

Demographic and sample details are presented in Table 3.1. Of the total sample, 70.5% reported experience of a traumatic event (interpersonal or non-interpersonal) and 47% experienced at least one high betrayal trauma. The overall sample was predominately females (79.5%) and Caucasian (86.7%). Kruskal-Wallis tests indicated that there were significant group differences in respect to age, $\chi^2(2) = 9.42$, $p = .009$. Dunn's post hoc comparisons found a greater proportion of younger people in the BPD group compared to non-clinical controls ($p = .004$). Chi square analysis indicated there were no statistically significant differences between groups with respect to gender $\chi^2(2, N = 119) = .61$, $p = .76$, ethnicity $\chi^2(2, N = 120) = 4.96$, $p = .09$, marital status $\chi^2(4) = 5.37$, $p = .25$ or accommodation status $\chi^2(2) = 1.86$, $p = .46$. Groups differed in employment status $\chi^2(4) = 10.53$, $p = .03$, with more participants employed in non-clinical control group, fewer employed in anxiety/depression group but more students in anxiety/depression group than expected. Groups also differed in education status $\chi^2(4) = 18.63$, $p = .001$, with higher proportion of BPD group having A-Levels and fewer having further education/university degree than the other groups.

Descriptive statistics for mental health measures are presented in Table 3.2. $\chi^2(2) = 33.9$, $p < .001$ Kruskal-Wallis tests indicated that there was a significant difference between the three groups for mean ranks on the PHQ-9 (BPD = 106.3, Anxiety/Depression = 86.4, Non-clinical = 35.3), $\chi^2(2) = 83.4$ $p < .001$. Dunn's pairwise post hoc tests (adjusted using Bonferroni error correction) showed that the BPD group and anxiety/depression group has significantly higher scores than the non-clinical control group ($p < .001$), whilst scores did not differ significantly between groups in the BPD and anxiety/depression groups ($p = .16$). Similarly, there was a significant difference between the three groups for mean ranks on the GAD-7 (BPD = 101.5, Anxiety/Depression = 87.8, Non-clinical = 35.67, $\chi^2(2) = 79.6$, $p < .001$. The same pattern was observed between groups with higher scores in the clinical groups than non-clinical group ($p < .001$) but not between the BPD and anxiety/depression group ($p =$

.55). There was a significant difference between the three groups for mean ranks on the QUEST (BPD = 114, Anxiety/Depression = 77.2, Non-clinical = 38.7), $\chi^2(2) = 72.8$, $p < .001$. Pairwise comparisons indicated the BPD group had higher scores than the anxiety/depression group ($p < .01$) and non-clinical control group ($p < .001$), whilst scores were also significantly higher in the anxiety/depression group than the non-clinical control group ($p < .001$).

Table 3.1
Sample demographic details

	BPD (N = 17)	Anxiety/ Depression (N = 39)	Non-clinical control (N = 66)	Total Sample (N = 122)
Age				
18-24	7 (41.2%)	12 (30.8%)	15 (22.7%)	34 (27.87%)
25-34	8 (47.1%)	11 (28.2%)	17 (25.8%)	36 (29.51%)
35-44	2 (11.8%)	8 (20.5%)	10 (15.2%)	20 (16.39%)
45-54	-	6 (15.4%)	10 (15.2%)	16 (13.11%)
55-64	-	2 (5.1%)	11 (16.7%)	13 (10.66%)
65-74	-	-	3 (4.5%)	3 (2.46%)
Gender				
Male	2 (11.8%)	7 (17.9%)	13 (19.7%)	22 (18.03%)
Female	15 (88.2%)	30 (76.9%)	52 (78.8%)	97 (79.51%)
Non-conforming	-	2 (5.1%)	1 (1.5%)	3 (2.46%)
Ethnicity				
White – Any	14 (82.35%)	37 (94.87%)	55 (83.33%)	106 (86.89%)
Mixed or Black – Any	3 (17.65%)	1 (2.56%)	10 (15.15%)	14 (11.48%)
Prefer not to say	-	1 (2.56%)	1 (1.52%)	2 (1.64%)
Marital Status				
Single	7 (41.18%)	12 (30.77%)	21 (31.81%)	40 (32.79%)
In a relationship or cohabiting	6 (35.29%)	12 (30.77%)	12 (18.19%)	30 (24.59%)
Married/Civil Partnership	3 (17.65%)	14 (35.90%)	28 (42.42%)	45 (36.88%)
Divorced/Separated/ Widowed	1 (5.88%)	1 (2.56%)	5 (7.58%)	7 (5.74%)
Living Status				
Living on own	5 (29.41%)	7 (17.95%)	10 (15.15%)	22 (18.03%)
Living with parents	3 (17.65%)	8 (20.51%)	7 (10.60%)	18 (14.75%)
Living with children	-	-	1 (1.52%)	1 (0.82%)

Living with partner/spouse	8 (47.06%)	19 (48.72%)	35 (53.03%)	62 (50.82%)
Sharing house/flat with others	-	5 (12.82%)	10 (15.15%)	15 (12.30%)
Other	1 (5.88%)	-	3 (4.55%)	4 (3.28%)
Education				
High School/GCSEs	2 (11.76%)	8 (20.51%)	12 (18.18%)	22 (18.03%)
College/A-levels or equivalent	12 (70.59%)	6 (15.39%)	13 (19.70%)	31 (25.41%)
University Degree or equivalent	3 (17.65%)	10 (25.64%)	17 (25.76%)	30 (24.59%)
Further education (Masters/Doctorate)	-	15 (38.46%)	24 (36.36%)	39 (31.97%)
Employment				
Unemployed	5 (29.42%)	7 (17.95%)	4 (6.06%)	16 (13.11%)
Employed or self-employed	10 (58.82%)	18 (46.15%)	46 (69.70%)	74 (60.66%)
Student	1 (5.88%)	11 (28.21%)	10 (15.15%)	22 (18.03%)
Unable to work due to health/Retired	1 (5.88%)	3 (7.69%)	6 (9.09%)	10 (8.20%)
Self-reported mental health problem	17 (100%)	32 (82.05%)	-	49 (40.16%)

Note: - represents 0

Table 3.2

Mean and standard deviations for anxiety, depression and BPD symptoms and mental contamination measures.

	All (N = 122)		BPD (N = 17)		Anxiety/Depression (N = 39)		Non-clinical control (N = 66)	
	M (SD)	*Range*	*M (SD)*	*Range*	*M (SD)*	*Range*	*M (SD)*	*Range*
PHQ-9	7.49 (6.24)	0 - 25	16.4 (4.27)	11 - 25	11.5 (4.33)	2 - 20	2.85 (2.23)	0 - 8
GAD-7	6.53 (5.70)	0 - 20	13.7 (3.49)	9 - 20	10.6 (4.36)	3 - 19	2.32 (2.32)	0 - 9
QUEST	23.2 (10.2)	12 - 58	44.8 (8.34)	30 - 58	23.39 (3.45)	15 - 27	17.6 (3.76)	12 - 24
VOCI-MC	6.99 (9.52)	0 - 49	18.4 (14.8)	0 - 49	6.97 (8.88)	0 - 36	4.08 (5.14)	0 - 24

Note: M = mean, SD = standard deviation. PHQ-9; patient health questionnaire 9, GAD-7; generalized anxiety disorder 7, QUEST; quick evaluation of severity over time, VOCI-MC; Vancouver obsessional compulsive inventory – mental contamination.

Cumulative Betrayal

Descriptive statistics for betrayal are provided in Table 3.4. MANOVA was performed to investigate between group differences in mean scores for betrayal trauma indexes. Three dependent variables were used: low, medium and high total betrayal indexes. As predicted, there was a statistically significant difference between groups on betrayal indexes, $F(6, 232) = 6.24$, $p < .001$; Pillai's Trace = 0.28, $\eta_p^2 = .15$. When the results for the dependent variables were considered separately, both the medium betrayal index, $F(2, 117) = 8.52$, $p < .001$ ($\eta_p^2 = .13$) and high betrayal index, $F(2, 117) = 19.34$, $p < .001$ ($\eta_p^2 = .25$) reached significance using conservative alpha (.01). Post hoc comparisons using Dunnett T3 tests indicated that the BPD group reported more medium betrayal traumas than the control group, $p = .011$, CI [0.29, 2.46] and anxiety/depression group, $p = .028$, CI [0.12, 2.40]. Mean number of medium betrayal traumas did not differ between the anxiety/depression group and control group, $p = .954$, CI [-0.49, 0.71]. For high betrayal trauma index, the BPD group reported more high betrayals than anxiety/depression group, $p = .005$, CI [0.27, 1.73] and control group, $p < .001$, CI [0.73, 2.08]. No significant differences in mean scores were found between anxiety/depression group and control group, $p = .64$ CI [-0.02, 0.83]. Findings from sensitivity analysis, in which we aimed to address normality violation from individual ANOVA outputs from MANOVA, were comparable (see Table 3.3).

Table 3.3
Sensitivity analysis for hypothesis 1a.

	Kruskal-Wallis		Post hocs
Variable	χ^2	*df*	*r*
Medium Betrayal Index	13.1^{**}	2	$.41^{a**}$ $.39^{b*}$
High Betrayal Index	28.4^{**}	2	$.57^{a**}$ $.43^{b*}$

Note: [a] BPD > control group [b] BPD > anxiety/depression group

** p<.001 *p<.01.

Table 3.4

Descriptive statistics for total betrayal trauma, childhood betrayal trauma and adulthood betrayal trauma indices. (Standard deviations).

	Group					
	BPD (N = 17)		*Anxiety/Depression (N = 39)*		*Non-clinical control (N = 66)*	
	Total Index		*Total Index*		*Total Index*	
Level	*Mean*	*95% CI*	*Mean*	*95% CI*	*Mean*	*95% CI*
Low	0.47 (0.72)	0.15, 0.80	0.44 (0.75)	0.22, 0.65	0.33 (0.62)	0.17, 0.50
Medium	2.53 (1.77)	1.93, 3.13	1.05 (1.26)	0.66, 1.45	0.94 (1.07)	0.64, 1.24
High	1.76 (0.97)	1.37, 2.16	0.82 (0.91)	0.56, 1.08	0.41 (0.70)	0.21, 0.61
	Childhood Index		Childhood Index		Childhood Index	
Level	Mean	*95% CI*	Mean	*95% CI*	Mean	*95% CI*
Low	0.35 (0.61)	-0.01, 0.63	0.33 (0.70)	0.08, 0.45	0.17 (0.38)	0.07, 0.26
Medium	1.82 (1.63)	0.85, 2.40	0.69 (1.06)	0.36, 1.06	0.45 (0.77)	0.27, 0.64
High	1.59 (1.00)	1.07, 2.10	0.64 (0.84)	0.37, 0.91	0.23 (0.49)	0.11, 0.35
	Adulthood Index		Adulthood Index		Adulthood Index	
Level	Mean	*95% CI*	Mean	*95% CI*	Mean	*95% CI*
Low	0.35 (0.61)	0.01, 0.49	0.23 (0.49)	0.05, 0.37	0.26 (0.56)	0.12, 0.40
Medium	1.82 (1.33)	1.04, 2.46	0.64 (0.86)	0.34, 0.92	0.70 (0.98)	0.46, 0.94
High	1.24 (0.90)	0.77, 1.70	0.62 (0.75)	0.37, 0.86	0.33 (0.69)	0.16, 0.50

Age of High Betrayal

Kruskal-Wallis tests were conducted to test between group differences in mean childhood high betrayal index (see Table 3.4). As predicted, we found significant difference between groups in childhood high betrayal scores $\chi^2(2) = 33.9$, $p < .001$. Post hoc comparisons identified more childhood high betrayals in the BPD group (Mean Rank = 96.9) than the anxiety/depression group (Mean Rank = 66.1) ($p < .01$, SE = 8.85, $r = .44$) and control group (Mean Rank = 49.6) ($p < .001$, SE = 8.28, $r = .63$). Childhood high betrayal scores were also higher in the anxiety/depression group than control group ($p < .05$, SE = 6.15, $r = .29$).

Mental Contamination

Kruskal-Wallis test was conducted to compare mean VOCI-MC scores between groups (Table 3.2). In line with our hypothesis, there was a significant difference between groups $\chi^2(2) = 21.4$, $p < .001$. Post hoc comparisons using Dunn's pairwise tests showed VOCI-MC scores were significantly higher in the BPD group (Mean Rank = 96.3) than the anxiety/depression group (Mean Rank = 61.6, $p = .002$, SE = 9.49, $r = .45$) and control group (Mean Rank = 52.5, $p < .001$, SE = 10.1, $r = .50$). No differences were found between the anxiety/depression and control group ($p = .58$, SE = 7.04, $r = .13$).

Appraisals

Gender was significantly correlated with low betrayal, where men (M = 0.73, SD = 0.83) had higher scores of LBT than women (M = 0.31, SD = 0.62). As gender was not significantly correlated with BPD symptom distress or appraisals; it was not included in the regression analyses (see Table 3.5). Appraisal subscales were not entered into the regression due to multi-collinearity, however alienation appraisal showed the strongest relationship with BPD difficulties with a moderate positive correlation ($r = .59$).

Table 3.5

Bivariate correlations of gender, betrayal trauma, mental contamination, BPD difficulties and appraisals (N = 84).

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	-	-.22*	-.10	.12	.01	.13	.21	.12	.02	.12	.09	.12	-.03
2. LBT	-	-	.42**	.13	.07	-.15	-.13	-.19	-.14	-.15	-.05	-.05	.25**
3. MBT	-	-	-	.59**	.39**	.41**	.31**	.24*	.46**	.35**	.35**	.38**	.52**
4. HBT	-	-	-	-	.48**	.58**	.58**	.44**	.50**	.54**	.39**	.48**	.44**
5. QUEST	-	-	-	-	-	.53**	.21	.44*	.52**	.59**	.49**	.41**	.55**
6. Total TAQ	-	-	-	-	-	-	.77**	.83**	.91**	.92**	.79**	.86**	.52**
7. Betrayal[a]	-	-	-	-	-	-	-	.47**	.60**	.63**	.66**	.62**	.32**
8. Self-blame[a]	-	-	-	-	-	-	-	-	.72**	.76**	.45**	.74**	.35**
9. Fear[a]	-	-	-	-	-	-	-	-	-	.82**	.67**	.75**	.47**
10. Alienation[a]	-	-	-	-	-	-	-	-	-	-	.70**	.73**	.47**
11. Anger[a]	-	-	-	-	-	-	-	-	-	-	-	.59**	.50**
12. Shame[a]	-	-	-	-	-	-	-	-	-	-	-	-	.58**
13. MC	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: *$p < .05$ **$p < .01$. [a] subscale of TAQ. LBT, low betrayal trauma; MBT, medium betrayal trauma; HBT, high betrayal trauma; QUEST, quick evaluation of severity over time; TAQ, trauma appraisal questionnaire; MC, mental contamination.

Hierarchical multiple regression was performed to determine whether appraisals predict BPD symptoms, after controlling for the influence of betrayal level. The four variables were entered sequentially for a total of two steps (see Table 3.6). The final model explained 31.1% of the variance, adjusted $R^2 = .27$ ($F(4, 79) = 8.93$, $p < .001$). Adding appraisals explained an additional 9.6% of the variance in BPD symptoms, after controlling for low, medium and high betrayal. In the final model, only appraisals remained statistically significant ($\beta = .40$).

Table 3.6
Hierarchical linear regression analysis predicting Borderline Personality Disorder symptoms within and by level of betrayal and appraisals (N = 84). BCa bootstrapped (95% CI).

	Final B	Final SE B	β
Step 1			
Constant	18.7	1.56	-
Total LBT	-1.56 (-3.84, 0.56)	1.06	.14
Total MBT	1.64 (-0.22, 3.14)	0.95	.21
Total HBT	3.59 (1.18, 6.66)	1.22	.33*
Step 2			
Constant	11.9	3.02	-
Total LBT	-0.73 (-2.60, 1.02)	0.92	-.05
Total MBT	0.81 (-0.86, 2.07)	0.82	.11
Total HBT	1.60 (-1.09, 4.97)	1.38	.15
Appraisals	0.08 (0.02, 0.14)	0.03	.40**

Note: $R^2 = .22$ for step 1 ($p < .001$), $\Delta R^2 = .10$ for step 2 ($p = .001$). *$p < .01$ **$p < .001$. LBT, low betrayal trauma; MBT, medium betrayal trauma; HBT, high betrayal trauma.

We conducted a hierarchical linear regression to test whether cumulative betrayal traumas predict appraisals. The three cumulative trauma indices were entered sequentially for a total of three steps (see Table 3.7). The full model explained 39.6% of variance in trauma appraisal strength, adjusted $R^2 = .37$, ($F(1, 80) = 17.5$, $p < .001$). HBT predicted the largest variation in appraisals ($\beta = .45$) $t = 4.66$, $p < .001$.

Table 3.7
Hierarchical linear regression models for predicting appraisals by betrayal level (N = 84). (95% CI).

	B	SE B	β
Step 1			
Constant	121 (109, 134)	6.47	
LBT	-9.61 (-23.9, 4.68)	7.19	-.15
Step 2			
Constant	96.9 (81.5, 112)	7.79	
LBT	-17.1 (-30.2, -3.99)	6.60	-.26*
MBT	17.5 (10.1, 24.9)	3.72	.47***
Step 3			
Constant	82.1 (66.8, 97.3)	7.65	
LBT	-9.97 (-22.1, 2.15)	6.09	-.15
MBT	10.1 (2.80, 17.5)	3.68	.27*
HBT	24.1 (13.8, 34.4)	5.17	.45***

Note: R^2 = .02 for step 1 (p = .19), ΔR^2 = .21 for step 2 (p < .001), ΔR^2 = .16 (p < .001) for step 3. *p < .05 **p < .01 ***p < .001. LBT, low betrayal trauma; MBT, medium betrayal trauma; HBT, high betrayal trauma.

Exploratory analyses

Given that childhood betrayal trauma was greater in the BPD group, we conducted hierarchical linear regression to test whether characteristics related to high betrayal predicted BPD symptoms (Table 3.8). Childhood and adulthood high betrayal indices accounted for 25.6% of the variance in BPD, adjusted R^2 = .24, F(2, 81) = 14.1, p < .001. Childhood high betrayal was a significant predictor (β=.52) but adulthood high betrayal was not. Adding repeated experiences to the model explained a further 14% of the variance in BPD and adding appraisals explained a further 5% of the variance in BPD symptoms. The full model accounted for 44.6% of the variance in BPD symptoms F(5, 78) = 12.6, p < .001. In the final model, high betrayal before 18, high betrayal after 18, repeated experiences after 18 and appraisals were significant predictors (p < .01), with childhood high betrayal the largest contributor (β = .51).

Table 3.8
Hierarchical linear regression model for predicting Borderline Personality Disorder symptoms age of interpersonal trauma, repeated exposure and appraisals. (N = 84) BCa bootstrapped (95% CI).

	Final B	Final SE B	β
Step 1			
Constant	19.9 (18.1, 21.7)	0.90	
Childhood HBT	6.13 (2.5, 9.2)	1.70	.52***
Adulthood HBT	-3.39 (-3.12, 3.19)	1.48	-.03
Step 2			
Constant	19.6 (17.9, 21.3)	0.87	
Childhood HBT	6.98 (3.21, 10.5)	1.90	.60***
Adulthood HBT	-3.39 (-6.36, -0.23)	1.48	-.27*
Childhood repeated HBT	-3.08 (-9.44, 2.30)	2.86	-.15
Adulthood repeated HBT	10.6 (5.34, 16.1)	2.80	.48***
Step 3			
Constant	14.2 (9.5, 19.5)	2.54	
Childhood HBT	5.99 (2.34, 9.89)	2.54	.51***
Adulthood HBT	-3.70 (-6.22, -0.66)	1.41	-.30*
Childhood repeated HBT	-3.97 (-9.45, 0.03)	2.44	-.19
Adulthood repeated HBT	8.60 (3.45, 14.2)	2.73	.39**
Appraisals	0.61 (0.01, 0.11)	0.27	.30**

Note: $R^2 = .26$ for step 1 ($p < .001$), $\Delta R^2 = .14$ for step 2 ($p < .001$), $\Delta R^2 = .05$ ($p < .01$) for step 3. *$p < .05$ **$p < .01$ ***$p < .001$. HBT; high betrayal trauma.

Discussion

The current study aimed to establish whether betrayal traumas and MC were more prevalent in BPD group than clinical and non-clinical controls. Findings showed that betrayal trauma and MC were greatest in the BPD group. Findings emphasise the importance of age of betrayal trauma with the BPD group having more betrayal traumas in childhood than clinical and non-clinical controls. Finally, findings showed that appraisals were the largest predictor of BPD symptoms, beyond cumulative betrayal and thus more negative appraisals of betrayal traumas were associated with more symptoms

of BPD. However, when childhood betrayal traumas were considered, appraisals were no longer the largest predictor.

We hypothesised that betrayal traumas, in particular high betrayal traumas, would be more common in the BPD group than the anxiety/depression or control group. Rates of overall trauma and high betrayal trauma were higher in this sample compared with previous studies (Kahler & Freyd, 2009; 2012). Consistent with previous research reporting high rates of interpersonal trauma in BPD (Zanarini et al., 1997), 94% of those in the BPD group reported interpersonal trauma. As predicted, we found that mean medium and high betrayal traumas were greater in those with BPD than individuals in the clinical and non-clinical groups. This is consistent with previous findings in non-clinical samples (Kahler & Freyd, 2009; 2012). The BPD group had more high betrayal traumas in childhood (medium effect) than clinical and non-clinical controls, with the clinical control group also reporting more than the non-clinical controls. Whilst the anxiety/depression group had more childhood high betrayal traumas than the control group, adulthood high betrayal traumas did not differ. This suggests that the age of betrayal traumas is important in understanding subsequent difficulties rather than solely the number of betrayal traumas. The findings suggest that childhood betrayal traumas are a better predictor of BPD symptoms than adulthood betrayal traumas. Such findings would fit with theories surrounding the impact of childhood betrayal trauma on attachments and emotional regulation that underpin difficulties characteristic of BPD (APA, 2013) and arguably suggest that diagnosis of BPD may distract from the real issue of the consequences for survivors of childhood interpersonal trauma.

Findings supported our second hypothesis that MC scores would be higher in BPD group than the anxiety/depression group or those without mental health difficulties. Mean scores were below clinical cut offs, however some participants from the BPD group did score above cut off indicating clinical levels of MC. To our knowledge this is the first study to investigate whether MC exists in BPD. Findings are consistent with previous studies which have linked MC to PTSD (Olatunji, Elwood, Williams & Lohr, 2008; Adams, Badour, Cisler & Feldner, 2014; Brake, Jones, Wakefield & Badour, 2018). The mean VOCI-MC scores, when reported, is 9.67, which is much lower than in our sample and may pertain to the use of a non-clinical sample. Compared to MC in clinical samples of OCD, scores in our BPD group are lower than reported in one study (Coughtrey et al., 2012) but are similar to those found in another study (Carraresi, Bulli, Melli & Stopani, 2013). Findings are also consistent with studies

linking mental pollution and childhood trauma (Berman, Wheaton, Fabricant & Abramowitz, 2012) in which emotional abuse was shown to be more closely related to inward contamination than washing. Although not directly tested, it is probable that higher rates of MC in the BPD group relate to the type of betrayal traumas as previous research has found MC to be related to PTSD severity amongst individuals who had experienced sexual assault (Badour, Feldner, Babson, Blumenthal & Dutton, 2013) with disgust shown to be a unique predictor of MC following sexual trauma (Badour, Ojserkis, McKay & Feldner, 2014). This study contributes to the growing number of studies showing that MC is perhaps best understood as a transdiagnostic phenomenon with further work needed to understand the shared mechanisms across psychopathology.

The findings also support our third hypothesis that high betrayal is the largest contributor to explained variance of appraisals and suggests that interpersonal traumas are associated with more negative trauma appraisals. We found that high betrayal traumas significantly predicted BPD symptoms ($\beta = .33$), however, they were no longer significant when appraisals were entered, with appraisals the largest predictor of BPD symptoms ($\beta = .40$). These findings are consistent with previous studies where high betrayal was the best predictor of BPD characteristics (Yalch & Levendosky, 2019) accounting for 17.2% and 12.8% of variance of borderline traits (Kahler & Freyd, 2009; 2012). These models did not include appraisals and including appraisals in our model explained 31.1% of the variance in BPD symptoms, with appraisals found to be a more credible predictor than high betrayal trauma. However, when the model included characteristics relevant to high betrayal (e.g. age and repeated nature), this explained 44.6% of the variance in BPD symptoms and childhood betrayal trauma was the largest predictor beyond appraisals.

Consistent with research of appraisals in PTSD (Mitchell et al., 2018), alienation appraisals showed the strongest relationship with BPD, followed by betrayal which has previously been linked to dissociation (DePrince et al., 2011). Scores on TAQ in our study (Mean: 116, Range: 54-233) are lower than those reported by Mitchell et al. (2018), this is most likely due to their whole sample being recruited from services whilst we collapsed our groups to examine appraisals. Currently our findings do not support distinct appraisals being associated with different symptoms but suggest overlap between appraisals and trauma-related outcomes. Perhaps betrayal traumas result in a range of negative trauma appraisals, each aimed minimising the focus of the caregiver's actions by negatively evaluating oneself to maintain the relationship, and such negative

evaluations and coping strategies then increase the risk of subsequent difficulties. To test this, future research should explore whether strong negative appraisals exist in those who have only experienced betrayal traumas in adulthood not childhood and see whether these traumas are more likely to be appraised as betrayals.

Clinical Implications

Although MC may not be relevant for all individuals with BPD, findings suggest that clinicians should assess for MC on an individual basis, particularly when interpersonal traumas high in betrayal are reported. Within interpersonal traumas, traumas with a close relationship between survivor and perpetrator were associated with more BPD symptoms than traumas where the relationship between the betrayer and betrayed was not close. Findings from this study provide support for betrayal trauma theory and highlight the importance of childhood betrayal trauma in understanding the harmful effects of trauma. The manner in which trauma survivors evaluate trauma experiences rather than cumulative trauma exposure was most meaningful in predicting BPD. Appraisals of the betrayal traumas in the past may differ from appraisals of interpersonal threats in the present (Platt & Freyd, 2015), however the current findings offer important implications for treatment applications. It suggests the need to assess for childhood betrayal traumas and that evaluations of betrayal traumas may help understand difficulties, particularly alienation appraisals. Subsequent difficulties with identity, relationships and mood might be partially explained by these appraisals of interpersonal traumas in childhood.

Limitations

The study was under-powered due to low participant numbers in the BPD group, although group differences were detected even when using conservative non-parametric tests, therefore replication with a larger clinical sample is warranted. The current sample was predominantly female and Caucasian preventing analyses by gender/ethnicity and therefore findings may not generalise. Whilst studies have suggested women experience more betrayal traumas (Kahler & Freyd 2009; 2012), Pérez Benítez et al. (2010) did not find racial differences in relationship between trauma and BPD, although race may influence interpretation of betrayal.

A further limitation is in the operationalisation of the BPD group who did not have a formal diagnosis of BPD. However, individuals were screened by a qualified clinician in the service and assessed to have difficulties consistent with a diagnosis. Furthermore, the BPD group had higher mean scores on the QUEST than previous

studies of individuals diagnosed with BPD where mean scores were 38.9 (Black, Simsek-Duran, Blum, McCormick & Allen, 2016) and 42.74 (Melca, Yücel, Mendlowicz, de Oliveira-Souza & Fontenelle, 2015). The identification of anxiety/depression relied upon self-report through screening measures, without confirmation of a diagnosis, and individuals were not required to be accessing services. However, clinical groups differed significantly in anxiety/depression scores from non-clinical group and service involvement could be considered an arbitrary indicator of anxiety/depression given the high rates of anxiety/depression reported amongst the general population, not all of whom will access services. Importantly, BPD symptoms differed significantly between clinical groups whilst anxiety/depression scores did not therefore differences between groups in MC cannot be explained by anxiety/depression. It is unsurprising that the BPD group also scored above cut off scores on screening measures for anxiety/depression given the tendency to express strong emotions and high rates of comorbidity reported by individuals with BPD (Lenzenweger, Lane, Loranger & Kessler, 2007). Furthermore, as OCD was not measured with a standardised questionnaire, we cannot rule out the possibility that MC scores could be a result of symptoms of OCD in the sample.

The single time point cross-sectional observational design and retrospective self-reporting prevent conclusions of causality; effects may be attributable to other variables not included in the current study. However, randomisation to illness groups is impossible, experimental manipulation of exposure to interpersonal traumas would be unethical and a longitudinal approach was beyond the scope of this study. Participants reported their age within set age group categories, meaning it was not possible to focus on age as a potential confounder as a younger population in BPD group could result in fewer experiences of adulthood betrayal traumas, however this would be unlikely to impact upon mean number of childhood betrayal traumas. Groups differed in education and employment status, however this is not surprising as poorer educational attainment and unemployment are commonly reported by individuals with BPD (Sansone & Sansone, 2012) and are also strongly correlated with childhood adverse experiences (Hardcastle et al., 2018). Furthermore, we recruited the non-clinical and majority of the clinical control group online and through advertisements at the university due to difficulties in recruiting from primary care services, which may have biased the education demographics and employment status of the anxiety/depression group.

Finally, we used a collapsed sample to address the relationship between betrayal trauma, appraisals and BPD symptoms which consisted of both clinical and non-clinical participants. This was chosen to ensure the analysis was correctly powered with exposure to trauma as a commonality amongst participants. It was beyond the scope of this study to address the relationship between these factors in individuals with a diagnosis of BPD and therefore future research focusing on the relationship between betrayal trauma and BPD is needed.

Strengths

Strengths of this study include the novelty of examining MC, a transdiagnostic construct relevant to betrayal, in a sample assessed as having difficulties in line with BPD. Furthermore, the use of clinical populations and exploration of age, repeated traumas and appraisals in investigating relationship between betrayal trauma and BPD extends existing research and supports theoretical ideas put forward by BTT.

Future Research

Future research should consider potential mediators to the relationship between betrayal and BPD, and between MC and BPD. Promising avenues include factors that influence interpersonal relationships (Belford, Kaehler & Birrell, 2012; Jacoby, Krackow & Scotti, 2017) such as attachment style, 'just world' beliefs (Giesen-Bloo & Arntz, 2005), trust, and emotional regulation strategies (Carvalho Fernando et al., 2013). Future research should determine whether particular appraisals following betrayal trauma differ between those with BPD from other complex-trauma related difficulties.

Conclusions

This is the first study to explore the relationship between betrayal and BPD in a clinical population, to differentiate childhood betrayal from total betrayal and to explore the phenomenon of MC in individuals with BPD. As predicted, the BPD group reported more high betrayal traumas and MC than controls. Appraisals predicted BPD symptoms above cumulative experiences of betrayal, however when age of betrayal was considered, childhood betrayal trauma was a better predictor than appraisals of BPD. Despite the limitations, the study provides support for betrayal trauma theory in understanding the link between trauma and subsequent trauma-related difficulties, such as BPD, and emphasises the importance of focusing on childhood betrayal trauma in future research.

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Executive Summary

Borderline personality disorder (BPD) refers to difficulties with interpersonal relationships, identity, negative emotions and impulsivity. The link between BPD and a history of trauma has been established for some time. However, the nature of the traumas experienced vary including sexual abuse, physical abuse and accidents. This has led to a growing interest in unpicking the impact of different traumas and the subsequent effects.

There has been some recognition that interpersonal traumas such as abuse may have different effects than non-interpersonal trauma such as a car accident. Researchers have begun to consider betrayal as important in interpersonal traumas. Betrayal trauma refers to an event where someone's trust or wellbeing is violated by someone who has a close relationship with the individual. Such traumas are argued to have a greater impact, particularly if the individual relies upon the betrayer for their survival. For example, a child relying on their caregivers. It is suggested that the amount of betrayal in traumas may help explain some of the difficulties experienced by individuals with BPD. It is also suggested that how we make sense of an event may contribute to levels of distress following trauma. This idea is well-established in cognitive models of post-traumatic stress disorder (PTSD) and have begun to be investigated in betrayal traumas. So far, research has not looked at whether appraisals are a key mechanism in the relationship between betrayal trauma and BPD.

Betrayal has also been linked to mental contamination (MC), which involves feelings of dirtiness and contamination without direct contact with a physical stimulus. Mental contamination has most commonly been linked to obsessive compulsive disorder, however recent research has begun to show it can also be related to PTSD and childhood trauma.

This study aimed to explore whether the number of betrayal traumas experienced were higher in individuals with BPD and whether these were individuals who had experienced more betrayal traumas in childhood. The study also aimed to investigate whether mental contamination was greater in individuals with BPD than those with other mental health difficulties. Lastly, the study aimed to explore whether the number of betrayal traumas or the way you think about them could better explain BPD difficulties.

One-hundred and twenty-two adults (79.5% female) took part in this study. The study was advertised via flyers in public places, through primary care mental health

services and online via websites and social media. Participants were asked to complete an online survey which asked them questions about their history of betrayal trauma, how they evaluated these experiences and whether they experienced MC. The survey also included measures to determine whether participants met the cut-off criteria for a probable diagnosis of anxiety, depression and BPD. Scores on these measures were used to categorise participants into group: BPD group (17 participants), anxiety/depression group (39 participants) and those without mental health difficulties (66 participants).

The study found that individuals with BPD reported more interpersonal traumas than the other groups, but also more of these interpersonal traumas were high in betrayal (involved someone with whom they were close to). The study also found that individuals with BPD had more traumas during childhood and reported higher scores on the measure of mental contamination.

The study found that interpersonal traumas involving someone close to you were associated with stronger negative thoughts about oneself. In addition, having lots of negative thoughts about oneself in relation to the betrayal trauma predicted symptoms of BPD more than experience of high betrayal traumas. This study found that when the age of betrayal trauma was considered (e.g. number of betrayal traumas experienced in childhood and adulthood), this was more important in predicting symptoms of BPD than the negative thoughts people had about themselves in relation to betrayal trauma.

This study confirms previous studies findings that betrayal traumas are related to BPD symptoms. However, this study suggests that childhood betrayal trauma is key to understanding difficulties that are commonly reported in individuals with BPD. This study also suggests that how individuals make sense of these experiences could explain some of the difficulties commonly linked to childhood trauma with distancing yourself from others and being unable to trust or get close to others found to be related to BPD difficulties. Future research should continue to investigate how childhood trauma may lead to complex-trauma related difficulties and see whether there is a difference in how we make sense of betrayal traumas experienced in childhood and adulthood.

In regard to treatment, this study suggests that interventions should pay close attention to the impact of childhood betrayal traumas and consider how the individual made sense of this event, which may have helped them maintain their relationship with their caregiver which was important at the time. It also suggests that clinicians should

ask individuals who have experienced interpersonal traumas about feelings of mental contamination as this may be important in treatment.

The results of the study should be considered with some limitations in mind. Firstly, there were fewer participants recruited for the BPD group than our target. All of the factors explored were based on self-report measures and collected at one time point. The BPD group had higher levels of depression and anxiety and were younger in age than the other groups. It is therefore not possible to draw clear conclusions about the factors that cause BPD, however the results provide support for the importance of interpersonal trauma, amount of betrayal involved and age the event is experienced in understanding the difficulties survivors of interpersonal trauma may face and the development of BPD.

Connecting Narrative

Starting training I was excited by the prospect of research, whilst others around me seemed quite set on topics, I had a broad range of interests keen to gain knowledge in new areas. This narrative aims to summarise what I have learnt from the process of my research projects and cases studies.

Literature Review

The pressure to develop an idea within the first year of training was tough; I ended up writing two proposals as I tried to grapple with the process. My first proposal stemmed from a client I was working with using Well's social anxiety model. I was really interested in compassion and within my clinical work, self-criticism and low self-esteem seemed important, thus I developed an idea for the use of compassion focused therapy in social anxiety because these constructs were not captured in the cognitive social anxiety model I was using. The feedback from the research team was that many changes were required and feeling unconfident, I abandoned the idea in search of the "right literature review". I worked on my second proposal with the support of Dr Jo Daniels. I had noticed an increase in research on intolerance of uncertainty in children and planned to see whether adult cognitive models of worry applied to children and adolescents. The proposal was passed - I had a literature review at last! Unfortunately, three months later, a very similar review was published elsewhere which had not been pre-registered. This was a huge disappointment given the substantial time and effort invested into writing the proposal and preparing search terms. This coincided with challenging time in my own personal life and at this point, I was overwhelmed, considerably behind predicted timescales having prioritised my review over my main and ultimately felt I had "failed" at the first hurdle. I was encouraged to assess the published review to see whether it was still feasible; I made the difficult decision that little would be added. Jo had alternative ideas related to her speciality, however these did not match my interests and so I focused on my other research projects, looking out for ideas that could relate to existing projects. This was a frustrating process with often little to show for the time spent and generally concluding there were not enough papers to warrant a review or my ideas were already registered on PROPSERO. In hindsight, without time pressures and with a supervisor to discuss ideas with, perhaps some of these could have been tweaked by broadening or narrowing search terms.

Having enjoyed my child and adolescent mental health (CAMHS) placement, at the end of the second year I decided to email potential supervisors with an interest in

CAMHS. This led to an idea on mental health literacy intervention in schools with Dr Maria Loades, I was once again enthused having had many conversations with family and friends before training about mental health teaching missing from curriculums. However, after scoping the project out, I was to discover that a similar review was already registered on PROSPERO. This left me in a difficult position; I was about to begin my third year of training and due to situational factors had still not begun this project. Fortunately, Dr Rachel Hiller offered me a lifeline and invited me to take up a review on interventions for maltreated children which had a protocol already registered. This tied in with my next elective in a looked after children's service. Since then, the process has been relatively straight forward, apart from time restraints which has meant having to make quicker decisions and having less time in the beginning stages for methodical planning. I've been fortunate to have had a very pragmatic supervisor. Whilst the literature review has been one of my most frustrating experiences, I've also learnt a great deal including perseverance, experience of generating multiple ideas, the importance of defining your question and criteria and subjectivity within appraising the quality of papers due to unreported information. This has made me a better reader of research and particularly mindful of such issues when writing up my own future research.

Service Improvement Project (SIP)

Prior to starting training, I had experience of service improvement and evaluating therapy groups. When looking for a SIP project, I had initially planned to look for projects on groups, reasoning that my prior experience would help me. However, I also had an interest in CAMHS, an area I had not managed to work in before training. A project with Dr Chloe Constable on transitions between CAMHS and adult services caught my eye. I contacted Chloe, who was enthusiastic, and thus subsequently approached Dr Cara Davis to be an internal supervisor. The service improvement project was in some respects one of the only projects which ran more smoothly. Cara encouraged me to focus on the theoretical underpinnings of transitions. Trying to balance the services' needs and more formal research approach of the course was tricky. As I read the literature, my ambition grew due to the lack of information on effective transitions to primary care services. This led to the project also growing, fortunately, this was recognised during the design stage and we revisited the services' aims "Is the new pathway effective and how is it being received?" Effectiveness of transition models was missing in the literature and therefore we needed to evaluate

whether the existing pathway based on “Ready, Steady, Go” was working, both from a service perspective (e.g. being implemented) and from service-user perspective. This resulting in combining an audit with qualitative methods.

I had planned to complete this project during my first summer. However, delays in receiving the necessary information to conduct the audit delayed interviews and difficulties with recruitment means that I was behind the planned time scales. With the help of Chloe’s perseverance, we eventually recruited enough participants. Having never conducted qualitative research before, one of the challenges was changing from a clinical role to a researcher when meeting with young people for interviews. Conducting the interviews and transcribing the data was an enjoyable process, though I was unsure whether I was doing it ‘right’ and ended up with lots of ‘themes’. Through discussion with Cara, it became clear that these themes were very specific and probably reflected codes, so it was back to the drawing board. This process was challenging as I felt like I was losing key details and the narrative as themes became broader. Conducting and transcribing interviews myself had led me to be very familiar with the data but I was aware of the many influences on the process, for example the reading I had done on transitions for the proposal leading me to doubt if I had the “right outcome”. Through meetings with Cara, I came to realise the importance of owning your influences, acknowledging your position and recognising how your interpretations shape the analysis. The process of developing themes and sub themes was a lengthy process with many iterations as sub themes were generated and then dropped. You really get to know your data in a different way from quantitative approaches and one of the hardest aspects was reflecting the data in my write up within the restricted word counts. I now have a greater understanding of different qualitative approaches and the assumptions underlying them. I have also learnt a great deal about transitions and gaining feedback on pathways, something I hope to take forward with me whether I work in child or adult services. It was rewarding to feed the project back to the service and I was asked to speak at the away day. Unfortunately, due to Chloe then going off on maternity leave and my placement commitments this did not come to fruition, however I feel I have gained the confidence to conduct qualitative research in the future.

Main Research Project

I was particularly interested in trauma and this led to a conversation with Megan Wilkinson-Tough at the research fair about betrayal trauma, a term that which I had not heard of. Megan was particularly keen on looking at mental contamination in people

with borderline personality disorder (BPD). Through my reading, I had become much more interested in what might underpin the relationship between betrayal and BPD. The study was designed to be online given the high number of participants needed. I knew these aims were ambitious, but I spent time considering the feasibility of achieving recruitment numbers through discussions with prospective services. The project posed a range of ethical considerations from the nature of conducting a project on trauma online. Nine months on from the initial conversations, at which point I was starting to doubt whether a project in trauma was such a good idea. My external supervisor believed that we would have difficulty having staff support recruitment in secondary care due to risk issues and suggested we recruit from primary care STEPPS groups. Then there was the challenge of defining BPD in a primary care group without the diagnosis, a trade-off between what might be the best thing to do and what is the most practical. I learnt a lot from Megan's extremely thorough approach, but my supervisors concern had also made me anxious about the project and approval. At the time of completing my ethics, Megan informed me that she was leaving the course, and I was to be given a new supervisor. This was difficult timing but has perhaps helped me to take autonomy for my research as I remained the only constant in the project and gained practice at explaining the project. The process of gaining ethical approval through the NHS was time consuming and the repetition between forms was frustrating. I submitted my NHS IRAS ethics expecting to attend a REC panel and was anxious about the timescales; I knew that I needed to be recruiting soon. Completing these detailed documents and taking the time to gather evidence of absence of distress from the trauma questionnaire was beneficial; the project received approval following a proportionate review with just two minor amendments. The experience of applying for ethical approval in the NHS will no doubt be helpful in conducting clinical research in the future.

Recruitment was to be the biggest challenge. It was a slow start recruiting to the BPD group. We had designed a pilot stage meaning we could not recruit elsewhere until this was completed. Josie Millar, my new supervisor, suggested visiting one of the groups to 'sell' the research to participants with iPads to enable people to take part. Eventually, we were up and running and able to recruit more widely following no issues from the pilot. Whilst I recruited my non-clinical sample relatively quickly, the clinical populations were much slower. I'd spent so long gaining permission to recruit in the NHS and was now trying to convince clinicians in services to share research with clients. Keeping your research in the minds of busy clinicians is no easy feat and to add

to the challenge, several of these services then became up for tender facing increasing levels of stress themselves. With few patients with anxiety/depression coming from services and low numbers to the BPD group, I met with Josie who was incredibly supportive and suggested we streamlined our NHS efforts to focus only on recruiting to the BPD group. I had to become more persistent in contacting services and to overcome issues with information being passed on, I emailed clinicians I had met who I knew were running groups. We then sought alternative ways to recruit those with anxiety/depression, putting up posters in University of Bath counselling service, creating digital ads to be displayed around the university and advertising on support groups and social media sites. Overall the NHS recruitment numbers were disappointing, this was particularly difficult as we were unable to recruit this group from elsewhere; the prior planning had not paid off. I learnt two vital lessons - firstly, you can not anticipate all problems, no matter how much you try! Secondly, influencing recruitment is challenging when you are not located within the PIC and are juggling multiple other projects and clinical work. In hindsight, it might have been helpful to design the research in a way that broadens the available pool of people to recruit from.

I was feeling disheartened, my biggest concern to have meaningful results, leading me to worry about the study being underpowered and having wasted people's time. Despite deciding my statistical analysis early on, I then started to doubt my decisions. I learnt that it can be helpful to take time to assess what your data will look like and that there are many different opinions on which statistics to use, where previously I had been chasing that there must be a 'right' decision in mathematics. At this point, I was very grateful to Gemma Taylor who reminded me that even researchers with grants still do not always reach recruitment targets and to have confidence in my decisions. This project was full of ups and downs, with many moments of frustration, however I have learnt a lot of valuable lessons as a researcher to take forward and I feel proud of the project.

Case Studies

My working age adult case study described the use of CBT in depression. Working in primary care gave me a good opportunity to complete one of my SCEDs because my entire caseload was CBT and outcome measures were planned. This was the first time writing a clinical case report and it took me a long time to write it being unsure what was required. My tutor advised multiple changes but suggested submitting for publication. However, when my case study was returned, there were numerous

changes to be made. This really helped me to become quicker at writing up cases in the future and to aim for "good enough". One of the main challenges was identifying the heuristic value, however over the course of my placements this became easier.

My older adults case described the use CBT for OCD in an older adult. Choosing an older adult case study was much more challenging, I had fewer cases who met the minimum number of intervention sessions using CBT and therefore my case study was somewhat pre-selected for me. Unlike my previous placement, using CBT was much more complex as the lady held more fixed beliefs that made exposure and response prevention a challenge. This work was helpful in working with reassurance seeking and required me to incorporate her partner who she sought reassurance from. In hindsight, with my systemic knowledge now, exploring their relationship may have helped progress therapy further.

My CAMHS case study described the use of CBT for self-esteem. I decided that this was another good opportunity to conduct my second SCED. This is one of my most 'successful' cases on training from a CBT perspective, most likely due to having a very motivated young person who regularly completed homework. We developed a good therapeutic rapport and in supervision I learnt a lot about transference and counter—transference with relation to risk and anxiety. Using outcome measures with this client felt extremely helpful for discussing progress with her and became a natural part of the process. The case provided the opportunity to consider more transdiagnostic processes and I enjoyed writing this up. I had hoped to submit this a poster to the BABCP conference, however unfortunately I missed the deadline juggling other demands. I hope to gain experience of this in the future.

My learning disabilities case study described the use of relaxation and systemic approaches for stress and aggressive behaviours. Whilst on my previous three placements I had identified a case to be written up early on, this was not the case on my learning disabilities placement. I had been nervous about this placement and my ability to work with this client group. I often struggled to feel I was offering effective therapy and even goals were hard to define. I wanted to be collaborative, however this work challenged my definition of collaborative. It taught me to be more flexible in my approach and to redefine my definition of effectiveness. Although the case study passed, I received feedback regarding the use of outcome measure. Upon reflection, this is interesting because finding relevant outcome measures in this population was more of a challenge and led me to wonder whether the outcome measures were meaningful or if

perhaps behavioural measures would have been more helpful. CBT did not prove to be overly helpful for this client, however the formulation proved useful for the system around the client.

In my elective placement, I decided to write my systemic case study and submit as part of the doctoral training requirements to save me time. Whilst this passed doctoral requirements, changes were required for intermediate level, however my placement supervisor provided lovely feedback commenting on the ability to provide a good overview of the literature relevant to their field. This was a very different case to write up with several layers of complexity. Unlike previous cases, there was no clear intervention model and instead I was drawing upon multiple theories and models to inform my formulation and intervention. I struggled with assessment and formulation being these clear neat stages in the write up as the reality throughout this and other cases, was that of a more iterative process. However, I really enjoyed the work, it provided an opportunity to implement systemic learning and to practice writing a non-CBT based case study.

Summary

The biggest challenge has been time to complete all the projects alongside other demands and letting go of the idea of 'perfect' research. This will no doubt be beneficial as resonates with the challenges for NHS staff in continuing with research. One of the paradoxes is that later in training you develop more research ideas through writing case studies, clinical placements and teaching, at which point you have usually already agreed your projects. Again, this highlights the values clinicians hold in conducting research and I am confident that I have developed skills to undertake clinically relevant research which I look forward to utilising within my future clinical practice.

Acknowledgements

I would like to extend my sincere thanks to Dr Cara Davis for her unwavering enthusiasm and valuable contributions to my service improvement project, as well as providing a space to reflect on the process of training. I would also like to thank Dr Chloe Constable for her help with recruitment and all the young people who shared their experiences with me.

I would also like to thank Dr Megan Wilkinson-Tough for her insightful questions and advice in developing my main research project during the early stages, as well as to Josie Millar for stepping in and providing support and encouragement during the realisation and write up of this project. Thank you to Dr Jim Nightingale, the clinicians who supported with recruitment and all those who gave up their time to take part in this project - without you this project would not have been possible.

I am grateful to Dr Rachel Hiller for allowing me to develop her idea, and to both her and Dr Maria Loades for their guidance in conducting the review.

I would like to express my appreciation to my family for their support and understanding over the last three years, as well as to my friends outside the course for sharing my research and providing much needed getaways.

Finally, I wish to thank my fellow trainees for their moral support over the last three years. I could not have asked for a better bunch of women with whom to share this journey with – your encouragement, advice and humour have kept me going through the tough moments of the last three years.

Appendices

Appendix A1. Searches conducted in each database.

PTSDpubs	**PubMed**	**PsychNET**
PTSD OR post-traumatic stress OR posttraumatic stress	PTSD OR post traumatic stress OR post-traumatic stress OR posttraumatic stress OR stress disorders, post-traumatic (Mesh)	emotional trauma OR trauma OR post-traumatic stress OR acute stress disorder OR stress reactions OR complex PTSD OR post-traumatic stress OR posttraumatic stress disorder
maltreat* OR verbal abuse, physical abuse OR emotional abuse OR, child abuse OR sexual abuse OR neglect OR family violence OR abandon*	Neglect OR abandon OR maltreat* OR child abuse OR domestic violence OR interpersonal violence OR emotional* abuse OR psychological* abuse OR physical* abuse OR verbal abuse OR sexual* abuse OR domestic violence (Mesh) OR physical abuse (mesh) OR child abuse, sexual (mesh) OR child abuse (mesh)	child welfare OR child neglect OR violent crime OR abandonment OR child abuse OR domestic violence OR emotional abuse OR physical abuse OR sexual abuse OR verbal abuse
Treatment OR therapy OR intervention	Intervention OR treatment	Intervention OR therapy OR treatment
Child* OR teen* OR youth OR young pe* OR adolesc* OR infant	Adolesce* OR teen* OR youth OR young pe* OR child* OR adolescent (mesh) OR infant (mesh) OR child (mesh)	

Appendix B1. Overview of study design and characteristics.

Study	Participants	Maltreatment	Interventions	Control	PTSD Measure	PTSD Timepoints
Bartlett et al. (2018) USA Cohort Control	N = 839 0-18 years (M = 9.14) 53.9% Females 70.31% White	Physical Abuse, Neglect, Caregiver Impairment (M = 5 traumas) Child Welfare	ARC; M=29 sessions Individual CPP; M=16 sessions Individual and Parent	TF-CBT M = 21 sessions Individual	Interview: PTSD-RI Caregiver self-report: YCPC	Baseline; 6m; 12m; 18m
Mannarino, Cohen, Deblinger, Runyon & Steer (2012) USA RCT	N=158 4-11 years M=7.60 62% Females 65% Caucasian	Sexual abuse 61% experienced contact/penetration, 42% Adults Perpetrators Verified by independent child abuse professional	TF-CBT (narrative) 8 vs. 16 sessions (30 mins) Weekly Individual Parent – parallel and conjoint (30min)	TF-CBT (no narrative) 8 vs. 16	Interview: K-SADS	6m F/U; 12m F/U

Goldbeck, Sachser, Tutus & Rosner (2016) Germany RCT	N=159 7-17 years (M = 13.03) 71.7% Females 89.9% German Native	Sexual Abuse, Sexual Assaults, Physical Violence or Witnessing DV 76.7% Interpersonal Trauma Interview	TF-CBT 12 sessions (90 mins) Weekly Individual Parent - parallel and conjoint	WL (4m)	Interview: CAPS-CA Self-report: PTSD-RI child PTSD-RI caregiver	Baseline; Post
Jensen et al. (2014) USA RCT	N=156 10-18 years (M=15.1) 79.5% Female 73.7% Norwegian	Family violence, physical and sexual abuse and other non-abuse traumas (accident, natural disaster, sudden death of close person, robbed) 49.7 % DV or physical abuse as target trauma but endorsed by more	TF-CBT 12-15 sessions Individual Parent - parallel and conjoint	TAU (included psychological interventions)	Interview: CAPS-CA Self-report: CPSS	Baseline; Mid; Post
Jensen, Holt & Ormhaug (2017)	N=143	Checklist based on Traumatic Events Screening Inventory for Children.			Self-report: CPSS	12m F/U, 18m F/U

Murray et al. (2015) Zambia RCT	N=257 OVC 5-18 years (M = 13.66) 48.1- 51.6% Females 45.8 – 46.8% Other 31- 32.1% Bemba	Physical Abuse (M = 5 traumas) 70% Physically Abused 65% Witnessed DV 17% Sexually Abused PTSD-RI	TF-CBT 10-16 sessions (60-90 mins) Weekly Individual Parent - conjoint	TAU (support groups, counselling, education, medical support, weekly phone calls and monthly visit to assess safety)	Self-report: PTSD-RI	Baseline; Post
O'Callaghan, McMullen, Shannon, Rafferty & Black (2013) North Kivu RCT	N=52 war affected 12-17 years 100% Females	Witnessed or personal experience of rape or sexual abuse Traumatic Life Events Questionnaire	TF-CBT 15 sessions (60 mins)* Weekly Group plus caregiver sessions	WL	Self-report: PTSD RI	Baseline; Post; 3m F/U
Shein-Szydlo et al. (2016) Mexico RCT	N=100 street children 12-18 years (M = 14.89) 64% Females	56% Sexual Abuse, 47% Physical Abuse, 18% Witness Violent Event 35% >1 Traumatic Event DISC	TF-CBT Individual Weekly (12 x 60mins)	WL	Self-report: PTSD-RI CPSS	Baseline; Post; 3m F/U

Auslander et al. (2017) USA RCT	N=27 Welfare Children 12-18 years (M=14.65) 100% Females 44.4% Black	History of abuse and neglect Child protective services report	CBITS - Girls Aspiring toward Independence 10 sessions (90 mins) CBT Group Parent – two sessions	TAU In-home therapy, outpatient mental health clinic services, and school-based counselling	Self-report: CPSS	Baseline; 3m post; 6m F/U
Barron, Mitchell & Yule (2017) Scotland RCT	N=17 Juveniles 14–18 years (M = 15.05) 64.7% Females 100% Caucasian	Traumatic Events M=8.47 (Range 4-12) Sexual abuse (71%) Physical abuse (88%) Physical assault (100%) DV (71%) Witness DV (47%) Neglect (59%) Emotional abuse (41%) Trauma History Interview	The Children and War Foundation's Teaching Recovery Techniques (TRT) 14 sessions (40 mins) Twice weekly CBT Group	WL	Self-report: Trauma SUDS CRIES-13 ADES	Baseline (2w pre); Post (2w after)

Overbeek, de Schipper, Lamers-Winkelman & Schuengel (2013) Netherlands RCT	N=155 6-12 years (M=9.22) 44.5% Females 92.9% Netherland native	DV =>1 psychological or physical violence in last year. 6.9 events of psychological maltreatment by parent and 13.4 by partner. 0.45 physical maltreatment by parent and 3.62 by partner. Duration in abusive relationship M=10.87 Continued contact with abusive partner 61.4% Report from police/child protection agency. Parent-Child CTS	'it's my turn now!' 9 sessions (90 mins) CBT Group Parent - parallel sessions	"you belong" Non-specific intervention Group	Self-report; TSCYC	Baseline; Post; 6m F/U
Church, Piña, Reategui & Brooks (2012) Peru RCT	N=16 Juveniles 12-17 years (M = 13.9) 100% Males	Physical or psychologically abused at home - neglect/sexual abuse. Residential treatment facility – ordered by judge if parents have history of maltreating their children	Emotion Freedom Technique (EFT) 1 session Individual	WL	Self-report: SUDS IES	Baseline; 30 days later

Foa, McLean, Capaldi & Rosenfield (2013) USA RCT	N=61 13-18 years (M = 15-15.7) 100% Female 55.7% Black 57% = 1+ comorbid psychiatric diagnoses	Sexual Abuse Interview – screening by counsellor at rape centre	PET 14 sessions (60-90 mins) Weekly Individual	Supportive Counselling (SC)	Interview: CPSS-I, K-SADS Self-report: CPSS	Baseline; Mid; Post; 3m F/U; 6m F/U; 12m F/U
Gosh Ippen, Harris, Van Horn & Lieberman (2011) USA RCT	N=75 3-5 years (M = 4.06) 52% Females 38.7% Mixed Ethnicity (Latino/White)	Physical abuse (29.3%) Sexual abuse (12%) Witnessing DV (97.3%) Neglect (5%) Mothers report CTS 2	CPP 50 sessions (60min) M=32 Weekly Parent - conjoint	TAU Individual Psychotherapy plus case management (30mins monthly calls)	Interview: PTSD-SSI CAPS-CA	Baseline; Post (1y)
Brillantes-Evangelista (2013) Philippines	N = 33 from shelters 13-18 years 63.6% Females	Physically and sexually abused =>1 year ago No information	Visual Arts or Poetry 8 sessions (3h) Weekly Group	No treatment (optional access to activities/	Self-report: CROPS	Baseline; Mid; Post

Quasi-Experiment				counselling in shelters)		
Carpenter, Jessiman, Patsios, Hackett & Phillips (2016) England RCT	N=242 6-16 years (M=10.7) 75% Female 25% Male 9% BME 17% Disabled 12% 'looked after'	Contact sexual abuse M=6.9 age for onset Nearly 60% 2+ times 65% intra familial, 35% extra familiar, 80% single perpetrator, 58% adult perpetrator >50% older children and 33.3% younger children experienced 3+ types of abuse including physical, verbal & sexual abuse at home and bullying by other children Caregiver & child completed Juvenile Victimisation Questionnaire. Interviews by practitioners to obtain details of sexual abuse.	Letting the future in 20 sessions M=15 Varied frequency Individual Parent – conjoint	WL	Clinical Status Self-report: TSCYC TSCC	Baseline; 6m F/U; 12m F/U

Dietz, Davis & Pennings (2012) USA Controlled Trial	N=153 from child advocacy centre 7-17 years (M = 10.97-11.63) 93.5% Females 43.1% Hispanic	Sexual Abuse 81% Adult Perpetrator 62% 1-2 times >20% 5+ times, 50% <6m duration Validated cases	Storytelling – dogs (DWS) 12 sessions Group	No storytelling – dogs (DNS) Storytelling - no dogs (SND)	Self-report: TSCC	Baseline; Post
Hamama et al. (2011) Israel Cohort Control	N=18 14-16 years 100% Females	Physical or Sexual Abuse History (3-4 years before study) Identified by school counsellor	Canine Assisted Therapy 12 sessions (3h) Weekly Group	No treatment	Self-report: PCL	Baseline; Post
Pernebo, Fridell & Almqvist (2018) Sweden Quasi-experiment	N=50 4-13 years (M = 7.4) 48% Females	100% DV and 62% Physical Abuse Mother report on revised CTS	CAMHS psychotherapy Group	"Children are People Too" Program Psychoeducation Community Group 12-15 Sessions (90 mins)	Self-report: TSCYC	Baseline; Post

				Weekly Parents – parallel group		
Razuri et al. (2016) USA RCT	N=304 adopted children 5-12 years (M=8.15) 50% Females Hispanic/Latino 38.3 - 40.6%	78.1-82% Neglect 37.5-43.8% Physical Abuse 16.4-25% Sexual Abuse Adoptive parental reports	TBRI Trauma informed parenting 18 online modules (20 – 30mins) over 30d Individual	No treatment – matched group	Self-report: TSCYC	Baseline; Post

ADES = The Adolescents Dissociative Experiences Scale; CRIES-13 = Children's Revised Impact of Events Scale; SUDS = Subjective Units of Distress; RCT = Randomized Controlled Trial; M = mean; N = Sample number; F/U = follow up; CPSS = Child PTSD Symptom Scale; PTSD = post-traumatic stress disorder; m = month; w = week; h = hours; d = days; DV = domestic violence; WL = waitlist; CROPS = Child Report of Posttraumatic Symptoms; PTSD-RI = Posttraumatic Stress Disorder - Reaction Index; YCPC = Young Child PTSD Checklist; CPP = Child Parent Psychotherapy; TF-CBT = Trauma Focused Cognitive Behavioural Therapy; BME = Black & Minority Ethnic background; TSCC = Trauma Symptom Checklist for Children; TSCYC = Trauma Symptom Checklist for Young Children; IPV = Intimate Partner Violence; K-SADS = Kiddie Schedule for Affective Disorders and Schizophrenia; TAU = Treatment As Usual; CPSS-I = Child PTSD Symptom Scale Interview; CAPS-CA = Clinician Administered PTSD scale for Children and Adolescents; CPP = Child Parent Psychotherapy; PCL = PTSD Checklist Civilian Version; CAPS = Clinician-Administered PTSD Scale; CTS = Conflict Tactics Scale; DISC = Diagnostic Interview Schedule for Children; DISC = Diagnostic Interview Schedule for Children; ARC = Attachment, Self-regulation, and Competency; OVC = orphans/vulnerable children; IES = impact of event scale; CRIES = child revised impact of event scale; TBRI = trust based relational intervention; CAMHS = child and adolescent mental health; PET = prolonged exposure therapy; SC = supportive counselling; SUDS = subjective units of distress scale; PTSD-SSI = PTSD semi structured interview. *one group received more intensely thrice-weekly (120mins)

Appendix C1. Overview of study findings.

Study	Findings	Limitations
Bartlett et al. (2018)	ARC > TF-CBT on most subscales of PTSD-RI and particularly on re-experiencing symptoms in younger children but at 12m only TF-CBT associated with decreased PTSD in younger children. ARC/TF-CBT > CPP for reexperiencing, arousal and severity at 6 and 12m time points. TF-CBT > ARC at 12m for symptoms of PTSD. Only TF-CBT improved avoidance. <u>12 months (T3)</u> PTSD-RI Parent Severity ARC: *d*=0.463 TF-CBT: *d*=0.303 PTSD-RI Child Severity ARC: *d*=0.684 TF-CBT: *d*=0.533 PTSD-RI Parent Reexperiencing ARC: *d*=0.669 TF-CBT: *d*=0.507 PTSD-RI Child Reexperiencing ARC: *d*=0.669 TF-CBT: *d*=0.54 PTSD-RI Parent Avoidance ARC: *d*=0.321 TF-CBT: NI PTSD-RI Child Avoidance ARC: *d*=0.476 TF-CBT: *d*=0.386 PTSD-RI Parent Arousal ARC: *d*=0.512 TF-CBT: NI PTSD-RI Child Arousal ARC: *d*=0.645 TF-CBT: *d*=0.357 <u>YCPC Severity 6 months (T2)</u> ARC: *d*= 0.456 TF-CBT: *d*=0.332 CPP: NI	Lack of no treatment control group; groups not randomly assigned – age differences between groups; no procedures to evaluate treatment adherence and optimum number of treatment sessions not received; small sample size for CPP; unblinded assessors; high number of clinicians to did not complete discharge assessments; high level of missing data means findings may under-represent those who terminated treatment.

Mannarino et al. (2012)	Between groups (8 vs. 16), post *d* = 0.44 60% decrease at 12m meeting diagnostic criteria. Significant improvements maintained 6m and 12m after treatment. Did not relate to 8 or 16 sessions of treatment or TN or no TN.	Small sample size; results only generalisable to young children who have experienced sexual abuse and in stable home; unable to administer some measures due to age of sample; measure may not be sensitive to differences between two active treatments; children exposed to all groups experienced some trauma exposure.
Goldbeck et al. (2016)	Between groups, time CAPS-CA: *d*=0.50 CAPS-CA, change TF-CBT: *d*=1.51 WL: d=0.88 Between groups, time PTSD-RI child: *d*=0.40 PTSD-RI child, change, TF-CBT: *d*=1.20 WL: *d*=0.79 Between groups, time, PTSD-RI caregiver: *d*=0.54 PTSD-RI caregiver, change, TF-CBT: *d*=0.77 WL: *d*=0.28 44.7% no longer met criteria for PTSD in TFCBT after treatment and 28.9% with previous diagnosis no longer met case in WL group. Younger and fewer traumas showed greatest treatment response.	No active control group to control for attention; lack of F/U; number of index events differed between groups.

Jensen et al. (2014) Jensen et al. (2017)	TFCBT > TAU Between groups, post: CPSS *d*=0.51, CAPS-CA *d*=0.46 TAU (pre to post) CPSS *d*=1.27, CAPS-CA *d*=0.88 TFCBT (pre to post) CPSS *d*=1.92, CAPS-CA *d*=1.49 At 18m fewer ppts in TFCBT scored above clinical cut off on CPSS compared to TAU χ^2 (1, N = 75) = 2.47, *p* = 0.12	Unable to control for therapist effects; majority of sample female; high attrition rate at follow up (50%); restricted to self-report questionnaires at F/U; relatively little ethnic diversity in sample.
Murray et al. (2015)	TFCBT > TAU Between groups, change (38 item) *d*=2.39 Between groups, change (20 item) *d*=2.57 Between groups, functional impairment change *d*=0.34 Between groups, change in total PTS (controlling for covariates) *d*=2.41 and functional impairment *d*=0.26	Lack of F/U; single blind – participants aware of intervention received; few caregivers attended sessions; PTSD measure validated in Zambia with sexual abuse sample not physical abuse.
O'Callaghan et al. (2013)	TFCBT > WL Between groups, post χ_p^2=0.518 Between groups, change baseline to 3m F/U *d*=2.04 Between groups, change post to 3m F/U *d*=0.31	Use of self-report measures; small sample size; may not generalise outside of urban setting with existing vocational support available; no comparison with alternative active treatment.
Shein-Szydlo et al. (2016)	TF-CBT>WL Between groups, change, post CPTS-RI *d*=1.75. Between groups, change, post CPSS *d*=1.73.	WL does not control for characteristics of active interventions; use of self-report and single informant; no F/U for those who left

	Scores in CBT group 3m F/U remained stable from post intervention (70% retention). Clinician ratings (blinded) 61.2% much/very much improved in CBT and 4.1% of those in WL.	the institution; remaining at institution may influence F/U scores as provided safety.
Auslander et al. (2017)	GAIN > UC 44.6% reduction of scores in clinical range (pre to 6m F/U) for GAIN versus 4.2% reduction in UC.	Small sample size; only females; feasibility study with descriptive statistics; confounding variables not measures – severity of child maltreatment, medication and use of UC between groups.
Barron et al. (2017)	TRT > WL for SUDS but not PTSD symptoms SUDS, between group, *d*=1.10 PTSD, between group, *d*=0.36	Small sample size; low power; WL group indirectly exposed to intervention information as in same facility; limited program fidelity observed.
Overbeek et al. (2013)	Control = Intervention PTS symptoms decreased in both conditions and remained so at F/U. Parent reports found lower levels of PTSD symptoms in intervention group.	Exposure to DV may be double counted by measure used; lack of no treatment control group. Control group had higher mean levels of PTSD symptoms at baseline.
Church et al. (2012)	EFT > WL Significant decrease on IES total/subscales post intervention. EFT group no longer in clinical range whereas WL were.	WL does not control for characteristics of active treatments; no procedures to evaluate treatment adherence; assessors unblinded; lack of F/U; adult measure of PTSD used.

Foa et al. (2013)	PET > SC Between groups, post CPSS-I *d*=1.01 Between groups, 12m F/U CPSS-I *d*=0.81 CPSS-I scores significantly lower in PET post treatment (*p*<.001) and 12m F/U (*p*=.02). Significantly more participants lost PTSD diagnosis in PET post treatment (*p*=.01) and 12m F/U (*p*=.01) CPSS self-reported PTSD severity improvements greater in PET than SC post treatment (*p*=.02) and 12m F/U (*p*=.02).	Results only generalizable to specific group – sexually abused females.
Gosh Ippen et al. (2011)	CPP > UC Reduced PTSD diagnosis rates for 4+ TSE in CPP (5%) compared to UC (53%) ITT (pre to post) CPP: <4TSE *d*=0.37 4+TSE *d*=1.49 UC: <4TSE *d*=0.03 4+ TSE *d*=-0.01 No significant difference between groups for <4 TSE.	Small sample size; reliance on maternal report for measure of PTSD; restricted F/U period; arbitrary dichotomization of <4 and 4+ as <4 TSE group typically had 2+ so might be different for 1 TSE.
Brillantes-Evangelista (2013)	VA > Poetry/No treatment VA (pre – post), *R*=.65	Interventions not designed by certified art therapists; use of quasi-experimental design; effect sizes not reported for some analyses; group allocation not random – groups may

		differ in demographics as information not reported.
Carpenter et al. (2016)	ITT: Letting the future in > WL at 6m F/U on TSCC No significant different between groups at 6m F/U on TSCYC (caregiver) total score. Clinical scores reduced at 6m F/U for older children in letting the right future in but increased after. No significant difference in scores over time between groups when controlling for baseline scores.	Younger children still receiving intervention at 6-month F/U; lack of control group as WL group begun treatment by 6-month F/U; outcomes not available for all cases; assessors not blind; relatively short F/U period.
Dietz et al. (2012)	DWS > DNS and SND PTSD scores decreased significantly more in DWS than DNS and in DNS than SND when controlling for baseline differences.	Allocation to groups not random; lack of no treatment control group; baseline differences existed between groups – PTSD higher in DWS Impossible to distinguish therapist effects by using different therapists and dogs for each group.
Hamama et al. (2011)	Canine > Control (post scores, N.S). Between groups, post: *d*= 0.424. Canine therapy (pre to post): *d*=1.118. Control (pre to post): *d*=0.078.	Small sample size; baseline differences existed between groups – PTSD severity and exposure to traumatic events.

Pernebo et al (2018)	CAMHS > Community for PTS anger (*d*=0.75) and dissociation (*d*=0.73) total PTS and other PTS scales, N.S. Community, pre to post: *d*=0.35* (TSCYC total) CAMHS, pre to post: *d*=0.47 (TSCYC total) Greater improvements in PTS when higher baseline scores (r^2=.24) Mothers reported significant reduction in total PTS and intrusive symptoms in community-based treatment whilst reductions in anger, arousal and dissociation greater in CAMHS treatment. Emotional symptoms affected more than trauma symptoms by both interventions.	Lack of no treatment control group; lack of F/U; small sample size; attendance rates not reported; heterogeneous population; baseline differences between groups - CAMHS group greater percentage in clinical range; use of imaginal exposure and memory processes minor in both interventions.
Razuri et al. (2016)	TBRI > control PTS change, between groups (n^2_p =.02)* Caregiver reports PTS intrusion, avoidance, arousal, total severity and dissociation decreased in TBRI* but not control.	Volunteer sample of adoptive parents may not be representative; use of parent self-report who were unblinded to intervention received; lack of F/U; restricted information on samples pre-adoption experience.

TSCC = Trauma Symptom Checklist for Children; TSCYC = Trauma Symptom Checklist for Young Children; PTS = Post traumatic symptoms; F/U = follow up; CAMHS = child adolescent mental health service; DWS = dogs with stories; DNS = Dogs no stories; SND = Stories no dogs; T2 = 6 months; WL = waitlist; VA = visual arts group; TSE = traumatic and stressful life events; CPP = child parent psychotherapy; ITT = intention to treat; PET = prolonged exposure therapy; SC = supportive counselling; CPSS-I = Child PTSD Symptom Scale Interview; UC = usual care; TF-CBT = Trauma focused cognitive behavioural therapy; TRT = Teaching Recovery Techniques; TBRI = Trust Based Relational Intervention; IES = Impact of Event Scale; SUDS = Subjective Units of Distress Scale; GAIN = Girls Aspiring toward Independence; TAU = Treatment as usual; PTSD-RI = Posttraumatic Stress Disorder Reaction Index ; TN = trauma

narrative; ARC = Attachment, Self-regulation, and Competency; YCPC = Young Child PTSD Checklist; KSADS = Kiddie Schedule for Affective Disorders and Schizophrenia; CPSS = Child PTSD Symptom Scale; T3 = 12 months; NI = no information provided; m = months; T1 = baseline; T6 = 12 month follow up; UC = usual care; N.S = not significant; * = significant.

Appendix D1. Quality assessment for randomised controlled trials.

Study	Randomisation Process	Deviation from Intended Intervention	Missing Outcome Data	Measurement of Outcome	Selection of Reported Result
Murray et al. (2015)	Low	Low	Low	Some	Low
Mannarino et al. (2012)	Some	Low	Low	Low	Some
Jensen et al. (2014)	Low	Low	Low	Low*	Low
Jensen et al. (2017)	-	-	Low	Some	Low
Foa et al. (2013)	Low	Low	Low	Low	High
Gosh Ippen et al. (2011)	Some	Low	Low	High	Some
Goldbeck et al. (2016)	Low	Low	Low	Low*	Low
Barron et al. (2017)	Some	Low	Low	High	Some
Auslander et al. (2017)	Low	Some	Low	Some	Low
Church et al. (2012)	Some	Low	Low	Some	Some
O'Callaghan et al. (2013)	Low	Low	Low	High	Low
Overbeek et al. (2013)	Some	Low	Some	Some	Some
Shein Szydlo et al. (2016)	Low	Low	Low	Some	Some
Razuri et al. (2016)	Some	Some	High	Some	Some
Carpenter et al. (2016)	Low	Some	High	High	Low

Note: *primary outcome is assessed as low risk but secondary outcomes or one of primary outcomes would be rated as some concerns due to self-report

Appendix E1. Quality assessment for non-randomised controlled trials.

Study	Confounding	Selection	Intervention Classification	Deviation from Intended Intervention	Missing Outcome Data	Measurement of Outcome	Selection of Reported Result
Hamama et al. (2011)	Critical	Serious	Low	Low	Low	Serious	Moderate
Brillantes-Evangelista (2013)	Serious	Low	Low	Low	Moderate	Serious	Moderate
Dietz et al. (2012)	Moderate	Low	Low	Low	NI	Moderate	Moderate
Pernebo et al. (2018)	Moderate	Low	Low	Low	Moderate	Moderate	Moderate
Bartlett et al. (2018)	Serious	NI	Low	Serious	Low	Moderate	NI

Note: NI; not enough information.

Appendix F1. Submission guidelines for Child Maltreatment Journal.

Aims and Scope:

Child Maltreatment is the official journal of the American Professional Society on the Abuse of Children (APSAC), the nation's largest interdisciplinary child maltreatment professional organization. *Child Maltreatment*'s objective is to foster professional excellence in the field of child abuse and neglect by reporting current and at-issue scientific information and technical innovations in a form immediately useful to practitioners and researchers from mental health, child protection, law, law enforcement, medicine, nursing, and allied disciplines. *Child Maltreatment* emphasizes perspectives with a rigorous scientific base that are relevant to policy, practice, and research.

Instructions for Authors:

Child Maltreatment (*CM*) is the official journal of the American Professional Society on the Abuse of Children (APSAC) and primarily publishes work on samples from North America. *CM* welcomes manuscripts addressing timely and important topics in practice, policy, and theory, including empirical research articles, systematic review articles, and program evaluations that illustrate theoretical issues or new phenomena.

Submissions should be prepared according to the guidelines in the *Publication Manual of the American Psychological Association* (6th edition).

Regular articles should be no more than 30 double-spaced pages, inclusive of tables, figures, and references. Brief reports will also be accepted, limited to no more than 12 double-spaced pages including tables, figures, and references. Reviews of the literature should be no more than 50 double-spaced pages. Include an abstract of approximately 150 words. The authors' name and affiliation must be listed on a separate Title Page for anonymous review. Submission to *Child Maltreatment* implies that the manuscript has not been published elsewhere, and is not under consideration by any other journal; a statement to this effect should be included with the all submissions.

Submissions in Microsoft Word format may be uploaded to ScholarOne Manuscripts at http://mc.manuscriptcentral.com/childmaltreatment.

This journal is a member of the Committee on Publication Ethics (COPE).

For any queries regarding the submission please write to:
childmaltreatment@apsac.org

Appendix A2. Transition of Care Audit Checklist.

Transition of Care from CYPS to Adult Services Audit

Audit ID No: **Age:** **Gender:**

1	Diagnosis/Clinical Coding			
2	Transitioning to (Team):			
		Yes	**No**	**N/A**
Care Coordinator				
3	Has a care co-ordinator (within adult services) been allocated to the young person?			
3b	If "yes", when was the adult team care co-ordinator allocated?			
Transition of care pathway for young people aged 17.5 years				
4	Is there documented evidence that the transition of care referral has been discussed and a decision made?			
5	When was the transition of care planning started – how long before 18th birthday?			
6	Has the CYPS care co-ordinator completed the transition of care referral form?			
7	Following a referral to an adult team, has a response been received by CYPS within 2 weeks?			
7b	If "no" to Q7, when was the response received?			
8	Was the agreed transition date kept?			
8b	If "no" to Q8, how long before or after the agreed date did the transition take place?			
CPA Review				
9	Has a minimum of 2 CPA review meetings taken place?			
10	Was the first CPA review meeting offered within 28 days of the referral?			
11	Did the second CPA review meeting take place within 28 days of the initial assessment?			
12	Following the second CPA meeting, has a "Your Transition Plan" been completed?			
12b	If "no" to question 12, why not?			
Did Not Attends				

13	Have any DNA's been documented on RiO?			
13b	If "yes" to Q12, how many and how has this been documented?			
14	Following a DNA, is there documented evidence that a discussion has taken place between CYPS and adult service to agree a clinically appropriate response?			
15	Has the adult team actively followed up DNA?			
Defining transition of care process for those vulnerable young people with fluctuating but acute/continuing mental health needs				
16	Have all decisions been documented on RiO and headed '2gt Transition of Care			
Tier 4				
17	In cases of a Tier 4 inpatient admission, has a social worker been allocated?			

Appendix B2. The Trust's Transition Policy Guidelines.

- Care coordinator should ring the adult team manager to discuss the referral information – history, diagnosis, presenting situation, risk and recovery needs. This should be responded to by the adult team within 2 weeks.

- The first CPA review appointment should be offered within 28 days of the referral. The "receiving team" should undertake the initial assessment to ascertain whether transition of care meets current commissioned service thresholds. If further support is required, the host team holding care coordinator responsibilities should travel to the "receiving" teams' locality area to undertake further joint assessment. If accepted, the "receiving" adult team will allocate a care co-ordinator.

- Young people should be consulted regarding location of each CPA review appointment, their purpose and whether other people should be invited to this.

- Transition of care cases should be flagged and recorded on an internal database and managed by performance manager.

- RiO progress notes should include a clear formulation and rationale for transition of care and all relevant data should be up to date

- A second CPA review meeting should be arranged within 28 days of referral being accepted by the adult team. This should involve the completion of "your transition plan" in collaboration with the young person. It is expected that both the CYPS and "receiving" adult care coordinator will attend. This document "my transition of care plan" should be uploaded to RiO by the adult care co-ordinator and all decision making should be formally documented on RiO headed "2GT Transition of Care".

- Discharge from CYPS/CAMHS once receiving adult team has assessed and accepted the young person for ongoing intervention via CPA review meeting.

- For crisis referrals for individuals 17.5 years or over, CYPS will accept if assessment only or envisage treatment to be complete by their 18th birthday otherwise a transition of care referral to adult services will be made.

- Those with ASD/ADHD referred for transition of care if assessment required after 18th birthday or comorbid mental health problems.

- Those with mild to moderate anxiety or depression problems following a CHOICE assessment they should be referred to MH intermediate care team or let's talk.

- Transition of young people from inpatient units, CYOPS care co should explore transition arrangements as soon as practically possible and if high risk/complexity/vulnerability or lengthy admission there should be a social worker involved. Multiagency planning

Appendix C2. Semi-structured Interview Schedule.

Could you tell me about your experience of transition from child to adult mental health services?

What was helpful about the transition process? Why was it helpful?

What was difficult about the transition process? Why was it difficult?

Appendix D2. Trusts 'Your Transition Plan' Document.

(your name) TRANSITION Plan

Transition is the time when you need to move on from CYPS as you are nearing 18 and we need to work together to prepare you to receive support from other services.

It can be a time when everything may seem "up in the air". You have to make sure that if you don't understand anything you ask someone to explain it. Transition is about having a clear plan about what will happen as you get towards your 18th birthday to help you continue to get better, as well as making the most of life as you become an adult.

"Threshold" criteria is a term used within health services to decide whether you are able to access certain services to meet your needs. It is important that you are aware of the differences between CYPS and adult mental health services, for example threshold criteria and the frequency that you will see your Adult Care Coordinator.

Name:	**Date of Birth:**
NHS number:	
Child in Care: Yes/No ***(if yes, name & phone number of worker)***	
CYPS Care Coordinator:	**Tel:**
Adult Care Coordinator:	**Tel:**
Start date of TRANSITION:	
Target date for TRANSITION:	

What did we discuss about my TRANSITION Plan? ***(my diagnosis, reason for TRANSITION)***

We discussed the following support which will be available to me when I am 18 years old:

Name of my new Care Coordinator is:

I can discuss with my new Care coordinator if the care I will be receiving is not as agreed in this TRANSITION Plan

MY TRANSITION PLAN:

1.
2.
3.

Has a joint handover meeting been planned: YES/NO

If I do not attend the appointment, we have decided that the following should be done:

Things I want my new Care Coordinator to know:

- *What I have learnt about myself? How can I successfully take responsibility for myself?*
- *Any special considerations around physical health needs, gender, sexuality, issues around consent (do I want my family to continue to be involved, accommodation issues?*
- *What has previously helped? What has <u>not</u> helped (consider WRAP Plan*)

Plan for Education or Training:

My "Just In Case" Plan:

CYPS crisis, contingency and relapse plan (where applicable)

Parent/Carer Hopes:

(*My parent/carer(s) have read the leaflet regarding Adult Mental Health Services and have had the opportunity to have any questions answered by an adult service worker. They have also been asked if they have any needs as parents/carers that are not addressed by this Transition of Care Plan and are signposted to other services where required)*

CYPS Care Coordinator

Name (print): **Signed:**

CYPS Team: **Date:**

Adult Care Coordinator

Name (print): **Signed:**

Team: **Date:**

Copies to (please circle):
Young Person: ✓ **Parent/s or carers/guardians**
Other i.e. referrer/GP (where appropriate)

What to do in a crisis?

My new Care Coordinator is …… and they can be contacted at ……., telephone/…… between 9am-5pm excluding bank holidays.

If I require urgent support, I can contact my GP or their out of hours service. For emergency medical attention, I should go to my nearest A&E department or A&E at Glos Royal Hospital

There are options of help and support through locally based organisations that I may find useful.

1. Teens in Crisis www.ticplus.org.uk Tel: 01594 546117
2. Cotswold Counselling Service www.cotswold-counselling.org.uk 01285 885830
3. YoungMinds www.youngminds.org.uk (web based advice and information for young people)

Helplines:

1. Childline www.childline.org.uk 0800 1111
2. YoungMinds Parent Helpline: 0808 8025544
3. Samaritans National Telephone No: 08457 909090 Auto transfer to nearest available listener. 24 hour
   Gloucester: between 9am & 10pm 01452 306333
   Cheltenham: between 8am & 10pm 01242 515777
4. Rethink Gloucestershire Self Harm Helpline Service www.rethink.org
   Telephone 0808 801 0606 Mon & Fri's 4.00–9.30pm Sat/Sun 5.30–11.00pm
   Text support: 075 37410022 www.rethink.org/glosselfharm.
5. PAPYRUS www.papyrus-uk.org
   Provides confidential help and advice to prevent suicide in young people
   Helpline: HOPELineUK: Tel: 0800 0684141 SMS: 07786 209697
6. National helpline for young people: www.getconnected.org
   Provides confidential help and support: Tel: 0808 8084994 Text: 80849 Mon–Fri 1pm – 11pm and available at weekends

Appendix E2. Evidence of SIP ethical approval.

Ethics 17-181: An evaluation of a joint working approach to transitions from child to adult mental health services

Nathalia Gjersoe
Thu 13/07/2017, 13:40
Rhiannon Bennett; Cara Davis

Reply all

You forwarded this message on 04/01/2019 15:21

Dear Rhiannon Bennett,

Reference Number 17-181: An evaluation of a joint working approach to transitions from child to adult mental health services

The ethics committee have considered your ethics proposal for the study above and have given it full ethical approval.

Best wishes with your research.

Dr Nathalia Gjersoe
Chair, Psychology Research Ethics Committee

Walker Mark <mark.walker@glos.nhs.uk>
Wed 16/08/2017 15:10
Inbox

Mark as unread

Hi Both

I've been in touch with Gen today and she is happy for the study to go ahead, so, Nigel, can you please issue a formal approval email for Rhiannon's project (EDGE is done).

If you can complete the form still Rhiannon, that would be great, but happy for the approval to go through in the meantime.

Good luck!

Cheers

mark

Senior Research Manager - Governance
Gloucestershire Research Support Service
Leadon House

Appendix F2. Submission guidelines for Journal of Adolescent Research.

Aims and Scope:
The aim of the *Journal of Adolescent Research* is to publish informative and dynamic articles from a variety of disciplines that focus on development during adolescence (ages 10 to 18) and early emerging adulthood (18-22). We are particularly interested in papers that use mixed-methods, systematically combining qualitative and quantitative data and analyses. We also seek rigorous qualitative research using a variety of strategies including ethnography, in-depth interviews, case studies, photo elicitation, and the like. We focus on work that takes a strengths-, or assets-, based approach to adolescent development. Our goal is to expand upon the understanding of a diverse range of experiences of adolescents and emerging adults across a variety of contexts.

Instructions for Authors:
The aim of the Journal of Adolescent Research is to publish informative and dynamic articles from a variety of disciplines that focus on development during adolescence (ages 10 to 18) and early emerging adulthood (18-22). We are particularly interested in papers that use mixed-methods, systematically combining qualitative and quantitative data and analyses. We also seek rigorous qualitative research using a variety of strategies including ethnography, in-depth interviews, case studies, photo elicitation, and the like. Our goal is to expand upon the understanding of a diverse range of experiences of adolescents and emerging adults across a variety of contexts.

This journal is a member of the Committee on Publication Ethics (COPE)

Manuscript Preparation
Manuscripts should be prepared using the *APA Style Guide* (Sixth Edition). All pages must be typed, double-spaced (including references, footnotes, and endnotes). Text must be in 12-point Times Roman. Block quotes may be single-spaced. Must include margins of 1inch on all the four sides and number all pages sequentially. *All research submitted must adhere with guidelines for the protection of human subjects. Please indicate in your cover letter and in your manuscript how you met this standard (e.g., following protocols approved by an institutional review board).*
The manuscript should include four major sections(in this order): Title Page, Abstract, Main Body, and References.

Sections in a manuscript may include the following (in this order): (1) Title page, (2) Abstract, (3) Keywords, (4) Text, (5) Notes, (6) References, (7) Tables, (8) Figures, and (9) Appendices.
1. Title page. Please include the following:
- Full article title
- Acknowledgments and credits
- Each author's complete name and institutional affiliation(s) and biosketch (2-3 sentences about each author)
- Grant numbers and/or funding information

- Corresponding author (name, address, phone/fax, e-mail)

We strongly encourage authors to include the following key points in their Abstract. Feel free to use this as a template. *Note*. The Abstract should not exceed 200 words
.

2. ABSTRACT. Print the abstract on a separate page headed by the full article title. Omit author(s)'s names.

• AIMS. Describe the aims of your study.
• DEMOGRAPHICS. Provide information about your sample of participants, including age, gender, race/ethnicity, socioeconomic status, immigrant generational status, etc.
• SETTINGS. Describe the site or context from which your sample was drawn.
• METHODOLOGY. Describe the specific qualitative or mixed-method strategy employed for the study (in-depth interviews, case studies, photo elicitation, etc.) ***Note.*** We do NOT accept manuscripts that use only quantitative methods. *Please include in your methodology a statement about how your research ensured the protection of human subjects (i.e., following protocols that have been approved by an Institutional Review Board).*
• ANALYSIS. Describe the type of analysis you used (inductive analysis, deductive analysis, chi sq.; logistic regression, etc.)
• FINDINGS. Briefly describe key findings.
• IMPLICATIONS. Include a concluding sentence regarding implications of study.

3. TEXT. Begin article text on a new page headed by the full article title.

a. Headings and subheadings. Subheadings should indicate the organization of the content of the manuscript. Generally, three heading levels are sufficient to organize text. Level 1 heading should be Centered, Boldface, Upper & Lowercase, Level 2 heading should be Flush Left, Boldface, Upper & Lowercase, Level 3 heading should be Indented, boldface, lowercase paragraph heading that ends with a period, Level 4 heading should be Indented, boldface, italicized, lowercase paragraph heading that ends with a period*,* and Level 5 heading should be Indented, italicized, lowercase paragraph heading that ends with a period*.*

b. Citations. For each text citation there must be a corresponding citation in the reference list and for each reference list citation there must be a corresponding text citation. Each corresponding citation must have identical spelling and year. Each text citation must include at least two pieces of information, author(s) and year of publication. Following are some examples of text citations:

(i) *Unknown Author*: To cite worksthatdo not have an author, cite the source by its title in the signal phrase or use the first word or two in the parentheses. Eg. The findings are based on the study was done of students learning to format research papers ("Using XXX," 2001)

(ii) *Authors with the Same Last Name*: use first initials with the last names to prevent confusion. Eg.(L. Hughes, 2001; P. Hughes, 1998)

(iii) *Two or More Works by the Same Author in the Same Year*: For two sources by the same author in the same year, use lower-case letters (a, b, c) with the year to order the entries in the reference list. The lower-case letters should follow the year in the in-text citation.Eg.Research by Freud (1981a) illustrated that…

(iv) *Personal Communication*: For letters, e-mails, interviews,and other person-to-person communication, citation should include the communicator's name, the fact that it was personal communication, and the date of the communication. Do not include personal communication in the reference list.Eg.(E. Clark, personal communication, January 4, 2009).
(v) *Unknown Author and Unknown Date*: For citations with no author or date, use the title in the signal phrase or the first word or two of the title in the parentheses and use the abbreviation "n.d." (for "no date").Eg. The study conducted by of students and research division discovered that students succeeded with tutoring ("Tutoring and APA," n.d.).

5. Notes. If explanatory notes are required for your manuscript, insert a number formatted in superscript following almost any punctuation mark. Footnote numbers should not follow dashes (—), and if they appear in a sentence in parentheses, the footnote number should be inserted within the parentheses. The Footnotes should be added at the bottom of the page after the references. The word “Footnotes” should be centered at the top of the page.

6. References. Basic rules for the reference list:

- The reference list should be arranged in alphabetical order according to the authors’ last names.
- If there is more than one work by the same author, order them according to their publication date – oldest to newest (therefore a 2008 publication would appear before a 2009 publication).
- When listing multiple authors of a source use “&” instead of “and”.
- Capitalize only the first word of the title and of the subtitle, if there are one, and any proper names – i. e. only those words that are normally capitalized.
- Italicize the title of the book, the title of the journal/serial and the title of the web document.
- Manuscripts submitted to *JAR* should strictly follow the *APA Style Guide* (Sixth Edition).
- Every citation in text must have the detailed reference in the Reference section.
- Every reference listed in the Reference section must be cited in text.
- Do not use “et al.” in the Reference list at the end; names of all authors of a publication should be listed there.
- Include the DOI number in the References.

7. TABLES. They should be structured properly. Each table must have a clear and concise title. When appropriate, use the title to explain an abbreviation parenthetically.Eg.*Comparison of Median Income of Adopted Children (AC) v. Foster Children (FC).*Headings should be clear and brief.

8. Figures. They should be numbered consecutively in the order in which they appear in the text and must include figure captions. Figures will appear in the published article in the order in which they are numbered initially. The figure resolution should be 300dpi at the time of submission.

IMPORTANT: PERMISSION - *The author(s) are responsible for securing permission to reproduce all copyrighted figures or materials before they are published in JAR. A copy of the written permission must be included with the manuscript submission.*

9. Appendices. They should be lettered to distinguish from numbered tables and figures. Include a descriptive title for each appendix (e.g., "Appendix A. Variable Names and Definitions"). Cross-check text for accuracy against appendices.
In addition, all articles must show an awareness of the cultural context of the research questions asked, the population studied, and the results of the study. EACH PAPER SUBMITTED MUST INCLUDE A COVER LETTER INDICATING HOW THE PAPER MEETS AT LEAST ONE OF THESE CRITERIA AND THE CULTURAL REQUIREMENT.
For more on the standards for publication in the *JOURNAL OF ADOLESCENT RESEARCH,* please see:
Arnett, J. J. (2005). *The Vitality Criterion: A new standard of publication for Journal of Adolescent Research. Journal of Adolescent Research*, 20, 3-7.
Suárez-Orozco, C. (2015). Transitional statement from the new Journal of Adolescent Research team. *Journal of Adolescent Research, 30*(1), 3-6.
Some essays may provide a thoughtful critique of a research area while making constructive suggestions for new ways of approaching it. Other essays could analyze a recent event, commenting on the developmental context when adolescents or emerging adults are in the news for involvement in something widely discussed. Policy discussions and advocacy also are welcome in the essays. Scholars interested in writing and submitting an Editorial Essay should query the editor first to confirm the appropriateness of the proposed topic.

The journal accepts ELECTRONIC SUBMISSIONS ONLY. Manuscripts should be submitted online at http://mc.manuscriptcentral.com/jar. The editor (or associate editor) will review all manuscripts within 1 month and then inform the lead author whether or not the paper has met the *JOURNAL OF ADOLESCENT RESEARCH* criteria. The manuscript then will be sent out for peer review.

Submission of a manuscript implies commitment to publish in the journal. Authors submitting manuscripts to the journal should not simultaneously submit them to another journal, nor should manuscripts have been published elsewhere in substantially similar form or with substantially similar content. Authors in doubt about what constitutes prior publication should consult the editor.

In general, manuscripts should not exceed 30-35 typed, double-spaced pages, including references, tables, and figures. Figures and tables should be included as part of the manuscript, not as separate files. If your study uses multiple methods and you feel you need additional space beyond 35 pages to describe each set of methods and integrated findings in-depth, please indicate that in your cover letter. Five to six keywords, to be used in archival retrieval systems, should be indicated on the title page. The title page should also include contact information for the lead author, including affiliation, mailing address, e-mail address, and phone and fax numbers. Manuscripts should include three- to four-sentence biographical paragraphs of each

author at the bottom of the title page. Following the title page, an abstract of no more than 200 words should be included. Text and references must conform to American Psychological Association style, as stated in the ***Publication Manual of the American Psychological Association (Sixth Edition).***

Appendix A3.NHS Ethical approval evidence for MRP.

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Miss Rhiannon Bennett
Department of Psychology, 10W, University of Bath
Claverton Down, Bath
United Kingdom
BA2 7AY

Email: hra.approval@nhs.net
Research-permissions@wales.nhs.uk

16 August 2018

Dear Miss Bennett

HRA and Health and Care Research Wales (HCRW) Approval Letter

Study title:	**Understanding betrayal trauma in Borderline Personality Disorder: exploring the role of appraisals, mental contamination and emotional regulation.**
IRAS project ID:	**237991**
Protocol number:	**N/A**
REC reference:	**18/NE/0262**
Sponsor	**University of Bath**

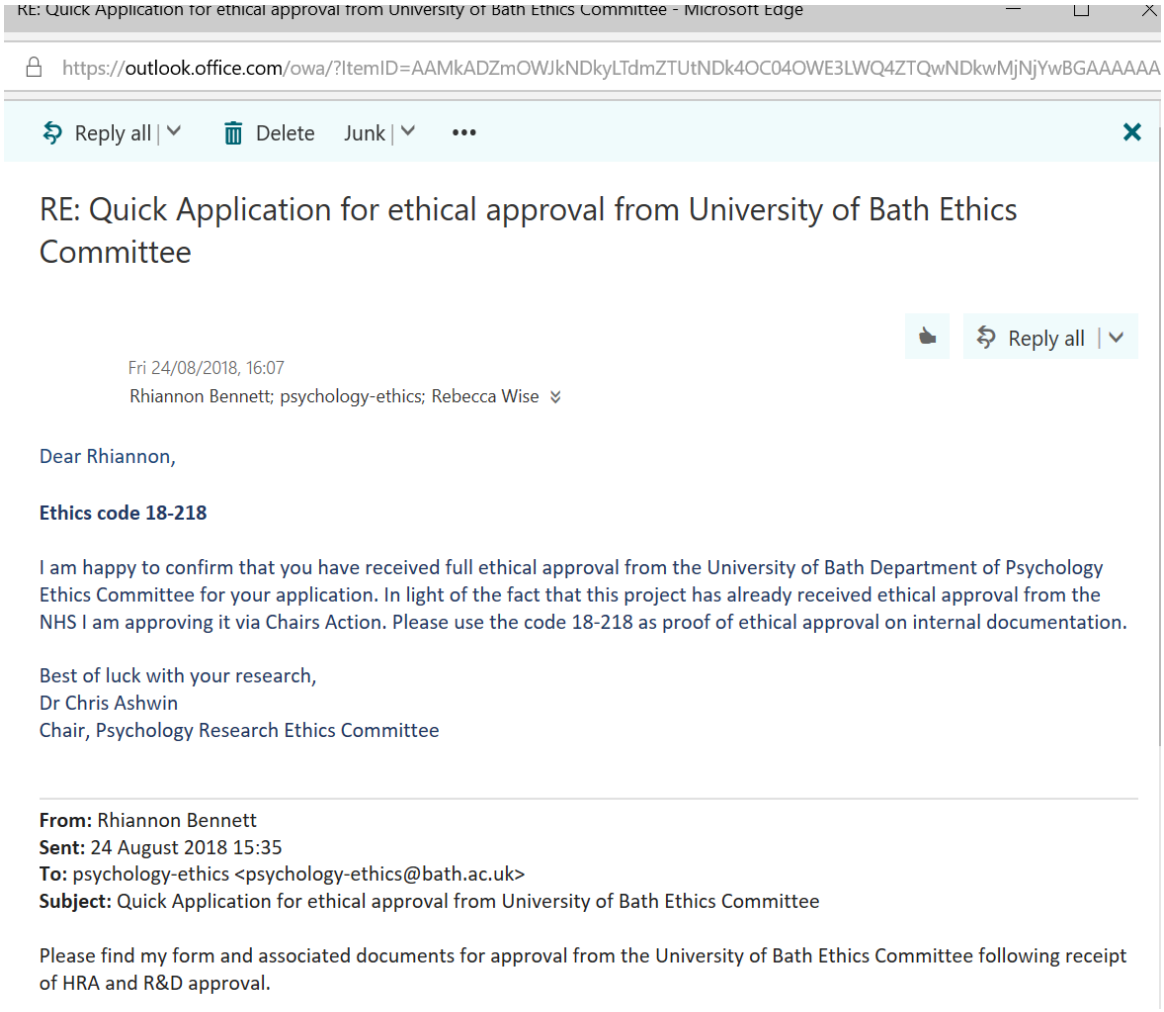
I am pleased to confirm that **HRA and Health and Care Research Wales (HCRW) Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

Following the arranging of capacity and capability, participating NHS organisations should **formally confirm** their capacity and capability to undertake the study. How this will be confirmed is detailed in the "*summary of assessment*" section towards the end of this letter.

You should provide, if you have not already done so, detailed instructions to each organisation as to how you will notify them that research activities may commence at site following their confirmation of capacity and capability (e.g. provision by you of a 'green light' email, formal notification following a site initiation visit, activities may commence immediately following confirmation by participating organisation, etc.).

It is important that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details of the research management function for each organisation can be accessed here.

Appendix B3. University of Bath Ethical approval evidence for MRP.



RE: Quick Application for ethical approval from University of Bath Ethics Committee - Microsoft Edge

https://outlook.office.com/owa/?ItemID=AAMkADZmOWJkNDkyLTdmZTUtNDk4OC04OWE3LWQ4ZTQwNDkwMjNjYwBGAAAAAA

Reply all | Delete Junk | •••

RE: Quick Application for ethical approval from University of Bath Ethics Committee

Reply all |

Fri 24/08/2018, 16:07
Rhiannon Bennett; psychology-ethics; Rebecca Wise

Dear Rhiannon,

Ethics code 18-218

I am happy to confirm that you have received full ethical approval from the University of Bath Department of Psychology Ethics Committee for your application. In light of the fact that this project has already received ethical approval from the NHS I am approving it via Chairs Action. Please use the code 18-218 as proof of ethical approval on internal documentation.

Best of luck with your research,
Dr Chris Ashwin
Chair, Psychology Research Ethics Committee

From: Rhiannon Bennett
Sent: 24 August 2018 15:35
To: psychology-ethics <psychology-ethics@bath.ac.uk>
Subject: Quick Application for ethical approval from University of Bath Ethics Committee

Please find my form and associated documents for approval from the University of Bath Ethics Committee following receipt of HRA and R&D approval.

Appendix C3.NHS trust R&D approval evidence for MRP.

On 23 Aug 2018, at 15:17, Shovelton, Claire <Claire.Shovelton@awp.nhs.uk> wrote:

Dear Rhiannon,

Title of study: Understanding betrayal trauma in Borderline Personality Disorder: exploring the role of appraisals, mental contamination and emotional regulation
AWP ref: 1058AWP
R&D confirmation date: 23rd August 2018
Recruitment end date: 30th April 2019
Study end date: 30th April 2019
Clinical Teams for which confirmation granted: Primary Care Talking Therapies Services - South Gloucestershire Talking Therapies, Positive Steps, LIFT Swindon, Bristol Wellbeing Therapies, Wiltshire IAPT and B&NES Talking Therapies.

Thank you very much for applying to undertake your research in AWP, we pride ourselves on a straight forward and rapid process for research governance.

We are pleased to advise we are able to grant R&D Confirmation at Avon and Wiltshire Mental Health Partnership NHS Trust ("the Trust") to cover the locations as stated above. Please find attached the AWP logo to use on any local documents you will be issuing i.e. information sheets and consent forms.

Under the conditions of approval, you are required to:

1. Obtain approvals from Managers of all Clinical teams you wish to recruit from;

2. You must have confirmation from a member of AWP staff willing to act as a Principal Investigator/Local Collaborator who will help to facilitate your study;

3. Notify us if you plan to recruit participants from any clinical team not outlined above;

4. Document any study activity on RiO for the relevant patient records, if applicable. If you do not have access to RiO and only need to update service user's records, you can ask a member of the clinical team to do this for you. Please ensure the attached procedures are still adhered to. If you need access to RiO for any other reason, please advise the AWP R&D office using the contact details below.

5. Update recruitment figures regularly via EDGE (a Clinical Management System). This enables us to keep a clear track of all Trust-wide study activity, which we need to report to our research funders. **Failure to comply with this will result in your research being suspended, so please make sure you complete this on a monthly basis.** If you need access to EDGE, please advise the AWP R&D office using the contact details below and we will set up an account for you, and your login instructions will be emailed to you;

6. To meet AWP R&D audit requirements and adhere to Good Clinical Practice guidelines, you will also need to ensue you create and manage a study site file. If you need more information on this please contact the AWP R&D department or visit the NIHR website:
http://www.crn.nihr.ac.uk/learning-development/good-clinical-practice/gcp-resources-templates-and-reference-documents/

The R&D Management Permission in the Trust is valid until 30th April 2019. If you require any extension to this in the future please contact us to arrange

Appendix D3. Statistical analysis plan for MRP.

Hypothesis 1a. We ran a MANOVA with low, medium and high betrayal traumas as dependent variables. Assumption of normality was violated for all three betrayal trauma indices - data was positively skewed. Log transformation were employed but data remained non-normal therefore sensitivity analyses using Kruskal-Wallis tests were conducted. Multicollinearity and homogeneity of covariances-matrices were assessed and not problematic. Two extreme multivariate outliers were noted and removed from the data (Pallant, 2016), one from the anxiety/depression group and one from the BPD group. Data violated homogeneity of variances and therefore a more conservative alpha level was employed of .01 (Tabachnick & Fidell, 2013). Given the unequal samples sizes and violation of normal distribution, we report Pillai's Trace as a more robust value (Tabachnick & Fidell, 2013). Dunnett T3 tests were used to investigate group differences due to their advantage for smaller and unequal sample sizes and heteroscedastic data.

Hypothesis 1b. An ANOVA had been planned, however due to violation of assumption of normality, Kruskal-Wallis tests were used to examine between group differences in childhood high betrayal traumas. Dunn's pairwise comparisons to determine individual differences between groups with adjusted p-values to account for multiple comparisons.

Hypothesis 2. An ANOVA had been planned, however due to violation of assumption of normality, Kruskal-Wallis tests were used to examine between group differences in mental contamination. Dunn's pairwise comparisons to determine individual differences between groups with adjusted p-values to account for multiple comparisons

Hypothesis 3a. Pearson Correlation was used to assess for relationship between gender, betrayal indices, appraisals and BPD symptoms. Correlations between appraisal subscales indicated multi-collinearity; therefore, only total appraisal score was entered into the regression. Linear hierarchical multiple regression was conducted to test whether betrayals and appraisals predicted BPD symptoms. Scatterplots were used to check linearity and homoscedasticity of residuals. Multicollinearity problems were assessed but not found. Autocorrelation was checked using Durbin-Watson test (1.1). Assumptions of homoscedasticity was violated and thus bootstrapping was applied. Bootstrapped 95% CI, Beta and p-values are reported.

Hypothesis 3b. Hierarchical multiple regression analysis was conducted to determine whether betrayals predicted appraisals. Model assumptions were checked. Scatterplots were used to check linearity and homoscedasticity of residuals. Multicollinearity and homoscedasticity were assessed but no problems found. Autocorrelation was checked using Durbin-Watson test (1.62).

Exploratory analyses. Given that childhood betrayal trauma differed between groups and high betrayal predicted BPD, we entered age and repeated nature of high betrayal trauma into the model as predictors of BPD symptoms. Hierarchical linear regression was conducted. Scatterplots were used to check linearity and homoscedasticity of residuals. Multicollinearity problems were assessed but not found. Autocorrelation was checked using Durbin-Watson test (1.12). Homoscedasticity was violated thus bootstrapping was applied. Bootstrapped 95% CI, Beta and p-values are reported.

Appendix E3. Submission Guidelines for Journal of Psychological Trauma: Theory, Research, Practice, and Policy.

Aims and Scope:

Psychological Trauma: Theory, Research, Practice, and Policy ® publishes empirical research on the psychological effects of trauma. The journal is intended to be a forum for an interdisciplinary discussion on trauma, blending science, theory, practice, and policy.

The journal publishes empirical research on a wide range of trauma-related topics, including

- Psychological treatments and effects
- Promotion of education about effects of and treatment for trauma
- Assessment and diagnosis of trauma
- Pathophysiology of trauma reactions
- Health services (delivery of services to trauma populations)
- Epidemiological studies and risk factor studies
- Neuroimaging studies
- Trauma and cultural competence

The journal publishes articles that use experimental and correlational methods and qualitative analyses, if applicable. All research reports should reflect methodologically rigorous designs that aim to significantly enhance the field's understanding of trauma. Such reports should be based on good theoretical foundations and integrate theory and data. Manuscripts should be of sufficient length to ensure theoretical and methodological competence.

Author Guidelines:

Prior to submission, please carefully read and follow the submission guidelines detailed below. Manuscripts that do not conform to the submission guidelines may be returned without review.

Submission

To submit to the Editorial Office of Kathleen Kendall-Tackett, please submit manuscripts electronically through the Manuscript Submission Portal in Microsoft Word or Open Office format.

SUBMIT MANUSCRIPT

Kathleen Kendall-Tackett, PhD
Praeclarus Press, LLC
General correspondence may be directed to the Editor's Office.
Authors must indicate in their cover letter whether they prefer masked or unmasked peer review. If anonymous review is requested, all author's names, their affiliations, and contact information will be removed by the manuscript coordinator.

In addition to addresses and phone numbers, please supply email addresses and fax numbers for use by the editorial office and later by the production office. Most correspondence between the editorial office and authors is handled by email, so a valid email address is important to the timely flow of communication during the editorial process.
Keep a copy of the manuscript to guard against loss.

Length

Manuscripts for *Psychological Trauma: Theory, Research, Practice, and Policy* can vary in length, but may not exceed 28 double-spaced manuscript pages (including title page, abstract, manuscript body, references, and tables/figures.) Manuscripts that exceed this length may be returned without review. Authors do have the option of electronically archiving supplemental material, such as tables and figures, in order to assist them in keeping their articles to the required length. (See below.)
While *Psychological Trauma* primarily publishes original empirical studies, we are also open to reviewing high quality literature reviews and clinical, qualitative, theoretical and policy articles.

Manuscript Preparation

Prepare manuscripts according to the *Publication Manual of the American Psychological Association* (6th edition). Manuscripts may be copyedited for bias-free language (see Chapter 3 of the *Publication Manual*).
Review APA's Journal Manuscript Preparation Guidelines before submitting your article.
Double-space all copy. Other formatting instructions, as well as instructions on preparing tables, figures, references, metrics, and abstracts, appear in the *Manual*. Additional guidance on APA Style is available on the APA Style website.
If your manuscript was mask reviewed, please ensure that the final version for production includes a byline and full author note for typesetting.
Below are additional instructions regarding the preparation of tables.

Tables

Use Word's Insert Table function when you create tables. Using spaces or tabs in your table will create problems when the table is typeset and may result in errors.

APA Style Journal Article Reporting Standards (JARS)

Authors should review the updated APA Style Journal Article Reporting Standards (JARS) for quantitative, qualitative, and mixed methods research before submitting. These standards offer ways to improve transparency in reporting to ensure that readers have the information necessary to evaluate the quality of the research and to facilitate collaboration and replication. For further resources, including flowcharts, see the Journal Article Reporting Standards (JARS) website.

Brief Reports

Brief reports are articles that do not exceed 12 pages including the cover page, abstract, tables, figures, and references. A brief report is appropriate when there are preliminary findings, or findings from a small sample size, that may not be appropriate for a full research report.

Academic Writing and English Language Editing Services

Authors who feel that their manuscript may benefit from additional academic writing or language editing support prior to submission are encouraged to seek out such services at their host institutions, engage with colleagues and subject matter experts, and/or consider several vendors that offer discounts to APA authors.

Please note that APA does not endorse or take responsibility for the service providers listed. It is strictly a referral service.

Use of such service is not mandatory for publication in an APA journal. Use of one or more of these services does not guarantee selection for peer review, manuscript acceptance, or preference for publication in any APA journal.

Submitting Supplemental Materials

APA can place supplemental materials online, available via the published article in the PsycARTICLES® database. Please see Supplementing Your Article With Online Material for more details.

Abstract and Keywords

All manuscripts must include a structured abstract divided into the following sections, with headings: Objective, Method, Results, and Conclusions. The Objective should clearly communicate the novel contribution of the manuscript. In the Conclusion, please identify at least one specific implication and avoid boilerplate language such as 'Implications will be discussed.'

The abstract should be no longer than 250 words and should be followed by five keywords, or brief phrases.

Clinical Impact Statements

Authors are asked to include a short statement of no more than 100 words, written in conversational English, that summarizes the article's findings and why they are important to practice.

This new article feature allows authors greater control over how their work will be interpreted by a number of audiences (e.g., practitioners, policy makers, news media).

This text should appear in your manuscript, below the abstract, in a section titled "Clinical Impact Statement."

Please refer to the Guidance for Translational Abstracts and Public Significance Statements page to help you write this text.

Data Transparency

In order to reduce the likelihood of duplicate or piecemeal publication, authors are required to provide, in their cover letter, a list of published, in press, and under review studies that come from the same dataset as the one in the submitted manuscript, as well as a narrative description of how the submitted manuscript differs from the others.

This narrative description should include how the manuscript differs (or does not) in terms of research question and variables studied.

Authors also are required to submit a masked version of the narrative description that can be provided to reviewers. Please add this as an appendix table on the last page of the submitted manuscript.

Please base your description on the following examples, edited according to your specific data circumstances.

Do not provide the title of the manuscript, authors, or journal in which it was published. Do provide the names of the relevant variables (i.e., substitute the numbers in the examples for actual names, such as depressive symptoms, therapeutic alliance, etc.).

Narrative Example: Multiple uses of data collected from the same sample

> The data reported in this manuscript have been previously published and/or were collected as part of a larger data collection (at one or more points in time). Findings from the data collection have been reported in separate manuscripts. MS 1 (published) focuses on variables 1, 2, and 3; while MS 2 (in press) focuses on variables 4, 5, and 6. MS 3 (the current manuscript) focuses on variables 8, 9, and 15. MS 4 (soon to be submitted) will focus on variables 10, 12, and 14.

Narrative Example: Publicly available dataset

> The data reported in this manuscript were obtained from publicly available data, [name of project, along with website link to project description]. A bibliography of journal articles, working papers, conference presentations, and dissertations using the [name of project] is available at [website link to bibliography list]. The variables and relationships examined in the present article have not been examined in any previous or current articles, or to the best of our knowledge in any papers that will be under review soon. [Alternatively, clarify any overlap of variables, as done in the narrative example above].

Upon submission of the manuscript, authors will be required to attest to the provision of the required information described above.

Finally, upon acceptance of a manuscript, authors will be required to provide, as part of the Author Note, a list of related published papers that come from the same dataset, unless such papers are clearly described and referenced in the manuscript (specifically noting that findings come from the same dataset).

References

List references in alphabetical order. Each listed reference should be cited in text, and each text citation should be listed in the References section.

Examples of basic reference formats:

- JOURNAL ARTICLE:
  Hughes, G., Desantis, A., & Waszak, F. (2013). Mechanisms of intentional binding and sensory attenuation: The role of temporal prediction, temporal control, identity prediction, and motor prediction. *Psychological Bulletin, 139,* 133–151. http://dx.doi.org/10.1037/a0028566
- AUTHORED BOOK:
  Rogers, T. T., & McClelland, J. L. (2004). *Semantic cognition: A parallel distributed processing approach.* Cambridge, MA: MIT Press.
- CHAPTER IN AN EDITED BOOK:
  Gill, M. J., & Sypher, B. D. (2009). Workplace incivility and organizational trust. In P. Lutgen-Sandvik & B. D. Sypher (Eds.), *Destructive organizational communication: Processes, consequences, and constructive ways of organizing* (pp. 53–73). New York, NY: Taylor & Francis.

Figures

Graphics files are welcome if supplied as Tiff or EPS files. Multipanel figures (i.e., figures with parts labeled a, b, c, d, etc.) should be assembled into one file.

The minimum line weight for line art is 0.5 point for optimal printing.

For more information about acceptable resolutions, fonts, sizing, and other figure issues, please see the general guidelines.

When possible, please place symbol legends below the figure instead of to the side.

APA offers authors the option to publish their figures online in color without the costs associated with print publication of color figures.

The same caption will appear on both the online (color) and print (black and white) versions. To ensure that the figure can be understood in both formats, authors should add alternative wording (e.g., "the red (dark gray) bars represent") as needed.

For authors who prefer their figures to be published in color both in print and online, original color figures can be printed in color at the editor's and publisher's discretion provided the author agrees to pay:

- $900 for one figure
- An additional $600 for the second figure
- An additional $450 for each subsequent figure

Permissions

Authors of accepted papers must obtain and provide to the editor on final acceptance all necessary permissions to reproduce in print and electronic form any copyrighted work, including test materials (or portions thereof), photographs, and other graphic images (including those used as stimuli in experiments).

On advice of counsel, APA may decline to publish any image whose copyright status is unknown.

- Download Permissions Alert Form (PDF, 13KB)

Publication Policies

APA policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications.

See also APA Journals® Internet Posting Guidelines.

APA requires authors to reveal any possible conflict of interest in the conduct and reporting of research (e.g., financial interests in a test or procedure, funding by pharmaceutical companies for drug research).

- Download Disclosure of Interests Form (PDF, 38KB)

Authors of accepted manuscripts are required to transfer the copyright to APA.

- For manuscripts NOT funded by the Wellcome Trust or the Research Councils UK
  Publication Rights (Copyright Transfer) Form (PDF, 83KB)
- For manuscripts funded by the Wellcome Trust or the Research Councils UK
  Wellcome Trust or Research Councils UK Publication Rights Form (PDF, 34KB)

Ethical Principles

It is a violation of APA Ethical Principles to publish "as original data, data that have been previously published" (Standard 8.13).

In addition, APA Ethical Principles specify that "after research results are published, psychologists do not withhold the data on which their conclusions are based from other competent professionals who seek to verify the substantive claims through reanalysis and who intend to use such data only for that purpose, provided that the confidentiality of the participants can be protected and unless legal rights concerning proprietary data preclude their release" (Standard 8.14).

APA expects authors to adhere to these standards. Specifically, APA expects authors to have their data available throughout the editorial review process and for at least 5 years after the date of publication.

Authors are required to state in writing that they have complied with APA ethical standards in the treatment of their sample, human or animal, or to describe the details of treatment.

- Download Certification of Compliance With APA Ethical Principles Form (PDF, 26KB)

The APA Ethics Office provides the full Ethical Principles of Psychologists and Code of Conduct electronically on its website in HTML, PDF, and Word format. You may also request a copy by emailing or calling the APA Ethics Office (202-336-5930). You may also read "Ethical Principles," December 1992, *American Psychologist*, Vol. 47, pp. 1597–1611.

Other Information

Visit the Journals Publishing Resource Center for more resources for writing, reviewing, and editing articles for publishing in APA journals.

Appendix F3. Vancouver Obsessional Compulsive Inventory – Mental Contamination Scale

VOCI - MC Scale

Please rate the extent to which you agree with the following statements?	**Not at all**	**A little**	**Some**	**Much**	**Very much**
1. Often I look clean but feel dirty.	0	1	2	3	4
2. Having an unpleasant image or memory can make me feel dirty inside.	0	1	2	3	4
3. Often I cannot get clean no matter how thoroughly I wash myself.	0	1	2	3	4
4. If someone says something nasty to me it can make me feel dirty.	0	1	2	3	4
5. Certain people make me feel dirty or contaminated even without any direct contact.	0	1	2	3	4
6. I often feel dirty under my skin.	0	1	2	3	4
7. Some people look clean, but feel dirty.	0	1	2	3	4
8. I often feel dirty or contaminated even though I haven't touched anything dirty.	0	1	2	3	4
9. Often when I feel dirty or contaminated, I also feel guilty or ashamed.	0	1	2	3	4
10. I often experience unwanted and upsetting thoughts about dirtiness.	0	1	2	3	4
11. Some objects look clean, but feel dirty.	0	1	2	3	4
12. I often feel dirty or contaminated without knowing why.	0	1	2	3	4
13. Often when I feel dirty or contaminated, I also feel angry.	0	1	2	3	4
14. Unwanted and repugnant thoughts often make me feel contaminated or dirty.	0	1	2	3	4
15. Standing close to certain people makes me feel dirty and/or contaminated.	0	1	2	3	4
16. I often feel dirty inside my body.	0	1	2	3	4
17. If I experience certain unwanted repugnant thoughts, I need to wash myself.	0	1	2	3	4
18. Certain people or places that make me feel dirty or contaminated leave everyone else completely unaffected.	0	1	2	3	4
19. The possibility that my head will be filled with worries about contamination makes me very anxious.	0	1	2	3	4
20. I often feel the need to cleanse my mind.	0	1	2	3	4

Radomsky, A.S., Rachman, S., Shafran, R., Coughtrey, A.E., & Barber, K.C. (2014). The nature and assessment of mental contamination: A psychometric analysis. Journal of Obsessive Compulsive and Related Disorders, 3(2), 181-187.

Appendix G3. Brief Betrayal Trauma Survey

Personal Experiences

We hope that you trust us to keep your responses in complete confidence and privacy; this is the reason that we ask you not to include your name on any of our questionnaires. Nonetheless, if you feel uncomfortable answering any of the more intimate questions in this section, just skip them, and go on to the next section. **For each item below, please mark one response in the columns labeled "Before Age 18" AND one response in the columns labeled "Age 18 or Older."**

Have each of the following events happened to you, and if so, how often?	BEFORE AGE 18			AGE 18 or OLDER		
	NEVER	ONE or TWO TIMES	MORE THAN THAT	NEVER	ONE or TWO TIMES	MORE THAN THAT
Been in a major earthquake, fire, flood, hurricane, or tornado that resulted in significant loss of personal property, serious injury to yourself or a significant other, the death of a significant other, or the fear of your own death	○	○	○	○	○	○
Been in a major automobile, boat, motorcycle, plane, train, or industrial accident that resulted in similar consequences	○	○	○	○	○	○
Witnessed someone with whom you were very close (such as a parent, brother or sister, caretaker, or intimate partner) committing suicide, being killed, or being injured by another person so severely as to result in marks, bruises, burns, blood, or broken bones. This might include a close friend in combat	○	○	○	○	○	○
Witnessed someone with whom you were not so close undergoing a similar kind of traumatic event	○	○	○	○	○	○
Witnessed someone with whom you were very close deliberately attack another family member so severely as to result in marks, bruises, blood, broken bones, or broken teeth	○	○	○	○	○	○
You were deliberately attacked that severely by someone with whom you were very close	○	○	○	○	○	○
You were deliberately attacked that severely by someone with whom you were not close	○	○	○	○	○	○
You were made to have some form of sexual contact, such as touching or penetration, by someone with whom you were very close (such as a parent or lover)	○	○	○	○	○	○
You were made to have such sexual contact by someone with whom you were not close	○	○	○	○	○	○
You were emotionally or psychologically mistreated over a significant period of time by someone with whom you were very close (such as a parent or lover)	○	○	○	○	○	○
Experienced the death of one of your own children	○	○	○	○	○	○
Experienced a seriously traumatic event not already covered in any of these questions	○	○	○	○	○	○

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Appendix H3. Trauma Appraisal Questionnaire

Trauma Appraisal Questionnaire (TAQ)

Measure development citation: DePrince, A.P., Zurbriggen, E.L., Chu, A.T.,& Smart, L. (2010). Development of the Trauma Appraisal Questionnaire. *Journal of Aggression, Maltreatment, & Trauma, 19*, 275-299. Available: http://mysite.du.edu/~adeprinc/TAQ.pdf

SAMPLE INSTRUCTIONS (yoking responses to study target incident): Please continue thinking about **the incident that happened about a year ago**. We are interested in how you feel **now** when you think about the event. For each of the following items, please circle the number that indicates how much you agree or disagree with the **description of your thoughts, feelings or experiences now** when you think about the event. You may skip any question you do not wish to answer.

1 strongly disagree	2 somewhat disagree	3 neutral	4 somewhat agree	5 strongly agree

	1 strongly disagree	2	3	4	5 strongly agree
1. I feel humiliated.	1	2	3	4	5
2. I don't feel safe even when others say I am safe.	1	2	3	4	5
3. I deserved what happened to me.	1	2	3	4	5
4. The person who was supposed to be closest to me hurt me the most.	1	2	3	4	5
5. I'm always ready to attack.	1	2	3	4	5
6. I feel ashamed.	1	2	3	4	5
7. The event happened because I wasn't careful enough.	1	2	3	4	5
8. I feel rage.	1	2	3	4	5
9. I don't think I'll survive.	1	2	3	4	5
10. It's as if I'm in a horror movie and can't get out.	1	2	3	4	5
11. I've cut myself off from other people.	1	2	3	4	5
12. I often find myself yelling and screaming at other people.	1	2	3	4	5
13. I'm not safe	1	2	3	4	5
14. I mostly stay to myself.	1	2	3	4	5
15. I am disconnected from people.	1	2	3	4	5
16. I want to physically hurt the people or thing that made the event happen.	1	2	3	4	5
17. Important people (such as parents, partner, friend) let this happen to me.	1	2	3	4	5
18. I must have done something really awful to make this happen.	1	2	3	4	5
19. I let myself down.	1	2	3	4	5

	1 strongly disagree	2	3	4	5 strongly agree
20. If the person really cared about me that person would not have done what they did.	1	2	3	4	5
21. I feel terrified.	1	2	3	4	5
22. I want revenge.	1	2	3	4	5
23. I feel betrayed.	1	2	3	4	5
24. I am always on alert for danger.	1	2	3	4	5
25. I feel double-crossed.	1	2	3	4	5
26. Something bad could happen at any time.	1	2	3	4	5
27. There is a huge void inside me.	1	2	3	4	5
28. I feel lonely.	1	2	3	4	5
29. I am responsible for what happened.	1	2	3	4	5
30. I don't know whether I will live or die.	1	2	3	4	5
31. I feel responsible.	1	2	3	4	5
32. I feel horrified.	1	2	3	4	5
33. I feel disgust.	1	2	3	4	5
34. I feel guilty.	1	2	3	4	5
35. If someone says the wrong thing to me, I might fly off the handle.	1	2	3	4	5
36. Anger gives me power.	1	2	3	4	5
37. I've lost my sense of manhood or womanhood.	1	2	3	4	5
38. I don't want to have to trust anyone.	1	2	3	4	5
39. Someone important (such as a parent, lover, friend) should have kept me safe.	1	2	3	4	5
40. Even though I have friends, I'm still lonely.	1	2	3	4	5
41. I'm a bad person.	1	2	3	4	5
42. I feel afraid.	1	2	3	4	5
43. I feel embarrassed.	1	2	3	4	5
44. If I were good enough, this wouldn't have happened to me.	1	2	3	4	5
45. I've lost a piece of myself.	1	2	3	4	5
46. No shower can wash away how dirty I feel.	1	2	3	4	5
47. I can't get close to people.	1	2	3	4	5
48. I feel angry.	1	2	3	4	5
49. The people that I was supposed to trust the most hurt me.	1	2	3	4	5
50. Danger is always present.	1	2	3	4	5

Appendix I3. Quick Evaluation of Severity over Time

QUEST© (Quick Evaluation of Severity over Time)

For the first 12 items, the highest rating (5) means that the item caused extreme distress, severe difficulties with relationships, and/or kept you from getting things done. The lowest rating (1) means it caused little or no problems. Rate items 13-15 (positive behaviours) according to frequency.

Circle the time period you have been asked to rate:	***Last 7 Days***	***Last 30 Days***	***Other ……***

Circle the number that indicates how much the item has caused distress, relationship problems, or difficulty with getting things done.

A. Thoughts and Feelings [ ]	None/Slight	Mild	Moderate	Severe	Extreme
1. Worrying that someone important in your life is tired of you or is planning to leave	1	2	3	4	5
2. Quickly changing your opinions about others such as switching from believing someone is a loyal, caring friend to believing that person is completely untrustworthy and hurtful	1	2	3	4	5
3. Extreme changes in how you see yourself. Shifting from feeling confident about who you are to feeling like you are evil, or that you don't exist.	1	2	3	4	5
4. Severe mood swings several times a day. Minor events cause major shifts in mood	1	2	3	4	5
5. Feeling paranoid or like you are losing touch with reality	1	2	3	4	5
6. Feeling extremely angry	1	2	3	4	5
7. Feeling very empty	1	2	3	4	5
8. Feeling suicidal	1	2	3	4	5

To the clinicians: the total for each section (A, B and C) Should be recorded In the brackets following the section titles. At the top of the page record the Total composite scores (15 + A + B – C)

Name: _____ ID#_____

Total Score: _____ Date: _____

B. Behaviours (Negative) [ ]

9. Going to extremes to try to keep someone from leaving you	1 2 3 4 5
10. Purposely doing something to injure yourself or making a suicide attempt	1 2 3 4 5
11. Problems with impulsive behaviours (not including suicide attempts or injuring yourself on purpose) Examples are: overspending, risky sexual behaviour, substance abuse, reckless driving, binge eating, other *(circle those that apply)*	1 2 3 4 5
12. Temper outbursts or problems with anger leading to relationship problems, physical fights, or destroying property.	1 2 3 4 5

Circle the number that indicates how often you used the following positive behaviours

C. Behaviours (Positive) [ ]

	Almost always / N/A	Most of the time	Half of the time	Sometimes	Almost never
13. Choosing to use a positive activity in circumstances where you felt tempted to do something destructive of self-defeating	5	4	3	2	1
14. Noticing ahead of time that something could cause you emotional difficulties and taking reasonable steps to avoid/prevent the problem	5	4	3	2	1
15. Following through with the therapy plans to which you agreed (e.g. talk therapy, 'homework' assignments, coming to appointments, medications, etc)	5	4	3	2	1

Appendix J3. Patient Health Questionnaire – 9

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔" to indicate your answer)*	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

Appendix K3. Generalised Anxiety Disorder -7

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3