

**Theraplay for Attachment-Related Challenging Behaviour: A Case Series
Approach**

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Thesis Abstract

Childhood challenging behaviours is a common reason for referrals to child and adolescent mental health services. Challenging behaviours have been linked to various implications, including later mental health difficulties, risk-taking behaviours, and increased costs to society. Several risk factors are associated with challenging behaviours, including attachment insecurities. First line intervention for childhood challenging behaviours is Parent Training Programmes (PTP). PTP's have a well-established and rigorous evidence-base demonstrating good effectiveness. Nonetheless, there are several limitations to PTPs including difficulties with engagement and attrition, alongside PTP's locating the 'problem' within the parent. PTP's are largely underpinned by behavioural and social learning theory and reportedly lack consideration into the parent-child relationship and attachment.

Theraplay is an attachment and play-based therapeutic approach implemented in many services across the world despite there only being a limited evidence base. However, it has been found to be a promising approach for various presenting difficulties including challenging behaviours. Theraplay is hypothesised to create change in children's internal working models by strengthening the overarching parent-child interactions based on four core concepts: Structure, Engagement, Challenge, and Nurture. Change is facilitated through sessions with the child, parent, and therapist using games based on the four concepts. Despite Theraplay's world-wide use, the evidence-base is scarce and is lacking in design rigour. An increase in both the quantity and quality of research into Theraplay's effectiveness, alongside if (and how) Theraplay works seems appropriate. The current study could be deemed a valuable contribution to the evidence base of an under-studied approach.

The current study implemented a multiple case series design to investigate the effectiveness of Theraplay on challenging behaviour and parent-child attachment. The case series design allowed investigation into Theraplay's key processes of change; a) Theraplay's four core constructs, and b) child

attachment. Three families participated in baseline, intervention, and follow-up phases. A mixed method approach of data collection and multiple forms of analyses was implemented. In light of COVID-19, the Theraplay interventions for two families were adapted and ended abruptly in line with service and governmental restrictions.

Results found no evidence of Theraplay being effective at reducing childhood challenging behaviour and enhancing parent-child attachment. Gradual, yet positive, increases in Theraplay-based interactions and mechanisms of change were observed. However, the change in mechanisms had no effect on challenging behaviour or attachment. Findings may have been influenced by the measures used and the limited number of sessions implemented. Further research is warranted into Theraplay's effectiveness. In particular, the use of a 'gold standard' attachment measure alongside intervention is recommended, with more understanding into the parental role as the potential mechanism of change within sessions required.

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Firstly, I would like to take this opportunity to give my sincere thanks to my research supervisors, Dr Sarah Wilde, and Dr David Dawson. Their enthusiasm and support throughout has been invaluable. Sarah has supported me from day one with this project and idea for investigating Theraplay, and she has helped me to stay motivated and interested during the challenging times. Dave has been a huge source of knowledge and guidance throughout the design, implementation, and analysis of case series designs. I have learnt a lot from both of you and you have kept me going when faced with barriers (which there have been many of!).

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Statement of Contribution

Journal article and extended paper

- Project design: Rebecca Money, Dr Dave Dawson, Dr Sarah Wilde
- Applying for ethical approval: Rebecca Money (supported by Dr Dave Dawson)
- Writing the review of the literature: Rebecca Money
- Recruiting participants: Rebecca Money (supported by recruiting services)
- Theraplay sessions: Facilitated by Theraplay therapists within the recruiting services
- Data collection: Rebecca Money (collection of paper measures supported by Theraplay therapists; creation of online measures supported by Dr Dave Dawson)
- Creation of Theraplay Observation Measure (TOF): Rebecca Money, Dr Dave Dawson, Dr Sarah Wilde
- Scoring measures: Rebecca Money (secondary observations Dr Sarah Wilde)
- Conducting change interviews: Rebecca Money
- Treatment fidelity checks: Rebecca Money
- Data entry: Rebecca Money
- Data analysis: Rebecca Money (supervised by Dr Dave Dawson)
- Write-up: Rebecca Money (supervised by Dr Sarah Wilde and Dr Dave Dawson)

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Systematic Literature Review¹

¹ The systematic literature review was later amended following feedback and published within the journal of Child and Adolescent Mental Health. Therefore, only some format changes have been made to the current version. Reference: Money, R., Wilde, S., & Dawson, D. (2020). The effectiveness of Theraplay for children under 12—a systematic literature review. *Child and Adolescent Mental Health*. doi: 10.1111/camh.12416

**The effectiveness of Theraplay for children under 12:
A systematic literature review**

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Abstract

Purpose: Theraplay is a relationship-focused model of treatment based on attachment theory involving both adult and child and is utilised within services across the world. The study aims to review the quality of Theraplay research and Theraplay's effectiveness for children aged 12 years and under with a range of presenting difficulties, to inform future practice and identify areas of further research.

Methods: A systematic literature search was conducted using PsycINFO, CINAHL, MEDLINE, and Web of Science. Quantitative studies using Theraplay only as a treatment for children aged 12 years and under with any presenting difficulty were identified. Additional manual searching was conducted, including eligible studies reference lists. Critical appraisal tools were used to provide a narrative synthesis of Theraplay's effectiveness and research quality.

Results: Six eligible articles were identified, with evidence of mixed quality and predominately case series using small samples within clinical practice. A high level of heterogeneity was identified between studies, including the delivery of Theraplay and outcome measures used. Promisingly significant results were shown when using Theraplay for internalising and externalising difficulties, dual diagnoses and developmental disabilities, with varied meaningful effect. No studies measured the effectiveness of Theraplay for children with attachment difficulties.

Conclusions: The use of Theraplay for children with various presenting difficulties was promising. However, the quality of literature and heterogeneity between studies meant firm conclusions could not be drawn regarding its effectiveness, despite its wide use within services. Several areas of future research are recommended to enhance the quality and depth of Theraplay literature.

Keywords: Systematic Literature Review, Theraplay, Children, Attachment Theory, Effectiveness, Mental Health, Developmental Disabilities.

Practitioner Points

- Theraplay is a relationship focused intervention based on attachment theory and was found to be used with children experiencing various difficulties.
- Despite the Theraplay Institute being established since 1970, and the broad design of the review question, few eligible studies were found.
- Theraplay literature contains high levels of heterogeneity, with poor quality and the extent of research into its effectiveness restricted. Nonetheless, it continues to be utilised within services across the world.
- More high quality and rigorous research is needed to fully establish the efficacy and effectiveness of Theraplay for children with various presenting difficulties, contributing to services use of evidence-based practice.

PROSPERO Registration Number: CRD42018104461

Introduction

Theraplay² is described as an ‘engaging, playful, relationship-focused treatment method that is interactive, physical and fun... based on attachment theory’ (Booth & Jernberg, 2009, p.xxi). This relationship-focused treatment was initially developed in the USA as a short-term and intensive model to address the needs of low-income families living in deprived areas, within Head Start Programmes. Theraplay has since expanded its use over the years to other countries and services for other presenting psychological difficulties; including attachment difficulties (including with fostered or adopted children), developmental disorders (e.g. Autistic Spectrum Disorders), trauma and regulation difficulties (both emotional and behavioural), (Booth & Jernberg, 2009; Munns, 2009; Wettig, Franke, & Fjordbak, 2006).

Theraplay is based on attachment theory and the work of Bowlby (1973), particularly the conceptualisation of inner working models. The first relationship a child has is argued to be the most important as it acts as a guide to future relationships (Bowlby, 1973). Children who experience pleasurable and attentive interactions with their caregivers create a positive inner working model, in that they view themselves, their parents (in turn others), and the world in a positive manner. Children with positive inner working models develop a degree of safety; learning to explore their environment but knowing that their parents will be there and caring when needed. The Theraplay model hypothesises that children who have been neglected from these interactions are more likely to develop problem behaviours and relationship difficulties (Booth & Jernberg, 2009).

Typical Play Therapy models focus on the child’s inner thoughts and feelings and uses play to provide opportunities to explore this between therapist and child. Theraplay differs in its use of both adult and child in session, using this relationship to recreate positive experiences and immediately respond to the child’s underlying needs. Based on four core concepts, Theraplay sessions provide the opportunity for the child to engage in an attuned connection (engagement), a basis of safety (structure) and the opportunities to experience mastery (challenge) and feel worthy and cared for (nurture). These core concepts are implemented within adult-child interactions and Theraplay games designed to re-create those parent-child

² Theraplay: A registered service mark of The Theraplay® Institute, Evanston, IL, USA.

experiences. By the adult interacting in a face-to-face, positive, playful and responsive manner, you can help to change a child's perception of themselves (i.e. their inner working model). These interactions are hypothesised to improve adult's sensitivity and attunement to their child (Booth & Jernberg, 2009). Interactions are based on early exchanges that would have typically occurred between parent-child at an early age, going back to the original relationship that stems on the development on an inner working model (Munns, 2000). Recreating these experiences later in the child's life using Theraplay is suggested to change the child's inner working model to be more positive, and in turn a healthier attachment style (Booth & Jernberg, 2009).

Attachment theorists also propose that the attachment between primary caregiver and child acts as a dyadic regulation of emotion (Schoore, 2000, 2001, 2005). The emotional connection between primary caregiver and child, initially as the parent co-regulating the child's emotions, significantly affects the child's development of self-regulation skills. The development of self-regulation is an important aspect of the child's ability to develop good social skills (Gerhardt, 2004). Theraplay sessions combination of up and down regulating games, alongside the multiple opportunities for co-regulation by adults (firstly the therapist to parent/carer, then parent/carer to child) promotes this development.

Qualitative approaches have described practitioners, professionals and carers views of Theraplay being effective, with Theraplay practitioners reporting how helpful the approach is with foster and adoptive families (Hong, 2014). The effectiveness of Theraplay with other presenting difficulties has also been reported, often via Theraplay newsletters (Theraplay Institute, 2017a). However these are often based on verbal accounts with no quantitative measures applied to monitor effectiveness objectively.

Preliminary, quantitative investigations indicate promising results of Theraplay for children with attachment difficulties (Brayman, 2016). Children's attachment difficulties often involve problems experiencing empathy, guilt or remorse, alongside poor discrimination and formation of relationships and poor regulation or bodily functions, emotions, and behaviours, ranging in severity (Hughes, 1999). Patterns of attachment difficulties can also be conceptualised into three subtypes; disorganised,

anxious-ambivalent or anxious-avoidant (Crittenden & Ainsworth, 1989). None of the studies within Brayman's (2016) review accounted for the use of Theraplay for children with specific attachment patterns. Furthermore, high levels of variability in how attachment was operationalised and measured, and the methodological design of studies, made it difficult to draw firm conclusions into whether Theraplay was effective for attachment difficulties. A large proportion of studies within the review were case studies, creating difficulties with generalisability, and there was no quality appraisal of the studies (Brayman, 2016). Despite these queries, the application of Theraplay has broadened and is known to be used with other presenting difficulties in children.

When implementing therapeutic models within services, it is important to consider and critically appraise its evidence base. Theraplay advertise their inclusion on the Substance Abuse and Mental Health Service Administration (SAMHSA, n.d.) National Registry for Evidence-based Programs and Practices. SAMHSA categorises Theraplay as 'effective' for internalising problems and 'promising' for Autism Spectrum Disorder and Symptoms. Yet only two studies contribute to these results of effectiveness (Siu, 2009, 2014), questioning the process of establishing effectiveness. Salkovski's (1995) 'hourglass model' suggests a three-stage evaluation process during the clinical development of psychological intervention evidence. The first stage involves the use of smaller samples and flexible methodological designs, followed by expanding to more stringent methodological strategies to assess efficacy and mechanisms of change, e.g. randomised control trials (RCTs). Finally, the evaluation process broadens any promising results to assess wider clinical utility. It would be helpful to consider how Theraplay literature falls with the hourglass model of clinical development in mind.

Aims

This systematic literature review builds on a previous review Brayman (2016), which focused on whether Theraplay is effective for older children with attachment difficulties. The current systematic literature review aims to:

- 1) Establish how the attachment-focused model of Theraplay is being applied to all presenting difficulties for children aged 12 years and under;

- 2) Provide a critical account of the summary of the results and the current literature, using a narrative review;
- 3) Establish how Theraplay literature and evidence falls within the 'hourglass model' (Salkovski, 1995), considering its current broad use within services.

Methods

The following systematic literature review was registered with PROSPERO, dated 27.07.2018, registration number CRD42018104461, and was consistent with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff & Altman, 2009).

Search Strategy

A systematic literature search was conducted in July 2018 using the following electronic databases: PsycINFO, CINAHL, MEDLINE and Web of Science. Each database was individually searched for English studies published between 1970 to July 2018. Reference lists of eligible full-text papers were also manually searched, alongside the recent Theraplay manual (Booth & Jernberg, 2009) and the Theraplay Institute website (Theraplay Institute, 2017a, 2017b). Any studies that were manually searched and not in English were excluded. Contact was made with the Theraplay Institute alongside support from a librarian to help identify any missing studies and to enable completeness of the search (Petticrew & Roberts, 2005).

Due to the limited number of publications within Theraplay, a sensitivity and specificity search was conducted to determine an appropriate systematic literature review. A sensitivity search provided a higher number of studies including less relevant studies, whereas a specificity search narrowed the literature to a smaller but more relevant number of studies (Petticrew et al., 2005). Following advice from an independent librarian, a specificity search was chosen due to the high volume of unsuitable papers included when combining the keyword of 'Theraplay' and the Medical Subject Heading (MeSH) of 'Play Therapy' (see Appendix A). The Theraplay Institute outline the difference between Theraplay and Play Therapy (Theraplay Institute, 2017c). Therefore it was felt that a study using this treatment model should be explicit of its use of 'Theraplay' within the text. The search process was therefore broadened by searching the full text of studies and not restricting to abstracts and titles. All databases were searched using the free text Theraplay AND Child*

(truncation for words including child, children, childhood). See Appendix B for full electronic search strategies.

Studies within the Theraplay manual (Booth & Jernberg, 2009) were manually searched via titles only, and any eligible studies found via titles were then subject to a full text search.

Selection Method

An overview of the search strategy is outlined in Figure 1. Initial searches (via electronic databases, the Theraplay Manual [Booth & Jernberg, 2009], and Theraplay Institute website, 2017a, 2017b) identified 642 studies that were potentially relevant. A total of 108 studies were removed due to duplication via scanning the title and author references, with 534 potentially eligible studies remaining. Each of these citations was screened by one reviewer to identify studies that did not meet inclusion criteria. Appendix C presents the inclusion and exclusion criteria and rationale for the current systematic literature review.

One hundred and fifty-three of the identified studies were removed as they were not in English, leaving 381 potential studies. A further 373 studies were excluded; with 69.8% of these found to have been published in a non-peer review format, and 9.4% used an alternative model to Theraplay (e.g. Play Therapy, Filial Therapy). A full breakdown of each of the exclusion criteria met is in Appendix D.

Fifteen studies were removed from the systematic literature review due to the author, Librarians and support from the Theraplay Institute (2017) not being able to source the literature.

Six articles were obtained and deemed eligible in the final review. One of these articles (Wettig, Coleman & Geider, 2011) was written and published as one article, yet reported two studies (a controlled longitudinal study and a multicentre study). These studies have been separated for the purpose of the current review. For ease, eligible studies have been numbered between 1-6b and shall be referred to by this number for the remainder of the review. These are tabulated in Table 1.

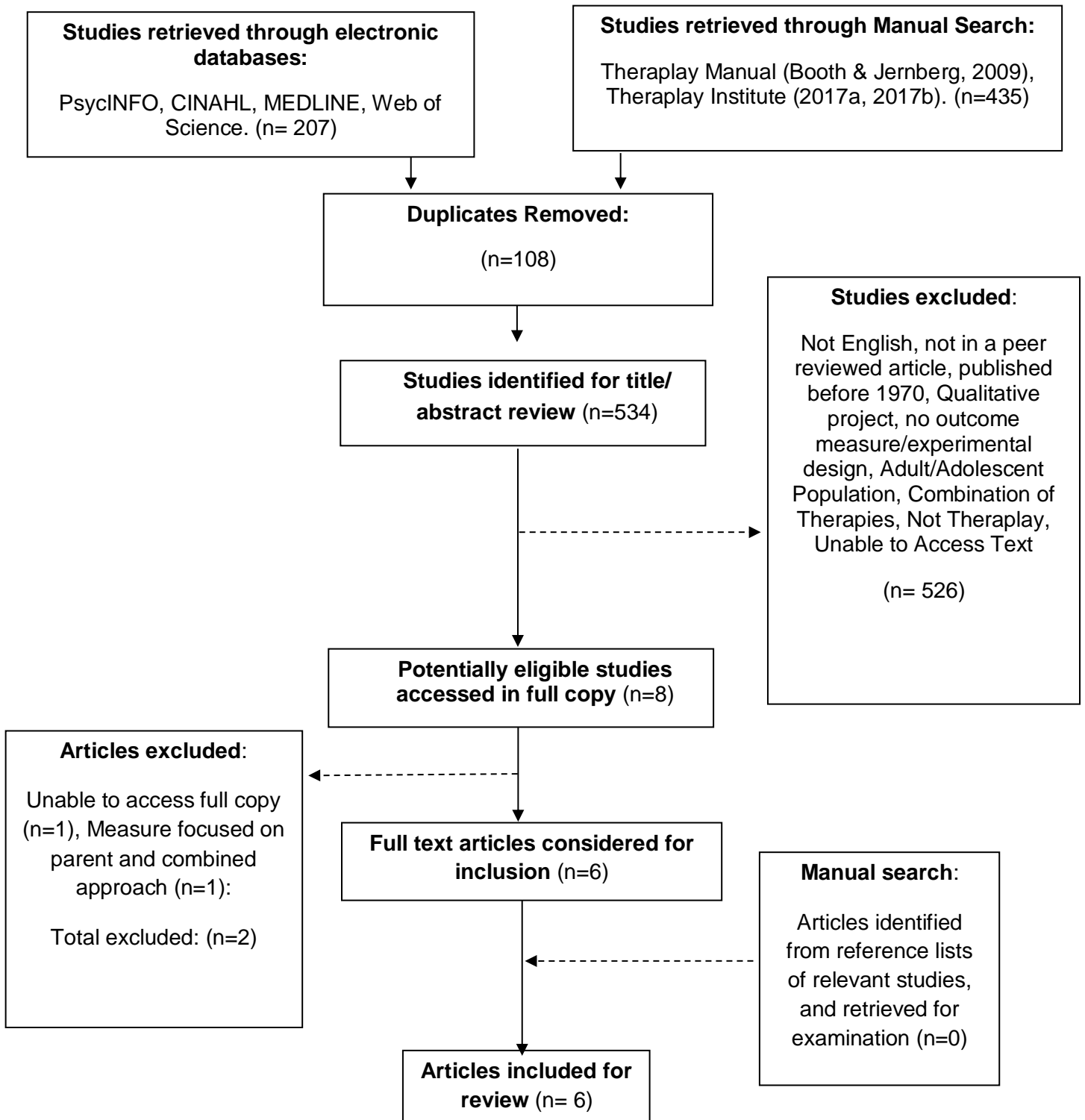


Figure 1: PRISMA diagram showing study selection process.

Data Abstraction

The following data was abstracted from each of the eligible studies; country, study design, population, sample size, range and average age of child, gender ratio, Theraplay treatment format (e.g. 1:1 or group), adult relationship in Theraplay (e.g. parent, carer, teacher), standardised measure used, who completed the measure, average number of sessions and frequency of sessions. Summary points and the key findings were also reported. Please refer to Table 1 for all abstracted data. Missing data in the table is due to this not being reported in the study. For the current review, studies with mixed methodology shall only focus on the quantitative data.

Quality Assessment

Whilst a hierarchy of evidence is argued within research, with meta-analyses and RCTs suggested to be more rigour (Roth & Fonagy, 2005), methodological quality of any study is not to be assumed. Quality assessment helps the reader to establish whether the content of the study provides confidence in its design and conduct (Boland, Cherry & Dickson, 2014). No gold standard or recommended critical appraisal tool (CAT) of assessing quality and bias is available (Sanderson, Tatt & Higgins, 2007). However, the use of any CAT rather than none is recommended (Voss & Rehfuss, 2012). The Joanna Briggs Institute (JBI) tools were chosen for the current review due to the range of study formats available, including case series (Moola et al., 2017), quasi-experimental designs and RCTs (Tufanaru, Munn, Aromataris, Campbell & Hopp, 2017). Each tool was adapted to allow for additional quality appraisal checks relevant to the current study (see Appendix E, F, G). Each item on the JBI is assessed as either yes, no, partially, or unclear.

Table 1

Study characteristics for eligible studies.

Author(s), Year, Country	Methodology	Sample Characteristics	Intervention Characteristics	Summary of Results
1) Bojanowski, J. J., & Ammen, S. (2011). Canada	Quantitative. Case series. Pre/post data, no follow up. Inferential statistics.	Setting: Private outpatient clinic Presenting difficulty: Internalising/Externalising difficulties, attachment difficulties. Sample Size: 11 parent- child dyads (8 children in total). Age: Mean = 6.55 years (SD= 1.63), Range = 5- 9 years. Gender: Female (n=5), male (n=3).	Treatment Type: 1:1 ³ Assessment: MIMRS (O'Connor, Ammen, Backman & Hitchcock, 2001); CBCL (Achenbach, 1991). Session No: Minimum 8 (range or mean not reported). Frequency of sessions: Not reported.	- CBCL: Decline in externalising problems* ($d=0.72$), total problems** ($d=1.14$) and internalising problems** ($d=1.10$) post Theraplay. - MIMRS: Improvement in total scores* ($d=1.07$) post Theraplay, alongside parents use and childs response to nurture** ($d=1.50$) and challenge* ($d=0.76$). No significant change found for structure and engagement scale, alongside separation task.
2) Francis, Y. J., Bennion, K., & Humrich, S. (2017). UK	Mixed Methods. ⁴ Case series. Pre/post data, no follow up.	Setting: School/Home Presenting difficulty: LAC, social and emotional difficulties Sample Size: 40 (20 LAC, 20 non-LAC) Age: Range 5-11 years (no	Treatment Type: 1:1 and group (child and significant adult in school, e.g. teacher, behaviour mentor) Assessment: SDQ (Goodman, 1997) Session No: Group: 4-16	- Combination of 1:1 and Group: No statistically significant change on SDQ. - 1:1 intervention: No statistically significant change on SDQ. - Group: No statistically significant change on SDQ. - Differences between group and 1:1 scores: Significant differences between pre and post total

³ 1:1 sessions involve one child, adult and therapist.

⁴ For studies with mixed methods, focus has been on quantitative aspects

	Inferential statistics.	mean data). Gender: Female (n=11), male (n=9).	sessions, 1:1 12-18 sessions. Frequency of sessions: Weekly, 30 minutes each.	scores, hyperactivity and conduct problems, and prosocial behaviours. Significant differences between post peer problems. No <i>p</i> values given.
3) Hiles Howard, A. R., Lindaman, S., Copeland, R., & Cross, D. R. (2018). USA	Quantitative. Case series. Pre/Post data, 3 months follow up. Inferential statistics.	Setting: Unclear Presenting difficulty: ASD, relationship difficulties Sample Size: 8 parent-child dyads Age: Mean = 5.38 years (SD= 1.92), Range 3-9 years. Gender: Female (n=6), male (n=2).	Treatment Type: 1:1 Assessment: Adapted MIM scoring from McKay, Pickens & Stewart (1996), parent/child sheets. Changes only monitored in session, not out of session. Session No: 19 Frequency of sessions: 2 x 1 hour daily for two weeks (first day only one session)	- Pre, post and follow up: Significant differences between child's positivity*, eye contact*, and acceptance of guidance* towards parent. - Significant differences in parent facial expression and affect*, response to behavioural cues*, eye contact towards child* and offering of guidance*. - No differences within the dyad scale. -Time Points: Session 1-5 (time point 1), 6-10 (2), 11-16 (3) and 16-19 (4). Scores improved as sessions increased over time on parent domain* [including facial expression and affect*, encouragement*, response to behavioural cues* and offering of guidance*] and child domain* [including positivity*, body positioning towards parent*, and acceptance of guidance*]. No exact <i>p</i> values given. Unable to compute effect sizes due to missing data.
4) Siu, A. F. Y. (2009). China	Quantitative. RCT. No follow up data. Inferential statistics.	Setting: School Presenting difficulty: Internalising problems (t-score above 63 on the CBCL, Achenbach, 1991). Sample Size: 46 (TG = 22, WC = 24). Age: TG: Mean = 7.84 (SD= 1.32), WC: Mean =	Treatment Type: Group Assessment: CBCL (Achenbach, 1991) Session No: 8 sessions Frequency of sessions: Weekly, 40 minutes	-Mean scores within Theraplay TG significantly decreased post intervention** with large effect (<i>d</i> = 1.19), compared with the CG. No exact <i>p</i> values given.

		7.89 (SD= 1.32). Gender: Female (n=21), male (n=25). TG: 56% female, WC: 54% female.		
5) Siu, A. F. Y. (2014). China	Quantitative. RCT. No follow up data. Inferential statistics.	Setting: School Presenting difficulty: Developmental Disabilities, social skills (47% mild ID, 53% moderate ID). Sample Size: 38 (TG = 23, WC = 15). Age: Mean = 10.34 (SD= 1.95), Range 6-13 years. Gender: Total participants: Female (n= 3), male (n= 35).	Treatment Type: Group Assessment: SRS (Constantino et al., 2003). Session No: Minimum 20 (no data on mean or range) Frequency of sessions: Weekly, 30 minutes	-Significant difference on the social communication scale* ($d= 0.78$) when comparing TG and CG. No other significant differences. -Changes in pre-post scores subscales for TG found significant changes with small effect for social awareness** ($d=.25$), social cognition** ($d=.28$), social communication** ($d=.36$), social motivation** ($d=.09$). -No reported changes in pre-post SRS subscales for the WC.
6a)⁵ Wettig, H. H. G., Coleman, A. R., & Geider, F. J. (2011). Germany	Quantitative. Controlled longitudinal study (quasi-experimental) Pre/post data, 2-year follow up. Inferential statistics.	Setting: Medical centre, therapy rooms Presenting difficulty: Dual diagnosis of language disorder and shyness/social anxiety (diagnosed by Speech Pathologist). Sample Size: 52 (TG = 22, CG= 30) Age: TG: Mean = 4.1 (SD= 1.1). CG: Mean = 4.6 years (SD= 1.35). Gender: TG: Female (n=8),	Treatment Type: 1:1 Assessment: CASCAP-D (Döpfner, Berner, Flechtner, Lehmkuhl & Steinhausen, 1999). Session No: Mean = 18, maximum 66 (no minimum data). Frequency of sessions: Not reported, 30-45 minutes.	- Significant difference following Theraplay compared to control group at post-treatment, for difficulties with attention*** ($d= 1.08$), expressive*** ($d= 2.30$) and receptive*** language problems ($d= 1.83$), cooperation* ($d= 0.56$) and being socially withdrawn* ($d= 0.57$). - TG: Significant difference post Theraplay in several areas including; shyness*** ($d= 2.35$), attention deficit** ($d= 0.58$), poor cooperation** ($d= 0.79$), conformity*** ($d= 1.89$), social withdrawal* ($d= 0.77$), mistrust* ($d= 0.63$), and receptive language problems** ($d= 0.73$). - A significant change was also found between pre

⁵ Article six has been split into two as it describes two different studies.

male (n=14).

and 2-year follow up for the above difficulties, alongside a significant change in expressive language disorder* ($d= 1.10$). Effect sizes ranged from medium to large, with differences in mistrust having the smallest effect ($d= 0.63, p<.05$), and shyness the largest ($d= 2.15, p<.001$). No exact p values. Effect sizes not reported, calculated by researcher.

6b) Wettig, H. H. G., Coleman, A. R., & Geider, F. J. (2011). Germany and Austria	Quantitative. Multicentre case series. Pre/post data, no follow up data. Inferential statistics.	Setting: Medical centre, therapy rooms Presenting difficulty: Dual diagnosis of language disorder and shyness/social anxiety (diagnosed by Speech Pathologist). Sample Size: 167 parent-child dyads Age: Mean = 4.5 years (SD= 1.1). Gender: Female (n=60), male (n=107).	Treatment Type: 1:1 Assessment: CASCAP- D (Döpfner et al., 1999). Session No: Mean = 18, Maximum 55 (no minimum data). Frequency of sessions: Not reported, 30-45 minutes.	-Post treatment, using the CG results from 6a, there were no significant differences between TG and CG for shyness, attention difficulties, poor cooperation, conforming and mistrust. Significant differences were found between the TG and CG for social withdrawal* ($d= 0.60$), low self-confidence** ($d= 0.76$), expressive*** ($d= 1.51$) and receptive language disorder*** ($d= 0.52$). - TG: All variables significantly changed between pre and post therapy for the TG*** with medium to large effect. Expressive language was found to have the least meaningful effect ($d= 0.60$) compared to shyness ($d= 2.13$). No exact p values reported. Effect sizes not reported, calculated by researcher. -Similar results were found in the current study (6b) as the previously controlled study (6a).
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Note: For quantitative studies the following significance indicators are used: * $p<.05$; ** $p<.01$; *** $p<.001$. All reported effect sizes were reported or have been converted to d to facilitate comparisons, d values indicate $d= 0.2$ (small), 0.5 (medium), 0.8 (large), (Cohen, 1988), MIMRS (Marschak Interaction Method Rating System); CBCL (Child Behavior Checklist); LAC (Looked after children); ID (Intellectual Disabilities), ASD (Autistic Spectrum Disorder), SDQ (Strengths and Difficulties Questionnaire); SRS (Social Responsiveness Scale); CASCAP-D (Clinical Assessment Scale for Child and Adolescent Psychopathology), TG (Treatment group); WC (Waitlist control), CG (Control group).

Results

Of the original 534 studies identified (minus duplications), only six articles (seven studies) were eligible for review. A narrative review of study characteristics, study quality, and key findings in line with the systematic literature review aims, shall be provided. A meta-analysis could not be completed for this study due to the heterogeneity of participants, outcome measures and timeframes assessed between each of the eligible studies (Boland et al., 2014).

General Characteristics

A significant amount of variance was found between each study and were conducted across the world, including Canada (1), UK (2), USA (3), China (4,5), Germany (6a,6b) and Austria (6b). Participant samples ranged from 8-167, with 63% of participants male with a mean age range (where reported) of 4.1 to 10.34 years. One study (6a) reported a sample consisting of 73% males, with the higher proportion of males to females within the studies creating difficulties in generalisability. The significant age ranges also pose greater risk of confounding factors that may also contribute to change, such as the variance in developmental stages between children aged four and 10 years old.

Most studies utilised a case series design using pre-post measures (1, 2, 3, 6b) alongside the use of quasi-experimental design (6a) and RCTs (4, 5). Whilst one study reported the use of a control group (6b), this was found to be from another study dataset (6a) with concerns of how comparable this control group was in relation to the treatment group (e.g. recruited at a different time and country). Study settings varied from schools (2, 4), home (2), therapy clinics (1, 6a, 6b) and one unknown (3), with most studies including the parent/carer within sessions (1, 3, 4, 6a, 6b). Other key adults used were those from school settings, e.g. teachers (2, 5). Four studies (1, 3, 6a, 6b) used 1:1 Theraplay sessions (involving child, adult and therapist), with two studies using Group Theraplay (4, 5) and one study a mixture of both (2). Where reported, the mean number of sessions ranged between 8-19 sessions, with a reported range of 4-66 sessions. Sessions were delivered on a weekly basis (2, 4, 5) with one study delivering this intensely for 2 sessions daily, for two weeks (3). Clinical heterogeneity of how Theraplay interventions are delivered is evident, and subsequently impacts the ability to draw accurate conclusions (Gagnier,

Moher, Book, Beyene & Bombardier, 2012). Results from the current review will be based on using narrative synthesis and relating this to the population, intervention, comparison and outcome (PICO), as recommended when clinical heterogeneity is present (Gagnier et al., 2012).

Quality Appraisal Results

Results from each of the CATs are tabulated in Table 2, 3, and 4. Studies varied in their reporting of whether the therapist delivering Theraplay had received adequate training from the Theraplay Institute⁶ (2017d), with one study (3) reporting that the teachers received 'basic, introductory training' (Siu, 2014, p.192). This lack of accredited training weakens the fidelity of the intervention, despite attempts from the researcher to address this using fidelity checks and supervision. Three of the studies also had some association with the Theraplay Institute (3, 6a, 6b) and only one acknowledging no affiliation with the Theraplay Institute in their article (2). None of the studies reported who had funded the research. This places the studies at risk to researcher and funding bias, and the potential to publish results that support the Theraplay Institute.

Mixed results were found in how studies reported the procedure and typical session of the Theraplay intervention, with Group Theraplay studies applying this better (2, 4, 5). An example session plan was only provided by one study (5). Theraplay recommends the transition of key adults into the Theraplay sessions (Booth & Jernberg, 2009), however inconsistencies were noted on how this was delivered. Some studies reported that this transition occurred (4, 6a, 6b) with only one study being clear on the duration of the adult's participation in sessions (3). However, it was also noted in this study that the child was not participative in all sessions offered. This fluctuation and lack of clarity comprises the studies validity and reliability.

Only one study (1) measured change between the four core concepts of Theraplay (structure, challenge, nurture and engagement), despite Theraplay games grounding in these being the key ingredients to change. Poor explanations of how the child's presenting problem was related to the attachment-theory underpinnings of

⁶ The Theraplay Institute (2017d) stipulate that to use Theraplay individuals need to have attended the minimum Level One training.

Theraplay were also seen in most studies (1, 2, 4, 5, 6a, 6b).

A range of assessment measures were used within the studies, with the Child Behaviour Checklist (CBCL, Achenbach, 1991) or variations and adaptations of scoring systems for the Marschak Interaction Method (MIM, McKay, Pickens & Stewart, 1996; O'Connor, Ammen, Backman, & Hitchcock, 2001) most common (1, 3, 4). Several self-report assessments were used and completed by key adults involved within the Theraplay intervention (1, 2, 4) which enhances the likelihood of reporting bias.

Most studies were poor at reporting the statistical analysis and inferential data. None included information into whether the analysis was adequately powered or met parametric assumptions, apart from one study acknowledging this as a potential limitation (5). Three studies did not report effect sizes (2, 6a, 6b) despite recommendations of doing so (Dancey & Reidy, 2017). These were instead established by the researcher. The small sample sizes and one study's multiple use of the same data (2) increased their risk of type 1 error.

Table 2.

Quality Appraisal using Critical Appraisal Tool (Moola et al., 2017): Case series.

Study	1	2	3	6b
Clear inclusion criteria	Y	N	N	U
Identification of presenting problem clear	U	U	U	U
Valid measure of presenting problem/specialist service	U	N	U	Y
Consecutive inclusion of participants	U	N	N	N
Complete inclusion of participants	U	N	N	N
Demographics clearly reported	U	Y	U	Y
Clear description of Theraplay	N	Y	U	Y
Therapist Theraplay trained	U	U	Y	Y
Standardised outcome measure	U	U	N	U
Theraplay four concepts measured	Y	N	N	N
Outcomes/follow up results reported	U	U	U	Y
Appropriate statistical analysis	Y	Y	U	Y
Presenting difficulty related to Theraplay theory	U	U	U	U

Note: Y (Yes) the study clearly provides a rich description of item, N (No) little information is provided to be able to adequately assess this item, U (Unclear) full or partial missing information, therefore unable to fully assess whether it addresses the item.

Table 3.

Quality Appraisal using Critical Appraisal Tool (Tufanaru et al., 2017): Quasi-experimental designs.

Study	6a
Clear 'cause' and 'effect'	Y
Valid measure of presenting problem/specialist service	Y
Participants in comparison similar	N
Participants in comparison receiving similar treatment	N
Control group	U
Demographics clearly reported	Y
Clear description of Theraplay	Y
Therapist Theraplay trained	Y
Standardised outcome measure	U
Theraplay four concepts measured	N
Pre/post multiple measurements	N
Follow up complete, or described/analysed	U
Same outcome measurements in comparison	N
Appropriate statistical analysis	Y
Presenting difficulty related to Theraplay theory	U

Note: Y (Yes) the study clearly provides a rich description of item, N (No) little information is provided to be able to adequately assess this item, U (Unclear) full or partial missing information, therefore unable to fully assess whether it addresses the item.

Case Series / Quasi Experimental Design

Case series designs were poorer at reporting how the child's presenting difficulties were measured, alongside missing inclusion/exclusion criteria. All studies used a pre-post study design (1, 2, 3, 6a) alongside additional follow-up (6a). However, this design mean that the effects cannot be truly explained by the intervention itself, as the results may have been due to other factors such as maturation of participants, information given about Theraplay itself or effects of completing the measures themselves (Marsden & Torgerson, 2012). It could also be argued that these changes may have naturally occurred without intervention.

Table 4.

Quality Appraisal using Critical Appraisal Tool (Tufanaru et al., 2017): Randomised control trials (RCT).

Study	4	5
Valid measure of presenting problem/specialist service	Y	Y
Demographics clearly reported	Y	U
True randomisation	U	U
Treatment allocation concealed	U	U
Groups similar at baseline	Y	U
Participants blind to treatment	U	U
Clear description of Theraplay	Y	Y
Therapist Theraplay trained	Y	U
Groups treated identically	N	N
Complete follow up	U	U
Standardised outcome measure	Y	Y
Participants analysis in allocated groups	Y	Y
Theraplay four concepts measured	N	N
Outcomes measured in the same way	U	Y
Outcomes measured in reliable way	U	U
Appropriate statistical analysis	Y	Y
Presenting difficulty related to Theraplay theory	U	U

Note: Y (Yes) the study clearly provides a rich description of item, N (No) little information is provided to be able to adequately assess this item, U (Unclear) full or partial missing information, therefore unable to fully assess whether it addresses the item.

Randomised Control Trials (RCT)

RCTs are deemed to be one of the most rigorous research designs (Ruth et al., 2005). Several weaknesses were found within the two included RCT studies (4, 5). A lack of information was provided regarding the process of randomisation alongside differences between the control and treatment groups (5). There was also missing information of how the control group post-measures were collected (4, 5). The use of waiting list control groups (4, 5) also questions ethical practices, by delaying identified participants of their opportunity to engage in treatment. Particularly as both studies recruited their participants by identifying the presenting problem, one at a clinically significant level (4).

Presenting Difficulties

Significant results are reported at the recommended $p < .05$ (Dancey et al., 2017), with Cohen's d effect sizes at 0.2 (small), 0.5 (medium), 0.8 (large), (Cohen, 1988).

Internalising (emotional) and externalising (behavioural) difficulties: Four studies found a significant decline in children's internalising difficulties following intervention (1, 4). A statistically significant decrease of internalising difficulties, with meaningful effect, was reported when using the CBCL (Achenbach, 1991). These changes were found when comparing pre and post CBCL internalising scores for 1:1 Theraplay (1), alongside the use of Group Theraplay being superior when compared with a waitlist control group (4). A significant change in total problems and externalising difficulties were also found following intervention (1), with moderately large to large effect.

Dual diagnosis: A statistically significant improvement with meaningful effect was found in children's attention, cooperation and levels of conformity, following 1:1 Theraplay for children with a dual diagnosis of a language disorder and clinical shyness/social anxiety (6a). A significant decline with meaningful effect was also found in children's levels of shyness, social withdrawal and mistrust, post 1:1 Theraplay (6a). Receptive language skills also significantly improved following intervention, with these changes maintained at two-year follow up. Interestingly, a statistically significant change between post-intervention and two-year follow up was also found with children's expressive language skills.

When expanded to a multicentre design (6b), all areas of clinical shyness were found to statistically improve post 1:1 Theraplay, including symptoms of attention, cooperation, levels of conformity, social withdrawal, mistrust and low self-confidence. Children's expressive and receptive language skills were also seen to have significantly improved. When these results were compared with the control group results from the subsequent study (6a), significant improvements with medium to large effect were found in children's self-confidence, expressive and receptive language skills, alongside a decline in social withdrawal. Effect sizes were calculated by the researcher for both studies, with results highlighting meaningful change for Theraplay with dual diagnosis.

Social and emotional needs of looked after children (LAC): No significant changes were found when using Theraplay for LAC with social and emotional needs (2). Dependent t-tests found no changes between pre and post results on the Strengths and Difficulties Questionnaire (SDQ, Goodman 1997) when combining the results of 1:1 and Group Theraplay, or when independently analysing 1:1 or Group Theraplay. Instead, a statistically significant difference was found between the two applications of Theraplay for total problems, hyperactivity, conduct problems and prosocial behaviours. However, these scores are more likely to reflect the researcher's allocation of participants to either 1:1 or group format, with children with more complex needs allocated to 1:1. No effect sizes or exact p values were reported to determine true significance or effect, with the SDQ causing potential issues with sensitivity to change or floor/ceiling effects.

Developmental disabilities: Statistically significant changes were found when using Theraplay with children diagnosed with Autistic Spectrum Disorder (ASD), including a difference in positivity, eye contact and acceptance of guidance at the beginning and end of Theraplay interventions (3). Differences were maintained at 3-month follow up. No changes were found between the beginning and end of Theraplay interventions in children's observed affect, body positioning towards parent, responsiveness to cues from parent and attentiveness to task. When the 1:1 Theraplay intervention was broken down into four time points, children's levels of positivity, body positioning towards parent and acceptance of guidance was found to statistically improve as the sessions progressed over time. No effect sizes, exact p values or standard deviations were reported to determine true significance or magnitude of effect. Missing data reported meant that the researcher was unable to calculate effect sizes.

Theraplay was found to be more effective than school lessons as usual (control group) for children with mild or moderate Intellectual Disabilities (5), with a small but significant effect shown. Significant changes were noted in children's social awareness, social cognition, social communication and social motivation after accessing Group Theraplay sessions, whereas no significant changes were noted in the control group.

Adult-child relationship. Despite theoretical underpinnings of attachment theory within the Theraplay model, and its focus on it being a relationship-based treatment model, few studies acknowledged or monitored changes within the adult-child relationships. Significant improvements, with meaningful effect, were found between parent and child within the Theraplay domains of challenge and nurture following 1:1 Theraplay, including a significant difference in the overall relationship (1). No significant changes within the parents use and child's response to structure and engagement were found after the use of Theraplay.

No significant changes were found within the overall relationship when assessed with families of children with ASD (3), with a significant improvement in balance between parent and child initiating and controlling behaviours. However, a significant improvement in parent's facial expression and affect, response to behavioural cues, eye contact towards child and offering of guidance was found following Theraplay. These behaviours, alongside parent's encouragement, were found to statistically improve as the sessions progressed over time. This pattern of progression was not statistically significant for parental eye contact. Effect sizes were not reported and were unable to be calculated for these results, therefore the true magnitude of this effect cannot be concluded.

Treatment

Theraplay was delivered in two formats, 1:1 (involving child, adult and therapist only) or group (several child-adult dyads and therapists). 1:1 and Group Theraplay both found promising results in terms of their effectiveness, with both formats identifying a mixture of significant and non-significant results. Where reported or calculated, 1:1 Theraplay sessions was seen to show more meaningful effect in its significant changes (ranging from moderate to large effect). Group Theraplay was also found to show meaningful change, however there was a broader range of effect (small to large). Firm conclusions cannot be made due to variance between studies, missing information and more studies using a 1:1 format.

One study, which implemented a mixture of both (2) found the weakest set of results and no significant results in terms of effectiveness, other than identifying the statistical difference between the two datasets of 1:1 and Group Theraplay.

However, this will be related to their allocation of each Theraplay format, with more complex needs allocated to 1:1 sessions.

Discussion

Building on previous research (Brayman, 2016), the primary aim of this review was to assess the effectiveness of Theraplay for children aged 12 years and younger presenting with attachment difficulties and other mental health and developmental difficulties. Interestingly, none of the studies included within the review assessed the use of Theraplay for children with attachment difficulties. Therefore, this presentation cannot be commented on. Studies for children with developmental disabilities (ASD and ID), dual diagnoses (language disorder and clinical shyness/social anxiety), social and emotional difficulties with LAC and internalising and externalising difficulties were included. Mixed results were found regarding the effectiveness of Theraplay, compounded by the mixed quality and potential biases of studies.

Theraplay was seen to be most effective at reducing children's internalising difficulties demonstrated the most positive results, alongside significant changes in children's receptive language skills and several symptoms of clinical shyness when presenting with a dual diagnosis. Most of these changes were found when expanding the design to multiple clinical settings and after a 2-year follow up, suggesting the generalisability and longevity of the effectiveness of Theraplay for this population group. The most meaningful change when using Theraplay was found to be with children with a dual diagnosis.

Mixed results were found for children with developmental disabilities. Theraplay was found to be more effective at enhancing social difficulties than usual school classes for children with ID, whereas some (but not all) changes within the parent-child relationship were found following Theraplay for children with ASD. The least meaningful change was using Theraplay for children with intellectual disabilities and improving social responsiveness. Theraplay was not found to be effective at reducing social and emotional difficulties for LAC, with no significant changes observed following intervention, with the study potentially exposed to floor/ceiling effects with the SDQ (Goodman, 1997). Interestingly, this was the only study that explicitly reported that they had no affiliation with the Theraplay Institute. Whilst

tentative conclusions can be drawn into the effectiveness of Theraplay in comparison to control groups, most of these results can only provide inferences that Theraplay is better than nothing due to their pre-post design.

Whilst promising results were identified, it is important to consider the methodological quality of the studies, particularly if these are being used to guide clinical practice. Demographic data was presented well across most studies; however, inconsistencies were found in how the Theraplay intervention itself was delivered and how the presenting problem related to the premise of attachment theory. A high level of heterogeneity was also identified between these studies, including their methodology, implementation of Theraplay and analysis of outcomes. Most studies utilised a case series design, which were poor at providing clear details regarding their inclusion/exclusion criteria and participant selection process. Alternatively, the two studies using an RCT design lacked information regarding their randomisation process and how control group data was collected. Despite these concerns, as all studies were implemented within naturalistic settings (e.g. therapy clinics, schools), the positive results found do enhance their ecological validity.

One of the most surprising outcomes of the review was each studies lack of information regarding statistical analysis and the quantitative data collected. Although some studies were better at this than others, minimal information was provided whether the datasets were adequately powered or met parametric assumptions, alongside minimal reporting of effect sizes and accurate statistical values. These concerns, alongside the varied sample sizes and ambiguity leave questions regarding the quality of the studies identified.

The foundations of attachment theory within the Theraplay model are widely promoted, with mixed explanations given by studies of how the presenting problem related to this theory. Theraplay acknowledges the central role of parents supporting the child in learning self-regulation skills, which could be supported within the changes of internalising and externalising difficulties found. However, Theraplay promotes their goal to 'change the child's inner working model through interactions that are responsive, attuned, empathic and reflective' (Booth & Jernberg, 2009, p57-58). Firstly, measuring an internalised concept of inner working models leads to challenges itself. Secondly, none of the studies included monitored any changes

related to children's attachment presentations. Therefore, it is difficult to establish whether the changes observed were related to changes in attachment and inner working models.

Theraplay session's inclusion of key adults (e.g. parent, school teacher) highlighted the role of modelling and social learning theory within the model (Bandura, 1973). Therapists model the Theraplay games and approach to the parent, for this in turn to be replicated within the adult. It could therefore be suggested that modelling provides a key mechanism and underlying process of change for children, within this treatment model. Previous qualitative research identified the theme of experiential learning and modelling from parental focus groups (Hong, 2014). However, only one study measured any parental change during and following intervention. Significant changes were found, but no account was provided into how these changes may or may not have contributed to change within the child.

Despite the Theraplay model's establishment in 1970, and the broadness of this review question, it was surprising to find only six eligible articles and the high level of heterogeneity and quality within these articles. A final aim of the review was to establish the evidence of Theraplay in line with the hourglass model (Salkovski, 1995) and its current implementation within services. Theraplay literature remains in the early stages of establishing a rigorous evidence-base, with most of the literature on clinical perspective and smaller scale exploratory studies. Its use, however, appears to have broadened out within clinical practise and presenting difficulties, despite previous acknowledgements for the need of more rigorous research and publications in peer-reviewed journals (Munns, 2000; Wardrop & Meyer, 2009). Conversely, a large proportion of therapists and services who utilise Theraplay validate their experience of its effectiveness (Hong, 2014); Francis Bennion & Humrich, 2017). Nonetheless, arguments for practice-based evidence of integrating expertise and service-led parameters (Barkham, Stiles, Lambert & Mellor-Clark, 2010), alongside the accumulation of clinician accounts of how Theraplay has helped families and its worldwide use, needs to be acknowledged.

Limitations

The main limitation of this review would be potential reporting bias, with one researcher screening, identifying and abstracting data. Adapting established critical appraisal tools also reduces the validity and reliability of assessing the quality of studies, increasing further subjectivity. Whilst specificity and sensitivity searches were conducted to establish the most effective search terms, the high number of initial studies found in comparison to those that met inclusion criteria highlights potential limitations with the search process. This process is likely to have excluded studies that focused on the adult role and associated factors within the Theraplay sessions and may explain missing information included within the study.

The absence of eligible studies may reflect a lack of research within the area. However, the inclusion of published studies only, and exclusion of studies that reported the use of Theraplay with other approaches, also places the review at risk of publication bias. The quality appraisal process and heterogeneity between studies also made it difficult to draw firm conclusions in relation to the primary aim of the review.

Finally, it is important to acknowledge that the researcher completing the review has no affiliation with the Theraplay Institute. However, they have completed the Level One Theraplay training, established by the Theraplay Institute (2017d). This may have led to some reporting bias within the review process.

Future Research

Firstly, future research into Theraplay needs to be of higher quality, using more robust and rigorous methodological design. Research monitoring any changes to children's attachment patterns, the underlying premise of the Theraplay model, would be advantageous, or the monitoring of process mechanisms within Theraplay sessions (i.e. games related to the four core concepts) would provide the opportunity to monitor change in the client's presenting difficulties and what the key ingredients to change are. Further research into the role of the key adult within sessions (either parent/carer or teacher), including the modelling process between therapist and adult, would also be of benefit. Building on this, gaining an understanding of the modelling process within Group Theraplay formats would be helpful in establishing

other contributing factors that a group setting offers, in comparison to a 1:1. Finally, more published research into the effectiveness and efficacy of Theraplay for attachment difficulties and beyond would provide more clarity into whether it is an effective model for children's mental health difficulties, building on its establishment within services worldwide.

With these recommendations in mind, it would also be helpful to consider why there is a lack of high quality and rigorous research when using the Theraplay model and help to address any potential barriers.

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Journal Paper⁷

⁷ The following paper has been submitted according to the formatting guidelines of the Evidence-based Practice in Child and Adolescent Mental Health (EPCAMH). Footnotes are used to signpost the reader to relevant information in the extended paper.

Theraplay for Attachment-Related Challenging Behaviour:

A Case Series Approach

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Abstract

Parent training programmes are recommended first line interventions for childhood challenging behaviours. . Challenging behaviour has been shown to be associated with attachment insecurities. It could be therefore be argued that challenging behaviour interventions should take attachment experiences into account. Theraplay® (an attachment and play-based therapeutic approach) is a promising alternative intervention for childhood challenging behaviours, yet it lacks a rigorous evidence base into its effectiveness. The current study aimed to investigate the effectiveness of Theraplay for children presenting with attachment-related challenging behaviours. Three families engaged in a mixed method approach using a case series design. Baseline and intervention sessions assessed changes in challenging behaviours, attachment, parental well-being, and individualised goals. Theraplay's four key mechanisms were investigated through session video recordings alongside participant measures. Quantitative data was analysed visually and also using clinically significant and reliable change alongside Tau-U analysis. Qualitative data from change interviews were analysed using framework analysis. For two families, intervention sessions were reduced due to COVID-19 restrictions. The content of sessions accessed remained coherent to the approach. Results revealed few significant changes and no effect of Theraplay on attachment-related challenging behaviours. There was some support for Theraplay mechanisms, however, the changes were not meaningful and did not lead to significant changes in challenging behaviours or attachment. The current findings highlight the need for more clinical and rigorous research into Theraplay's effectiveness and hypothesised processes of change. More research into Theraplay's hypothesised attachment underpinnings is also warranted, alongside the development of a quantitative session measure of change.

Keywords: Theraplay, attachment, challenging behaviours, case series design

Introduction

Childhood challenging behaviours are one of the most common reasons for referrals into Child and Adolescent Mental Health Services (CAMHS; National Institute for Health and Care Excellence, (NICE), 2017). Mandalia et al., (2018) estimate that nearly one in twenty (4.6%) 5-19-year olds experience behavioural difficulties at a problematic level. Childhood challenging behaviours can be conceptualised as internalising difficulties (e.g. anxiety, withdrawal), or externalising difficulties (e.g. disruption, hyperactivity, and aggression; Hinshaw, 1987; Nikstat & Riemann, 2020)⁸. Associated consequences of childhood challenging behaviours include mental health difficulties later in childhood, engagement in high-risk taking behaviours (Kim-Cohen et al., 2003), increased parent/carer stress (Donenberg & Baker, 1993) and an increased cost to society (Parsonage, Khan, & Saunders, 2014). Looked After and Adopted Children (LAAC) who display challenging behaviours are also at greater risk of placement instability and breakdown (Rock, Michelson, Thomson, & Day, 2015).⁹

Various biopsychosocial risk factors have been associated with childhood challenging behaviours. These risk factors include personal factors (e.g. biology, temperament), environmental (e.g. neighbourhood, poverty), and parental factors such as parenting styles (Bosmans, Braet, Leeuwen, & Beyers, 2006; Burke, Loeber, & Birmaher, 2002; DeKlyen & Greenberg, 2016; Liu, 2004). Children who have experienced disrupted care are also at greater risk of displaying challenging behaviours (Hutchings et al., 2007) with behavioural difficulties more prevalent in LAAC in comparison to non-LAAC (Ford, Vostanis, Meltzer, & Goodman, 2007; Wierzbicki, 1993).¹⁰

Parent training programmes are recommended by the NICE Guidelines (NICE, 2017) for childhood challenging behaviours and are regularly implemented within services.¹¹ Popular parent training models include the ‘Incredible Years Program’ (Webster-Stratton, 2001) the ‘Positive Parenting Program’ (Markie-Dadds & Sanders, 2006), and ‘Parent–Child Interaction Therapy’ (Brinkmeyer & Eyberg, 2003). Parenting programmes aim to reduce

⁸ For the purpose of the study ‘challenging behaviour’ shall account for both internalising and externalising difficulties; see section 1.1 of the extended introduction for more information.

⁹ See section 1.2 of extended introduction for further information on the impact of childhood challenging behaviours.

¹⁰ See sections 1.3- 1.5 of extended introduction for further information on the prevalence and epidemiology of childhood challenging behaviours.

¹¹ See sections 1.6 and 1.7 of extended introduction for further information on recommended interventions for challenging behaviours and parent training programmes.

undesirable and challenging behaviours alongside enhancing desirable behaviours (Barlow & Stewart-Brown, 2000; Moffitt & Scott, 2008). Parenting programmes are often informed by behavioural or social learning theory (Reyno & McGrath, 2006)¹² and involve teaching common techniques such as; modelling (e.g. alternative parenting approaches); rehearsal (such as role-play in sessions); receiving feedback (e.g. how to respond or what is helpful/unhelpful in the person's approach); and out of session homework (McKee, Colletti, Rakow, Jones, & Forehand, 2008; Scott, 2008; Tarver, Daley, Lockwood & Sayal, 2014).

Parent training programmes are considered a 'well-established' intervention for childhood challenging behaviours (McKee et al., 2008; Moffitt & Scott, 2008). Parent programmes have been found to reduce children's behavioural difficulties (Buchanan-Pascall, Melvin, Gordon & Gray, 2019; Furlong et al., 2012; Lundahl, Risser, & Lovejoy, 2005; Tarver et al., 2014). Reductions in challenging behaviours following parenting programmes have been found for varied parental roles, such as birth parents and foster carers (Uretsky & Hoffman, 2017). Nonetheless, the long-term effectiveness of parent training programmes has been questioned with high levels of heterogeneity in programme designs and differences in the operationalisation of challenging behaviours (Smedler, Hjern, Wiklund, Anttila, & Pettersson, 2014).

Parenting programmes are not effective for all families (Reyno & McGrath, 2016)¹³. Some children continue to experience a degree of challenging behaviour after parent training programmes (Greene & Doyle, 1999), with poorer outcomes associated with maternal mental health, low family income, and parental education/occupation (Reyno & McGrath, 2016). Parenting programmes have also been found to be more effective for younger children (Hutchings et al., 2007; Uretsky & Hoffman, 2017) and often have poor engagement and high attrition rates (Chacko et al., 2016). The approach also typically locates 'the problem' within the parent, which may contradict the parent's perception (Prout et al., 2015). Parent training programmes also place more emphasis on the parenting approach alone and less emphasis on the coercive process¹⁴ (Burke, Pardini & Loeber, 2008). With several problems in existing parenting programmes identified, Interventions for childhood challenging behaviour could potentially benefit from consideration into the quality of parent-child interactions (Bosmans et al., 2006; Prout et al., 2015). An appropriate alternative to parenting programmes may be

¹² See section 1.8 of extended introduction for further information on theoretical underpinnings of many parenting programmes.

¹³ See section 1.9 for more information on the limitations of parent training programmes.

¹⁴ See section 1.8.2 of extended paper for more information on coercive processes

attachment-informed interventions, which are currently utilised yet less established within extant literature.

Parent-child relationships and interactions can largely be conceptualised within attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1997; 2005).¹⁵ Attachment theory focuses on the attachment bond, the child's behavioural system, and an infant's early life experiences (Ainsworth et al., 1978; Bowlby, 2005). It is suggested within attachment theory that early parent-child interactions help to co-regulate and later shape a child's ability to self-regulate emotions and behaviours (Ainsworth et al., 1978; Bowlby, 1997). Early childhood experiences also influence the development of a child's secure base; i.e. an individual who is responsive and attuned to the child's needs, who can soothe them when unsettled, and who the child can return to during exploration (Bowlby, 1997, 1973, 2005). Responsive and sensitive caregiving during early life is reported to help a child to develop a positive internal working model (Bowlby, 1997, 1973, 2005), i.e. a child who sees themselves as lovable, secure, and safe to explore. Conversely, a child who has experienced insensitive or inconsistent caregiving is reported to be more likely to develop an insecure base and negative internal working model (i.e. see themselves as unlovable and see the world and others as untrustworthy). These differing experiences contribute to the understanding of secure or insecure attachment styles (Ainsworth et al., 1978; Bowlby, 1973; Main & Solomon, 1986). Children with disrupted caregiving, such as LAAC, are reported to be at greater risk of experiencing insecure attachments (McAuley & Young, 2006), although Woolgar and Baldock (2015) suggest that it could be overestimated within this population

Attachment theory offers a developmental framework to help understand how early relationships can influence later difficulties (DeKlyen & Greenberg, 2016; O'Connor, Matias, Futh, Tantam & Scott, 2013). Systematic reviews and meta-analyses have shown an association between childhood challenging behaviours and insecure attachments¹⁶ (Fearon, Bakersman-Kranenburg, Van IJzendoorn, Lapsley, & Roisman, 2010; Fearon & Belsky, 2011; Madigan, Brumariu, Villani, Atkinson, & Lyons-Ruth, 2016; Van IJzendoorn, Schuengel, & Bakersman-Kranenburg, 1999). However, the reviews highlight the inconsistency in conceptualising and measuring attachment. Reviews consisted of different measures of attachment, with difficulties in establishing the direction of the association (e.g.

¹⁵ See section 1.10 of for more information on attachment theory

¹⁶ See section 1.11 of for further discussion of the association between challenging behaviours and attachment.

do attachment difficulties lead to greater challenging behaviours, vice versa, or is there a dual process?). Nonetheless, it is reported that insecure attachment styles alone do not lead to challenging behaviours and that other risk factors are also likely to be present (DeKlyen & Greenberg, 2016), including child temperament (Bosmans et al., 2006) and negative parenting practices (Burke et al., 2002). Furthermore, there is some suggestion that the presence of protective factors, such as pro-social siblings, extra-curricular activities, and a supportive neighbourhood, may counteract many attachment insecurities¹⁷ (Eriksson, Cater, Andershed & Andershed, 2011).

Attachment styles have reportedly been found to be amenable to intervention (Bakermans-Kranenburg, Van Ijzendoorn, & Juffer, 2003; Mountain, Cahill, & Thorpe; 2017; Wright & Edginton, 2016). Bakermans-Kranenburg et al., (2003) stated that interventions did not always need a large number of sessions to be effective. Other studies have found limited evidence to support the effectiveness of attachment interventions for certain age groups (e.g. older children/teenagers; Wright & Edginton, 2016). Furthermore, some reviews consisted of only a few studies (Mountain et al., 2017) also varied in the attachment measures reviewed and conceptualisation of attachment.

Given the identified association of attachment insecurity and childhood challenging behaviours, and attachments shown to be amenable to change, there is a potential role for alternative interventions for challenging behaviours which are attachment-informed (Scott, 2008). Furthermore, the reported limitations to parent training programmes suggest that there is scope to explore alternative interventions for childhood challenging behaviour. One increasingly popular intervention within child mental health services that may offer a suitable alternative is the dyadic model of Theraplay®. Theraplay is an increasingly popular parent-child intervention used within clinical practice and across 36 countries (The Theraplay Institute, 2020a), including within UK NHS CAMHS. Theraplay is an ‘engaging, playful, relationship-focused treatment method that is interactive, physical and fun’ (Booth & Jernberg, 2009, p.xxi)¹⁸. Theraplay is understood to be largely based on the principles of attachment theory (Bowlby, 1997). The goal of Theraplay is to enhance the parent-child relationship, and to provide the child with alternative cognitive, behavioural, and emotional experiences to revise the child’s internal working model and attachment style (Bowlby, 1997;

¹⁷ See section 1.4 and 1.5 of extended introduction for more information on risk and protective factors

¹⁸ See section 1.12 of extended introduction for further information on the model of Theraplay

Munns, 2000). Despite these claims, there has been only a small amount of research evaluating Theraplay's general efficacy and any potential processes of change¹⁹.

Theraplay hypothesises that children's presenting difficulties stem from their experiences of early relationships with caregivers (Booth & Jernberg, 2009; Booth & Winstead, 2015). Theraplay sessions aim to strengthen the overarching qualities of parent-child interactions and offer sessions which are positive, playful, and restorative. The overarching qualities of parent-child interactions are operationalised as four core Theraplay concepts: structure, engagement, nurture, and engagement²⁰. Theraplay sessions provide the opportunity for the child to engage in an attuned connection (engagement), with a basis of safety (structure), with opportunities to experience mastery (challenge), and feel worthy and cared for (nurture). The four core concepts are embedded and delivered through 'games', designed to re-create early interactions and positive attachment experiences (Booth & Jernberg, 2009). These games are identified as Theraplay key mechanisms of change (Booth & Jernberg, 2009; Rodwell & Norris, 2017). Theraplay sessions appear to facilitate the reciprocal processes that other parenting programmes may lack, and sessions aim to target changes in the child's behaviour alongside parenting responses (Burke et al., 2008)., Thus far, little appears to be understood about if and how Theraplay games contribute to any changes in attachment or behaviour observed.

Despite Theraplay's appeal and worldwide use, the current evidence-base into Theraplay's effectiveness is limited. A review by Brayman (2016) concluded that Theraplay was effective at enhancing child attachment for children aged three years and older. However, the studies included in the review, varied in their operationalisation and measurement of attachment, and had a high degree of heterogeneity of the methodological designs, which also reflect the criticisms of parenting programme research. A further review into interventions promoting secure attachments was unable to include Theraplay due to the lack of rigorous research (Wright & Edginton, 2016).

Theraplay has been utilised in various settings and implemented with many presentations; such as children with combined speech/language and behavioural disorders (Wettig, Coleman & Geider, 2011), Autistic Spectrum Disorders (Howard, Copeland, Lindaman & Cross, 2018), Developmental Disabilities (Siu, 2014), internalising and

¹⁹ See section 1.13 of extended introduction for further detail into Theraplay's evidence base

²⁰ See section 1.12.1 and 1.12.2 of extended introduction for further discussion on the four core constructs of Theraplay and the key mechanisms of change

externalising problems (Bojanowski & Ammen, 2011; Siu, 2009), and LAAC (Francis Bennion & Humrich, 2017). There is also limited evidence into Theraplay’s effectiveness for childhood challenging behaviour and attachment, including with children of various care status’ (Booth & Winstead, 2015; Lindaman & Lender, 2009). The California Evidence-Based Clearinghouse, (CEBC, 2019) acknowledges the evidence base as ‘promising’, with qualitative research promoting the effectiveness and application of Theraplay (Hong, 2014). However, most of the extant evidence is based on pre-post methodologies; therefore changes may have been due to other factors such as maturation of participants, information given about Theraplay itself, or the effects of completing the measures (Marsden & Torgerson, 2012). Despite the ‘promising’ evidence base, there are still questions into whether Theraplay is effective at changing childhood attachment; how Theraplay’s key mechanisms work; and whether the hypothesised mechanisms mediate any reported changes (Kraemer, Wilson, Fairburn, & Agras, 2002).

Given the reported limitations to parent training programmes and the association between attachment and challenging behaviour, there appears to be scope for more attachment-informed interventions for childhood challenging behaviour. On the surface Theraplay does link theoretically to the concept and understanding of attachment-related challenging behaviour. However, the evidence-base is scarce and limited, with the substantial need for more rigorous research into Theraplay’s effectiveness acknowledged (Brayman, 2016; Munns, 2000; Wardrop & Meyer, 2009). Therefore, the current study potentially offers a valuable and welcomed contribution to the nascent evidence-base of Theraplay interventions.

Aims

The current project aimed to assess the utility of Theraplay for reducing childhood challenging behaviours. Specifically, the study aimed to investigate the following questions:

- Is Theraplay effective at reducing challenging behaviour?
- Is Theraplay effective at enhancing parent-child attachment?²¹
- Do any changes in attachment underpin any reported changes in challenging behaviour?
- Do Theraplay’s reported key mechanism(s) contribute to any changes found?

²¹ For the purpose of the current study the term parent shall be used but encompasses all parental figures (i.e. birth parent, alternative parent through Special Guardianship Order (SGO), adoptive parent, foster carer, etc.).

The above aims were explored using a multiple baseline case series design. The study hoped to contribute to the clinical use of Theraplay within wider service contexts, including NHS provisions underpinned by national policy to offer evidenced-based care (Department of Health, 2015).²²

Method

*Design*²³

The study was approved by the University of Lincoln and the NHS North East – York Research Ethics Committee (REC ref 19/NE/0090)²⁴. Support for the project also gained from the relevant NHS Trust Research and Development Department and the Non-NHS service provision.

The current study consisted of a case series design²⁵ utilising a non-concurrent, A-B multiple baseline design (Smith, 2012). The A-B design consisted of an assessment/baseline period (A), and intervention and one-month follow up phase (B; Barlow, Nock & Hersen, 2008). The case series design aimed to answer the research questions into both Theraplay's effectiveness and the processes of change that Theraplay hypothesises. Theraplay interventions offer a wealth of information, with multiple sources of triangulation (Denzin, 1970) implemented in the current study. Data was gathered from three informants (parent and child self-report, researcher observations), and via multiple approaches to quantitative and qualitative analysis. The single case study design remained consistent across participants. However, some adaptations were made to procedural elements of the study due to COVID-19 restrictions, which are outlined later.²⁶

Participants and Recruitment

Participants were recruited from two services: NHS Child and Adolescent Mental Health Services (CAMHS) and a Council-commissioned therapy service²⁷. Families had accessed services for help to address the challenging behaviours their child was experiencing.

²² See section 1.14 of extended paper regarding clinical relevance and 4.9.1 for broader policy context

²³ See section 2.1 of extended paper regarding epistemological position taken in this study

²⁴ See section 2.2 of extended paper for further discussion of ethical considerations in this study

²⁵ See section 2.3 of extended paper for further discussion of case series research designs and rationale

²⁶ See section 2.4 of the extended methods for more information about COVID-19 restrictions

²⁷ See section 2.5 of extended paper for further information on recruitment

Participants were approached by clinicians in their service to ask if they were interested in taking part; if consent was provided, participants were contacted by the researcher, provided with further information, and recruited to the study if interested.

Families were eligible to participate if they met the following criteria²⁸:

- Were referred due to concerns of challenging behaviour in school and/or home, identified by a clinically significant score (t-score ≥ 65) using the Brief Problem Monitor (Achenbach, McConaughy, Ivanova, & Rescorla, 2011),
- Child aged 6-12 years at time of referral,
- Parent and child able to read, write, and speak to acceptable standards of English (ascertained by the lead researcher during the initial meeting),
- Parent above the age of 16,
- Full consent received, including from an individual with Parental Responsibility if appropriate²⁹.

Families were excluded if the child was actively involved in any court processes regarding their care. The parent provided written consent on behalf of the family, and verbal or written assent from the child was ascertained.

*Measures*³⁰

The case series design involved several outcome and process measures which were completed by the participants and research team. See Table 5 for more information about the measures, including psychometric properties and the frequency of administration.

Parents completed the Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS; Stewart-Brown et al., 2009) and Personal Questionnaire³¹ (PQ; Elliott, Mack, & Shapiro, 1999) to ascertain the well-being of the parent and their individual goals for Theraplay. Parents also completed the Brief Problem Monitor (BPM; Achenbach et al., 2011) and Maternal Perception of Child Attachment (MPCA; Hoppes & Harris, 1990) every session. The MPCA is not intended as a formal measure of attachment organisation, rather a measure of the parent's perceptions of their child's attachment to them. Children were asked

²⁸ See section 2.6 of extended paper for further discussion on inclusion/exclusion criteria

²⁹ See section 2.2.2. of extended paper for more information about consent

³⁰ See section 2.7 of extended paper for more information on the measures and rationale of measure choice

³¹ See section 2.7.2 in extended paper for detailed administration of the Personal Questionnaire

to complete the Inventory of Parent and Peer Attachment – Revised (IPPA-R; Gullone & Robinson, 2005). Only the parent related items on the IPPA-R were used.

An observational measure was completed by the researcher using video recorded session data. The Theraplay Observation Form³² (TOF), adapted from a previous Theraplay form (The Theraplay Institute, 2018), allowed a rating of Theraplay-based interactions during all video recorded sessions. During the baseline phase, data was collected from the Theraplay assessment, the Marschak Interaction Method (MIM³³; Jernberg, Booth, Koller & Allert, 1991). The TOF also enabled fidelity checks of sessions to assess adherence to the Theraplay model. Sessions needed to have an ‘opening, middle, and closing’ and follow the structure outlined by Theraplay (Booth & Jernberg, 2009; Booth & Winstead, 2015). Researchers who observed and analysed video recorded sessions had completed a minimum of Level One Theraplay training (The Theraplay Institute, 2020b).

Change Interview

An audio recorded change interview (adapted from Elliott, 2012) was completed with the parent during the final meeting. The change interview was undertaken by a researcher who was independent to the intervention³⁴. The interview aimed to gather a qualitative account of parent’s experience of Theraplay to supplement quantitative data.

³² See section 2.7.7 in extended paper for more information into the development of the TOF

³³ See section 2.7.6 in extended paper for more information about the MIM assessment

³⁴ See section 2.7.8 in extended paper for further discussion on the change interview

Table 5

Characteristics and Psychometric Properties of Measures

	Measure Construct	Description	Items	Internal Consistency*	Time/ Frequency
Parent/Carer Measure	SWEMWBS Parents well-being	Shortened measure of individual well-being, based on the WEMWBS (Tennant et al., 2007). 5-point Likert scale (1=None of the time, to 5= All of the time). Higher scores indicate better well-being.	7 items	$\alpha=.84$ (Fat, Scholes, Boniface, Mindell, & Stewart-Brown, 2017)	Pre-post (meetings with researcher). One month follow up
	PQ Individualised goals for Theraplay	Client-centred and individualised measure of change. 7-point Likert scale (1= not at all, to 7= maximum possible). Higher scores indicate more difficulties.	Up to 10 items	$\alpha =.77$ (Elliott et al., 2016)	Pre-post (meetings with researcher). One month follow up
	MPCA Child attachment	Parent's perception of their child's attachment towards them (completed by males and females in the current study). 5-point Likert scale (1= Frequently, to 5= Never). Higher scores indicate better attachment.	23 items	Mother's ($\alpha=.86$), Father's ($\alpha=.87$), (Goodman, 2010)	Every session (baseline and intervention phases) One month follow up

Parent/Carer Measure	BPM	Measure of child internalising, externalising and attentional difficulties. Only externalising scale focused on for current study.	19 items	Tot ($\alpha=.91$) Int ($\alpha=.78$) Ext ($\alpha=.86$) Att ($\alpha=.87$)	Every session (baseline and intervention phases)
	Child challenging behaviours	3-point Likert scale (0= Not True, to 2= Very True). Higher scores indicate more difficulties.		(Piper, Gray, Raber, & Birkett, 2014).	One month follow up
Child Measure	IPPA-R	Measure of child's attachment towards parents (items related to peers removed for the study).	28 items	Trust ($\alpha=.78$) Alien ($\alpha=.79$) Comm ($\alpha=.82$) (Gullone & Robinson, 2005)	Pre-post One month follow up
	Child attachment	3-point Likert scale (1= Always True, to 3= Never True). Higher scores indicate better attachment.			
Researcher Measure	MIM	Parent-child assessment consisting of nine games based on four constructs of structure, engagement, nurture, challenged.	9 games	N/A (observational and qualitative measure)	Pre-post
	Theraplay interactions	Qualitative observations based on play and interactions between parent and child			
Researcher Measure	TOF	Measure of parent-child interaction based on Theraplay constructs: Structure, Challenge, Engagement and Nurture.	21 items	Kappa $\kappa=.89$ (based on inter-rater reliability checks)	Every session (baseline and intervention phases)
	Theraplay key mechanisms	5-point Likert scale (0= Never, to 4= Always). Higher scores indicate improvement in construct	Example: <i>'The adult can engage the child in the tasks given'</i>		

Notes: SWEMWBS (Short Warwick-Edinburgh Mental Well-Being Scale); PQ (Personalised Questionnaire); MPCA (Maternal Perception of Child Attachment); BPM (Brief Problem Monitor); IPPA-R (Inventory of Parent and Peer Attachment, Revised); MIM (Marschak Interaction Method); TOF (Theraplay Observation Form); M (Male); F (Female); Av (Average); Tot (Total); Int (Internalising); Ext (Externalising); Att (Attention); Trust (Trusting); Alien (Alienation); Comm (Communication), *Cronbach's Alpha Coefficient

*Procedure*³⁵

Three participants completed the baseline and intervention phases of the design. The study allowed for a baseline period consisting of up to four sessions. Baseline sessions consisted of standardised Theraplay assessment sessions. The baseline assessment sessions consisted; a) of a parent meeting with the therapist (assessment and information sharing about the Theraplay model), b) a session completing the MIM assessment, and c) a MIM feedback session. The MIM is non-interventional and the Theraplay model's standardised assessment. One assessment baseline session was added for research purposes. The research session consisted of completing the study paperwork, pre-measures (SWEMWBS, PQ), and the BPM, MPCA.

Gold standard practice within single-case research is for baseline stability and intervention to be introduced once baseline stability has been achieved³⁶ (Kratowill et al., 2010; Morley, 2018; Smith, 2012). While the study aimed for a stable baseline, this was not always possible given that it was not ethically appropriate to delay treatment.

*Intervention*³⁷

Theraplay interventions were provided by therapists who had completed a minimum of Level One training (The Theraplay Institute, 2020b).³⁸ The number and content of sessions were pre-determined by the service and the allocated therapist. The intervention sessions incorporated Theraplay 'games' based on the areas of need (i.e. Structure, Challenge, Engagement Nurture) and followed the typical Theraplay session structure³⁹. Adherence to the Theraplay model was assessed via the TOF measure³³.

Participants completed the process measures (BPM, MPCA) before each session. All video recorded sessions were observed and analysed by the lead researcher using the TOF, and 15% were double coded to assess inter-rater reliability, with 'strong' inter-rater reliability found ($\kappa=0.89$; McHugh, 2012)⁴⁰. After the final intervention session, participants met with the lead researcher to repeat the BPM and MPCA and to complete the post measures

³⁵ See section 2.8 in extended paper for detailed procedural processes

³⁶ See section 2.8.1 in extended paper for further information on baseline stability within single-case research

³⁷ See section 1.12 in extended paper for further information on Theraplay intervention

³⁸ See section 2.9 and 2.10 in the ended paper for information on therapist training and fidelity

³⁹ See section 1.12 for more information on Theraplay session structures

⁴⁰ See section 2.10 of the extended methods section for more information on inter-rater reliability

(SWEMWBS, PQ, IPPA-R). An audio-recorded change interview (Elliott, 2012) was also completed by the lead researcher who had not delivered the intervention to families.

One month after the final session, participants were asked to repeat the SWEMWBS, PQ, BPM, and MPCA to ascertain whether change had been sustained. Children were asked to repeat the IPPA-R.

In line with COVID-19 restrictions that occurred during the study, intervention session numbers for two families were reduced due to Theraplay sessions being suspended. Details of the allocated and received session numbers can be seen in the results section. Families that were affected by COVID-19 restrictions still offered both phases of the A-B case series design and continued to offer follow-up data⁴¹.

*Data Analysis*⁴²

Visual analysis is the recommended form of analysis within single case research (Parker, Cryer & Byrns, 2006). Graphs were visually analysed to inspect for data trend, variability, point of change, and central location (Morley, 2018). Visual inspection aimed to explore if, and when, change occurred, and whether any key mechanisms of change within Theraplay contributed to any changes observed. Tau-U⁴³ effect sizes were calculated alongside visual analysis (Parker, Vannest, Davis & Sauber, 2011). Jacobson and Truax's (1991)⁴⁴ standards of reliable and clinically significant change were also calculated⁴⁵. Data analysis from change interviews was informed by Framework Analysis (FA; Ritchie & Spencer, 1994).

Results

Six families expressed an interest in the project, and three families participated. Of the three who did not participate; (a) one family was unable to due to COVID-19 restrictions, (b) one family due to Theraplay sessions starting before baseline data were collected, and (c) one

⁴¹ See section 2.4 of the extended methods for more information about COVID-19 restrictions

⁴² See section 2.11 in extended methods for further information on analyses processes

⁴³ See section 2.11.3.3 in the extended paper for the rationale in using Tau-U analysis

⁴⁴ See section 2.11.2 in the extended paper for elaboration on RCI and CSC processes

⁴⁵ For CSC to be achieved, participant's pre-treatment scores needed to fall within the clinical range (where appropriate, and pre-post change needed to be greater than the RCI value.

family did not attend the pre-intervention meeting.⁴⁶ Participant demographics are presented in Table 6; pseudonyms have been used to protect participant confidentiality.

No families dropped out of the study. However, for two of the families who participated (participants two and three) some adaptations to design were implemented amongst COVID-19 restrictions. Fidelity checks using observational data found 100% adherence to the Theraplay model.⁴⁷

Table 6.

Participant demographics

	Participants One 'Lizzie [c] and Rachel [p]'	Participants Two 'Holly [c] and Steve [p]'	Participants Three 'Tom [c] and Carl [p]'
Child's Age	10 years old	9 years old	6 years old
Child's Gender	Female	Female	Male
Parental Relationship	Birth Aunt	Birth Father	Adoptive Father
Time spent living with family*	6 years	5.5 years	6 years
Past Therapy Experience	None	Counselling through school	None
No. of Sessions Allocated	17 sessions	12 sessions	18 sessions
COVID-19 Adaptations	None	Sessions ended at session 5	Sessions ended at session 12

Note: *duration at initial researcher meeting, c: child, p: parent.

*Quantitative Data*⁴⁸

In order to examine whether Theraplay is effective at reducing challenging behaviour and enhancing parent-child attachment, visual and Tau-U analyses are presented for each family. RCI/CSC analyses are also presented to assess if any relationships apparent from the visual analysis were reliable and clinically significant. RCI/CSC analyses also examined any changes in parental well-being and individualised goals for Theraplay. Finally, to assess

⁴⁶ See section 4.6.1 of the extended paper for further thought into participant attrition

⁴⁷ See section 2.9 of extended paper for further information on fidelity checks.

⁴⁸ See section 3 of extended results for further analysis of the BPM, PQ, and TOF measures

whether any changes in attachment contributed to any changes in challenging behaviour, and whether Theraplay mechanisms contribution to any changes found, visual analyses of the processes are presented.

Participants One: 'Lizzie and Rachel'⁴⁹

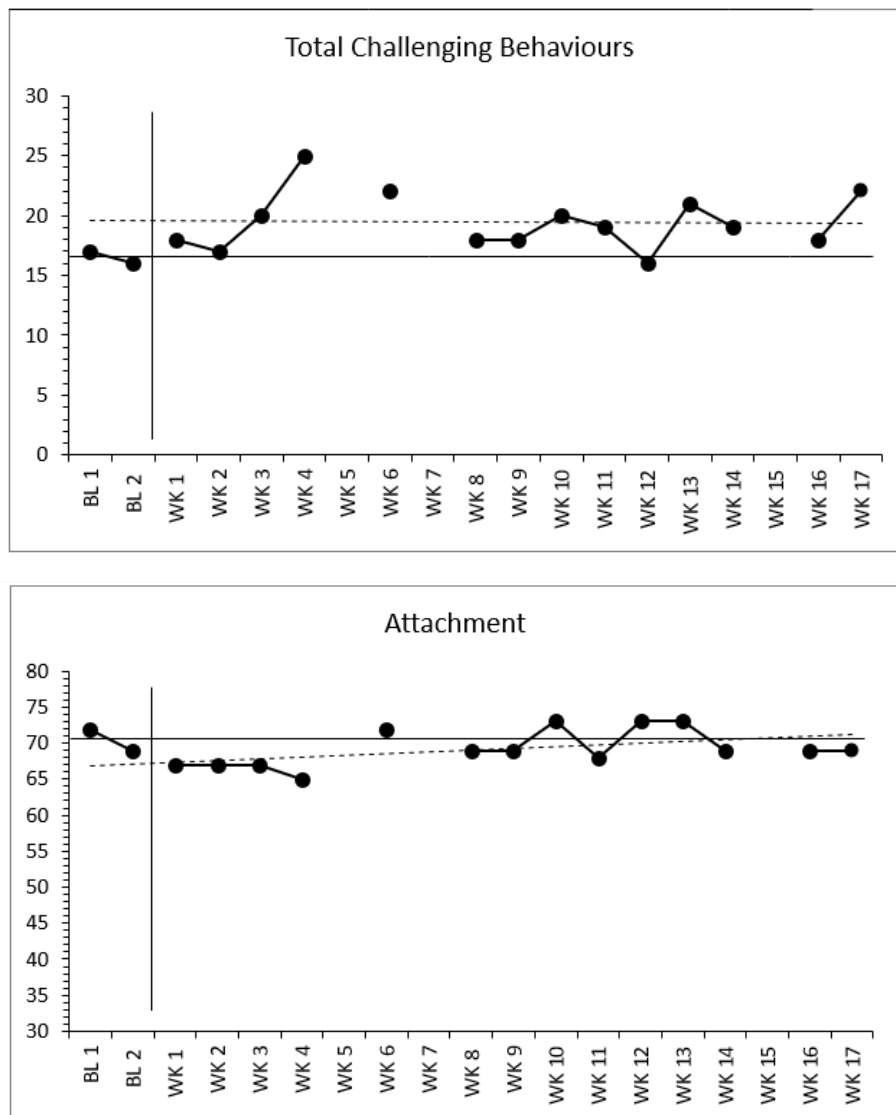


Figure 2. Visual data across baseline, intervention, follow-up. Dotted line indicates intervention trendline. Solid horizontal line indicates baseline median. BL: baseline; WK: intervention session week; vertical lines indicate different phases. Total challenging behaviours is total BPM score.

⁴⁹ See section 3.8.1 of extended results for participant summary

Participants Two: ‘Holly and Steve’⁵⁰

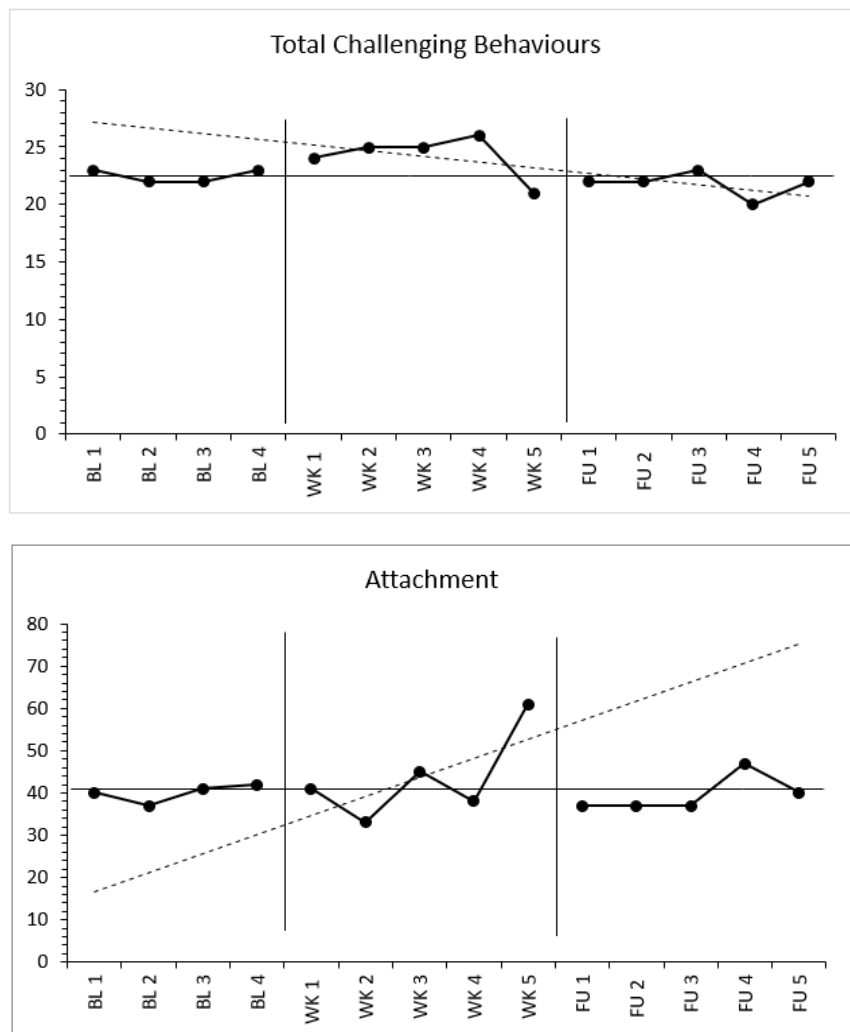


Figure 3. Visual data across baseline, intervention, follow-up. Dotted line indicates intervention trendline. Solid horizontal line indicates baseline median. BL: baseline; WK: intervention session week; vertical lines indicate different phases. Total challenging behaviours is total BPM score.

⁵⁰ See section 3.8.2 of extended results for participant summary

Participants Three: ‘Tom and Carl’⁵¹

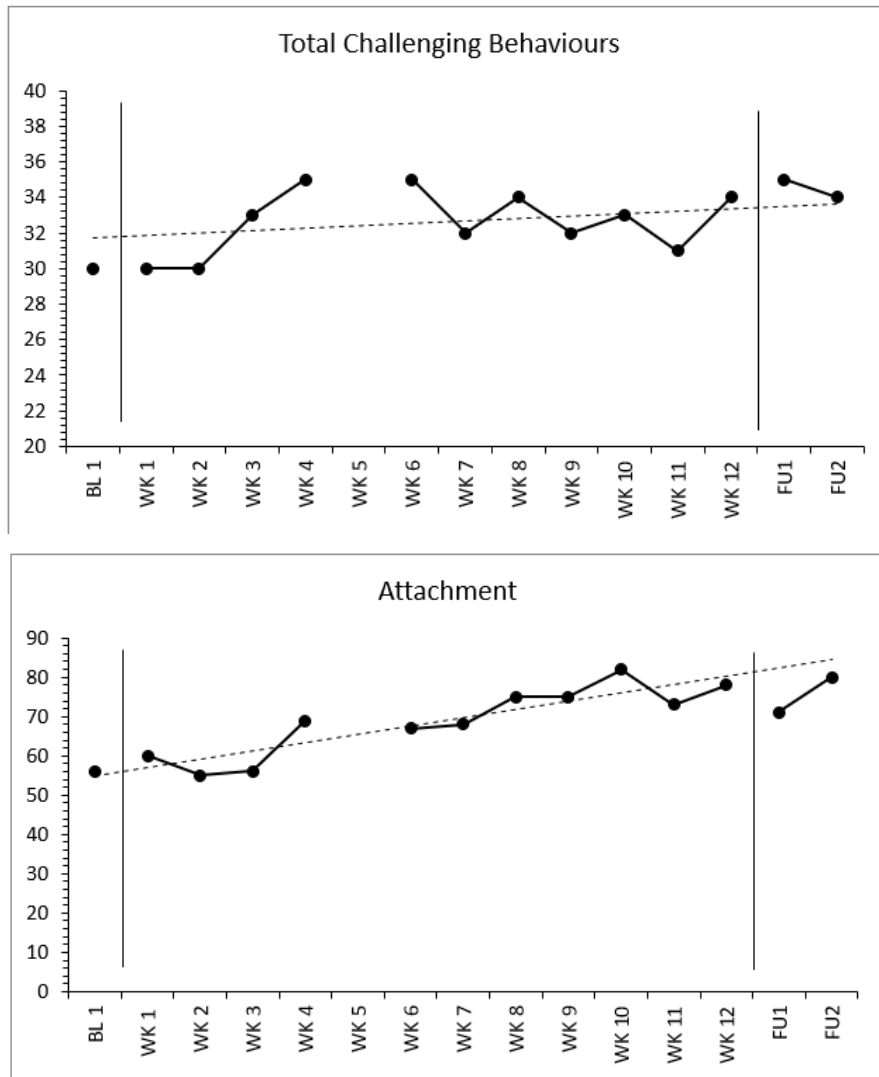


Figure 4. Visual data across baseline, intervention, follow-up. Dotted line indicates intervention trendline. BL: baseline; WK: intervention session week; vertical lines indicate different phases. Total challenging behaviours is total BPM score.

⁵¹ See section 3.8.3 of extended results for participant summary

Challenging Behaviours

Visual and Tau-U analysis examined whether Theraplay was effective at reducing childhood challenging behaviour. Overall, visual analysis appears to suggest that Theraplay had no influence on childhood challenging behaviours. For Holly, an increase in challenging behaviours were reported during initial stages of the intervention phase (i.e. scores above those in baseline). Holly's behaviours decreased over time and the decrease was sustained during the follow-up period. There was no trend in challenging behaviours for Lizzie and Tom during the intervention phase. Both of Lizzie and Tom's parents reported an overall increase in challenging behaviours during the intervention phase in comparison to the baseline phase, with week's three and 13 points of variation for Lizzie. The baseline phase only consisted of one data point for Tom, and two points for Lizzie. Therefore, firm conclusions between the phases cannot be made.

Using Tau-U, Theraplay was not effective at reducing challenging behaviours for any of the three families (see Table 7).

Parent-Child Attachment

Visual and Tau-U analysis examined whether Theraplay was effective at enhancing the attachment between child and parent. Across all three participants a gradual, yet minimal, increased trend in attachment was reported during the intervention phase. Lizzie's attachment was reported to slightly decline across initial intervention sessions, however, this improved as the intervention progressed. Visual analysis aided by Tau-U calculations (see Table 3) identified a trend in Holly's attachment during the baseline phase (i.e. Holly's attachment was reported to be naturally improving in baseline). There was also some variability in Holly's reported attachment during the intervention phase. For Holly (and partially Tom), the improvements in attachment were not sustained during follow-up. Due to the limited baseline periods for Lizzie and Tom, firm conclusions cannot be determined when comparing the baseline and intervention phases.

Using Tau-U analysis, Theraplay was found to not be effective at enhancing attachment for any of the three families (see Table 7).

Table 7

Tau-U analyses for each participant

	Visual Analysis		Tau-U	
	BL Trend	INT Trend	Tau-U	<i>p</i> value
P1				
BPM	No	No	0.89	0.06
MPCA	No	Minimal	-0.29	0.53
P2				
BPM	No	Yes	0.6	0.14
MPCA	Yes*	Yes	-0.05	0.90
P3				
BPM	No	Minimal	0.82	0.19
MPCA	No	Minimal	0.73	0.25

Note: BPM: Brief Problem Monitor, MPCA: Maternal Perception Child Attachment, BL: Baseline, INT: Intervention, *p* value associated with Tau-U. *Baseline trend corrected (Tau-U=0.67)

RCI and CSC analyses was undertaken to assess if any relationships apparent from the visual analysis reached the threshold for reliable and clinically significant change. Results are tabulated for each participant in Table 8.

A reliable deterioration of both Lizzie and Tom's challenging behaviours were found. For Tom, this deterioration was sustained at follow-up. Alternatively, Holly showed a reliable improvement in challenging behaviours, but this was not sustained at follow-up. Lizzie's reported attachment towards Rachel remained unchanged post-Theraplay. A reliable improvement in Holly and Tom's attachment towards their parents was found post-intervention, with the reliable improvement maintained at follow-up for Tom but not for Holly. Tom was the only child to complete the child attachment measure (the IPPA-R) across the baseline, intervention, and follow-up phases. Tom's self-report of his attachment towards Carl showed a similar trend for trust and communication, with a reliable improvement during follow up (including a clinically significant change in trust). However, Tom's feelings of alienation reliably deteriorated post intervention, but remained unchanged during follow up.

For reported changes in childhood challenging behaviours and attachment, the discrepancy in findings between Tau-U and RCI analyses, and the use of visual analysis, indicated the likelihood of RCI analysis being subject to type 1 error (Tarlow, 2017).⁵²

⁵² See section 4.6.5 of extended discussion for further elaboration on discrepancies in analyses

The lack of follow-up measures for Lizzie means long term conclusions cannot be drawn. Furthermore, the changes observed during follow-up for Holly and Tom may have been influenced by Theraplay factors or other contextual factors, such as COVID-19.

Individualised Goals and Parental Well-Being

All scores on the PQ across the phases were deemed to be at a clinically significant level (≤ 3.25 ; Elliott et al., 2016). None of the families in the study reported any changes to the individualised problem statements (see Table 8)⁵³. Similarly, minimal change in parent well-being was found across the phases. Steve (P2) reported a reliable change during the follow up period⁴⁹, whereas Rachel (P1) reported no change post-Theraplay. Carl (P3) reported a reliable deterioration both following Theraplay and during follow up⁴⁹.

⁵³ See section 3.5 of extended results section for further analysis on individualised problems for accessing Theraplay.

Table 8.

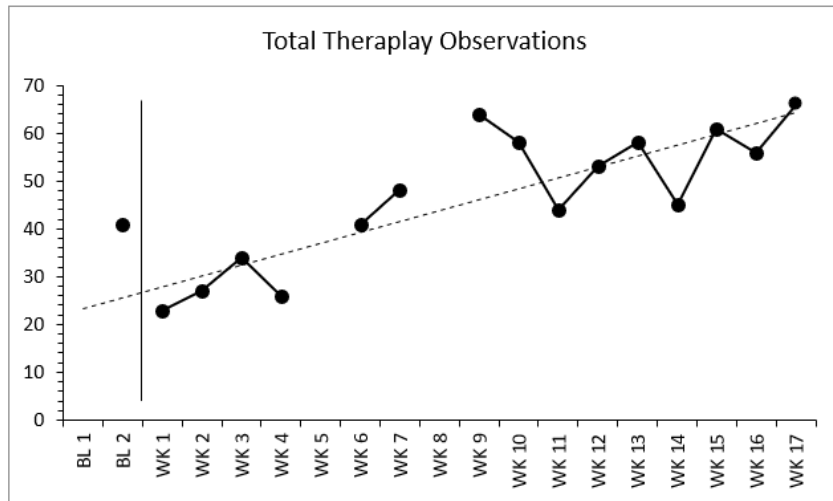
Outcome measure scores at pre-intervention, post-intervention, and one-month follow-up

Participant Measure	Pre-Intervention	Post-Intervention	One Month Follow-up
Participant 1 (parent)			
SWEMWBS	22	26 ^U	//
PQ ^a	4.33	4.5 ^U	//
MPCA	72	69 ^U	//
BPM	17	22 ^{R-}	//
Participant 1 (child)			
Trust	//	//	//
Alienation	//	//	//
Communication	//	//	//
Participant 2* (parent)			
SWEMWBS	15	/	24 ^{R+}
PQ ^a	5.5	/	5.4 ^U
MPCA	40	61 ^{R+}	40 ^U
BPM	23	21 ^{R+}	22 ^U
Participant 2* (child)			
Trust	10	/	//
Alienation	19	/	//
Communication	12	/	//
Participant 3*(parent)			
SWEMWBS	23	18 ^{R-}	17 ^{R-}
PQ ^a	4.57	4.17 ^U	4.33 ^U
MPCA	56	71 ^{R+}	80 ^{R+}
BPM	30	35 ^{R-}	34 ^{R-}
Participant 3* (child)**			
Trust	19	21 ^U	22 ^{R+C}
Alienation	13	18 ^{R-}	15 ^U
Communication	15	15 ^U	19 ^{R+}

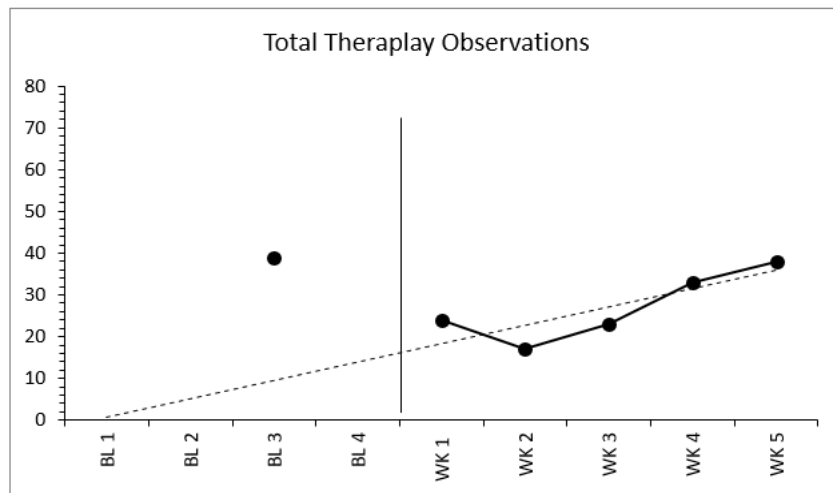
Notes: SWEMWBS (Short Warwick-Edinburgh Mental Well-Being Scale); PQ (Personalised Questionnaire); MPCA (Maternal Perception of Child Attachment); BPM (Brief Problem Monitor); ^R denotes Reliable Change and ^C denotes Clinically Significant Change (from clinical to non-clinical range) compared to pre-intervention scores at p<.05; + or - indicates improvement or deterioration, respectively. ^U denotes unchanged. *For participants two and three, post measures were taken from final intervention sessions, **Tom was the only child to complete the child attachment measure at all three points, ^aPQ scores mean of overall scores, / denotes participant not asked, // denotes participant declined to complete.

Theraplay Processes

‘Lizzie and Rachel’
(P1)



‘Holly and Steve’
(P2)



‘Tom and Carl’
(P3)

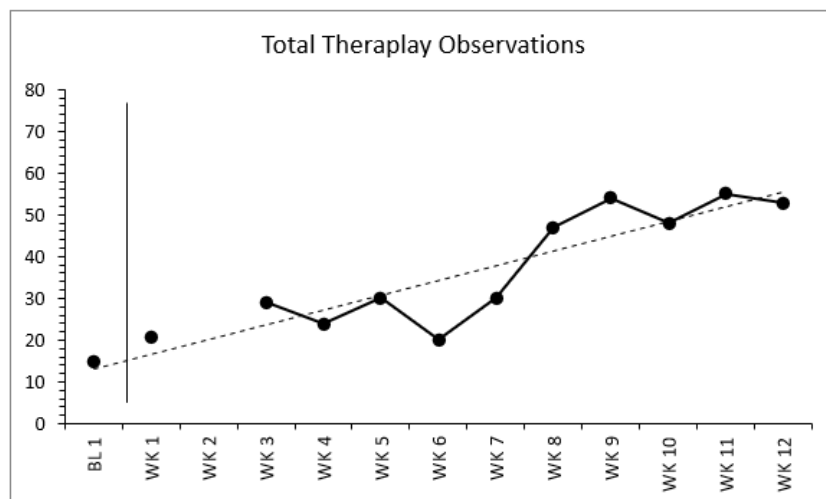


Figure 5. Visual data across baseline, intervention, follow-up. Dotted line indicates intervention trendline. BL: baseline; WK: intervention session week; vertical lines indicate different phases. Total challenging behaviours is total BPM score.

Visual analysis examined any changes in Theraplay interactions based on the key mechanisms of change and four core constructs (see Figure 5). Total Theraplay observations were informed by the TOF and the total scores across all four Theraplay domains⁵⁴.

Across all three families a positive trend in Theraplay-based interactions were observed during the intervention phase. All three families displayed some variance during the intervention phase, including all families experiencing a temporary decline and ‘dip’ of Theraplay-based interactions early into intervention (ranging between sessions 2-4 using the TOF). Holly and Steve’s interactions appeared stable across the five sessions, whereas Lizzie and Tom’s families displayed more variance (particularly during week four, 11, and 14 for Lizzie, and between weeks 3-8 for Tom). Both families, however, appeared to be sustain positive changes in their interactions at the end of the intervention phase.

Individual Tau-U analysis found no meaningful change in mechanisms and Theraplay-based interactions for any of the three families (see Table 9).

Table 9

Tau-U analyses for each participant

	Visual Analysis		Tau-U	
	BL Trend*	INT Trend	Tau-U	<i>p</i> value
P1				
Total TOF	-	Yes	0.4	0.52
P2				
Total TOF	-	Yes	-1	0.14
P3				
Total TOF	-	Yes	1	0.11

Note: TOF (Theraplay Observation Form), BL: Baseline, INT: Intervention, *p* value associated with Tau-U. *Due to only one data point in baseline, unable to ascertain baseline trend for TOF

Dual Processes⁵⁵

Visual analyses across the three domains (challenging behaviours, attachment, and Theraplay observations) allowed for the examination of change processes. Visual analysis explored whether any changes in attachment potentially contributed to any changes in challenging behaviour, and whether Theraplay mechanisms (informed by the TOF) appeared to contribute to any changes in attachment and/or challenging behaviours.

⁵⁴ See section 3.3 of extended results for a breakdown of change over Theraplay dimensions

⁵⁵ See section 3.4 for further discussion on combined processes

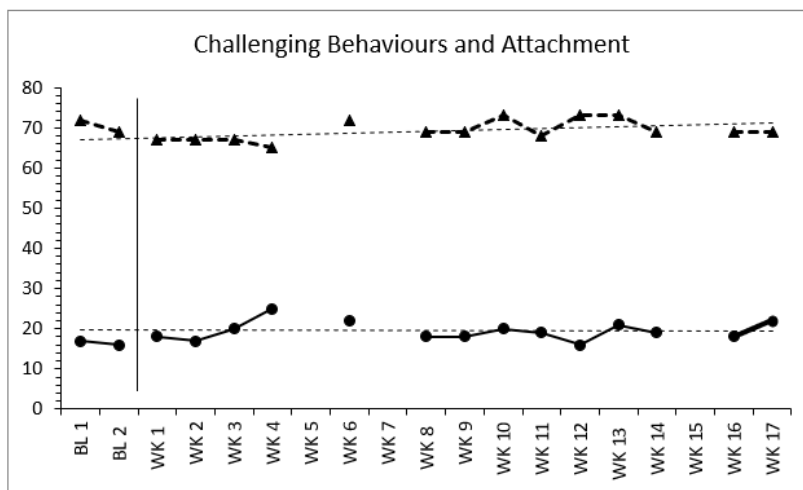
Attachment and Challenging Behaviours

No relationship between the constructs of attachment and challenging behaviour was found (see Figure 6). Visual inspection revealed some occasions of challenging behaviours and attachment measures mirroring, i.e. a higher score in attachment and lower on the behaviour measure (and vice versa; week five, follow-up four for Holly; week four for Lizzie). However, there were other times when higher attachment was reported alongside greater challenging behaviours (week four for Tom). Despite some changes in attachment observed (for Holly and Tom), changes in attachment did not appear to influence any changes in challenging behaviour across all three families.

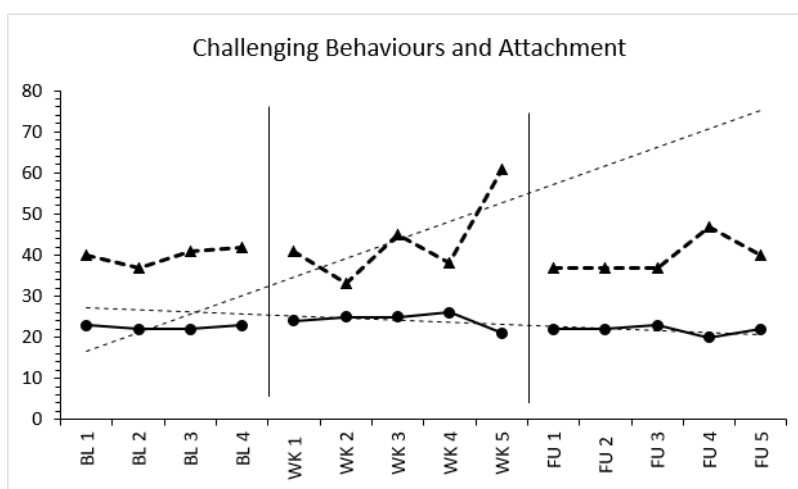
Theraplay Mechanisms and Attachment

Visual inspection appears to evidence a weak relationship between Theraplay's mechanisms of change and attachment (see Figure 7). The strongest relationship was observed for Holly and Steve; with an increase in Theraplay interactions and increase in Holly's attachment during the intervention phase. The relationship is limited, as it was based on only five sessions, with variance in reports of Holly's attachment. For both Tom and Lizzie, a positive trend in Theraplay observations during the intervention phase indicated improvements in parent-child interactions based on Theraplay's four constructs. However, the gradient of the attachment trendlines was small for Tom or non-existent for Lizzie. Therefore, results suggest that Theraplay's mechanisms had little influence on attachment.

‘Lizzie and Rachel’
(P1)



‘Holly and Steve’
(P2)



‘Tom and Carl’
(P3)

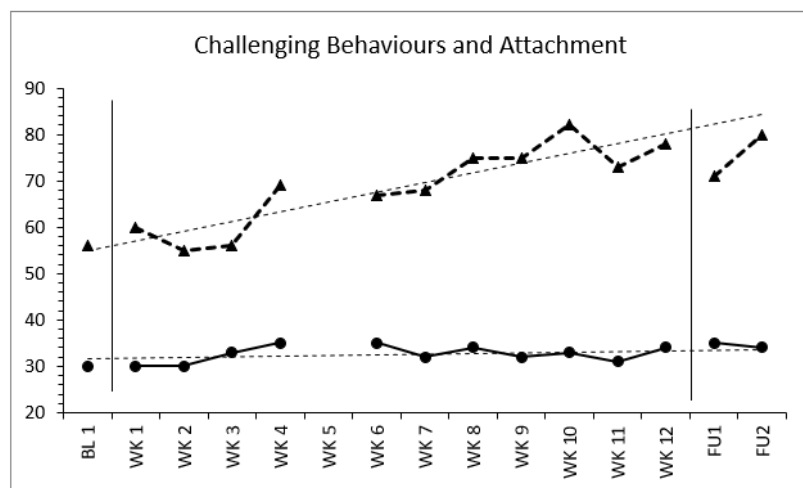
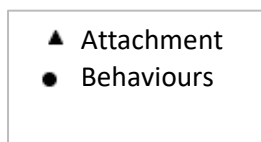
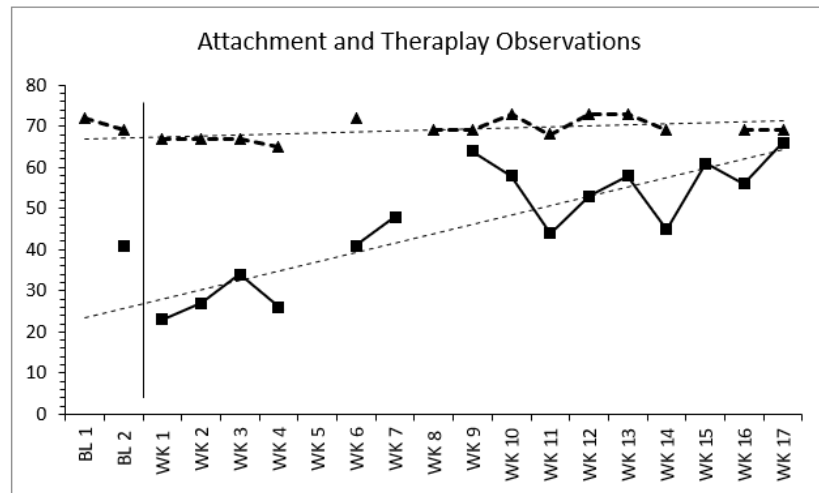
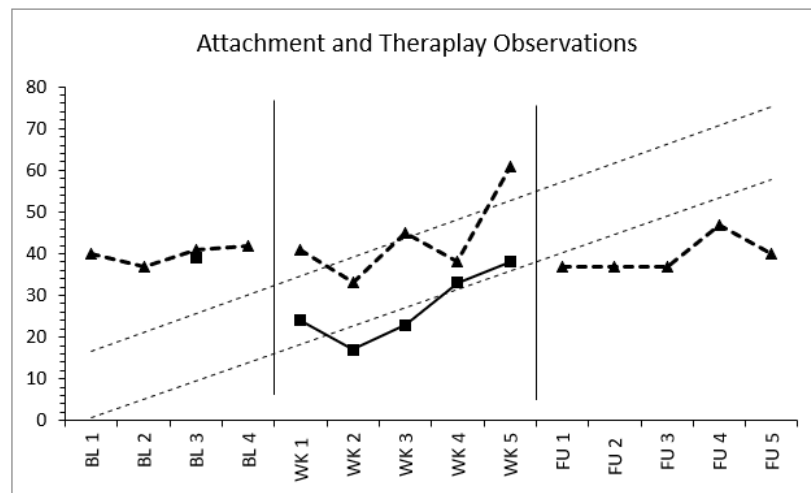


Figure 6. Visual data of process measures across baseline and intervention. Dotted line indicates intervention trendline. BL: baseline; WK: intervention session week; FU: follow-up. Vertical lines indicate different phases; Behaviours (BPM scores), Attachment (MPCA scores).

‘Lizzie and Rachel’
(P1)



‘Holly and Steve’
(P2)



‘Tom and Carl’
(P3)

▲ Attachment
■ Theraplay
Constructs

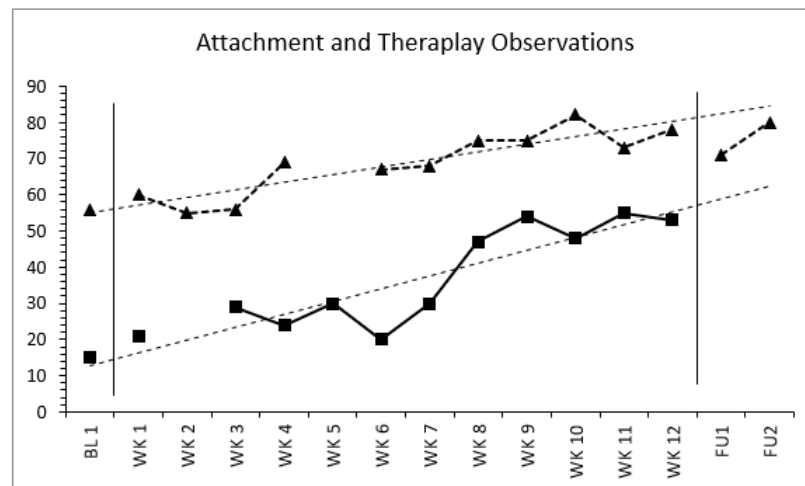


Figure 7. Visual data of process measures across baseline and intervention. Dotted line indicates intervention trendline. BL: baseline; WK: intervention session week; FU: follow-up. Vertical lines indicate different phases. Behaviours (BPM scores), Attachment (MPCA scores).

Qualitative Data

Change Interviews⁵⁶

Overall, the participants shared positive feedback of the Theraplay intervention, with some consistencies and inconsistencies with quantitative data. One family (Tom and Carl) partly attributed changes observed to other life circumstances, but also felt Theraplay sessions had helped. Nurture-based games were consistently commented on as a helpful aspect of Theraplay, with some positive changes noted within the relationship between parent and child. Two of the three parents noticed changes in their child, themselves, and the relationship, including how they approached parenting and understood their child's behaviours. Carl did not notice any differences in himself, only his child and their relationship. The Theraplay approach appeared to be quite unusual for families to understand. However, it appeared that parents valued the games and sessions being facilitated towards a younger developmental age rather than their child's chronological age.

Discussion⁵⁷

The current project aimed to assess the utility of Theraplay for reducing childhood challenging behaviours. Specifically, the study aimed to investigate the following questions:

- Is Theraplay effective at reducing challenging behaviour?
- Is Theraplay effective at enhancing parent-child attachment?
- Do any changes in attachment underpin any reported changes in challenging behaviour?
- Do Theraplay's reported key mechanism(s) contribute to any changes found?

Effectiveness of Theraplay for Attachment-Related Challenging Behaviours

Several meta-analyses and studies have evidenced the association between childhood challenging behaviours and attachment (Fearon et al., 2010; Fearon & Belsky, 2011; Madigan et al., 2016; Van IJzendoorn et al., 1999). The evidenced association implies the role for alternative interventions for challenging behaviours which are attachment-based (Scott, 2008), such as Theraplay. Despite previous literature, the current study did not find

⁵⁶ See section 3.7 in extended results for change interview data

⁵⁷ See extended paper section 4 for further discussion of study findings

Theraplay effective in reducing childhood challenging behaviour or enhancing parent-child attachment.

Results found no changes in childhood behaviour using both the BPM and PQ. Qualitative feedback supported some of the findings collected via questionnaires, with two parents reporting ongoing difficulties with childhood challenging behaviours.-The use of multiple analyses enabled the conclusion that RCI findings were likely to be subject to Type 1 error (Tarlow, 2017). It could be hypothesised that the lack of change in challenging behaviours for participants two and three may have been due to disrupted intervention due to COVID-19 restrictions and the families not receiving the full number of anticipated sessions. However, participant one received the full intended Theraplay intervention and similarly found no changes in childhood challenging behaviour.

The current findings into challenging behaviours both support and refute differing aspects of other Theraplay research. This study appears to support the findings of Francis et al., (2017) who also reported no changes to behavioural difficulties following Theraplay intervention (and Bojanowski and Ammen (2011) who reported individual cases of an increase in challenging behaviours (reported in one of the 11 families). However, the current findings do not support a significant reduction in challenging behaviour following Theraplay reported by Bojanowski and Ammen (2011); Mahan, (2001); and Wettig et al., (2011). Children who have experienced disrupted caregiving, like the children in the current study, are shown to experience more difficulties with challenging behaviours than those who have not (Ford et al., 2007; McAuley & Young, 2006; Wierzbicki, 1993). Therefore, the results in the current study may have been influenced by the degree of childhood challenging behaviours reported.⁵⁸ Furthermore, the participants' challenging behaviours may have not been fully measured in the current study given the difficulties in assessing attachment-related challenging behaviours in clinical settings (Harris-Waller, Granger, & Gurney-Smith, 2016).

The current study found limited results in Theraplay changing child attachment. The Theraplay approach is hypothesised to provide a reparative experience of early parent-child interactions to shape the child's internal working model (Booth & Jernberg, 2009; Booth & Winstead, 2015; Munns, 2009). Brayman's (2016) review concluded that Theraplay was effective at enhancing child attachment for children aged three years and older. Despite visual analysis in the current study showing some positive trends in attachment during intervention,

⁵⁸ See section 2.12.2.3 and 4.1 in extended paper

the same positive changes in attachment were not found, with Tau-U analysis showing no significant change in attachment for any family. Participants three experienced the most positive change in attachment following Theraplay, however, the change was primarily from the parent's report and less from the young person. No change was observed in participant one's attachment, and visual analysis, concluded that the reliable change found in attachment for participants two was deemed to be subject to Type 1 error (Tarlow, 2017). The discrepancy in findings between the current study and existing literature may be due to many reasons. Brayman's (2016) review included only one study using a specific measure of attachment (Mahan, 2001); whereas the current study utilised both a parent and child attachment measure. Nonetheless, the lack of changes in attachment in the current study may have been due to the limitations of the MPCA not being a 'gold standard' or more reliable measure (such as the Child Attachment Interview, CAI; Shmueli-Goetz, Target, Fonagy, & Datta, 2008; or Manchester Child Attachment Story Task, MCAST; Goldwyn, Stanley, Smith, & Green 2000). For the current study, it could also be hypothesised that the participants had greater difficulties with attachment due to their caregiving experiences (McAuley & Young, 2006).

Dual Process Changes

In Theraplay it is hypothesised that children's presenting difficulties are underpinned by the child's negative internal working model (Booth & Jernberg, 2009). Therefore, sessions target the parent-child interactions and relationship to create change. The present study attempted to investigate whether the proposed mechanisms (i.e. Theraplay's four core constructs and games) contributed to any changes in attachment, and in turn, any changes to challenging behaviour.

No changes were found in the associated relationship between attachment and challenging behaviours. The lack of meaningful change in reported attachment (shown using Tau-U) may have been explained by the lack of change in reported behavioural difficulties. More positive changes in Theraplay-based interactions (i.e. Theraplay's hypothesised mechanisms of change) were observed across the intervention phase. However, the changes observed had no clear relationship to child attachment or challenging behaviours. For mechanisms to be related, it would be expected that a lag in attachment changes would have been observed after the introduction of Theraplay mechanisms, rather than simultaneously.

The lack of evidence for Theraplay's proposed mechanisms may have been influenced by the TOF measure used. The study found strong inter-rater reliability for the TOF ($\kappa=0.89$); however, the measure was newly developed and lacked existing validity and reliability data. The lack of evidence for associated mechanisms in the current study may have also been influenced by the sample. It is recommended that for young people who have experienced some disruption in their primary caregiver the number of sessions should be increased (Lindaman & Lender, 2009). Therefore, in conjunction with earlier discussions around attachment and behavioural difficulties potentially being greater for the current sample, it could be argued that the degree of difficulties in this sample may not have been addressed within a relatively short number of Theraplay sessions and adaptations made in line with COVID-19 restrictions.

The current study did not find evidence to support the theoretical underpinnings and proposed mechanisms outlined by Theraplay (Booth & Jernberg, 2009; Booth & Winstead, 2015). Furthermore, the current findings did not support Bojanowski and Ammen's (2011) study, which found a significant change in overall Theraplay-based interactions using the Marschak Interaction Method Rating System (MIM-RS; O'Connor, Ammen, Backman & Hitchcock, 2001), and a significant change in challenging behaviours using the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001). However, Bojanowski and colleagues' study was based on a pre-post design, therefore limiting the conclusions drawn into whether Theraplay contributed to change or not. Current observational data did support other proposed processes during Theraplay intervention sessions, such as children displaying some degree of resistance early into sessions (Booth & Jernberg, 2009). All three families displayed a point of decline in their Theraplay-based interactions early into sessions (ranging between sessions 2-4).

Previous qualitative research has evidenced that Theraplay is experienced as a positive and helpful approach; including for parents, teachers, children, and therapists (Francis et al., 2017; Hong, 2014). The use of change interviews in the current study allowed for exploration into parents' experiences of Theraplay, alongside what was helpful/unhelpful and any attributions to change. Nurture-based games were commonly cited as one of the most helpful aspect of sessions. However, for the two families whose interventions were disrupted due to COVID-19, they shared that the restrictions (amongst other external family circumstances for family three) contributed to some of the changes observed in the final and follow-up sessions. Qualitative findings in the current study supported other evidence of

parent's valuing experiential learning and modelling in sessions (Hong, 2014), and the learning of nurture-based games (Bojanowski & Ammen, 2011).

Given the unusual circumstances of COVID-19 restrictions, some findings need to be interpreted with the additional context in mind. The number of sessions for two families was reduced due to face-to-face sessions being suspended. However, families were still able to complete follow-up sessions. The decision to cap the sessions at the point of COVID-19 restrictions enabled the study to remain coherent to its design and the Theraplay approach. Despite the limitations to final data collection, the results seemed to be similar across all three families (including the family whose intervention was not impacted by government restrictions) and offered valuable insight and understanding into Theraplay processes.

*Strengths and Limitations*⁵⁹

The current study is innovative within Theraplay literature. No other study has yet attempted to investigate Theraplay's proposed mechanisms of change. The use of a triangulation of methods in the current study allowed for potential inferences regarding the processes and effectiveness of Theraplay. The use of observational data alongside other quantitative and qualitative data collection methods was a strength of the study. Qualitative data gathered through change interviews provided the opportunity to make inferences across the data, or to support/refute data shared by families within the questionnaires.

Observational data also allowed for treatment fidelity checks. All observational data analysis was completed by somebody who was not involved with the family intervention, therefore reducing the risk of bias on scoring. The use of fidelity checks also enabled exploration into the adherence to the Theraplay model and research questions. The findings of the fidelity check demonstrated a high level of adherence to the model, despite each family receiving intervention from different therapists across two services.

The use of analytical triangulation (Kimchi, Polivka, & Stevenson, 1991) was a further strength of the study. Visual (Parker et al., 2006), Tau-U (Parker et al., 2011), and RCI/CSC analysis (Jacobson & Truax, 1991) demonstrated how an in-depth investigation into understanding the data can enhance the validity of the findings (Denzin, 1989). The use of three analysis methods reduced the risk of conclusions being drawn and based on error, e.g. visual analysis alone being subject to bias (Morgan & Morgan, 2009) and RCI analysis

⁵⁹ See section 4.8 of extended discussion for further elaboration on strengths and limitations

being subject to Type 1 error (Tarlow, 2017). The study was, however, completed within clinical practice and limited in its ability to determine the recommended baseline stability needed for single case approaches (Kratowill et al., 2010; Morley, 2018; Smith, 2012). Therefore, the study is restricted in the conclusions that can be drawn between baseline and intervention phases. The lack of appropriate clinical data to calculate reliable change, and the reliance on non-clinical samples, may have also impacted the sensitivity of analysis to assess change.

The current study highlighted the lack of attachment measures for middle childhood, a concern also raised in systematic literature reviews (Jewell et al., 2019). A questionnaire completed by the parent/carer was even scarcer in the literature. The MPCA and IPPA-R were chosen as the most appropriate and available measures. However, the lack of evidence base using the MPCA, and the reliance on the parent completing it, means that measures of childhood attachment were mediated by the perceptions of the adult. Furthermore, the Theraplay observation form (TOF) had no reliable or valid data to base its effectiveness on. Attempts were made to enhance the reliability of the observations; however, results are to be interpreted with caution.

*Future Research*⁶⁰

Theraplay is an intervention regularly practiced across the world and with many families, including within the UK's NHS CAMHS. A rigorous evidence-base into Theraplay's effectiveness is lacking, and the use of an in-depth multiple case design in the current study found a lack of support into Theraplay's effectiveness. Therefore, further investigation into both Theraplay's effectiveness and key mechanisms of change is warranted. More rigorous research is needed, with only two randomised control trials (RCT) to date having been conducted (Siu, 2014; Wettig et al., 2011). More research implementing RCT and single case experimental designs is recommended, which would enable a stringent and rigorous investigation into Theraplay's effectiveness. A study comparing the effectiveness of Theraplay with parent training programmes would also aid clinical practice where Theraplay is being offered. Although the current results cannot be generalised across populations (due to the small sample and limitations acknowledged), careful consideration into future research is required given the findings related to challenging behaviours in the current study.

⁶⁰ See section 4.9 of extended discussion for further elaboration on clinical implications and future research

Further investigation into Theraplay's hypothesised attachment underpinnings is required. The use of 'gold standard' or more reliable measure of childhood attachment would aim to offer a more in-depth understanding into any hypothesised changes in child attachment, for example, using the CAI (Shmueli-Goetz et al., 2008) or MCAST (Goldwyn et al., 2000). Additionally, research into a sessional observational measure of both model fidelity and mechanisms of change (akin to the TOF designed in the current study) would be of benefit. More detailed research into a mechanism of change measure would also allow for quantitative analysis of session changes, rather than the MIM only assessments currently available (McKay, Pickens, & Stewart, 1996; O'Connor et al., 2001).

Conclusions

A multiple case design was implemented to investigate the effectiveness of Theraplay intervention for attachment-related challenging behaviours. The study offered minimal support into Theraplay's effectiveness for childhood challenging behaviours, and limited findings into whether Theraplay contributes to any changes in childhood attachment. No evidence was shown for improvements in attachment contributing to a decline in challenging behaviour. This study was the first of its kind into the model of Theraplay, and when compared to the scarce evidence-base currently, the current study supports and refutes other conclusions found. Nonetheless, and the limitations in achieving baseline stability and disruptions to allocated session numbers due to COVID-19 mean firm conclusions cannot be drawn and generalised. Given the current findings, and the extent Theraplay is practiced across the world with families, further research into Theraplay's effectiveness and mechanisms of change is warranted.

Declaration of Interest Statement: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. Two of the authors have completed Theraplay training; however they have no personal or financial investment with the Theraplay Institute. It was completed as part of the Doctorate in Clinical Psychology.

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Extended Paper

1. Extended Introduction

1.1. Childhood Challenging Behaviours

Childhood challenging behaviours is a difficult construct to conceptualise. Different terms and language are used between services and professional groups; for example, Psychiatrists referring to specific 'disorders' and education professionals 'emotional and behavioural problems' (BMA Board of Science, 2013). Typical child development encompasses some degree of challenging behaviour, which can be transient and/or changeable depending on the day, context, and situation (BMA Board of Science, 2013). Some degree of tantrums, low-level destruction, non-compliance, and impulsivity are commonly expected during childhood development (BMA Board of Science, 2013; Hong, Tillman, & Luby, 2015). Conversely, some families experience childhood challenging behaviours at a more problematic and severe level, which may consist of a 'pattern of behaviour which is above the expected norm for age and level of development' (Ogundele, 2018, p.10). Behaviours less typical and suggestive of behavioural difficulties include 'high-intensity behaviours', such as; frequently being argumentative/defiant, aggression to people/animals, and vindictiveness; Hong et al., 2015), especially when co-occurring with a lack of prosocial behaviours (BMA Board of Science, 2013).

The terms 'internalising' and 'externalising' behavioural difficulties were introduced by Achenbach (1966) following a factor analysis of childhood difficulties⁶¹. report that the concepts introduced by Achenbach (1996) The terms internalising and externalising behavioural difficulties have been referred to in thousands of studies (Achenbach, Ivanova, Rescorla, Turner, & Althoff, 2016). Despite Achenbach's (1996) widely-cited classification of challenging behaviours, the categorisation of challenging behaviour has faced criticism due to high rates of co-morbidity between internalising and externalising behaviour problems (Hinshaw, 1987), limitations to specificity (Liu, 2004), and the lack of coherent use (DeKlyen & Greenberg, 2016).

The term challenging behaviours has been used within this study to reflect a variety of behaviours often demonstrated by children that are challenging to manage for people around the child; both internalising and externalising in nature.

⁶¹ See journal paper for examples of difficulties

1.2. Impact of Childhood Challenging Behaviours

The consequences of childhood challenging behaviours have been researched at an individual and systemic level (i.e., families, services). A longitudinal study assessing children from the age of 10 onwards (including those who did and did not display challenging behaviours), reported a marked increase in difficulties and adverse events during the twenty-year follow up period for those who presented with challenging behaviours (Champion, Goodall, & Rutter, 1995). Similar findings were offered up by Colman and colleagues' 40-year longitudinal study. Results appeared to show that adolescents who displayed challenging behaviours were more likely to have poorer mental health, social and economic outcomes, alongside less successful family lives (e.g., divorce rates, feeling unhappy with family life), compared to adolescents with few challenging behaviours (Colman et al., 2009). However, both these longitudinal study findings are now outdated given the start of data collection was 1970 and 1946, respectively.

On an individual level, children who display challenging behaviours are found to be at greater risk of engaging in risk-taking behaviours (including fighting, substance misuse, crime), alongside experiencing more mental health difficulties and negative sexual/relationship experiences (e.g., teenage pregnancy; Fergusson, Horwood & Ridder, 2005; Thompson et al., 2011). The systemic implications of childhood challenging behaviours can also be seen within the family, including increased parent/carer stress (Anthony et al., 2005; Donenberg & Baker, 1993). Parents of children with challenging behaviours were reported to hold more negative connotations about their child being a 'burden' (Simpson, Cohen, Bloom, & Blumberg, 2009), and in these circumstances, were shown to be more likely to access child mental health services for support. Although parental stress has been acknowledged as a consequence of childhood challenging behaviours, a reciprocal relationship between the two factors has been reported (Neece, Green, Baker, 2016); with challenging behaviour appearing to cause increased stress to the parent, with parental stress increasing childhood challenging behaviour.

The prevalence of childhood challenging behaviours is reported to incur a significant cost to society (Parsonage, Khan, & Saunders, 2014), particularly if intervention is not offered or successful (BMA Board of Science, 2013). It is

estimated that in the UK, it costs an average of £5960 per annum for each child presenting with severe challenging behaviours, including for services (i.e., NHS and local authority) and non-service costs (i.e., carer time spent off work, household repairs; Romeo, Knapp, & Scott, 2006). More recent estimates of lifetime societal costs of moderate to severe challenging behaviours are estimated between £85,000-£260,000 per child (Parsonage et al., 2014).

1.3. Epidemiology and Etiology

Childhood challenging behaviours is a common and universal experience (Canino, Polanczyk, Bauermeister, Rohde, & Frick, 2010; Samek & Hicks, 2014). However, significant differences in prevalence rates have been reported between Western and Non-Western cultures (Demmer, Hooley, Sheen, McGillivray, & Lum, 2017). The difference may be due to factors such as challenging behaviours being viewed as pathological in Western cultures, and a deviation from gender roles in non-Western cultures.

Prevalence rates of challenging behaviours varies, with estimates of 5-20% of young people experiencing overall difficulties (Hill, 2002; Ogundele, 2018), including 12.8% of 5-19 years old in the UK (Sadler et al., 2018). More specifically, 8.1% of children in the UK are suggested to experience internalising behavioural problems (Vizard et al., 2018) and 4.6% externalising behavioural problems (Mandalia et al., 2018). The variance in assessment measures and language around childhood challenging behaviours hinders the ability to assess more accurate prevalence rates.

Boys are frequently cited to experience more behavioural problems than girls (Ogundele, 2018; Samek & Hicks, 2014), with externalising behavioural difficulties more prevalent in boys (Mandalia et al., 2018; Moffitt, Caspi, Rutter, & Silva, 2001) and internalising behavioural difficulties more prevalent in girls (Vizard et al., 2018). Etiological differences of gender and challenging behaviours have been found, with environmental factors found to be a stronger influence for boys and genetic factors a stronger influence for girls (Burt, Slawinski, & Klump, 2018). Gender differences in challenging behaviours can also be influenced by different cultural norms and values (Nikapota, 2009); such as different cultures social approval or disapproval of externalising behaviour and disciplinary norms. For boys, emotional understanding was reportedly shown to play less of a role in predicting challenging behaviours,

whereas being able to competently express your emotions did (Maguire, Niens, McCann, & Connolly, 2016).

1.4. Risk Factors

Some degree of childhood challenging behaviour is typical of child development (BMA Board of Science, 2013). Therefore, not all children and families require service input or support. However, there are reported to be many children who display behaviours which are at a more problematic level and not concordant with the norm (Ogundele, 2018).

The aetiology of challenging behaviours is complicated and often an aggregation of various risk factors (Ogundele, 2018). Many biopsychosocial risk factors have been identified (Bosmans, Braet, Leeuwen, & Beyers, 2006; Guttman-Steinmetz & Crowell, 2005; Liu, 2004), not only influencing the severity of challenging behaviours but also their complexity (Saleem & Mahmood, 2013). Risk factors tend to fall within the realms of child, environmental, and parental⁶² factors (Bosmans et al., 2006), with challenging behaviours likely to be influenced by a combination of risk factors and the age of the child (Liu, 2004; Samek & Hicks, 2014). Certain risk factors may also influence the typology of challenging behaviours (DeKlyen & Greenberg, 2016).

1.4.1. Individual Factors

Child temperament and attachment security have been identified as risk factors for childhood challenging behaviours. Despite the issues in conceptualising 'temperament', a common understanding includes 'individual differences in affect, activity, attention and self-regulation', influenced by biology, experience, and maturation (Caspi & Shiner, 2008, p.182). The association between early child temperament and challenging behaviours has been reported (Bosmans et al., 2006; Burke, Loeber, & Birmaher, 2002; Ogundele, 2018; Schmitz et al., 1999). However, less is known about the association during middle childhood (McClowry, 1995) and temperament which could be an influence in conjunction with other parental or environmental risk factors (Caspi & Shiner, 2008).

⁶² The term 'parent' shall be used throughout the extended paper; however, it encompasses all parental roles (i.e., birth parent, adoptive parent, foster carer, extended family member).

Children's attachment experiences have been acknowledged as both a risk and protective factor for the development of childhood challenging behaviours (DeKlyen & Greenberg, 2016).⁶³

1.4.2. Parental Factors

The quality of parenting has been associated with challenging behaviour, with poorer parenting practices increasing a child's risk of experiencing more challenging behaviours (Bosmans et al., 2006; Burke et al., 2002; Hill, 2002). In particular, associations between punitive parenting (including 'smacking') and challenging behaviours has been reported (Larzelere, 2000; Stormshak, Bierman, McMahon, & Lengua, 2000; Weiss, Dodge, Bates & Pettit, 1992), and does not appear to be dependent on the parental figure (i.e., shown for both Mothers and Fathers; Prinzie et al., 2005). Aunola and Nurmi (2005) investigated differing parenting styles, with findings highlighting an association between Mother's display of affection, their use of behavioural and psychological control and childhood challenging behaviours. No association was found when investigated with Father's; however, results may have been due to low sample sizes of Father's in the study. When stimulation analyses were performed to match the sample size of Mother's, an association between Fathers' display of affection and their use of behavioural and psychological control was demonstrated (Aunola & Nurmi, 2005). Comparatively, psychological control by both parents was not found to be associated with challenging behaviours in other studies (Nunes, Faraco, Vieira, & Rubin, 2013).

Parental mental health and adverse perinatal experiences have also been suggested to be associated with childhood challenging behaviours (BMA Board of Science, 2013), including substance misuse, difficult pregnancies (Hill, 2002; Ogundele, 2018), attitudes towards being pregnant (Liu, 2004), and depressive symptoms in both Mothers (Josefsson & Sydsjo, 2007) and Fathers (Ramchandani et al., 2008).

The association between parental factors and childhood challenging behaviours could contribute to the recommendation of parents often being involved in intervention (National Institute of Clinical Excellence; NICE, 2017). However, the

⁶³ See section 1.11 for more information on attachment and challenging behaviours.

relationship is likely to be reciprocal (Burke et al., 2002) and the effect of parenting practices may also be contingent on the attachment relationship between child and parent (Bosmans et al., 2006).

1.4.3. Environmental Factors

Environmental risk factors may include those within the home, community, or school. Children living in crowded housing (Marsh et al., 2018), exposed to domestic violence, maltreatment (BMA Board of Science, 2013), family stress, (Kjeldsen, Janson, Stoolmiller, Torgersen, & Mathiesen, 2014) and poverty (BMA Board of Science, 2013; Liu, 2004) have been shown to experience more behavioural difficulties than those not exposed. Families based in neighbourhoods and communities from a lower socio-economic status reportedly house children with more challenging behaviours (BMA Board of Science, 2013; Bosmans et al., 2006; Rutherford, Sharp, Hill, Pickles, & Taylor-Robinson, 2019), with social service and/or police involvement also associated (Buchanan & Flouri, 2001). Childhood challenging behaviours is also associated with poorer peer relationships (Burke et al., 2002). However, the direction of the association is difficult to establish as to whether negative peer relationships contribute to challenging behaviours, or vice versa (Hill, 2002). The emphasis of environment being a risk factor may change dependent on the child's age and developmental stage (e.g., going to school, spending time with friends; Samek & Hicks, 2014).

Children who have experienced disrupted care are also reported to be at greater risk of displaying challenging behaviours (Hutchings et al., 2007). A study interviewing the parents of recently adopted children stated that 89% of boys and 78% of girls had demonstrated physical aggression towards others, including in the home (Selwyn, Wijedasa, & Meakings, 2014).

1.5. Protective Factors

Eriksson and colleagues' narrative review outlined several protective factors of challenging behaviour; including child, family, and environmental factors (Eriksson, Cater, Andershed, & Andershed, 2011). Adaptive coping skills, average-high intelligence, easy temperament, and effective emotion-regulation were identified as associated protective factors (Eriksson et al., 2011). Secure attachments with parents was also reported to be a protective factor (BMA Board of Science, 2013;

DeKlyen & Greenberg, 2016), particularly when in the presence of other risk factors (Guttman-Steinmetz & Crowell, 2005).

Pro-social siblings and positive relationships with parents/siblings (Eriksson et al., 2011) was also reported to also reduce the risk of childhood challenging behaviours, alongside environmental factors such as appropriate housing, afterschool activities, a network of pro-social adults/peers (Eriksson et al., 2011) and a social support network for parents (BMA Board of Science, 2013). Extant research has suggested that teacher-child attachments act as a mediating factor for children who experience both insecure attachment styles and challenging behaviours (O'Connor, Collins & Supplee, 2012). Nonetheless, Burke and colleagues study highlighted the challenges in acknowledging the function of protective factors for challenging behaviour (Burke et al., 2002). For example, whether protective factors are the opposite of risk factors or only considered a protective factor when reducing the impact of other risk factors present.

1.6. Treatment of Childhood Challenging Behaviours

National guidelines recommend parent training programmes, child focused programmes, and multimodal interventions (e.g., Multisystemic Therapy; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009) as evidence-based interventions for childhood challenging behaviours (NICE, 2017). It is beyond the scope of this paper to review all interventions for childhood challenging behaviours. Parent training programmes are focused on (a) the likelihood that parent training programmes have already been accessed prior to any Theraplay intervention (as they are a recommended first line intervention; NICE, 2017), and (b) training programmes offer similarity to Theraplay in comparison to the other recommended interventions (in that they support both parent and child).

1.7. Parent Training Programmes

Broadly, parent training programmes help to teach parents in, (a) recognising challenging behaviours, (b) knowing how and when to use positive reinforcement to encourage desirable behaviours, and (c) the use of discipline to discourage undesirable behaviours (Barlow & Stewart-Brown, 2000). A Cochrane review evidenced that parent training programmes are an efficacious and cost-effective

intervention for childhood challenging behaviours (Furlong et al., 2012). Scott's (2008) review of behaviourally informed parenting programmes identified common effective features across the programmes available. Sessions are often interactive and structured by a sequence of topics promoting calm parenting and strategies. Strategies explored include time-out, tangible rewards, positive instructions, praise, and problem-solving (Chorpita & Daleiden, 2009). Practice of new strategies in sessions is important, either facilitated live or through role-play, alongside out-of-session tasks set. Programmes are grounded in evidence-based research and theory (see section 1.8), with a manual to aid delivery and consistency. Parent training programmes support parents in recognising antecedents to childhood challenging behaviours, alongside facilitating alternative ways of understanding the behaviour (Ogundele, 2018; Reyno & McGrath, 2008). Sessions offer an opportunity to observe, practice, and receive feedback on new techniques.

There is heterogeneity in the content, facilitation, and focus of strategies in parent training programmes (Furlong et al., 2012; Kaminski, Valle, Filene, & Boyle, 2008). Some programmes involve only the parent, others the parent and child together, and others self-directed with no/minimal facilitation. The variance in programmes is important to consider given the aforementioned child, parental, and environmental risk factors associated with childhood challenging behaviour. Neither parent only, or parent and child parenting programmes have been found superior, with both approaches effective at reducing challenging behaviours (Buchanan-Pascall, Melvin, Gordon & Gray, 2019). Conversely, a meta-analytic review found that having both parent and child within sessions was associated with more positive outcomes on both childhood challenging behaviours and parenting behaviours (Kaminski et al., 2008). However, only 77 out of the 128 eligible studies were included in the meta-analysis, with little account to this research decision which is likely to have skewed the results. Self-directed parent training programmes (i.e., no therapist facilitation) have also reported to be effective in a reducing challenging behaviour (Tarver, Daley, Lockwood & Sayal, 2014). However, the results were only observed in parent reports and not independent reports, potentially increasing the risk of response-bias.

1.8. Theories Underpinning Parent Training Programmes

Most parent training programmes are informed by behavioural theory and social learning theory. A brief critical account of each theory and the common therapeutic processes implemented within parent training programmes is offered.

1.8.1. Behavioural Theory

Behavioural theory suggests that all behaviours are acquired through the conditioning of a person's interactions with their environment. Classical and operant conditioning are two major types of conditioning in behavioural theory. Classical conditioning is conceptualised as the repeated pairing of neutral stimuli which become associated (Clark, 2004). Operant conditioning is posited as the maintenance and frequency of a behaviour being controlled by its consequences (Skinner, 1953). In operant conditioning, consequences may include positive and negative reinforcement, and positive and negative punishment.

From a behavioural perspective, childhood challenging behaviour is seen as a function of the reinforcing contingencies between parent and child, and parenting practices inadvertently contribute to the development and maintenance of the child's behaviours (Barlow & Stewart-Brown, 2000; Prinzie et al., 2005). Parent training programmes largely draw upon operant conditioning in their approaches. Operant conditioning understands that the maintenance of challenging behaviours is due to positive reinforcement (i.e., something being 'added' to increase a behaviour) and negative reinforcement (i.e., something being 'removed' to increase a behaviour; Skinner, 1953). Common examples of reinforcement include a child engaging in a certain behaviour (e.g., shouting) and the parent responding with what the child desires (e.g., care/attention). Alternatively, when a parent initiates an aversive interaction with the child, but then withdraws from the child following the child's aversive response back (Barlow & Stewart-Brown, 2000). After these interactions are repeated, the association becomes paired and is maintained by the reinforcement.

Parent training programmes support parents to notice distal and proximal antecedents to undesired behaviours, alongside implementing strategies informed by conditioning principles (Webster-Stratton, 2001). Programmes teach punishment-based strategies (e.g., 'time-out') as a consequence to undesirable behaviours, with

strategies informed by the principles of negative punishment (i.e., the removal of a stimulus to decrease behaviour; Murphy & Lupfer, 2014). Punishment-based strategies are often implemented by parents due to their reinforcing characteristics for the adult (Scott & Yule, 2008). Consequently, parenting programmes largely recommend the implementation of more adaptive reinforcement contingencies with strategies such as praising and rewarding desirable behaviours (e.g., behavioural charts). For these strategies to be positively reinforcing the rewards need to be tangible for the child (Scott & Yule, 2008). The use of extinction strategies in programmes can enable parents to withhold any behavioural reinforcements to eliminate the undesirable behaviour; therefore, ending the association between stimuli. However, extinction strategies require the parent to avoid responding which can be challenging as the behaviour is likely to escalate to elicit a reinforcer (i.e., an extinction 'burst'; Scott & Yule, 2008).

There is a large presence of parent training programmes informed by behavioural theory and behavioural strategies. However, there is variance in how behavioural mechanisms are facilitated across the approaches and models (Furlong et al., 2012; Kaminski et al., 2008). For example, the Incredible Years programme promotes the use of positive parenting skills before teaching consequences (Webster-Stratton, 2004). Variance across programmes is problematic as it creates difficulties in knowing which mechanisms contribute to which change. Furthermore, parent training programmes largely focus on observed behaviour (Patterson, 1996). Less emphasis placed on other factors that can contribute to childhood challenging behaviours (Barlow & Stewart-Brown, 2000), for example a child's internal working model and conscious decision making (Chen & Chang, 2012; Scott & Yule, 2008). For children who have experienced untrustworthy care, or few experiences of praise, they may lack the skills to trust the individual giving the reinforcer or feel worthy of the reinforcement.

1.8.2. Social Learning Theory / Coercive Cycles

Social learning theory conceptualised the role of children modelling and imitating behaviours of the adults around them (Bandura, Ross & Ross, 1963; Bandura, 1977), with behavioural repertoires acquired from the social experiences around the individual (Ward, 2007). Behaviours are learned and imitated through direct

observation and maintained by the principles of reinforcement and conditioning (for example, a child receiving parental approval or attention following the display of a certain behaviour; Scott, 2008). Four hypothesised processes are suggested by social learning theory, for the individual to: (a) be attentive to the events, (b) for the material to be attended to and retained through imaginal/verbal representations, (c) for the representation to be converted into similar appropriate actions, and (d) for enough incentive to be present for the use of the modelled action (Bandura, 1977; Grusec, 1992). Children are more likely to imitate challenging behaviours when they observe a model being reinforced for aggression (Bandura, et al., 1963), and less likely to imitate a behaviour when they observe the model being punished.

From a social learning perspective, childhood challenging behaviours are understood as a result of ineffective and harsh parenting which reinforced the child's behaviours (Bandura, 1977; Scott, 2008). However, the social learning approach implies that an explicit stimulus needs to be present as a model for the child to imitate, which may not always exist. Continuing from Bandura's work, Patterson conceptualised the 'coercive cycles' of aggression between parent and child (Patterson, 2002; Patterson, Reid, & Dishion, 1992). Infants are born with instinctive aversive behaviours (e.g., crying) which shape parental responses and behaviours (e.g., feeding; Lunkenheimer, Lichtwarck-Aschoff, Hollenstein, Kemp, & Granic, 2016; McKee, Colletti, Rakow, Jones, & Forehand, 2008). Over time, the child typically develops less aversive skills. However, for some children they continue to rely on and develop their use of aversive behaviours, with behaviours becoming increasingly challenging over time and often in response to ineffective parenting (Dumas, Lemay, & Dauwalder, 2001). It is hypothesised that children's challenging behaviours are learned from and reinforced by parallel challenging behaviours from parents, with aggression increasing over time and the relationship becoming 'stuck' (Patterson, 2002). A key factor of coercive cycles are parents who disengage or withdraw from their child's challenging behaviours (McKee et al., 2008), which acts as a negative reinforcement (depicted in Figure 8).

Social learning theory posits that individuals can learn new information and behaviours through observations (McCullough Chavis, 2011). Therefore, for a child's behaviour to change, so does the parent's (Scott, 2008). This understanding contributes to the rationale of parent training programmes and parents being agents

of change for childhood challenging behaviours (Uretsky & Hoffman, 2017). Modelling and role play, a large aspect of parent training programmes, aims to help parents, and in turn their child, develop new skills and develop more prosocial behaviours (BMA Board of Science, 2013; Furlong et al., 2012; Scott & Yule, 2008). Social learning theory underpinnings also aim for the child's more prosocial behaviours to in turn become positively reinforcing for the parent.

Despite social learning theory and coercive cycles underpinning many understandings of childhood challenging behaviours, both approaches lack consideration into the quality of the relationship between child and parent, and have a strong emphasis on external factors with less accountability for internal factors (Scott & Yule, 2008).

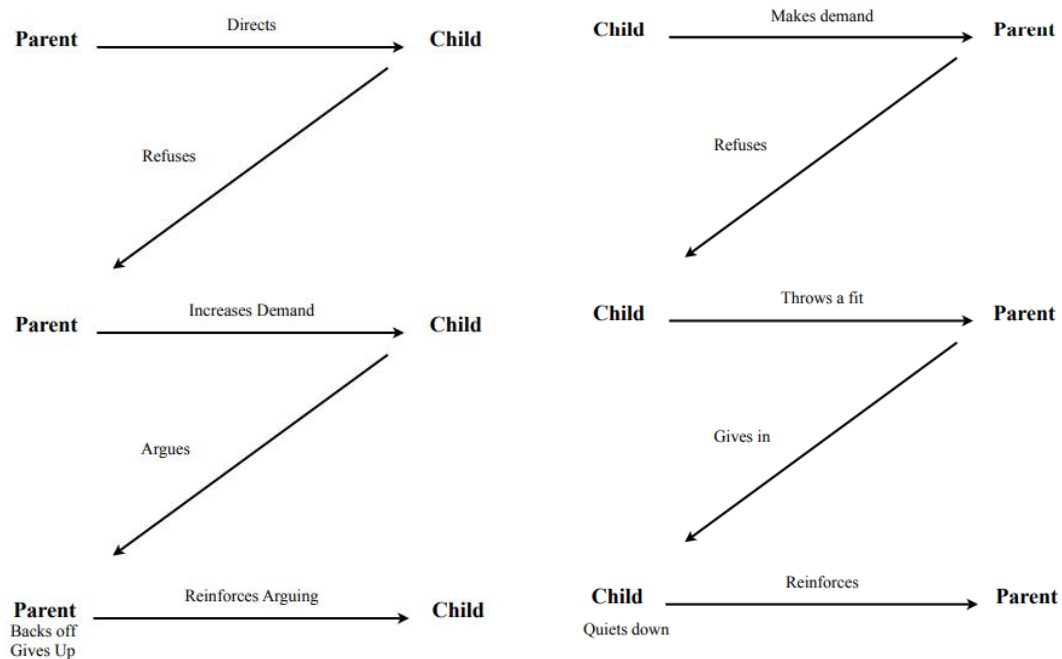


Figure 8. Examples of parent and child led coercive cycles (Templeman, 2020).

1.9. Limitations of Parent Training Programmes

The long-term effectiveness of parent training programmes is less evidenced, with more information required to draw firm conclusions (Furlong et al., 2012). A systematic review found inconsistent and small effects on challenging behaviours when assessed 6 months post intervention (Smedler, Hjern, Wiklund, Anttila & Pettersson, 2015). However, Smedler's study reportedly focused on the inclusion of

preventative interventions, rather than treatment interventions. Little clarity is given regarding the difference of the two concepts when the same parenting models been used in reviews for intervention (i.e., the 'Triple P' and 'Incredible Years' models).

Greene and Doyle (1999) found that many parents continue to experience some level of childhood challenging behaviours following intervention, and that these behaviours can remain within a clinical range. More information is required about the key mediators of change in parenting programmes (Scott, 2008). Kaminski et al's., (2008) meta-analysis found components such as teaching parents emotional communication skills, time-out, and consistency, were associated with larger effect sizes. However, the methodological flaws in the study's inclusion, and selection within the meta-analysis, cast doubt on the reliability of the findings. Parent training programmes also offer little consideration into the types of relationships and attachments between parent and child, which can impair the effectiveness of parent training strategies (e.g., time-out, behavioural charts; Zilberstein, 2014).

Parent training programmes often experience difficulties in families accessing and/or engaging in intervention. Information on attrition is lacking in studies, with a systematic review estimating that fewer than half of families receive the full benefits of parenting training intervention, including due to an attrition rate of 26% following the start of intervention (Chacko et al., 2016). Koerting et al., (2013) completed a meta-synthesis into the factors of accessing and engaging in parent training programmes. Facilitators of parenting programmes included easily accessible information, therapist qualities, and cohesive groups. Barriers included an individual's disliking of activities, or psychological/practical barriers (e.g., travel difficulties, worries). Barriers to intervention have often been attributed to factors related to the environment and parent, rather than child (McKee et al., 2008; Reyno & McGrath, 2008). However, this attribution may simply be due to the reliance on the role of the parents within parent training programmes, as informed by underpinning theory.

1.10. Attachment Theory

There is a significant amount of literature regarding attachment theory, including more established theories (e.g., secure, and insecure attachment styles) and emerging understandings (e.g., neurobiological understanding of attachment). There

are also discrepancies in the conceptualisation of difficulties within a person's attachment (Chaffin et al., 2006). It is beyond the possibility of the paper to provide a critical account of all attachment perspectives. Consequently, the attachment models discussed are those most relevant to the model of Theraplay.

1.10.1. Attachment Behavioural System

John Bowlby first conceptualised attachment theory in the 1950's and focused on the attachment bond between infant and caregiver. Bowlby acknowledged the primary motivation of infant behaviour as the desire for proximity towards a caregiver and its security, rather than food or gratification that other theories had suggested (Allen, 2011a; Bowlby, 1988; Bowlby, 2005; Cassidy, 2016). Overtime the ideal outcome would be for the child to experience their parental figure as a secure base; i.e., an individual who is responsive and attuned to the child's needs, who the child can turn to and return to during exploration, and who can soothe them when unsettled (Bowlby, 2005).

A child's attachment pattern begins within the first few months of their life (Schaffer, 1966) and continues to develop throughout childhood to adulthood. The first years of a child's life provide the opportunities for an infant to develop an attachment style to their caregiver (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1997), using 'attachment behaviours' (e.g., crying, crawling) as a way of maintaining proximity to keep safe (Bowlby, 1997; Cassidy, 2016). The infant's use of attachment behaviours is dependent on their caregiver's responsivity and level of attunement⁶⁴. For some children, substitute attachment behaviours may begin to be utilised if their needs are not being regularly met, such as avoiding or resisting the primary caregiver (Zimmerman, 1999).

Overtime, attachment behaviours develop into an 'attachment behavioural system'; which is a reciprocal process and dependent on the infant's experience of their caregiver (i.e., their 'caregiving behavioural system', Bowlby, 1982; Solomon & George, 1996). There are four hypothesised stages to an infant's development (Bowlby, 1997; Ainsworth et al., 1978).

⁶⁴ See section 1.10.4 for further information on attunement

- 1) *Initial pre-attachment*, 0-6 weeks; lack of discrimination between others, orientation towards anybody who will get close, attachment-behaviours to attract proximity include crying, smiling. Infant moves to next stage when able to discriminate Mother.
- 2) *Attachment-in-making*, 6 weeks to 7 months; some discrimination between familiar vs. non-familiar (particularly Mother), the effect of the proximity/soothing differs with each person, attachment-behaviour repertoire has expanded and infant starts to use different behaviours with each person.
- 3) *Clear-cut attachment*, 7-9 months; locomotion develops, infant actively seeks proximity and contact (which frequently with preferred figure), more active attachment-behaviours (e.g., climbing), exploring facial features, infant starts developing separation distress and expectations, high egocentricity.
- 4) *Goal-corrected partnership*; approx. 18 months; egocentricity lessens, infant developed a flexible, organised, and hierarchical system of attachment-behaviours (dependent on person), infant starts to try and change Mother's plans.

The goal of the attachment-behavioural system changes between early–middle childhood. During child development, less emphasis is placed on maintaining proximity to the caregiver which is needed during infancy. Alternatively, the availability of the primary attachment figure, alongside the development of self-regulation and autonomy, becomes more important as a child develops into early childhood (Allen, 2011a; Bosmans & Kerns, 2015).

The age ranges of the attachment behavioural system are hypothesised and are not definitive. As a child develops and engages in new life experiences, attachment-behaviours evolve and the attachment-behavioural system becomes triggered by different events (Zilberstein, 2014). The attachment-behavioural system involves monitoring, processing, and appraising interactions which determine the behaviour used to achieve the goal and unmet need (Gillath, Karantzas, & Fraley, 2016).

1.10.2. Internal Working Model (IWM)

An infant's appraisal of a situation and/or interaction, and their predominant attachment-behavioural system (i.e., to resist, avoid, or approach others), indicates

the operation of a child's internal working model (IWM). Attachment theorists propose that children develop an IWM through their earliest experiences with their caregiver (Bowlby, 1997; Zilberstein, 2014); often through the ages of two-six years (Cassidy, 2016). IWMs help a child to understand and navigate their world using their attachment-behavioural system (Bowlby, 1982; Collins & Allard, 2001). A child's attachment-behavioural system and IWM is felt to be a reciprocal process; in that the system informs the IWM whilst the IWM also guides what attachment-behaviours to utilise (Zimmerman, 1999). According to attachment theory, IWMs are typically secure or insecure (depicted in Figures 9 and 10).

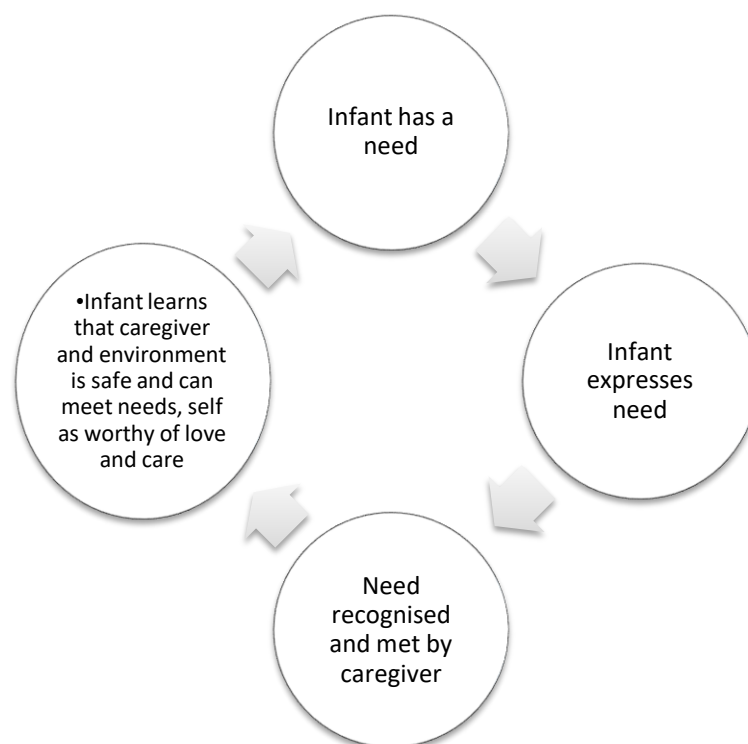


Figure 9. Secure Internal Working Model

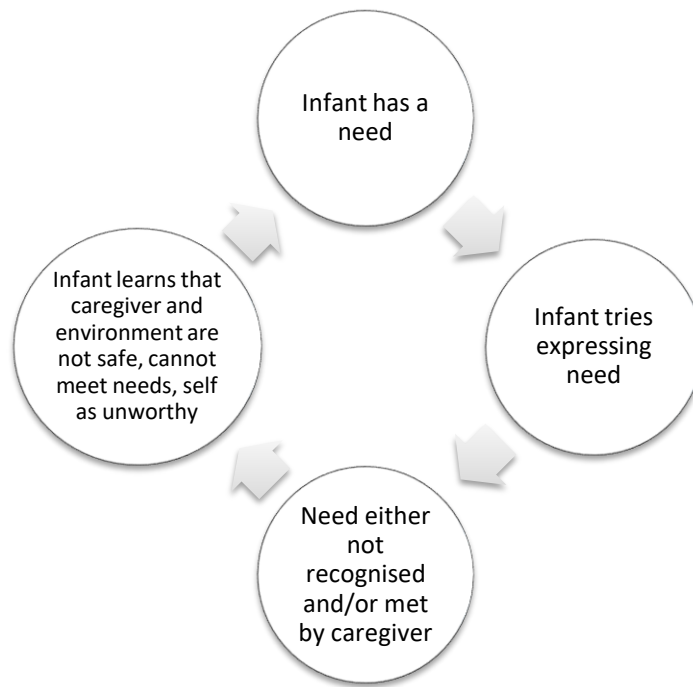


Figure 10. Insecure Internal Working Model

Overtime children start to develop a generalised IWM of other relationships and the self (Bowlby, 1988). In conjunction with other developmental changes (e.g., in cognitive abilities), IWMs play a large role of a child's life during early-middle childhood (Allen, 2011a). It is suggested that early established IWMs navigate future interactions, relationships, behaviours, and responses to attachment disruptions (Bretherton & Munholland, 2016; Kobak, Zajac, & Madsen, 2016; Zilberstein, 2014). IWM, however, are acknowledged as multifaceted and not a singular mental representation, with various IWM dependent on situations, contexts (Pietromonaco & Barrett, 2000), and caregivers (Collins & Read, 1994).

Despite IWMs commonly referenced within literature and practice, a lot remains unknown (Pietromonaco & Barrett, 2000; Slater, 2007). IWMs are commonly associated as a cognitive framework (Bowlby, 1997; Main, Kaplan, & Cassidy, 1985); involving an individual's appraisal of events and the availability of attachment figures (Bowlby, 1980; Bretherton, 1987). The appraisal of events is said to be informed by an internal archive of past attachment figures and outcomes (reflective of true current and past experiences), and is a habitual, unconscious, decision-making process (Bowlby, 2005; Zimmerman, 1999). IWMs function through declarative (explicit), procedural (implicit), and sensory-motor memory processes (Crittendon,

1990; Zimmerman, 1999), alongside both semantic (i.e., general facts) and episodic memory (i.e., personal facts; Slater, 2007). Children with insecure IWMs are hypothesised to be more rigid in their appraisals of situations and their adaptability to new information, potentially due to their developed attachment-behavioural systems which inadvertently reinforces existing internal working models (Dykas & Cassidy, 2011; Rowe & Carnelley, 2003).

Whilst the concept of IWM appears a largely cognitive construct, attachment theorists emphasise that IWMs are also affect loaded and guide affect responses (Collins & Allard, 2001). More understanding is starting to emerge around early life experiences within the attachment-relationship being stored in the body, brain, and more complex neuropsychological processes (Bretherton & Munholland, 2016; Cassidy, Jones, & Shaver, 2013; Schore & Schore, 2008).

The complexity of IWM adds to the challenges of assessment and intervention. Some assessment methods are designed to facilitate a greater understanding of underlying narratives around the self and others (e.g., storytelling, interviews; Toth, Maughan, Manly, Spagnola, & Cicchetti, 2002). Other assessment methods, such as self-report measures, are at greater risk to biases and social desirability (Kerns, Klepac, & Cole, 1996; Pietromonaco & Barrett, 2000; Zilberstein, 2014). However, the latter assessment methods are more accessible within clinical practice and research. The complexity of processes within IWM and attachment-behavioural systems offers a framework to help clinician's understand presenting difficulties that do not seem to respond to other interventions or strategies (Slater, 2007). However, the interdisciplinary nature creates difficulties when establishing key mechanisms of change and increases the risk of incoherence or misapplication of 'attachment-informed' working.

1.10.3. Attachment Patterns

Informed by the Strange Situation experiments, common patterns of attachment styles have been conceptualised, with each attachment style informed by different behavioural responses stemming from different underlying IWMs (Pietromonaco & Barrett, 2000). Mary Ainsworth and colleagues conceptualised children as having secure or insecure attachment styles; operationalised as (a) secure, (b) anxious-ambivalent, (c) anxious-avoidant, or (d) disorganised (Ainsworth et al., 1987; Main &

Solomon, 1986). A securely attached child confidently explores their environment with the understanding of the caregiver being present, holding an IWM reflecting security. Comparatively, a child who becomes highly distressed and difficult to comfort when separated from their caregiver holds an anxious-ambivalent attachment and IWM. Children who lack distress and resist contact when separated from their caregiver are hypothesised to hold an IWM and attachment style that is anxious-avoidant. A third insecure attachment pattern which was termed 'disorganised' was later introduced (Main & Solomon, 1986). Disorganised attachment describes children who display an inconsistent and paradoxical behavioural pattern to their caregiver, often due to their caregiver being perceived as a source of both threat and comfort.

Bowlby claimed that an infant's attachment was 'from the cradle to the grave' (Bowlby, 1997, p.208). However, the trajectory of attachment being stable or changeable between childhood and adulthood has been a source of contention. Evidence highlights that children hold more than one attachment style, either towards the same or different caregivers (Cowan & Cowan, 2007). Fraley (2002) attempted to contextualise two viewpoints on attachment over the lifespan; the revisionist and prototype perspective, with the latter suggesting that early attachment patterns are sustained throughout the lifespan. Fraley's (2002) meta-analysis found more evidence for the prototype perspective of attachment and the understanding that children hold a dominant attachment which influences later relationships and interactions.

How attachment patterns are characterised and acknowledged within literature and clinical practice is of discord (Chaffin et al., 2006; Ratnayake, Bowlay-Williams & Vostanis, 2014). The use of Ainsworth and colleagues' categories (Ainsworth et al., 1987; Main & Solomon, 1986) has been favoured by some, as secure and insecure alone increases the risk of polarisation between 'good' and 'bad' (DeKlyen & Greenberg, 2016). However, categorising attachment styles and arguments regarding rigidity of attachments and IWM could be reductionist and pathologizing, similar to the use of diagnostic labels rather than psychological formulation (Johnstone, 2018). More recently, attachment has been acknowledged and measured as a more continual and dimensional construct (Bosmans et al. 2006).

Bowlby, Ainsworth and colleagues' conceptualisations have led to a wealth of complimentary attachment theories and understandings which have underpinned many studies, clinical practice, and policy drivers (Slater, 2007). Parent and child attachments are acknowledged as a universal experience (Van Ijzendoorn & Sagi-Schwartz, 2008). However, most research into attachment theory has been based on Western populations, often focusing on Mothers as the primary caregiver. Given the cultural variances between norms and expectations, particularly between parenting practices (i.e., having multiple caregivers, cultural parenting expectations; Agishtein & Brumbaugh, 2013), sociocultural factors are likely to influence an individual's attachment experiences. For example, children in Western societies have been shown to prefer a single attachment figure in comparison to other societies (Kobak, Rosenthal, & Serwick, 2005). Different sociocultural experiences, therefore, may not be truly reflected within a theory largely influenced by Western samples. Furthermore, within attachment literature and many Western cultures, the Mother is the primary attachment figure which increases the risk of blame to this individual figure when difficulties in attachment arise (Slater, 2007).

1.10.4. Regulation and Attunement

Parental attunement is an intersubjective experience between infant and child. It is an important aspect towards building a healthy attachment (Gerhardt, 2015), which is largely during the infant's first year of life (Schore & Schore, 2008). The parent sensitively notices and responds to the internal experiences of the infant (e.g., feelings, hunger, discomfort; Rees, 2007), with a shared dyadic experience of positive and negative affect (Hughes, Golding, & Hudson, 2019). Gerhardt (2015) likens attunement to an experience where the caregiver 'identifies with [the infant] so strongly that the baby's needs feel like hers' (Gerhardt, 2015, p.38). Attunement is described as a dyadic and mutually reinforcing process (Rees, 2007), and can be impaired by parental factors such as mental health difficulties, substance misuse, fatigue, and stress (Rees, 2016). Some parental experiences of misattunement are expected during infancy (Papoušek, 2008) and allow the opportunity for parents to repair the relationship (Schore & Schore, 2008). Misattunement experiences are important during the development of secure attachment experiences (Rees, 2007),

however, the polarised extremes of attunement (either under attuned, or over attuned parenting) are likely to influence insecure attachment experiences.

The processes of attunement during infancy are important during the child's development of self-regulation. Difficulties with self-regulation during childhood have been associated with later challenging behaviours, particularly for boys rather than girls (Lonigan et al., 2017). Thompson (1994) defines emotion regulation as 'extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions' (Thompson, 1994, p.27); a process which begins in infancy through parental co-regulation and transitions to later skills in self-regulation (Schoore & Schoore, 2008). An infant's first experiences rely on the role of attuned parents to recognise their non-verbal cues of unmet needs and increased levels of arousal (both positive and negative). As importantly, the infant relies on the parent's ability to respond and regulate the child's levels of discomfort down to a more comfortable level. Early co-regulation skills employed often use non-verbal communication (e.g., rocking, holding, soothing and/or playful facial or vocal expressions; Gerhardt, 2015; Hughes et al., 2019). Overtime a child's emotional repertoire expands as they develop the skills of emotion recognition and regulation through their experiences of interactions and observations (Brumariu, 2015).

During early childhood children's behavioural systems focus on exploring. Availability of the primary attachment figure becomes more important than proximity as a child develops (Allen, 2011a; Bosmans & Kerns, 2015). During this transition parent's also support the move towards self-regulation (Bosmans & Kerns, 2015; Mikulincer, Shaver, & Pereg, 2003). Self-regulation involves a complex process of children appropriately using a set of skills to regulate emotions, behaviours, and thoughts. The developmental shift in middle childhood facilitates the role of the child developing more autonomy and responsibility in self-regulatory skills, such as their use in settings beyond the family (e.g., in schools; Brumariu, 2015).

Research has evidenced the associations between attachment experiences and children's self-regulatory skills. However, the direction of the association cannot be determined and may be bidirectional. Evans and colleagues' research into mother-infant co-regulation and attachment experiences found that early patterns of co-regulation, particularly at the 6-month stage, played an important role in later

attachment security (Evans & Porter, 2009). A study into boy's attachment experiences and self-regulation skills found that when aged 1.5 years old, more securely attached children had better self-regulation skills when aged 3.5 years old, in comparison to those with early insecure attachments (Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002). Despite acknowledgements of the association between attachment styles and different patterns of self-regulating difficulties (Brumariu, 2015; Gerhardt, 2015), research still lacks the rigour, breadth, and depth to offer conclusions about the associations (Brumariu, 2015).

1.10.5. Mentalization

Infant's attachment experiences from their primary caregiver contribute to an individual's later ability to 'mentalize' or 'reflective function' (Bateman & Fonagy, 2004; Warshaw, 2015). The skill of mentalizing is important for self-regulation and refers to an individual's ability to understand and reflect on their own emotions, thoughts, and motivations (Ensink & Mayes, 2010). Mentalization also involves the reflective process of being able to understand the behaviours and associated internal experiences of others. Mentalization is a skill applied during many areas of life, including self-regulation, empathy, and social interactions (Bateman & Fonagy, 2004).

An individual's ability to mentalize is based on the experiences of parent-infant interactions during early years. Secure and healthy attachment experiences provide an infant with the opportunity to be aware of, and understanding of theirs and others experiences (Warshaw, 2015). For the first 3-4 years of an infant's life, the infant relates to internal experiences of situations in two modes; either 'pretend mode' (where an infant knows that internal experiences are not reflective of external reality) or 'psychic equivalence mode' (where an infant presumes internal experiences of the self and others to be true to external reality; Fonagy & Target, 1997). After these first years and positive attachment experiences, a child would then integrate the two modes which lead to their ability to mentalize. The child begins to understand the links between internal and external reality and is accepting of experiences no longer needing to be the same or polarised. Infants missing out on healthy attachment experiences are hypothesised to struggle with the skill of mentalization, therefore struggle in their ability to understand their own and others

thoughts, motivations, and emotions (Fonagy & Target, 1997). Moreover, an individual's parenting abilities influence their own ability to mentalize, and therefore parent in a manner that facilitates either secure or insecure attachments (Slade, Grienenberger, Bernbach, Levy, & Locker, 2005).

Mentalization has been argued to be a common process within all therapeutic approaches (Bateman & Fonagy, 2004; Allen, Fonagy & Bateman, 2008). However, it has been cautioned that clinical applications of mentalization are being implemented beyond its evidence-base (MacIntosh, 2013). One approach to enhance an individual's ability to mentalize can be through the therapist and therapeutic relationship. The therapist can provide the opportunity to offer a secure base to the individual, to offer empathic listening, alongside helping the individual to recognise and regulate affect and internal representations (Fonagy & Target, 1997). More specifically in approaches for children and young people, improving a child's mentalization can be facilitated through play. The therapist may identify internal experiences through play or behaviours, including that of characters that may be acted out (Zevalkink et al., 2012). Exploring these experiences helps the child to link experiences of behaviours and emotions and in turn regulate and communicate emotions (Fonagy, Gergely, Jurist, & Target, 2002). Mentalization underpins child and family therapeutic approaches such as Mentalization-Based Treatment for Children (MBT-C; Midgley, Ensink, Lindqvist, Malberg, & Muller, 2017) and the play-based model of Regulation Focused Psychotherapy for Children (RFP-C; Hoffman, Rice, & Prout, 2016).

Mentalization offers a theoretical framework to aid our understanding regarding infant and child development. Nonetheless, there are limitations and unanswered questions regarding the approach. For example, whether the process of developing the skill of mentalization is multidimensional or not (e.g., the roles of affect, cognitions, internal and external foci), alongside understanding the skill of mentalization throughout child development stages (Liljenfors & Lundh, 2015). These unknowns in relation to the theory are likely to be influencing its translation into practice, with differences noted in mentalization based approaches. For example, differences in focus on more traditional approaches of intersubjectivity and those attending to cognitions (Ensink & Mayes, 2010).

1.11. Attachment-Related Challenging Behaviours

The concept of 'attachment-related challenging behaviours' in the current study attempts to conceptualise the following evidence between the associations of attachment insecurity and challenging behaviours. The assessment and identification of attachment-related challenging behaviours in clinical settings is problematic (Harris-Waller, Granger, & Gurney-Smith, 2016), particularly due to the lack of available measures and variances within the understandings of both 'attachment' and 'challenging behaviours'.

The association between attachment security and challenging behaviours has been evidenced within several systematic literature reviews and meta-analyses. Children with insecure attachment styles reportedly present with greater levels of challenging behaviours in comparison to children with secure attachments (Fearon, Bakersman-Kranenburg, Van IJzendoorn, Lapsley, & Roisman, 2010; Madigan, Brumariu, Villani, Atkinson, & Lyons-Ruth, 2016). However, the associations do not always appear to account for the different insecure attachment styles conceptualised by Ainsworth and colleagues (Ainsworth et al., 1987; Main & Solomon, 1986). The most consistent evidence is the significant association between disorganised attachment styles and challenging behaviours (Fearon & Belsky, 2011; Fearon et al., 2010; Madigan et al., 2016; Van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). For children with anxious-ambivalent insecure attachment styles, no significant associations with challenging behaviours were reported in both meta-analyses (Fearon & Belsky, 2011; Fearon et al., 2010; Madigan et al., 2016). Conversely, mixed results in the association of anxious-avoidant and childhood challenging behaviours have been demonstrated; with two meta-analyses supporting the association (Fearon & Belsky, 2011; Fearon et al., 2010) and another not (Madigan et al., 2016). Most research has focused on the association of attachment insecurity and challenging behaviour in early childhood; however, similar results have been suggested in later childhood (O'Connor et al., 2012).

Insecure attachment does not solely account for childhood challenging behaviours (Sroufe, 1990).⁶⁵ Several factors appear to moderate any associations

⁶⁵ Please refer back to section 1.4 in the extended introduction for other risk factors associated with challenging behaviours.

between challenging behaviours and attachment insecurity, particularly a child's age. Arguments have been made that attachment insecurity may have a greater influence on challenging behaviours within early years (DeKlyen & Greenberg, 2016). However, other evidence has shown that the association between attachment insecurity and challenging behaviours increased the older the child was (Fearon & Belsky, 2011; Fearon et al., 2010). More evidence is needed into how age contributes to any associations between challenging behaviour and attachment insecurity, with later childhood potentially influenced by other factors (e.g., peer relations, cognitive abilities; DeKlyen & Greenberg, 2016).

The literature into attachment and challenging behaviours is primarily informed on the attachment relationships between Mother and child and varies in whether clinical or non-clinical populations were included in studies. The gender of the parent figure is also important to consider, with no association in attachment insecurity and challenging behaviours reported with Father's in comparison with Mother's (Nunes et al., 2013). Little information is known about the changes in associations during childhood development, including the mechanisms contributing to the associations (O'Connor et al., 2012). There is a need for longitudinal research in developmental changes in attachment-related challenging behaviours. However, research is restricted by the lack of applicable attachment measures across different age ranges. Moreover, whilst an association has been found, the causation between attachment insecurity and challenging behaviours is unclear. It should also not be assumed that any challenging behaviours are perpetuated or precipitated by attachment insecurities (Guttman-Steinmetz & Crowell, 2005).

The concept of IWMs offers a potential understanding into why children with insecure attachment styles are found to display more challenging behaviours. The IWM is felt to not only offer a mental representation of the child and the world, but also a system of emotional and behavioural regulation (Moss, Beliveau, Zdebik, & Lepine, 2009; Zimmerman, 1999). Children who hold more negative IWMs may utilise more challenging behavioural strategies to ensure their needs are met in line with their IWM (Allen, 2011a). For example, viewing the world as unpredictable and others as unreliable, therefore, increasing the use of aggressive behaviours to feel safe (Grossmann, Grossmann, & Waters, 2005; Guttman-Steinmetz & Crowell, 2005). Few studies have assessed the association between IWM and challenging

behaviours. Moss and colleagues' examination into attachment representations of children at both six and eight years of age offers an insight into these understandings, with results evidencing the role of IWM in offering a regulatory system for behaviours (Moss et al., 2009).

1.12. Theraplay®⁶⁶

Theraplay is relationship-focused treatment model developed in the 1960's in America (Booth & Jernberg, 2009). Theraplay was developed in Chicago, USA, to address the needs of low-income families living in deprived areas that were accessing Head Start Programmes (Booth & Jernberg, 2009). Developed as a short-term and intensive model, Theraplay aims to provide positive interactions between parent and child based on healthy and secure parent-infant attachments (Booth & Jernberg, 2009). Positive interactions in sessions, facilitated through games and play, aim to enhance the child's internal working model and in turn, the child's feelings, and behaviours. The Theraplay model argues that childhood difficulties (e.g., problematic behaviours, emotional difficulties) can be changed by focusing on the parent-child relationship (Booth & Jernberg, 2009).

Theraplay is an accessible, cost-effective, and short-term intervention (Munns, 2009). Theraplay differs from other traditional Play Therapy models in its use of both adult and child in sessions, little use of toys/props, and claims of using the relationship to achieve change (The Theraplay Institute, 2017). Furthermore, Theraplay differs from other attachment-informed play approaches, such as RFP-C (informed by mentalization; Hoffman et al., 2016). RFP-C offers unstructured rather than structured sessions to focus on and target verbal and nonverbal disruptions in the child's play and communication (Prout et al., 2020). The Theraplay model suggests that the facilitating therapist is the key play object in actively facilitating structured play and positive parent-child interactions (Bundy-Myrow, 2005). Whilst described as a short-term intervention, there are inconsistencies regarding the number of sessions needed, including 8-16 sessions (Munns, 2009), 25 sessions (Booth & Winstead, 2015) and 18-24 sessions (Booth & Jernberg, 2009). Evidence has highlighted Theraplay's implementation with as few as four sessions (Francis,

⁶⁶ Theraplay® is a registered service mark of The Theraplay® Institute, Evanston, IL, USA, established in 1971 and trademarked in 1976

Bennion, & Humrich, 2017), or alternatively as many as 66 sessions (Wettig, Coleman, & Geider, 2011). More sessions are recommended for more severe difficulties. However, at present there is no evidence into how many sessions are needed to start to see change.

All Theraplay interventions are recommended to follow the same process (see Figure 11). The assessment sessions identify the areas of strength within the parent(s)-child relationship, and areas that need support during intervention. Areas of support are primarily based on the outcome of the Marschak Interaction Method assessment (MIM; Jernberg, Booth, Koller, & Allert, 1991)⁶⁷. Initial intervention sessions are strictly therapist led, with parents either observing in or out of the room (dependent on available resources). Therapist’s transition towards including the parent more within sessions, with the parent’s responsibility in leading the ‘games’ gradually increasing across sessions . Guidance on when to include the parent in sessions can be dependent on the parents own well-being, the child’s presentation, and parents’ own thoughts and feelings about their child (Booth & Jernberg, 2009). There has been little research into the graded inclusion of parents within sessions. The MIM is repeated at the end of intervention, to enable the opportunity to assess any changes within the parent-child relationship.

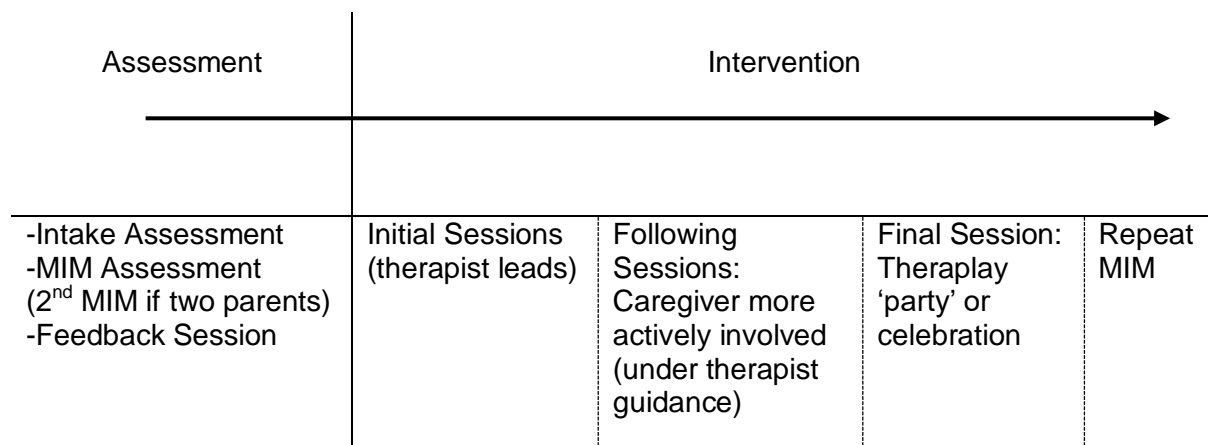


Figure 11. Theraplay Intervention Structure (Booth & Jernberg, 2009; Booth & Winstead, 2015). Note: MIM (Marschak Interaction Method, Jernberg et al., 1991).

Theraplay emphasises the need to tailor sessions based on the individual needs of the child. However, the model suggests an overall structure within the intervention

⁶⁷ See Section 2.7.6 for more information about the MIM assessment

which should be common across individuals. The overall Theraplay structure anticipates six phases across the intervention period (Booth & Jernberg, 2009; Munns, 2009). The following six phases are tentatively suggested as there is little empirical evidence assessing or measuring the phenomenon described.

- 1) Introduction: the therapist introduces themselves, demonstrating and conveying the message that they will be providing playful, organised, and attentive moments of interaction from the start to end of intervention.
- 2) Exploration: the therapist and child actively get to know each other. The therapist notices the positive qualities of the child whilst attending to any hurts. The goal is to achieve moments of intense and joyful connection with the child, and for the parent to see the child in a new way. The exploration is suggested to be crucial when working towards changing the child's inner working model (Booth & Jernberg, 2009).
- 3) Tentative acceptance: also known as a 'honeymoon period'. The child may go along with the games with underlying hesitation or be indiscriminately friendly with the therapist.
- 4) Resistance: the child actively resists any further connections, e.g., present as limp, mute, actively avoid, and negative. Not every child will resist, and often seen within sessions two or three (Booth & Jernberg, 2009). It is important for the therapist to continue to show the same upbeat presentation and that the resistance does not upset them. Resistance may continue over a few sessions. Overtime resistance from the child will decrease in intensity and hopefully disappear.
- 5) Growing and trusting: the therapist and child mutually begin to experience pleasure in interacting with each other. The child begins to develop confidence and trust, with fleeting moments at first. Once the therapist-child has become more comfortable, this is an indicator for the parents to take more of an active role.
- 6) Ending: the ending is planned from the start and is transitioned towards within the final sessions. A celebration within the final session emphasises the strengths within the relationships and positive times had.

Individual Theraplay sessions follow the structure outlined in Table 10. Sessions provide a mixture of games based on each Theraplay domain⁶⁸ and are informed by the areas of need identified by the MIM assessment (Jernberg et al., 1991). Therapists monitor the child's engagement and non-verbal cues of dysregulation, with the mixture of games offering both up-regulating and down-regulating experiences to aid self-regulation (Booth & Jernberg, 2009; Booth & Winstead, 2015).

Table 10.

Theraplay session structure (Booth & Jernberg, 2009; Booth & Winstead, 2015)

The Opening

- Playful entrance: signals time to have fun
- Greeting activities: allows the child to experience pleasure at being discovered
- Check-up activities: 1) reconnect after a week of separation, 2) give the child a sense of consistency as you remember the same spot (e.g., freckle), 3) convey the message that they are capable of growth

The Middle:

- **Depending on the need (as determined by the MIM), a mixture of:**
 - Structuring activities,
 - Engaging activities,
 - Nurturing activities,
 - Challenging activities.

Plan the sequence of activities with a good balance of active and quiet games, managing the transitions in between.

The Closing

- Parting- transition back to everyday life and enabling the child to maintain sense of their relationship
-

1.12.1. Theraplay Core Concepts

Informed by attachment theory, it is hypothesised that Theraplay sessions provide the young person with new experiences. The repetition of processing new experiences aims to modify the existing internal working model to a more positively

⁶⁸ See section 1.12.2 for more information on Theraplay domains

held mental representation of themselves, the world, and others (Booth & Winstead, 2015; Delius, Bovenschen, & Spangler, 2008). To achieve change, sessions offer positive parent-child interactions to strengthen the relationship (Booth & Jernberg, 2009; Rodwell & Norris, 2017) and provide an experience that:

- Is guided by the adults; demonstrating that the adult can provide safety and care.
- Is interactive and relationship-based; with the therapist facilitating positive social interactions between parent and child, showing how they can work together.
- Provides attuned, empathic, and reflective responses; the therapist supports the parent's capacity to attune to their child's affect and offer co-regulation.
- Is a 'here-and-now' interaction; focusing on what is going on in the session and not past experiences.
- Is informed by preverbal and social interactions; providing the child with early non-verbal communication and interactions geared towards right-brain stimulation (i.e., areas involved in affect regulation).
- Is a multisensory experience; including the use of the self and relationship to offer different sensory experiences such as rhythmic movement and positive and approach touch.
- Offers a playful attitude; (re)introducing joy, fun, and excitement within the parent-child relationship involving physical and interactive play.

The six qualities are conceptualised within Theraplay as the four key constructs of Structure, Challenge, Engagement and Nurture, and are facilitated through 'games' (Booth & Jernberg, 2009; Booth & Winstead, 2015). The Theraplay games and constructs are recognised as the key mechanisms and 'ingredients' that contribute to change.

1.12.2. Key Mechanisms of Change

Theraplay's key mechanisms of change are identified as the 'games' facilitated within sessions. Theraplay games are underpinned by the four core concepts which overarch the hypothesised qualities of healthy parent-child relationships and attachment theory.

- 1) Structure - To demonstrate and provide safety whilst regulating a child's experience. The adult sets limits, boundaries, and connection between each game (e.g., when the games will begin and end) whilst keeping the child safe. *Example game: 'Mirroring', face the child, move different body parts at a time (e.g., arms, shoulders) and ask them to copy you and move them in the same way. You can vary the tempo.*

Theraplay sessions offer a dual process of structure; with the therapist demonstrating structure to the parent and child, alongside the parent demonstrating structure for their child. The mechanism of structure draws on the underpinnings of the secure base concept (Bowlby, 1997, 1973). Sessions explicitly and implicitly share the message to the child that they have an opportunity to participate in and explore new experiences, which can often be overwhelming and frightening (Munns, 2009). However, the message conveyed is that the adults in the session (particularly the parent) are there as a safe base for exploration, showing that the child will be safe and cared for (Booth & Jernberg, 2009).

- 2) Challenge – To encourage the child to take more appropriate risks, tailoring to the child's developmental abilities to help to foster sense of mastery and competence. Challenge should be non-competitive and fun. *Example game: 'Bubble Tennis', blow bubbles high into the air between you and the child, pick one bubble and block it back and forth until it stops, count how many times you can pass it.*

Challenge based games are designed to meet the developmental abilities of the child to offer periods of success, exhilaration, and achievement (Booth & Jernberg, 2009; Schore, 1994). Challenge also allows some risk-taking to enhance a child's development whilst learning how to cope with failure (Booth & Jernberg, 2009; Munns, 2009). The safe base of the adults (particularly parents) in the session, alongside the use of scaffolding (Vygotsky, 1978) aids the exploration and learning of challenge with the child, learning that risk taking can also lead to feelings of excitement and mastery (Munns, 2009).

- 3) Engagement – To connect with the child in a playful and positive way. To attune to the child's experiences, focus on the child, and encourage of new

experiences. It is important to attend to the affect and level of arousal within the child and modulate when needed. *Example game: 'Sticker match', put a sticker on the child and have the child place stickers on you and/or parent in the same place so you match. Do this with a few different coloured stickers. After stickers are applied, child and parent touch matching stickers e.g., elbow-to-elbow.*

Engagement games offer a multisensory experience which is important in early development (Gerhardt, 2015), and helps to elicit feelings of happiness and joy (Schore, 1994). The mechanism of engagement draws on attachment experiences of playful, physical contact between parent and child, replicating the early experiences and tactile sensory system (Munns, 2009). Engagement is based on attachment theorists' understanding that the attachment between primary caregiver and child acts as a dyadic regulation of emotion (Schore, 2005). The development of self-regulation is an important aspect of the child's ability to develop good social skills (Gerhardt, 2015). Amongst the domain of engagement, Theraplay sessions combine the use of up and down regulating games to either stimulate or soothe (Munns, 2009). Regulation is facilitated through the multiple opportunities for co-regulation by adults (firstly the therapist to parent/carer, then parent/carer to child).

- 4) Nurture – To reinforce the message that child is worthy of care and that the adults will provide comfort, care, and soothing without the child having to ask. Nurture helps to enhance feelings of self-worth and is demonstrated through multiple senses (e.g., sound and touch) which are important within early parent-child interactions (Gerhardt, 2015). *Example game: 'Lotion or powder prints', apply lotion/powder to child's hand/foot and make a print (e.g., on paper). Notice the child's body part whilst applying e.g., freckles, lines on their palm. If using lotion, use powder to enhance the print.*

The mechanism of nurture games draws on an infant's first sources of pleasure, often based on the senses of smell, sound, and touch (Gerhardt, 2015). Affectionate touch is important during child development (Gerhardt, 2015; Munns, 2009), and nurture-based games in Theraplay offer a graded approach to nurture if nurture is challenging for the young person. Repeated experiences of nurture within Theraplay are attributed with the implicit and explicit message of the child being worthy of being

taken care of and being able to trust others (Booth & Jernberg, 2009; Booth & Winstead, 2015).

The key mechanisms of change within the Theraplay model are yet to be evaluated, with a lack of research and evidence into how (and if) the Theraplay 'games' and four core constructs contribute to any changes found. The Theraplay model is largely informed by attachment theory, in particular, providing children with early life parent-child interactions that they may have missed out on. Due to developmental and environmental differences during middle childhood to infancy or early childhood, the applicability of early attachment understandings may not translate and apply to later years within attachment-based interventions (Zilberstein, 2014).

1.13. Theraplay Evidence Base

Theraplay has been implemented with various age ranges (from infants through to older adulthood). Due to the developmental differences between the significant age ranges, the focus of this section shall be for children of a similar age range to the current study (i.e., 12 years old and younger). Part of the following evidence was informed by a recent systematic literature review (Money, Wilde, & Dawson, 2020), establishing the effectiveness of Theraplay for children aged 12 years and under with various presenting difficulties.

1.13.1. Theraplay's Effectiveness

A previous review by Brayman (2016) concluded that Theraplay was an effective intervention for childhood attachment difficulties. However, there were several criticisms of the review, including significant heterogeneity between studies and variability in the operationalisation of attachment. Two studies lacked a quantitative measure of attachment (Hong, 2014; Weir et al., 2013), and two studies implemented Theraplay alongside other approaches and models (Weir, 2007; Weir et al's., 2013). Despite one study (Mahan, 2001) implementing two specific measures of attachment (Attachment Story Completion Task, ASCT; Bretherton, Ridgeway & Cassidy, 1990; Randolph Attachment Disorder Questionnaire, RADQ; Randolph, 2000), only one measure (the RADQ) found change post Theraplay, which was a measure completed by the parent and not an independent observer (as

the ASCT is). Furthermore, Mahan's (2001) study was informed by a singular twin study, which impacts the generalisability of the results. The limitations to Brayman's (2016) review cause doubt to the conclusions drawn.

Mixed yet promising findings for Theraplay's effectiveness have been shown when supporting children with challenging behaviours. Theraplay was found to be effective at reducing children's total behavioural difficulties, externalising difficulties (Bojanowski & Ammen, 2011) and internalising difficulties (Bojanowski & Ammen, 2011; Siu, 2009). Wettig and colleagues' study (Wettig et al., 2011) found similar positive findings when an alternative measure (Clinical Assessment Scale for Child and Adolescent Psychopathology, CASCAPD; Doepfner, Breuer, Flechtner, Lehmkuhl, & Steinhausen, 1999). Other studies have found different results of Theraplay's effectiveness for behavioural difficulties (Mahan, 2001; Salisbury, 2018), with the findings differing between the respondent in the study (e.g., parent report vs. teacher report).

Theraplay has also shown to be effective at reducing children's social difficulties (Siu, 2014). Medium to large effects for children with dual diagnosis of a language disorder and clinical shyness (Wettig et al., 2011), with most of the changes found when applied and measured across multiple services. No significant changes in social, emotional, and behavioural needs were observed when using Theraplay for looked-after children (LAC; Francis et al., 2017). Firm conclusions into whether Theraplay is effective for children under 12 years of age could not be drawn due to the heterogeneity of the studies, heterogeneity of presenting difficulties, and small number of studies available that met the reviews eligibility criteria.

To date, no study has investigated Theraplay's mechanisms of change, and how (and if) any key mechanisms contribute to any changes found in clinical presentations. A pre-post study found clinically significant improvements within the parent-child Theraplay domains of nurture and challenge, but not engagement and structure, when using the Marschak Interaction Method Rating System (MIM-RS; Bojanowski & Ammen, 2011; O'Connor, Ammen, Backman & Hitchcock, 2001). However, there was no investigation into whether the improvements in Theraplay domains contributed to the changes in child's internalising and externalising difficulties. Furthermore, the pre-post design did not allow for any specific

measurement of Theraplay processes. A recent study found perceived improvements of closeness within the parent-child relationship after engaging in attachment-based activities informed by Theraplay (Salisbury, 2018). However, the perceived closeness was greater within parents than it was for the child.

A recent study utilised a time series approach for parent-child dyads of children with Autistic Spectrum Disorders (Howard, Lindaman, Copeland, & Cross, 2018). Significant changes in parent-child interactions were found as sessions progressed. However, the study involved time points that were devised from an average score (ranging from 4-6 sessions) and observation data not always based on the entire Theraplay session. Additionally, the data did not measure Theraplay's key mechanisms (i.e., the four constructs of Challenge, Structure, Engagement, and Nurture), therefore, being unable to conclude if Theraplay processes contributed to any changes found.

Despite the lack of clarity into the effectiveness of Theraplay and evidence into Theraplay processes, Theraplay continues to be utilised within various services and with various clinical presentations and ages (Booth & Jernberg, 2009; Munns, 2009). Furthermore, Theraplay is described as an attachment-based intervention, yet very little is known about whether Theraplay contributes to any changes in a child's attachment. Zilberstein (2013) argues that Theraplay is a parent-child based intervention focusing on positive, nurturing parenting, and does not assess or focus on attachment specifically.

1.13.2. Evaluation of Literature

Theraplay literature (for children aged 12 years and younger) was evaluated using the 'hourglass model' (Salkovski's, 1995). The evaluation consisted of studies included in the systematic literature review (Money et al., 2020). The 'hourglass model' is a three-stage evaluation process during the clinical development of psychological intervention. Therapeutic models are first evaluated using smaller samples and flexible methodological designs, for example case studies (stage one). More stringent methodological strategies (e.g., randomised control trials, RCTs, single case experimental designs) follow to assess efficacy and more stringently mechanisms of change (stage two). The final stage involves larger scale research within routine clinical practice across multiple services.

Within Theraplay literature there is a significant number of studies conducted, often based on case series and quasi-experimental designs within clinical settings. However, within the systematic review process, a significant number of studies were excluded due to their lack of publication in a peer-reviewed journal or lack of standardised psychometric measure of assessment. Only six papers (seven studies) met the inclusion criteria, despite the broad application of the review. Only two RCTs met the characteristics of stage two within the hourglass design (Siu, 2009; 2014), with limitations within the study designs acknowledged. Of the six studies, most used small sample sizes, with only one study recruiting a large clinical sample (n= 167 parent-child dyads; Wettig et al., 2011).

Theraplay literature remains in the early stages of establishing a rigorous evidence base. Its use, however, appears to have broadened out within clinical practice and presenting difficulties, despite previous acknowledgements for the need of more rigorous research and publications in peer-reviewed journals (Munns, 2009; Wardrop & Meyer, 2009). The lack of rigorous evidence into Theraplay's effectiveness for children under 12 may, alternatively, be reflective of the general lack of evidence into attachment-informed interventions for middle childhood (Allen, 2011b).

1.14. Clinical Relevance

Earlier sections outline the prevalence rates, associated risk and protective factors, and individual and systemic consequences of childhood challenging behaviours. Challenging behaviours are costly, in both finances and resources, and prevalent across multiple services and countries (Parsonage et al., 2014; Romeo et al., 2006). Despite the wealth of literature and utilisation of parent training programmes (McKee et al., 2008; Moffit & Scott, 2008), childhood challenging behaviours continue to be one of the most common reasons for referrals into Child and Adolescent Mental Health Services (CAMHS; NICE, 2017).

Parent training programmes have been shown to be an effective and costly intervention in reducing the severity of challenging behaviours (Buchanan-Pascall et al., 2019; Furlong et al., 2012; Lundahl, Risser, & Lovejoy, 2005; Scott, Spender, Doolan, Jacobs, & Aspland, 2001; Tarver et al., 2014) and recommended by national guidelines (NICE, 2017). However, attrition and engagement are often poor (Chacko

et al., 2016) with doubts regarding the long-term effectiveness (Furlong et al., 2012; Smedler et al., 2015). Meta-analyses have highlighted the association between attachment insecurity and challenging behaviours (Fearon et al., 2010; Fearon & Belsky, 2011; Madigan et al., 2016; Van IJzendoorn et al., 1999), and it could be suggested that the theoretical underpinnings and mechanisms of change for parent training behaviours may not be coherent with the suggested concept of 'attachment-related challenging behaviours'. If challenging behaviours are hypothesised to be mediated through internal attachment experiences (e.g., IWM), then behaviourally informed interventions may not be suitable for change (Scott & Yule, 2008). More investigation is needed into whether improvements in child attachment mediate changes in challenging behaviours (Madigan et al., 2016), with acknowledged support for the specificity of theory-informed interventions (Toth et al., 2002).

The model of Theraplay is currently being used across many children's services, both public (e.g., NHS) and private. For a therapeutic model to be recognised as evidenced-based practice, several studies implementing various methodological designs are needed (Byiers, Reichle & Symons, 2012; Salkovskis, 1995). Currently, the evidence base of Theraplay is scant, lacking in rigorous design, and primarily disseminated amongst own-branded avenues. Nonetheless, initial findings indicate Theraplay as a promising approach for children with challenging behaviours. Furthermore, Theraplay's proposed theoretical underpinnings of attachment theory (Booth & Jernberg, 2009) suggest that it may be a suitable alternative to parent training programmes. However, the evidence does not yet exist if, and how, Theraplay's mechanisms of change function as they are described to, and if, and how, any mechanisms contribute to any changes found.

Consequently, the current study is important to clinical practice to explore an alternative attachment-based intervention for childhood challenging behaviours, alongside offering an in-depth investigation into the Theraplay model's processes and effectiveness.

2. Extended Methodology

During the completion of the project there were some changes to ethical processes, design, methodology, and data collection due to the government and Health Research Authority (HRA) guidelines in response to the COVID-19 outbreak. See section 2.4 for information outlining the researcher's response and changes made.

2.1. Epistemological Position

The current study was designed and implemented from a pragmatist position. Pragmatism views the research question itself as important, emphasising the use of the most appropriate methodological approach to answer the question (Creswell, 2003; Goles & Hirschheim, 2000; Kaushik & Walsh, 2019). Within pragmatic research, the researcher's own values aid the study question and design in a way that remains congruent with their values (Goles & Hirschheim, 2000; Kaushik & Walsh, 2019). Nonetheless, appropriate analysis and psychological theory remains important in measuring and explaining the phenomena within pragmatic approaches (Denscombe, 2008; Goles & Hirschheim, 2000; Morgan, 2007), and it should not be misunderstood as an 'expedient' approach (Denscombe, 2008, p.274).

Pragmatism views human behaviours as inseparable from past experiences, with beliefs and knowledge originating from our own experiences (Kaushik & Walsh, 2019). Pragmatism avoids the tensions between the contentious issues of many epistemologies regarding truth and reality by orientating itself towards solving 'real world' problems embracing the position of both positivists and interpretivists (Feilzer, 2010; Glasgow, 2013; Kaushik & Walsh, 2019). The process of acquiring knowledge is viewed as a continuum rather than a dichotomous process of either objectivity or subjectivity (Goles & Hirschheim, 2000). Morgan (2007) describes pragmatic research as a process of intersubjectivity; accepting the two ends of the spectrum of there being a single reality alongside us all having our own interpretations of reality. Pragmatic research design allows for plurality of views and methods to answer the research question (Kaushik & Walsh, 2019), and is commonly applied in mixed method designs (Feilzer, 2010; Morgan, 2007; Teddlie & Tashakkori, 2009).

Pragmatism aligns well with the case series methodology utilised and the current research question. The design and research question in this study value the context around a case series yet allow for causal inferences, which can be verified using replication across similar cases (Kratchowill et al., 2010; Smith, 2012; Widdowson, 2011). The study design also allows the investigation of 'real world' therapeutic experiences, offering further understanding into the nascent literature of Theraplay. A pragmatic approach to the research question also allows for the potential exploration of unexpected data and findings (Fielzer, 2009), and the role of the researcher to be curious and adaptable to findings (Kuhn, 1970).

2.2. Ethical Considerations

2.2.1. Ethical Approval

The current study was informed and completed in line with the British Psychological Society's (BPS, 2014) code of human research ethics. Ethical approval was granted by the North East – York Research Ethics Committee (REC Ref 19/NE/0090⁶⁹). Approval to support the project was also sought from the NHS Trust Research and Development department, and confirmation of ethical approval and support gained from the Non-NHS service.

2.2.2. Informed Consent and Participant Information

The current study involved the participation of young people under the age of 16 years who were unable to give informed consent (BPS, 2014). Therefore, informed consent was sought from the young person's parent⁷⁰ in conjunction with the assent of the child⁷¹. Alongside informed consent, families were also asked whether the young person's care was subject to any care order (Children Act 1989) and whether the parent figure had Parental Responsibility. This was confirmed with the recruiting service. All parents in the study had Parental Responsibility therefore no additional consent was needed from a Responsible Individual (i.e., Social Worker). Two versions of participant information sheets were devised; parent and child versions, to

⁶⁹ See Appendix H for letter confirming ethical approval.

⁷⁰ See Appendix I for parent consent form

⁷¹ See Appendix J for child assent form where written assent was appropriate

ensure all participants were provided the information in a format that they understood⁷².

2.2.3. Confidentiality and Data Protection

Participant's confidentiality was respected and maintained throughout the study. If consent had been given, the young person's GP was also informed of their participation⁷³. No participant data gathered during the research was shared with the GP.

The study complied with the principles of the Data Protection Act (2018) and General Data Protection Regulation (GDPR) 2016/079. Compliance with these principles protected the rights of study participants with regards to the collection, storage, processing, and disclosure of personal information. Minimal personally identifiable information was sought, and in line with ethical practice, personal data, research data, and the linking code were stored in separate locations. Electronic data was stored using encrypted digital files within password protected folders and storage media. The online collection of questionnaires was facilitated using Qualtrics; an electronic hosting system for surveys which is compliant with GDPR (2016/079). Online questionnaires did not include any personally identifiable information and participants submitted a unique unidentifiable code when submitting data. Video recordings of sessions did not leave the service base where the sessions were held⁷⁴. Paper information, such as consent forms, were securely kept in a locked filing cabinet at the University of Lincoln. Only the administration staff to the Trent Doctorate in Clinical Psychology and other research members had access to the data.

In line with GDPR (2016/079), personal data was stored for one month following the end of the study, so that the lead researcher could provide participants with a summary of the research (if requested). Research data will be stored for five years and securely destroyed after this period.

⁷² See Appendix K and L for participant information sheets

⁷³ See Appendix M for letter to GP.

⁷⁴ See section 2.7 of extended methods section for adaptations made to the retrieval of video recorded data during the restrictions of COVID-19

2.2.4. Participant Withdrawal

Throughout the study participants were informed of their right to withdraw from the research. Withdrawal may have been initiated by the researcher or the participant. Participants were informed that they did not have to provide an explanation for their withdrawal and were made aware of contact information should they wish to do so on the participant information sheets. Participants were also made aware that withdrawal from the study would not influence their access to treatment or care, and that they were able to continue with the Theraplay intervention regardless of research participation.

Due to the study design, any participant who wanted to withdraw was permanently withdrawn from the study, with temporary discontinuation not an option. Participants were made aware (via the information sheet and consent form) that if they withdrew/dropped out of the study, then the data that had already been collected would be anonymised and kept within the study unless deletion was requested. When providing data, participants were given a unique code to allow for data removal if they wished to remove their data.

2.2.5. Adverse Events and Safeguarding

The study did not predict any adverse events or significant risks to participants, for either parent or child. Before fully consenting to participate in the study, participants were made aware of the potential additional stress they may experience when completing the research measures, in the initial discussions and on the participant information sheets. To reduce the burden, short forms of measures were sourced where available. Initial and final meetings with the researcher were arranged at a location and time most convenient to the participant. Whilst it was not expected, there was the possibility that some participants may have experienced additional distress when answering some of the questions. Participants were made aware of services they could access to support them should such distress occur on the participant information sheets and debrief form⁷⁵.

To protect the care of participants, participants and the service were aware that the therapist involved within the Theraplay intervention (i.e., usual treatment)

⁷⁵ See Appendix N for debrief form

maintained full responsibility regarding safeguarding concerns and the management of risk. If information was disclosed during the study that could have posed a risk of harm to the participant or others, the researcher would discuss this with the therapeutic team as they maintained full responsibility and a duty of care. If there were any discrepancies in understanding between the therapeutic team and research team, that meant the therapeutic team did not act on any safeguarding information shared, then where appropriate the research team would report accordingly, which may have included following the guidelines of breaching confidentiality. Participants were informed of this information during initial discussions and via information sheets.

2.3. Single Case Design and Rationale

Single case design research is identified by the following characteristics; (a) an individual 'case' (i.e., single participant or cluster of participants), (b) repeated dependent variable measured across different phases of the independent variable, (c) and the case acting as their own control (Kratochwill et al., 2010). Fundamental to single case designs are the use of repeated observations or measurements over time (Kazdin, 2019) and different conditions, typically the baseline (A) and intervention (B) phases. The multiple baseline design was deemed most appropriate for the current study due to the small sample population and constraints of not being able to remove the intervention (Theraplay) once participants had been exposed to sessions. Moreover, multiple baseline designs allow for cause and effect interferences between and across participants to be made, and control for threats to internal validity that standard AB designs experience (Backman, Harris, Chisholm & Monette, 1997; Kazdin, 2019). Within the current study, repeated and systematic measures of the dependent variable (attachment and challenging behaviours) are measured before and during the manipulation of the independent variable (Theraplay; Kratochwill et al., 2010). The single case design allowed the opportunity to assess moment to moment changes over time throughout baseline and intervention (Morgan & Morgan, 2009).

Randomised controlled trials (RCTs) are positioned as the 'gold standard' design when determining treatment effectiveness (Roth & Fonagy, 2005). However, there is increasing recognition in the benefit of using single case designs as an

alternative rigorous research design (Kazdin, 2019). Single case designs are more feasible and applicable within clinical settings (Byiers et al., 2012) and can still be used to evaluate treatment effects (Horner et al., 2005; Morgan & Morgan, 2001). Additionally, to achieve the aims of the current study, the single case design allowed for the systematic assessment of Theraplay's key mechanisms of change over time. Examination of a treatment models' key mechanisms of change helps to identify causal links between treatment and outcome, with the potential for future interventions to concentrate on these mechanisms and disregard those less efficient (Kraemer, Wilson, Fairburn, & Agras, 2002).

Participants acted as their own control. The staggered implementation of baseline phases meant that causal inferences could be made as to whether any changes observed could be attributed to the Theraplay intervention. Single case research recommends that the intervention phase is implemented once stability of the dependent variable has been achieved in the baseline phase, or following reports of an increase in worsening symptoms (Smith, 2012). No consensus has been reached regarding the number of baseline points needed for single case research. However, the following have been recommended within single case designs to increase validity:

- A minimum of three data points (Kratochwill et al., 2010);
- Stable baseline period, with an absence of trend and limited variation around the mean value of the data (Smith, 2012).

However, reviews of single case research have identified variation of baseline periods (Shadish & Sullivan, 2011) and it is not always achievable when recruiting within clinical practice (Morley, 2018). Due to the study design being implemented alongside treatment as usual⁷⁶, and the presenting difficulties children were being referred into service for, additional baseline points were unable to be facilitated.

Single case designs have been found to be at an increased risk of any/some changes observed being attributed to practice effects, learning, and maturation (Lobo et al., 2018). To account for these limitations, the current study utilised a multiple baseline design (staggering the introduction of intervention) and used

⁷⁶ See section 2.8.1 in extended methodology for further information about the baseline usual treatment

randomisation where appropriate (i.e., randomising the order of the process questionnaires given [BPM, MPCA]). Qualitative data from the change interviews also aimed to provide additional information that may support or refute quantitative data provided.

2.4. Project Response to COVID-19

During the implementation of the project there was a governmental response to the COVID-19 pandemic which led to an immediate suspension of Theraplay sessions. The decision was made by both recruiting services, following governmental advice, to stop all face-to-face sessions. The Theraplay Institute quickly released a statement also recommending the suspension of face-to-face sessions (The Theraplay Institute, 2020). Although the statement suggested the use of virtual Theraplay sessions, services were not set up to facilitate and deliver sessions online and were offering alternative support which was not consistent with the model (i.e., parental phone check ins). Furthermore, there is no evidence about the delivery or effectiveness of Theraplay in a virtual format, and concerns were raised regarding the fidelity and efficacy of Theraplay if a change in format was made mid-intervention and mid-study. These concerns were particularly important given Theraplay's emphasis on interpersonal connectedness and healthy, positive physical contact and touch (Booth & Jernberg, 2009).

At the point of Theraplay suspension, one participating family (participant two) had completed five sessions, and another family (participant three) had completed 12 sessions. Another participating family (participant four) had only completed baseline sessions and were due to start intervention. After discussions with the research team/supervisors and the services, adaptations to the study design were made to uphold the study validity⁷⁷. The following adaptations and the rationale for these decisions are outlined for each participating family.

- *Participant two*: the family had attended five of 12 sessions. Given the few sessions that the family had received, it was decided to wait and see if sessions were going to resume. During the waiting period, the participating family were contacted to see if they would consent to continue completing the

⁷⁷ See section 2.4.1 about ethical considerations following COVID-19

two session measures (MPCA, BPM) on a weekly basis until further clarification was provided about sessions resuming. The restrictions meant that it was highly unlikely that the remaining sessions would be offered in the near future, and any reimplementation would involve a significant break in intervention. The additional measures were completed for four weeks, and the family were then asked to see if they would complete the post therapy data collection. Although not frequently utilised, Theraplay has previously been facilitated with few sessions (Francis et al., 2017). Due to the sudden ending of sessions, the post MIM assessment could not be offered.

- *Participant three:* the family had attended 12 sessions, with six sessions outstanding. It was unlikely that the remaining sessions would be offered in the near future due to restrictions and family circumstances around the COVID-19 pandemic. Any reimplementation would involve a significant break in intervention, and it was not guaranteed that sessions with the family would resume. Literature has evidenced the use of Theraplay with 12 or fewer sessions (Bojanowski & Ammen, 2011; Francis et al., 2017; Siu, 2009; Weir et al., 2013). Therefore, it was decided to end therapy session data collection at that point. The family were approached to see if they would continue participating in the final stages of the study design; i.e., post therapy data collection and one-month follow up. Due to the sudden ending of sessions, the post MIM assessment could not be offered.
- *Participant four:* the family had completed three out of the four planned baseline sessions. As the family had not received any therapeutic intervention, and it being unlikely that sessions would be offered in the near future, no further data was collected by the research team. The family were informed of the research decision.

2.4.1. Ethical Considerations as a result of COVID-19

All ethical processes were followed during the adaptations made to the study design. Following HRA guidance, face-to-face contact was suspended and any contact was offered remotely where feasible/possible (e.g., the post-therapy researcher meeting). The changes were deemed a non-substantial amendment during this period, with

relevant documents updated and shared⁷⁸. Contact was made with the sponsor and both services Research & Development (R&D) departments to communicate the changes made.

Discussions were held with each participating family to discuss the adaptations to the project design, including how data was going to be collected or shared remotely (i.e., data collection through Qualtrics, telephone calls, and outstanding video data recordings shared securely and electronically). Participants were sent a revised participant information sheet remotely. All participants were reminded of their right to withdraw following the suspension of face-to-face sessions. Participants were informed that they did not have to participate with any of the adapted aspects of the project, and that withdrawal would not impact any agreements or involvement with the services they were accessing for intervention. No additional adverse events or significant risks were predicted for participants. To reduce participant burden, families were contacted during a time that was suitable for them and contact was facilitated in their preferred format.

2.5. Participant Recruitment

Participants were recruited from two services. Participants had already been referred and accepted for Theraplay due to behaviours that were challenging to manage at home and/or school. The use of two recruiting services aimed to reduce the chances of selection bias and enhance generalisability. The study aimed to invite all new referrals who met inclusion criteria to participate (see journal article). The two services offered Theraplay interventions for children of all care statuses (e.g., living with birth families, in foster care, or with adoptive parents). Information about the research project was disseminated amongst all therapists who were Theraplay trained within the services. Information was shared via email, presentations at service away days, and during Theraplay peer-supervision sessions (NHS only). At the non-NHS service, a central member of staff who allocated families to therapists identified all potential participants and discussed this with allocated therapist.

Participants had already been referred and accepted into each service to access Theraplay. Figure 12 outlines the full participant recruitment/screening

⁷⁸ See Appendix O for the updated participant information sheet shared with participating families following COVID-19.

process. During the initial stages, only the therapists within the services had access to the participant's personal data. First contact was made by a member of staff from the respective service. Families were asked if they consented to being contacted by the lead researcher after providing them with a Participant Information Sheet (PIS). If the family verbally consented the researcher made contact. Initial contact involved providing more information about the study, answering any initial questions, and seeking consent to meet for an initial meeting to discuss the project further. Eligible participants were informed of the difference between usual treatment and Theraplay sessions and the additional research elements (i.e., the two meetings with the researcher, questionnaires, the observational measures being completed by the research team, the post-intervention change interview, and one-month follow up). Throughout recruitment participants were informed that their entry into the study was entirely voluntary and that their treatment and care was not affected by their decision.

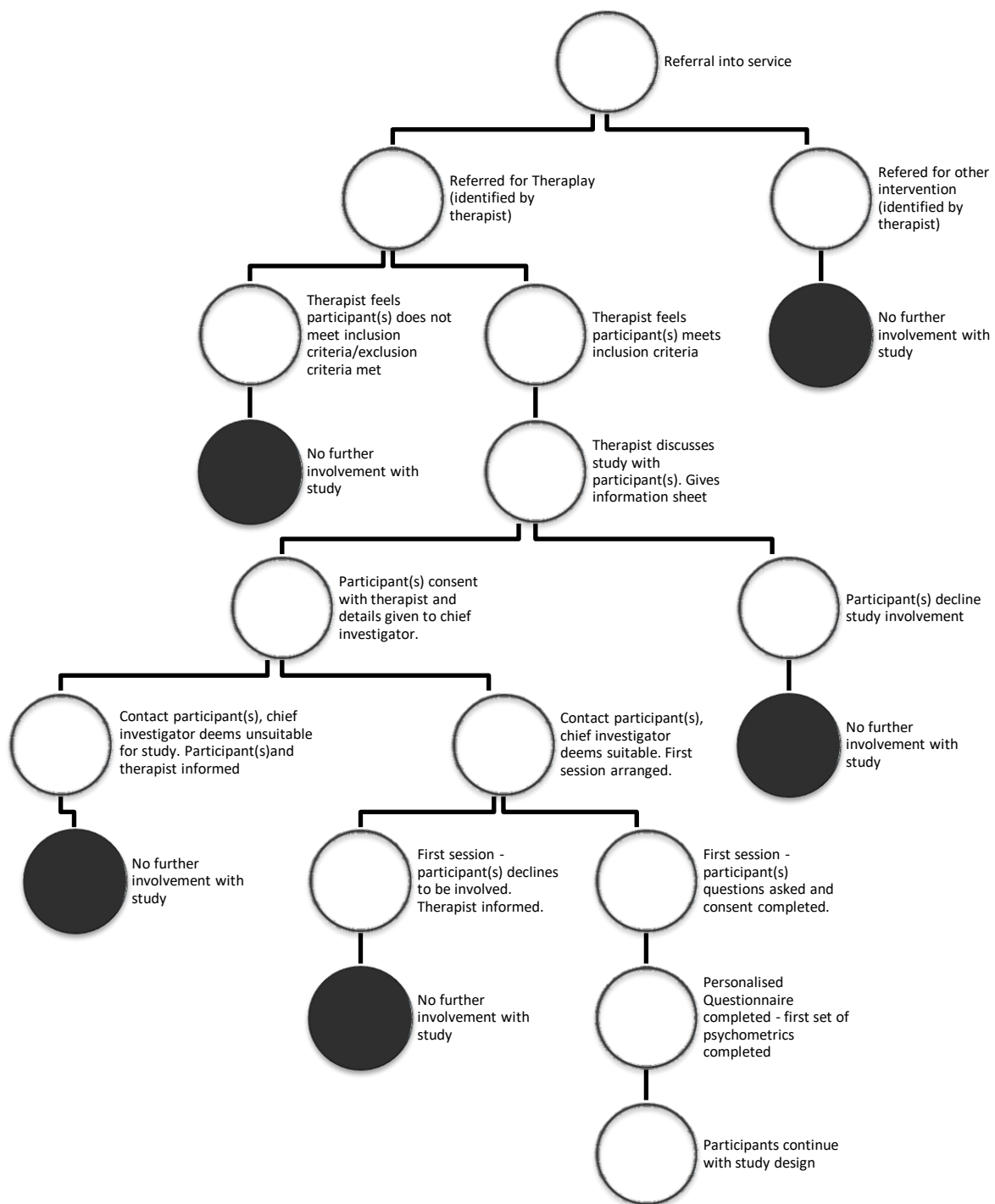


Figure 12: Screening and selection process

2.6. Participant Inclusion/Exclusion Criteria

The study aimed to recruit families who had entered children's therapeutic services for Theraplay intervention. Suitable families were those who had been experiencing a degree of challenging behaviour that was deemed to be problematic. Challenging behaviour could have been experienced at home, at school, or both. To enable some standardisation, families included in the study were those whose degree of challenging behaviours met the clinical cut off score as measured by the Brief Problem Monitor (Achenbach, McConaughy, Ivanova, & Rescorla, 2011).

Parents who had been referred for Theraplay intervention alongside their child needed to be above the age of 16 years, to allow them to be able to provide consent for themselves and their child. Discussions with both services indicated that most referrals for Theraplay were for children of a younger/primary school age. With this consideration, and to reduce the variability within childhood development, the project aimed to focus on children of a UK primary school age. Therefore, the established inclusion criteria were for young people between the ages of 6-12 years at the time of referral. In order to provide a representative account of Theraplay's uses in current clinical practice, and to be inclusive of all children and families, the study allowed families to participate from all care statuses (i.e., birth families, adoptive families, foster care, special guardianship order etc.). Young people who were actively attending court proceedings were unable to participate to reduce the likelihood of additional stress and potential conflicting interests.

To ensure participants (both young person and parent/carer) were able to participate and fully consent to the project, they needed to be able to understand, read, and speak English to acceptable standards. All the measures used in the project were of English language, with translated versions unable to be obtained or available.

2.7. Overview of Assessments⁷⁹

Table 5 in the journal paper provides an overview of each of the measures used within the study. Additional information and the rationale for why the measures were

⁷⁹ Due to copyright laws and specific permissions given for the project, copies of the measures cannot be shared within the appendices. See Appendices P-S for permissions to use measures.

chosen will be provided in this section. Measures chosen typically met the criteria of internal consistency being above .70 (Nunnally, 1978).

During initial stages of the research participants only completed the questionnaires in paper format. To aid recruitment and reduce the potential burden for families, an approved substantial amendment⁸⁰ allowed participants to have the option to complete the session process measures either using a paper or online format (using Qualtrics). Qualtrics was used for all families during the COVID-19 period of data collection. Two participants completed the measures using paper format, one participant completed the measures using Qualtrics⁸¹. The amendment also included the option for participants to be prompted by text to complete the questionnaires, if consent had been given by the family.

2.7.1. Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS).

The SWEMWBS is a 7-item self-report measure to ascertain any changes in well-being (Stewart-Brown et al., 2009). The measure was for parents to complete and included items such as; 'I've been feeling optimistic about the future'. Responses were marked on a 5-point Likert scale. The greater the score the greater the individual's well-being. Despite the full version of the SWEMWBS being shown to be more sensitive to change than the shorter version (Fat, Scholes, Boniface, Mindell & Stewart-Brown, 2017), the SWEMWBS has been found to be equally as effective with high internal consistency (alpha = .84; Fat et al., 2017; Stewart-Brown et al., 2009).

The SWEMWBS was chosen as it was less burdensome for parents. The SWEMWBS allowed a parent/carer measure of change, which was important to capture given the dyadic nature of Theraplay.

2.7.1.1. Alternative Measure

The Depression, Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) is a frequently used adult measure of anxiety, depression, and related constructs.

⁸⁰ See Appendix T for the approved substantial amendment from the North East – York Research Ethics Committee

⁸¹ Following the COVID-19 restrictions, all questionnaires were then collected remotely via Qualtrics

Despite the availability of the shortened version, the DASS-21 was still felt too much of a burden for parents/carers to complete. Furthermore, the study was less interested in specific symptoms of parental anxiety/depression, which Theraplay sessions did not aim to change, and more interested in general parental well-being.

2.7.2. Personal Questionnaire (PQ)

The PQ is a patient-generated measure to assess individualised client change. The PQ is informed by a standardised procedure (Elliott et al., 1999). For the current study, the procedure of 'generating items', 'refining items', and 'rating items' was completed with parents⁸². The prioritising of items and duration of items were not completed to reduce the burden on participants during the initial meeting. Items generated were problem focused. A decrease in PQ scores indicated an improvement in any difficulties the family had been experiencing before Theraplay started. The PQ has been found to have high internal consistency (alpha = .80; Elliott et al., 1999) with good utility to capture the client's view (Antunes, Sales, & Elliott, 2020).

The use of an idiographic measure aimed to provide a more personalised assessment of change for participants (Green, 2016), particularly given the variability of 'challenging behaviours' families may experience. The PQ also enabled distinguishable goals for each family who participated in Theraplay, and the opportunity to assess individualised change over time (Sales & Alves, 2016).

2.7.2.1. Alternative Measure

The Psychological Outcome Profiles (PSYCHLOPS) is an alternative idiographic measure of change (Ashworth et al., 2004) with good reliability (Ashworth, Evans, & Clement, 2009). The PQ was chosen as the most appropriate measure for the study given its flexibility of allowing up to 10 problem statements, alongside some concerns of the PSYCHLOPS being difficult for participants to complete (Sales & Alves, 2016).

⁸² See Appendix U for the procedure of establishing items for the Personal Questionnaire

2.7.3. Maternal Perception of Child Attachment (MPCA)

The MPCA is a 23-item parent measure of perceived child attachment (Hoppes & Harrison, 1990). Items are scored on a 5-point Likert scale, including items such as 'when my child is hurt or in pain, s(he) comes to me for comfort and help'. Higher scores on the MPCA indicate greater perceived attachment. Despite the measure being conceptualised as 'maternal' perceptions, items are applicable for other gendered parents/carers to complete with good internal consistency for both male ($\alpha = .87$) and female ($\alpha = .86$) respondents (Goodman, 2010).

Establishing a measure of middle-childhood attachment posed challenges. Middle-childhood attachment is particularly difficult to measure due to the developmental period and shifts in attachment behaviours (Bosmans & Kerns, 2015). A recent systematic literature review of middle-childhood attachment measures did not include questionnaires completed by others (i.e., clinicians, parents, and teachers; Jewell et al., 2019), and other reviews highlight the lack of available screening measures of attachment (Lim et al., 2010; Pritchett et al., 2011). The MPCA was chosen as a short parent measure which could be repeated and fell within the constraints of a doctoral project. Although the measure focused on perceptions of a population of young people who had Autism Spectrum Disorder (ASD) and Down syndrome, items did not focus specifically on any difficulties these presentations may display. Items on the MPCA also seemed to align well with the model of Theraplay (e.g., 'how often does your child initiate or ask to play with you?').

2.7.3.1. *Alternative Measure*

Few alternative measures were available. One frequently referenced and alternative questionnaire was the Randolph Attachment Disorder Questionnaire (RADQ; Randolph, 2000). However, the RADQ normed data was based on adopted children only and focused on contributing to the diagnostic assessment of attachment disorders.

2.7.4. Brief Problem Monitor (BPM)

The BPM is a 19-item measure of young people's functioning, focusing on areas of internalising, externalising, and attentional behavioural difficulties (Achenbach, McConaughy, Ivanova & Rescorla, 2011). Parents completed the BPM based on a set time point (as suggested by the facilitator, in this case the study team), and respond on a three-point Likert scale. Items include 'destroys things belonging to his/her family or others'. The current study used raw scores rather than t-scores to assess for individual change within the single case design.

The BPM is an abbreviated version of the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000), which is a widely used measure with strong psychometric properties (Achenbach et al., 2016). The BPM has been shown to have good psychometric properties, high internal consistency (alpha = .91), and good consistency when completed by different caring roles, e.g., birth, adopted/foster parents (Piper, Gray, Raber, & Birkett, 2014). The BPM offered a repeatable measure which could be completed alongside each session to track changes. The BPM was also chosen for the current study given the regular use of the CBCL within other Theraplay research (Bojanowski & Ammen, 2011; Mahan, 2001; Makela & Vierikko, 2004; Siu, 2009).

2.7.4.1. Alternative Measure

The Strengths and Difficulties Questionnaire is a frequently used questionnaire to assess social, emotional, and behavioural difficulties in children aged 2-17 years (Goodman, 1997). The SDQ has shown similar efficiency to Achenbach measures (Warnick, Bracken, & Kasl, 2008 et al., 2008). However, the BPM was chosen due to its applicability to the single case design and frequent use alongside every session.

2.7.5. Inventory of Parent and Peer Attachment – Revised (IPPA-R).

The IPPA-R is a measure of attachment completed by young people (Gullone & Robinson, 2005). Only the parent-related items were included in the study consisting of 28 items. Items include 'I can't depend on my parents to help me solve a problem' and are scored using a 3-point Likert scale. The IPPA-R consists of three constructs of attachment; communication (i.e., degree and quality of verbal communication),

trust (i.e., mutual understanding within the parent-child relationship), and alienation (i.e., degree of anger and feelings of isolation). Higher scores of communication and trust, and lower scores on the alienation domain, suggest more secure attachments. The IPPA-R has been shown to have adequate internal consistency across the three domains on the parent scale ($\alpha = 0.78-0.83$; Gullone & Robinson, 2005).

Self-report measures are a common tool of assessment during middle childhood (Bosmans & Kerns, 2015). However, a recent meta-analysis identified few reliable measures (Jewell et al., 2019). The older child version of the IPPA-R (the IPPA; Armsden & Greenberg, 1987) informed the development of the IPPA-R and was based on Bowlby's construct of attachment (Gullone & Robinson, 2005). The IPPA has been found to be the best questionnaire measure of older childhood/adolescent attachment (Jewell et al., 2019). Given the lack of valid and reliable measures for the age range of the study participants, the IPPA-R was deemed to be the most appropriate child self-report option for middle childhood. The use of a child measure alongside a parent measure also enabled the voice of the young person to be represented within the research design and aided the assessment of attachment via two separate measures, enhancing reliability (Allen, 2011a; Zilberstein, 2014).

2.7.5.1. *Alternative Measure*

The Security Scale (SS) is an alternative measure of middle-childhood attachment, consisting of 15 items focusing on the child's perceived attachment to their parent/carer (Kerns, Aspelmeier, Gentzler, & Grabill, 2001). However a systematic review found conflicting findings regarding adequacy of the SS (Jewell et al., 2019). Furthermore, the formatting of the questions on the SS was quite confusing for young people to complete (e.g., 'some kids find it easy to count on their [mom/dad] for help BUT Other kids think it's hard to count on their [mom/dad]').

2.7.6. Marschak Interaction Method (MIM)

The MIM is a structured observation tool for viewing and assessing the parent-child interaction and relationship (Booth & Jernberg, 2009; Brooke, 2004; Jernberg et al., 1991). The assessment is based on pre-defined Theraplay 'games' informed by the

four core constructs (Structure, Challenge, Engagement and Nurture). The MIM assessment is completed before intervention, with analysis and interpretation of parent-child interactions used to inform intervention and areas of need. The MIM is repeated at the end of intervention to assess any changes. The MIM is not standardised on a normative sample (Brooke, 2004) and typically does not provide any quantitative data. The MIM can sometimes be described as an assessment of attachment (e.g., Brayman, 2016). However, the MIM is more of an interaction-based measure based on the four core concepts of Theraplay. Although interpretation of the MIM is subject to bias due to its reliance on clinical insight and experience (Brooke, 2004), training and interpretive guidance is necessary for the use of the MIM. Table 11 provides an overview of a typical pre-school MIM assessment.

The MIM was administered during the baseline phase in line with standard Theraplay protocol. The MIM does not consist of any interventional aspects of Theraplay. For the current study, MIM assessments were observed using the Theraplay Observation Form to offer some standardisation across participants.

Table 11.

Recommended MIM Tasks (aged 3 years and older; Booth & Jernberg, 2009).

Task One	'Adult and child each take one squeaky animal. Make the two animals play together'
Task Two	'Adult and child each take paper and pencil. Adult draws quick picture, encourages child to copy'
Task Three	'Adult and child each take one bottle of lotion. Apply lotion to each other'
Task Four	'Adult tells child about when child was a baby OR when they came to live with you'
Task Five	'Adult teaches child something the child doesn't know'
Task Six	'Adult leaves room for one minute without child'
Task Seven	'Play a game that is familiar to both of you'
Task Eight	'Adult and child put hats on each other'
Task Nine	'Adult and child feed each other'

2.7.7. Theraplay Observation Form (TOF)⁸³

The TOF is designed to be used as a process measure to assess the key mechanisms of change; the parent-child interactions based on the four constructs of Theraplay. Higher scores were indicative of greater parent-child interactions. The TOF was developed by the research team and based on a pre-designed form by the Theraplay Institute (The Theraplay Institute, 2018). Most of the original items remained, with some additional items included based on the descriptions of each construct. The inclusion of a 5-point Likert scale (0=never, 4=always) allowed for quantitative data within the current study, alongside the option to score 'not applicable' (i.e., for any times when the parent was not present in the session). Individual domains were summed, alongside a total TOF score which was determined by summing each of the domains. The TOF was multifaceted, in that it included items focused on the 'adult' (i.e., the therapist), the 'parent' figure, and the child.

Due to the nature of the TOF having no validity or reliability, the results from the TOF are to be interpreted with caution. The TOF was completed by members of the research team who had completed Theraplay Level One and MIM training as accredited by the Theraplay Institute (The Theraplay Institute, 2020b).⁸⁴

2.7.7.1. *Alternative Measure*

Several measures have been developed to assess the four constructs of Theraplay during the MIM only; the MIM-RS (O'Connor et al., 2001), Marschak Interaction Method Behavioral Rating System (MIMBRS; McKay, Pickens, & Stewart, 1996) and Dyadic Emotional Interaction Style (D-EIS; Salo & Mäkelä, 2018). The MIM-RS has demonstrated the most positive evidence base to date. However, the MIM-RS has also shown weak to moderate correlation with the Attachment Q-Sort (AQS; Backman, 2002). None of the alternative measures were available in the public domain and are restricted by the conditions of a doctoral project (i.e., cost, training). Additionally, none of the existing observation measures have been developed to be used alongside Theraplay sessions, only the MIM assessment. The TOF was

⁸³ See Appendix V for copy of TOF

⁸⁴ See section 2.9, 2.10 for further information on scoring of the TOF, inter-rater reliability and consideration regarding response bias

therefore developed to assess the four areas across all areas of Theraplay intervention.

2.7.8. Change Interview⁸⁵

The use of a post-intervention change interview enabled a qualitative account of participant's experiences of Theraplay. Qualitative data provided the opportunity to ascertain whether participant's views supported or refuted the quantitative data found in other measures. The semi-structured change interview schedule was adapted by Elliott (2012) and focused on the following experiences; changes they had noticed, any attributions they made to those changes, what they found helpful or unhelpful, and any future suggestions. Attributes explored factors in and out of Theraplay sessions to account for any contributory factors outside of the intervention. Interviews were held during the final meeting with the researcher and were audio recorded. The risk of response bias was minimal as the researcher conducting the interview was not involved in the Theraplay intervention.

2.8. Procedure

2.8.1. Baseline Phase

Within the standardised Theraplay approach a period of assessment is completed prior to intervention. Assessment often includes a psychosocial assessment of the family's presenting difficulties (or 'intake' assessment), completion of the MIM assessment (for both parents if appropriate), and a MIM assessment feedback session (Booth & Jernberg, 2010; Booth & Winstead, 2015). For the purpose of the research project, the initial meeting with the researcher and assessment measures (i.e., the SWEMWBS, PQ, BPM, MPCA and TOF) were additional to the assessment sessions.

Routine assessment sessions were standardised and acted as the baseline phase of the single-case design. Participants completed two measures alongside each of the assessment sessions (i.e., BPM, MPCA). The TOF was completed alongside the MIM session. The MIM assessment is considered non-interventional as no therapeutic mechanisms (i.e., Theraplay games based on the constructs) are facilitated by the therapist. The baseline period aimed to assess participant's

⁸⁵ See Appendix W for the change interview questions

reported attachments and challenging behaviours prior to the implementation of intervention (Theraplay).

Adhering to single-case design recommendations, baseline data was considered stable if there is limited variability within the baseline period and an absence of trend (Kratochwill et al., 2010; Morley, 2018; Smith, 2012). The current study aimed to collect four data points within the baseline phase. Pragmatic reasons meant that additional baseline points and ascertaining baseline stability within the current study was not feasible or ethical (Morley, 2018). This was due to study recruitment from clinical practice, external determinants of set session numbers, and the nature of the presenting difficulties (i.e., young people presenting with behaviours at home that were challenging to manage).

2.8.2. Intervention Phase

Theraplay intervention was delivered as usual treatment and was informed by each service, clinician, and assessment. Families attended the recruiting service bases for their sessions and each intervention session was attended by parent, child, and therapist. Parents completed the process measures (BPM and MPCA) before all of their intervention sessions. All sessions were video recorded as recommended by the Theraplay Institute and then accessed by the lead researcher. Interactions were analysed using the video-recorded data and TOF. .

Participants were invited to meet with the lead researcher at the end of their intervention to complete the questionnaires and a change interview. The researcher aimed to meet with participants within a week of their final session. This final meeting involved repeating the SWEMWBS and PQ to ascertain any changes in parental well-being and individualised problem statements. The final process measures (BPM, MPCA) were also repeated. If the young person had completed the IPPA-R pre-intervention, then this was completed. The semi-structured change interview was completed by the lead researcher and audio recorded.

2.8.3. Follow-Up

One month after the final meeting with the researcher, participants were asked to repeat the questionnaires. The follow up data allowed of the research team to

investigate whether any changes observed had been sustained over time, in addition to any other effects from Theraplay intervention over time.

2.8.4. Adaptations to Design - COVID-19

Some adaptations to the intervention and follow-up phases were made in line with COVID-19 restrictions. One participant completed the original project design. Adaptations were made for other participants (please refer to section 2.4 in extended methodology for information).

2.9. Treatment Fidelity

To deliver Theraplay intervention, it is recommended that therapists have completed a minimum of Level One training accredited by the Theraplay Institute (The Theraplay Institute, 2020b). For transparency, Table 12 outlines the training completed by those involved in the research team and/or intervention.

Although intervention is exposed to confounding variables, the expectation of minimum training aimed to preserve consistency and fidelity to the intervention model as outlined in the extended introduction. Theraplay has been found to be highly replicable across settings and between therapists (Wettig et al., 2011).

Video recorded sessions were observed to see if they adhered to the model and structure outlined by the Theraplay Institute (see Table 12); i.e., they had an 'opening' game, 'middle' task (mixed between the constructs), and a 'closing' game. One researcher watched all the sessions, and 100% were deemed to be in line with Theraplay's recommendation.

Table 12

Theraplay training for individuals involved in analysis/intervention

Individual	Training Completed	Involvement in Study
Lead Researcher	Level One Theraplay	Completion of TOF
Therapist One	Foundation Level	Delivered intervention
Therapist Two/ Researcher	Level One Theraplay	Delivered intervention / Secondary Completion of TOF
Therapist Three	Certified Practitioner	Delivered intervention

2.10. Observer Bias

To enhance the scoring of the TOF, only members of the research team who had completed some degree of Theraplay training were able to complete the observations (the details of this training are outlined in Table 12). The use of Theraplay trained observer's enhanced fidelity to the scorings in terms of Theraplay's proposed mechanisms and approach. Conversely, the use of trained individuals potentially increased the risk of observer bias, with observers potentially viewing sessions in a manner that supports the Theraplay approach. Several procedures were implemented to reduce the risk of observer bias in the study:

- Sessions were observed and analysed by the Lead Researcher and Therapist Two and consisted of sessions that they had not facilitated. Observers were not involved in the therapy or with the family. The use of impartial observers aimed to reduce the risk of observer bias and individuals potentially analysing results in a favoured manner.
- The use of a Theraplay manual and interpretive guidance aimed to enhance standardisation to the scorings of interactions based on core concepts.
- Sessions were watched and scored independently by the observers and at separate times. The use of inter-rater analysis facilitated reliability checks of scorings (see section 2.10).
- The observations of sessions and completion of the TOFs were randomised and completed at different time points. Sessions were not watched in the order of their implementation. The aim was to reduce the likelihood of demand

characteristics and response bias (i.e., the potential for the observer to interpret the data in a manner that would assume an increase in any of the four constructs over time).

- The research team consisted of a supervisor with no Theraplay training who had no previous understanding of Theraplay. Research supervision enabled discussions around Theraplay mechanisms and observations, and aimed to enhance reliability and coherence of observations and the proposed mechanisms being observed.

2.11. Inter-Rater Reliability

The lead researcher was the primary analyst of the TOF. Therapist Two completed secondary data analysis, which enabled the assessment of inter-rater reliability. Inter-rater reliability was assessed using Cohen's kappa (Cohen, 1960). Kappa is a widely accepted measure of inter-rater reliability (Sun, 2011) and tests whether the degree of agreement between two independent scorers is greater than it would have been by chance. Correlation coefficients can range from -1 to +1, with a result of 1 indicating complete agreement (McHugh, 2012). The following interpretations were considered for the current study; $\kappa=.01-.20$ (none), $\kappa=.21- \kappa=.39$ (minimal), $\kappa=.40-.59$ (weak), $\kappa=.60-.79$ (moderate), $\kappa=.80-.90$ (strong), and $\kappa\leq.90$ (almost perfect; McHugh, 2012).

Of the recorded sessions, 15% were observed and analysed by two researchers. Inter-rater reliability was deemed to be 'strong' (kappa $\kappa=.89$). A weighted kappa score is provided to consider both exact matches between observers, alongside close matches (e.g., when one observed scored '1', and the other '2').

2.12. Analysis

2.12.1. Visual analysis

Data from the BPM, MPCA (parent completed measures) and TOF (therapist completed measure) were graphed and visually inspected for data trends, variability, point of change, and central location (Morley, 2018; Parker, Cryer & Byrns, 2006). Visual analysis allowed for the examination of any changes in data across phases in relation to the Theraplay processes and potential mechanisms of change.

Visual analysis remains the preferred method of analysis for single case research (Kratochwill et al. 2010; Morgan & Morgan, 2009; Smith, 2012). However, when used alone, visual analysis has been subject to criticism. Visual analysis is known to be subjective and influenced by perceptual biases (Morgan & Morgan, 2009), and may overlook other important findings within the data (Morley, 2018). Therefore, there are arguments for the use of objective analyses to supplement visual analysis to explore any further effects of intervention (Lobo et al. 2018; Morgan & Morgan, 2009; Vannest & Ninci, 2015). Common statistical analyses used within larger research designs (e.g., Randomised Control Trials) are not appropriate for single case design. Data sets within single case research often violate the assumptions in relation to parametric tests of normal distribution and the independence of data (Lane & Gast, 2013; Morley, 2018). The following section provides an overview of more appropriate methods of quantitative analysis for the current study design.

2.12.2. Reliable and Clinically Significant Change

2.12.2.1. Reliable Change Index (RCI).

RCI is a form of statistical analysis that enables the researcher to assess whether the change between pre and post scores is reliable and not due to measurement error (Jacobson & Truax, 1991). Whilst RCI is a less well-known use of analysis, it lends itself to small-scale designs and the assessment of individual change (Zahra & Hedge, 2010).

To calculate the RCI value, the baseline score (pre-treatment; X^1) is deducted from the final score (post-treatment; X^2). This value is then divided by the standard error of measurement (SEdiff).

$$RCI = \frac{(X^1 - X^2)}{SEdiff}$$

Figure 13. RCI calculation (Jacobson & Truax, 1991).

The standard error of measure (SEdiff) is calculated using the following equation:

$$SE_{diff} = \sqrt{2 \times SEM^2}$$

Figure 14. SEdiff calculation

Note: SEM = standard error of measurement = SD \times $\sqrt{(1 - r)}$

The RCI criterion is set at ± 1.96 (i.e., 95% confidence interval around the baseline score; Jacobson & Truax, 1991). If the calculated RCI criterion exceeds ± 1.96 , it can be assumed with 95% confidence that reliable change has been achieved. The direction of change (i.e., increase or decrease in score) is determined by the associated direction of the relevant measure.

Due to the small number of data collection points, it is recommended that RCI criterion values are calculated using existing data from large sample studies that have a similar population and study design (Jacobson & Truax, 1991). The PQ already has a pre-established RCI value of 1.67 (Elliott et al., 2016), which was implemented in the current study. Other measures did not have pre-existing RCI values. Table 13 presents critical RCI values for each measure, and Table 14 outlines the referenced data used from existing studies to calculate RCI scores.

2.12.2.2. *Clinically Significant Change (CSC)*

If reliable change has been achieved, further analysis can establish whether the change is also clinically significant. Data that is not found to be reliable cannot be further analysed using CSC criteria. CSC establishes whether participants have achieved a large enough change for it to be clinically meaningful (Morley, 2018). Jacobson and Truax (1991) outline three criteria that inform CSC:

- *Criterion a:* CSC is achieved if an individual's post-intervention score is more than two standard deviations from the mean score of a clinical group. This is used when norms for a comparison non-clinical group are not available;
- *Criterion b:* CSC is achieved if an individual's post-intervention score is within two standard deviations of the mean score of a non-clinical group. This is used when norms from both clinical and non-clinical groups **do not** overlap;

- *Criterion c*: CSC is achieved if an individual's post-intervention score is closer to the mean of the non-clinical group than the mean of the clinical group. This is used when norms from both clinical and non-clinical groups **do** overlap.

Choosing the appropriate criterion for analysis depends on the degree in which the distributions overlap between clinical and non-clinical groups, and the availability of appropriate information (Morley, 2018). It is recommended that data from clinical samples are comparable to the current study (Jacobson & Truax, 1991). Criterion b and c were implemented in the current study, dependent on the available and appropriate data in current literature (see Table 14 for values used to calculate CSC cut-off scores). The only measure available with relevant and appropriate clinical data was the SWEMWBS, which consisted of a sample of parents of children with challenging behaviours. The PQ already has a pre-established clinical cut-off of 3.25 (Elliot et al., 2016), which was implemented in the current study.

Jacobson and Truax's (1991) analysis helped to inform the 'success' of the intervention, and whether a person has 'Recovered' (met the RCI and CSC criteria), 'Improved' (met the RCI criteria alone), 'Unchanged' (not met either RCI or CSC criteria), or 'Deteriorated' (met RCI criteria in a negative direction; Wise, 2004).

Table 13.

RCI and CSC values for current study

Measure	Critical RCI Value	CSC Cut-off	CSC Criterion Used
Parent Measure			
SWEMWBS	4.39	31.55	c
PQ	1.67*	3.25*	-
MPCA	14.41(f) / 13.88(m)	111.68	b
BPM Tot	1.11	11.67	b
Internalising	0.28	2.43	b
Externalising	0.55	4.47	b
Attention	0.55	4.81	b
Child Measure			
IPPA-R: Trust	2.6	18.83	b
IPPA-R: Alienation	3.99	10.67	b
IPPA-R: Communication	3.13	20.18	b

Note: RCI (reliable change index); CSC (clinically significant change); SWEMWBS (Short Warwick-Edinburgh Mental Well-Being Scale); PQ (Personalised Questionnaire); MPCA (Maternal Perception of Child Attachment); BPM Tot (Brief Problem Monitor, Total Score); IPPA-R (Inventory of Parent and Peer Attachment, Revised; f= female; m=male; *reliable change criterion and CSC cut-off value taken from Elliott et al. (2016).

Table 14

Referent data of group norms for RCI and CSC calculations

Measure	Authors	Sample	Mean	SD	Reliability (Cronbach's alpha)
SWEMWBS	Fat et al., (2017)	Non-clinical sample: General Adult Population	M= 23.67	M= 3.92	0.84
			F= 23.59	F= 3.99	
			Av= 23.63*	Av= 3.96*	
	Karjalainen, Kiviruusu, Aronen, and Santalahti (2019)	Clinical sample: Parents of children with challenging behaviour	24.3	4.4	0.84 ^a
PQ	Elliott et al., (2016)	Non-clinical sample: UK (Scottish) Community	-	-	0.77
MPCA	Goodman (2010).	Non-clinical sample: Community (parents of children at special education schools)	83.90	13.89	0.86(F) 0.87(M)
BPM	Piper et al., (2014).	Non-clinical sample: Community (school aged children)	9.0 (Tot)	1.33 (Tot)	0.91 (Tot)
			2.0 (Int)	0.21 (Int)	0.78 (Int)
			3.4 (Ext)	0.53 (Ext)	0.86 (Ext)
			3.7 (Att)	0.55 (Att)	0.87 (Att)

IPPA-R	Gullone and Robinson (2005).	Non-clinical sample: Community (school aged children)	14.83 (Trust) 4.39 (Alien) 14.7 (Comm)	2.00 (Trust) 3.14 (Alien) 2.74 (Comm)	0.78 (Trust) 0.79 (Alien) 0.83 (Comm)
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Notes: SWEMWBS (Short Warwick-Edinburgh Mental Well-Being Scale); PQ (Personalised Questionnaire); MPCA (Maternal Perception of Child Attachment); BPM (Brief Problems Monitor); IPPA-R (Inventory of Parent and Peer Attachment, Revised); M (Male); F (Female); Av (Average); Tot (Total); Int (Internalising); Ext (Externalising); Att (Attention); Trust (Trusting); Alien (Alienation); Comm (Communication), ^a Cronbach Alpha taken from development paper of SWEMWBS (Fat et al., 2017), in absence of reliability data for comparable population data, - no data available

2.12.2.3. Current Dataset

CSC analysis was informed by Jacobson and Truax's (1991) criterion b or c, dependent on available data (see Table 13). Non-clinical data was used for the BPM and MPCA measure due to the lack of an equivalent clinical sample. Given the current study was based on a clinical sample, further investigation into the homogeneity of the current dataset and referenced dataset was important. The mean pre-treatment scores of the current sample were compared to the mean scores of the non-clinical reference group (see Table 15).

Table 15.

Mean pre-treatment scores of the current sample and the mean scores of the non-clinical reference samples, used to calculate reliable and clinically significant change.

Measure	Mean (SD) pre-treatment score of current study sample	Mean (SD) score of clinical reference sample
MPCA	56 (16)	83.90 (13.89)
BPM	23.33 (6.51)	9 (0.4)

Note: MPCA: Maternal Perception of Child Attachment, BPM: Brief Problem Monitor, SD: standard deviation

Results indicated heterogeneity between the current sample and the referenced non-clinical sample. The mean of the MPCA was lower in the current study (more than one standard deviation than the mean of the referenced sample), and the mean of the BPM was higher in the current study (more than two standard deviations than the mean of the referenced sample). This indicates that (on average), the current study sample's childhood challenging behaviours were greater, than the referenced sample, and the parent-child attachment lower. Considering the difference in samples, and critique of the RCI and CSC methodology, other methods of analysis were recommended to determine whether treatment had or had not been effective for the individual (Wise, 2004). See below for further information.

2.12.3. Effect Sizes

Effect sizes provide a quantifiable estimate of meaningful change following a period of intervention. Effect sizes can supplement the use of visual analysis within single

case research (Morgan & Morgan, 2009; Vannest & Ninci, 2015). There are no agreed or favoured methods when assessing effect sizes (Kratochwill et al. 2010), with a review by Parker, Vannest and Davis (2011) acknowledging strengths and limitations within nine different techniques. Two of the techniques outlined by Parker and colleagues are discussed below.

2.12.3.1. Fisher's Conservative Dual Criterion (CDC) Method

The CDC method (Fisher, Kelley, & Lomas, 2003) was developed from the earlier use of the Percentage Exceeding the Mean (PEM) method (Ma, 2006). The PEM method involves the median value of baseline data being calculated and a horizontal line drawn across subsequent phases (Ma, 2006). Data points in subsequent phases that exceed the line in the anticipated direction are then counted, and a percentage is then calculated to assess the interventions effectiveness. Although the PEM method is easily applied, it does not account for trends within data (Kratochwill et al. 2010; Vannest & Ninci, 2015) and is at greater risk of Type I errors (i.e., concluding that the findings are significant when they have occurred by chance; Wolery, Busick, Reichow, & Barton, 2010). Subsequently, the limitations of the PEM method were addressed by introducing the CDC method (Fisher et al., 2003). The CDC includes the projected trend line adjusted by 0.25 standard deviation, depending on the desired outcome (Morgan & Morgan, 2009; Morley, 2018), and thus can be utilised to account for some of the limitations acknowledged in other effect size calculations within single case research.

The CDC method aids the assessment of whether there are changes between phase A and B (Morley, 2018) and utilises baseline data to establish a mean and projected trend line. If intervention data points fell outside of both the lines then it was likely to be due to the intervention effects (Morgan & Morgan, 2009).

2.12.3.2. Tau-U

It is beyond the scope of this paper to offer a full account of Tau-U analysis, see Parker and colleagues (2011b) or Vannest and Ninci (2015). To summarise, Tau-U analysis allows for the identification and accommodation of trends within data sets, and subsequently calculating an effect size for the intervention. Trends can be explored (a) within the baseline dataset (b) the intervention dataset, and (c) between

the baseline and intervention datasets. The analysis then allows for trend correction. It is recommended that when a trend is under 0.1 or 0.2 it does not need correcting (Vannest & Ninci, 2015). Although a consensus has not been agreed, the following categorisations have been conceptualised to account for effect sizes when using Tau-U; 0.20 a small change, 0.20-0.60 a moderate change, 0.60-0.80 a large change, >0.80 a very large change (Vannest & Ninci, 2015).

Tau-U can be calculated by hand (see Morley, 2018 for guided instructions). For the current study, all Tau-U calculations were completed using a verified online calculator (Vannest, Parker, Gonen & Adiguzel, 2016).

Tau-U offers an alternative method within single case research to compliment visual analysis (Parker, Vannest, Davis & Sauber, 2011). In contrast to other non-overlap methods, Tau-U uses the full dataset to assess effect sizes and any differences between data phases (Morley, 2018; Parker et al., 2011a). Other methods, such as the PEM method (Ma, 2006), Percentage of non-overlapping data (PND; Scruggs, Mastropieri, & Casto, 1987) and Non-overlap of all pairs (NAP; Parker & Vannest, 2009) are at increased risk of over or underestimating the effect of an intervention (Morley, 2018; Parker et al., 2011a; Vannest & Ninci, 2015). Tau-U can address problematic trend issues within data (Parker et al., 2011b), and offers a robust form of analysis which lends itself to small data sets (Vannest & Ninci, 2015). Tau-U can also be applied in circumstances where baseline trends cannot be achieved, such as research conducted in clinical practice (Lee & Cherney, 2018).

2.12.3.3. Rationale for Tau-U

Tau-U rather than Fisher's CDC was chosen as the most appropriate analysis of effect size for the current project. Tau-U allowed for the inconsistencies in baseline data points between each family due to the sample being recruited from clinical practice (Lee & Cherney, 2018) and the small dataset available (Vannest & Ninci, 2015). Furthermore, effect sizes using Tau-U allowed adjustment for any baseline trends (Parker et al., 2011b) and used the full dataset rather than relying more on the baseline phase (Morley, 2018; Parker et al., 2011a). Tau-U was conducted as a compliment to the preferred method of analysis for single case research, visual

analysis (Kratochwill et al. 2010; Morgan & Morgan, 2009; Smith, 2012). Vannest and Ninci's (2015) recommendations of baseline trend were followed in the current study.

2.12.4. Triangulation of Analysis

A triangulation of analysis methods was implemented in the current study; including visual (Morley, 2018; Parker et al., 2006), RCI and CSC (Jacobson & Truax, 1991), and Tau-U analysis (Parker et al., 2011b). The use of all three analysis methods aimed to account for the limitations of each approach outlined above.

3. Extended Results

3.1. Baseline Stability

3.1.1. Participant One and Three

For two families (Lizzie and Rachel, Tom and Carl⁸⁶), the minimum baseline dataset could not be met. The lack of baseline points was largely due to families being recruited from clinical services. Lizzie and Tom's families had already accessed some of their initial assessment appointments prior to the initial researcher meeting. Therefore, they were due to start the intervention phase within the next session or two. Furthermore, both families reported significantly high levels of challenging behaviour (as shown on the BPM measure) and stressors of managing the situation. Due to constraints and services not being able to offer additional assessment sessions, it would have been unethical to delay the start of the intervention phase for the purpose of the research only.

3.1.2. Participant Two

The baseline phase for Holly and Steve exceeded the minimum recommendation of three points (Kratochwill et al., 2010).

3.2. Challenging Behaviour

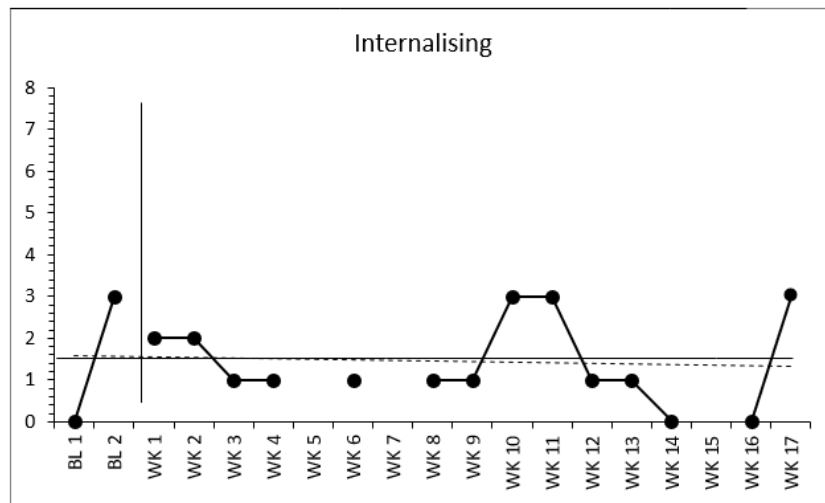
Further visual and Tau-U analysis was conducted on the BPM measure (see Figures 15-17, Table 16). Additional analysis enabled further exploration into specific behavioural difficulties of an externalising, internalising, and attentional nature.

⁸⁶ All names used are pseudonyms to protect participant confidentiality

Internalising

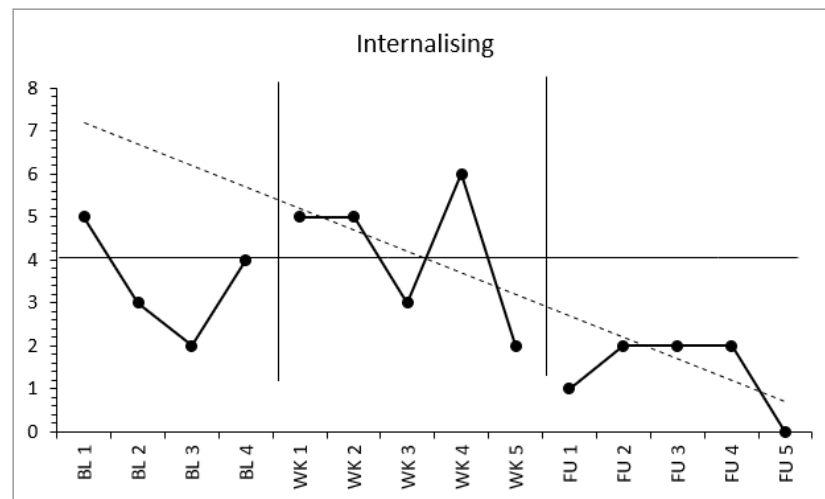
'Lizzie and Rachel'

(P1)



'Holly and Steve'

(P2)



'Tom and Carl'

(P3)

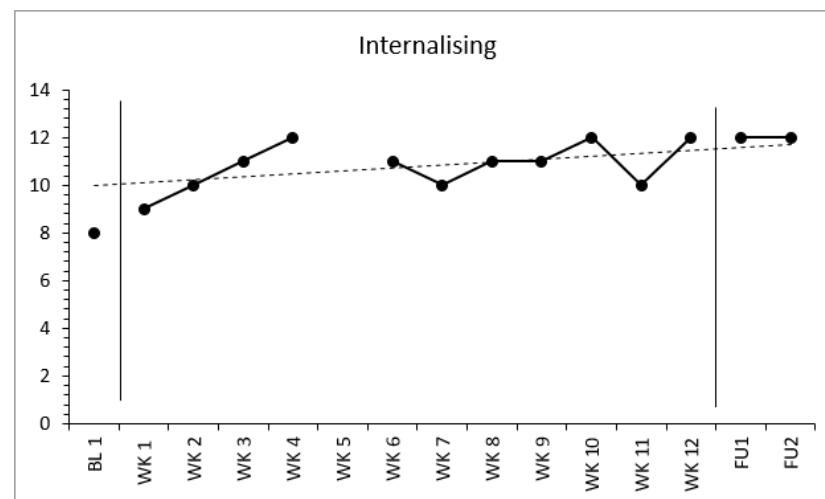
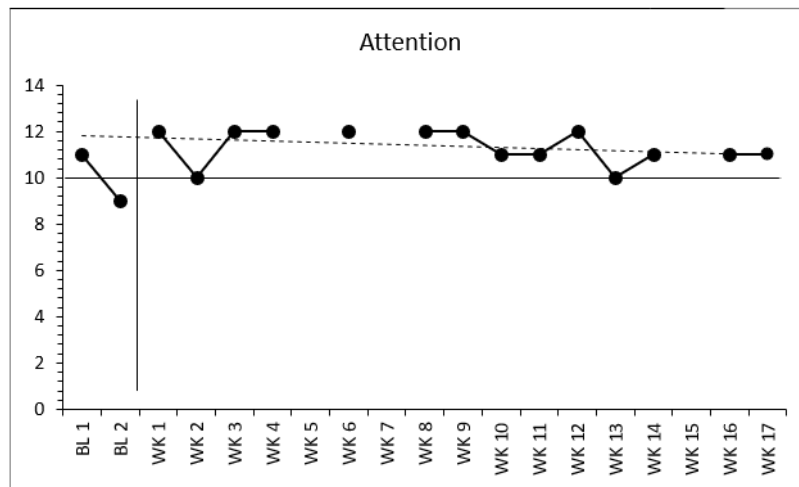


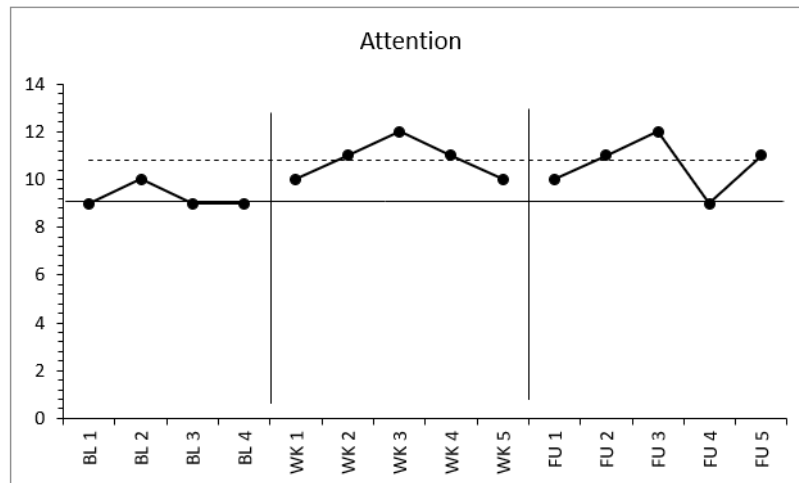
Figure 15. Visual data across baseline, intervention, follow-up. Dotted line indicates intervention trendline. Solid horizontal line indicates baseline median. BL: baseline; WK: intervention session week; FU: follow-up; vertical lines indicate different phases.

Attention

'Lizzie and Rachel'
(P1)



'Holly and Steve'
(P2)



'Tom and Carl'
(P3)

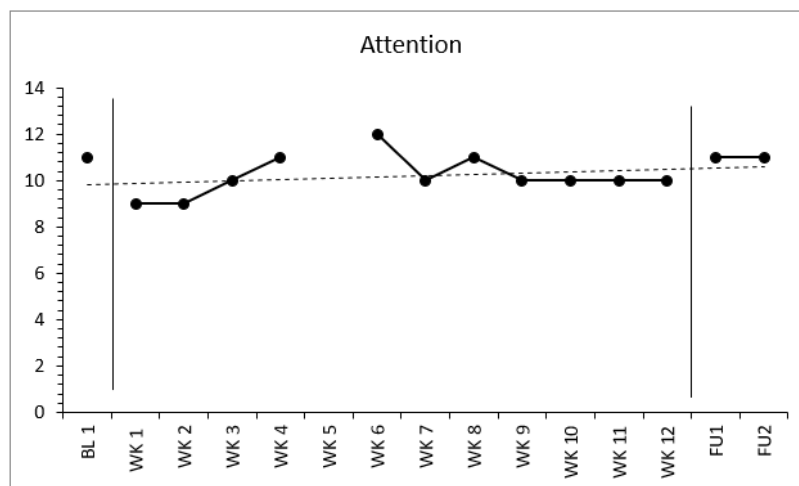
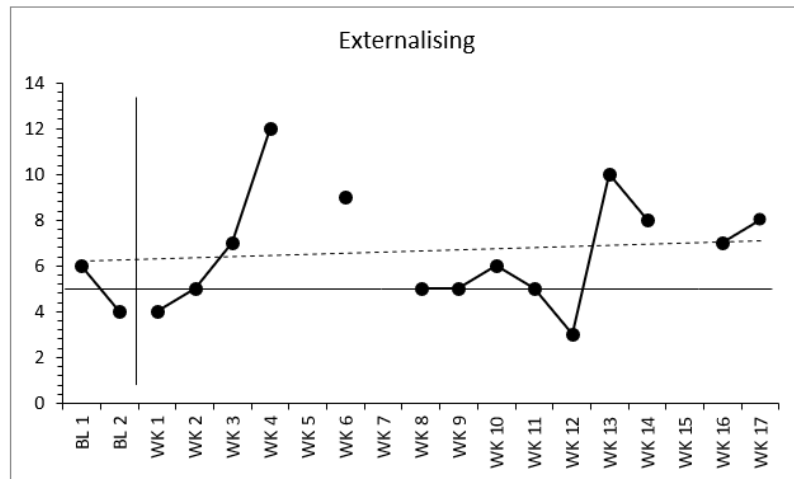


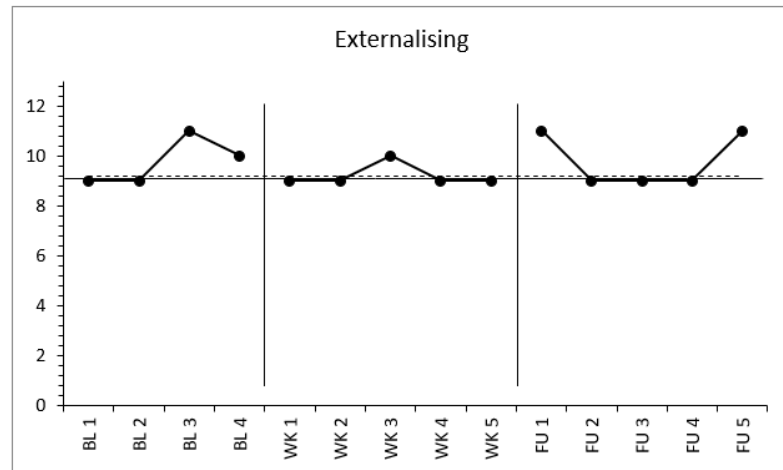
Figure 16. Visual data across baseline, intervention, follow-up. Dotted line indicates intervention trendline. Solid horizontal line indicates baseline median. BL: baseline; WK: intervention session week; FU: follow-up; vertical lines indicate different phases.

Externalising

'Lizzie and Rachel'
(P1)



'Holly and Steve'
(P2)



'Tom and Carl'
(P3)

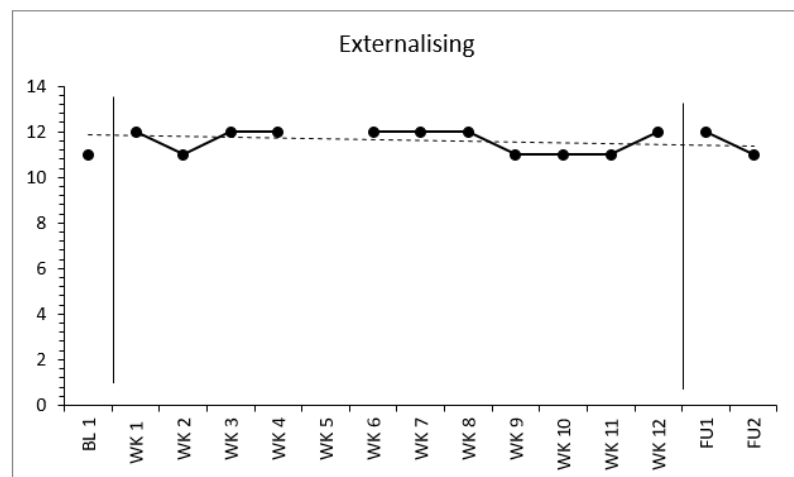


Figure 17. Visual data across baseline, intervention, follow-up. Dotted line indicates intervention trendline. Solid horizontal line indicates baseline median. BL: baseline; WK: intervention session week; FU: follow-up; vertical lines indicate different phases.

Table 16.

Tau-U analyses for each participant across the BPM scales

	Visual Analysis		Tau-U	
	BL Trend	INTx Trend	Tau-U	p value
P1				
Int	Yes*	No	0	1.00
Att	No	No	0.68	0.13
Ext	No	Minimal	0.43	0.34
P2				
Int	No	Yes	0.3	0.46
Att	No	No	0.9	0.03 ^c
Ext	Yes**	No	-0.5	0.22
P3				
Int	No	Minimal	1	0.11
Att	No	No	-0.64	0.31
Ext	No	No	0.64	0.31
All Participants				
Total Int	Yes*	-	0.37	0.20
Total Att	No	-	0.43	0.14
Total Ext	Yes**	-	0.12	0.68

Note: Int: Internalising, Att: Attention, Ext: Externalising, BL: Baseline, INTx: Intervention, *p* value associated with Tau-U. *BL trend corrected (Tau-U: 1), **BL trend corrected (Tau-U: 0.5), ^c clinically significant finding at $p \geq .05$

3.2.1. Internalising Difficulties

Visual and Tau-U analysis examined whether Theraplay was effective at reducing internalising challenging behaviour. Overall, visual analysis revealed that Theraplay had no effect on internalising behavioural difficulties. There was no trend in internalising difficulties throughout the intervention phase for Lizzie, with variance in later sessions during weeks 10, 11, and 17. Tom's internalising difficulties were observed to slightly increase during the intervention phase, but with little variance in scorings. The lack of baseline data points makes it difficult to ascertain changes between baseline and intervention phases for Lizzie and Tom. Holly's scores indicated variance in both baseline and intervention phases, which influenced the intervention trend line. Whilst a decline in internalising difficulties was observed during the intervention phase for Holly, three of the five data points were above the baseline median point. Holly's internalising difficulties did decline during the follow-up phase.

When using Tau-U analysis, Theraplay was found to not be effective at reducing internalising behavioural difficulties for all three families (see Table 16).

3.2.2. Attentional Difficulties

Visual and Tau-U analyses examined whether Theraplay was effective at reducing attentional behavioural difficulties. Visual analysis revealed that Theraplay had no effect on reducing attentional difficulties. No trend within the intervention phase was observed in any of the families. During the intervention and follow-up phases, most data points for Lizzie and Holly were greater than the baseline phase, which indicated greater difficulties after starting Theraplay. Conversely, the majority of the data points for Tom during the intervention and follow-up phases were lower than the baseline phase, which indicated fewer difficulties after starting Theraplay. The minimal baseline data points for Lizzie and Tom, however, make it difficult to draw firm conclusions between phases.

Using Tau-U analysis, Theraplay was not effective at reducing attentional behavioural difficulties in any of the families (see Table 16). When assessing individually, Tau-U analysis found a significant and meaningful change for Holly (participant two) between baseline and intervention phases. However, the meaningful change for Holly's attentional difficulties were observed to be in the opposite direction to that which would be anticipated; i.e., her attentional behavioural difficulties were seen to worsen between baseline and intervention phases. Visual analysis supported the findings using Tau-U.

3.2.3. Externalising Difficulties

Visual and Tau-U analyses examined whether Theraplay was effective at reducing externalising behavioural difficulties. Visual analysis found Theraplay to have no effect on externalising difficulties across the three families. No trends were observed for Holly and Tom during intervention phases. For Holly there was a trend in the baseline phase; which suggested a natural increase in externalising difficulties before Theraplay sessions started. Holly's externalising difficulties appeared to decline during the intervention phase and slightly increase again in the follow-up. Lizzie's reported externalising difficulties varied across baseline and intervention phases. For Lizzie a minimal, yet slightly gradual, increase in trend is observed during the intervention phase sessions. However, there is significant variance in Rachel's reports (particularly during week four and 13).

When using Tau-U analysis, Theraplay was not effective at reducing externalising behavioural difficulties in any of the three families (see Table 16).

3.2.4. Reliable and Clinically Significant Change

RCI and CSC analyses were undertaken to assess if any data reached the threshold for reliable and clinically significant change. Results are tabulated for each participant in Table 17.

A reliable deterioration in both Lizzie and Tom's internalising difficulties were observed; including during follow-up for Tom. Conversely, Holly 'recovered' from her internalising difficulties post intervention and during follow-up (i.e., there was a reliable and clinically significant improvement; Wise, 2004). No change was observed in Lizzie and Tom's attentional difficulties, whereas Holly was found to experience a reliable deterioration in attentional difficulties post-intervention and during follow-up.

Mixed results were found for participant's externalising difficulties. All three participants experienced some degree of reliable deterioration either post-intervention or during follow-up. However, the results appeared to fluctuate between phases. Lizzie and Tom experienced reliable deterioration post-intervention; however, Tom's externalising difficulties stabilised and were found unchanged in follow-up. There was no follow-up data for Lizzie. Holly's externalising difficulties were unchanged at post-intervention, and reliably deteriorated during follow-up. It is worth noting that any observed changes during follow-up for Holly and Tom may have been influenced by Theraplay sessions or other contextual factors (e.g., related to COVID-19 restrictions).

The use of multiple analyses found a discrepancy between Tau-U and RCI/CSC findings. All but one result was different. The only consistent result was the deterioration in Holly's attentional difficulties, which was found using both Tau-U and RCI analysis. It is hypothesised that results using the RCI/CSC analysis were subject to Type 1 error (Tarlow, 2017), including the clinically significant changes reported in Holly's internalising behaviours.

Table 17.

Results of Parent/Carer BPM scales

Participant Measure	Pre	Post	1 Month Follow-up
P1			
Internalising	0	3 ^{R-}	-
Attention	11	11 ^U	-
Externalising	6	8 ^{R-}	-
P2*			
Internalising	5	2 ^{R+C}	0 ^{R+C}
Attention	9	10 ^{R-}	11 ^{R-}
Externalising	9	9 ^U	11 ^{R-}
P3			
Internalising	8	12 ^{R-}	12 ^{R-}
Attention	11	11 ^U	11 ^U
Externalising	11	12 ^{R-}	11 ^U

Notes: ^R denotes Reliable Change and ^C denotes Clinically Significant Change (from clinical to non-clinical range) compared to pre-intervention scores at $p < .05$; + or - indicates improvement or deterioration, respectively; ^U denotes unchanged. *P2 post scores after the end of five intervention sessions

3.3. Theraplay Observations

Further visual and Tau-U analysis of the TOF was conducted into each of the Theraplay mechanisms of Structure, Engagement, Nurture, and Challenge (see Figures 18-20, Table 18). When using the TOF the baseline phase consisted of only one data point. Therefore, comparisons between baseline and intervention phases cannot be determined.

Participants One: 'Lizzie' [child] and 'Rachel' [parent]

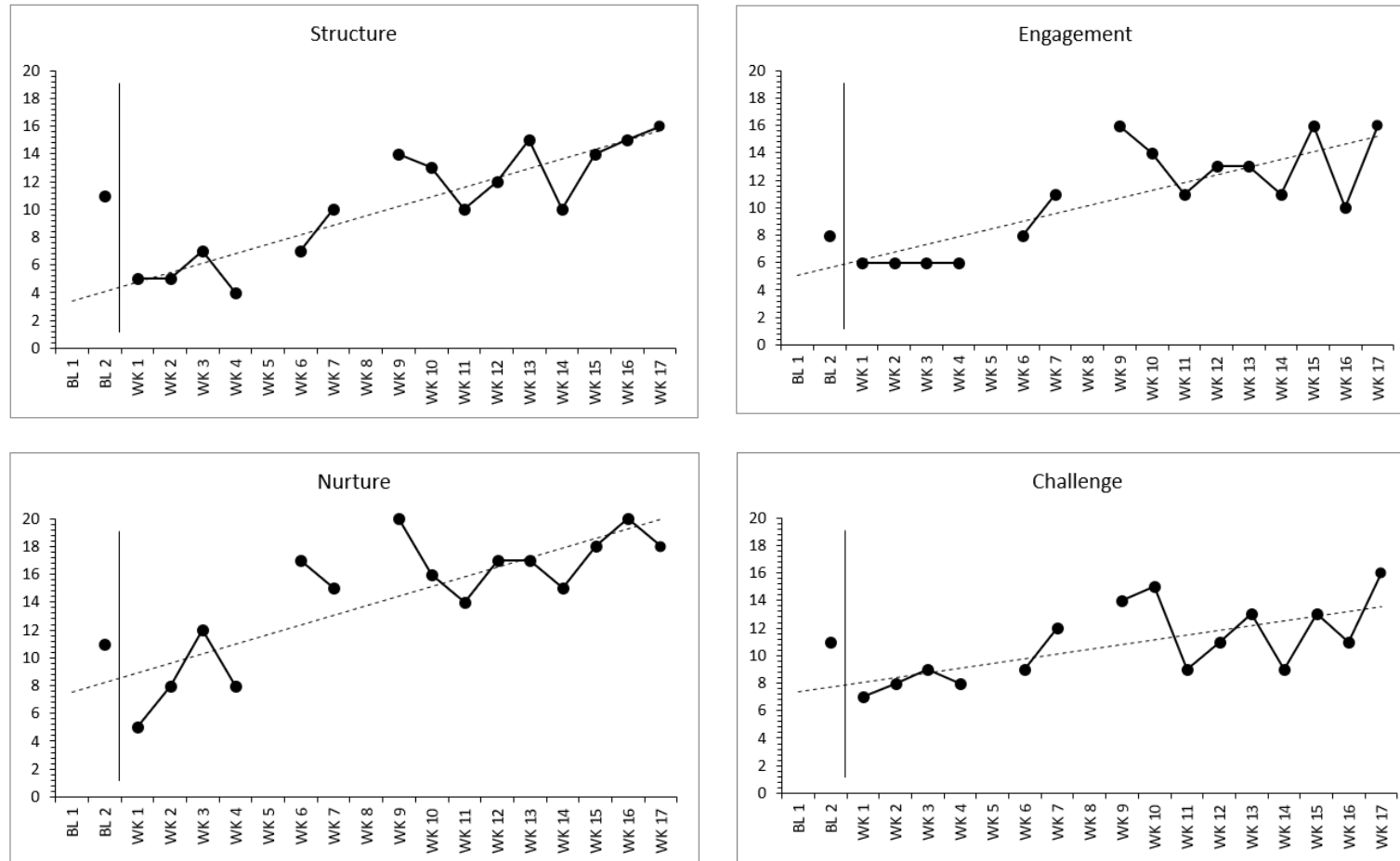


Figure 18. Visual data across baseline and intervention. Dotted line indicates intervention trendline. BL: baseline; WK: intervention session week; vertical lines indicate different phases.

Participants Two: ‘Holly’ [child] and ‘Steve’ [parent]

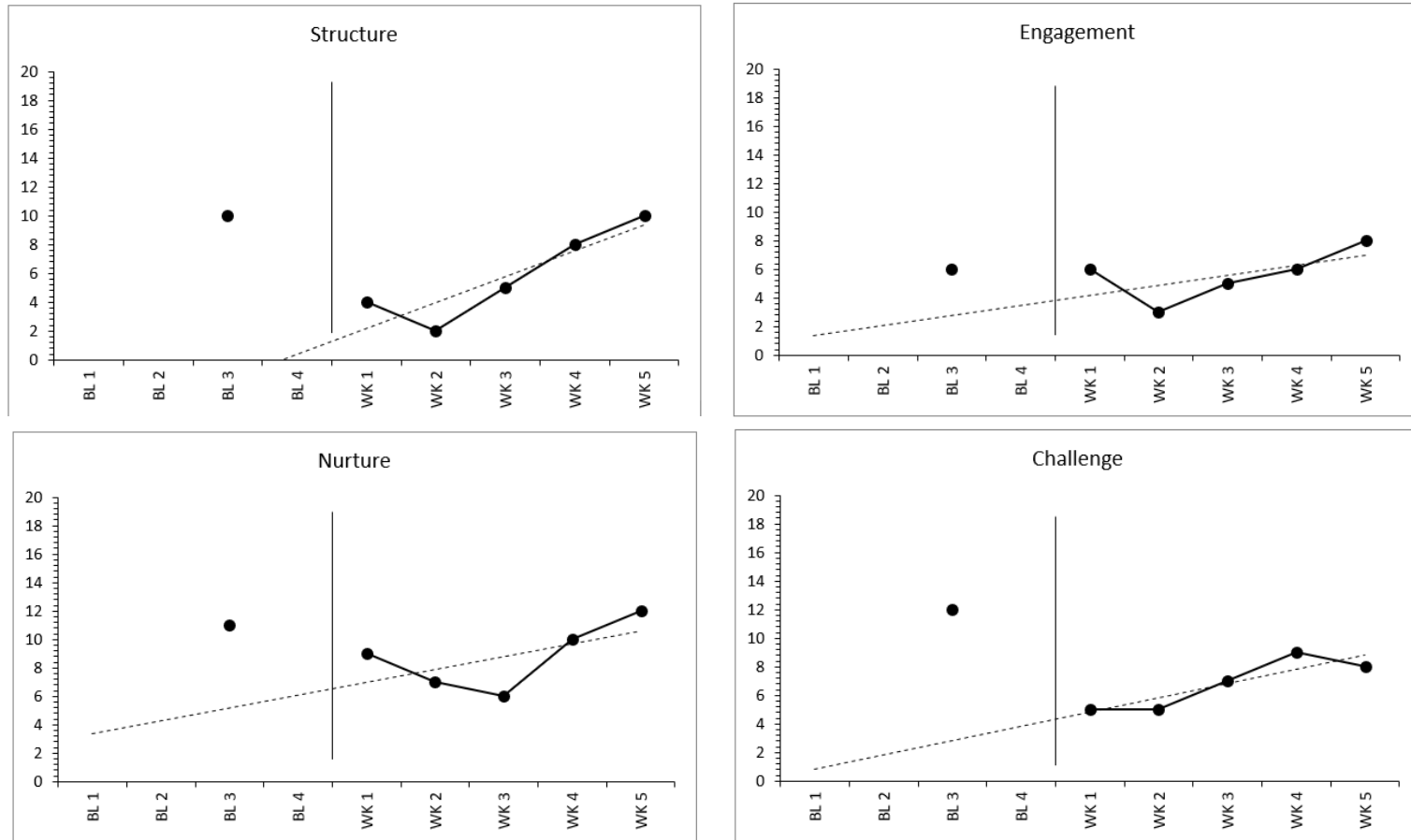


Figure 19. Visual data across baseline and intervention. Dotted line indicates intervention trendline. BL: baseline; WK: intervention session week; vertical lines indicate different phases.

Participants Three: 'Tom' [child] and 'Carl' [parent]

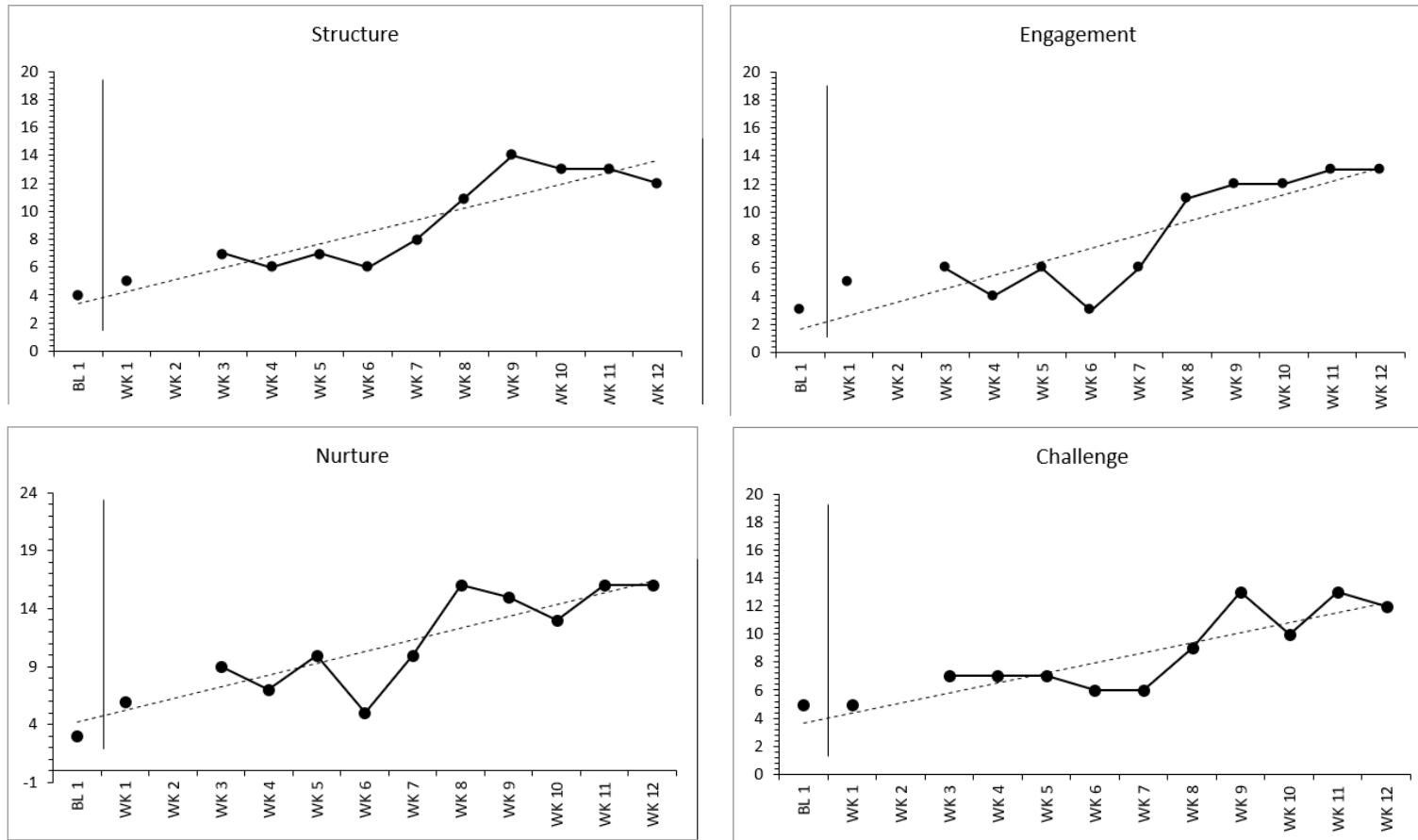


Figure 20. Visual data across baseline and intervention. Dotted line indicates intervention trendline. BL: baseline; WK: intervention session week; vertical lines indicate different phases.

Table 18.

Visual and quantitative analysis of all four mechanisms of Theraplay, using the Theraplay Observation Form.

	Tau-U	
	Tau-U	p value
P1		
Structure	-0.07	0.91
Engagement	0.40	0.52
Nurture	0.60	0.33
Challenge	-0.07	0.91
P2		
Structure	-0.8	0.24
Engagement	-0.20	0.77
Nurture	-0.60	0.38
Challenge	-1.00	0.14
P3		
Structure	1.00	0.11
Engagement	0.91	0.15
Nurture	1.00	0.11
Challenge	0.91	0.15
All Participants		
Total Structure	0.07	0.86
Total Engagement	0.39	0.30
Total Nurture	0.36	0.33
Total Challenge	-0.03	0.94

Note: p value associated with Tau-U.

3.3.1. Structure

Using visual analysis, a positive trend in structure-based interactions was found across all three families. The degree of trend varied between each family. Holly and Tom's families experienced a relatively stable and increased trend in structure-based interactions; with some variability in week two for Holly and weeks six and nine for Tom. Lizzie's interactions were seen to be more varied throughout the intervention phase, particularly weeks four, 11, and 14. Both Lizzie and Holly's families experienced a 'dip' in structure-based interactions early into the intervention phase (Lizzie week four, Holly week two).

When using Tau-U analysis, Theraplay was not effective at enhancing structure-based interactions for any of the three families (see Table 18).

3.3.2. Engagement

Visual analysis found a positive trend in engagement-based interactions across all three families, with some variation in the degree of the trend. Holly had a positive, yet gradual, increase in engagement-based interactions during the intervention phase. Lizzie and Tom's trend line gradient was slightly greater and may have been influenced by the increased number of sessions. Lizzie and Tom's engagement-based interactions varied during the intervention phase, with week six (for Lizzie) and week eight (for Tom) points of change. Tom's engagement-based interactions gradually continued during the final intervention sessions, whereas Lizzie's interaction displayed more variance. Holly and Tom's families experienced a 'dip' in engagement-based interactions early into the intervention phase (Holly session two, Tom sessions four and six).

When using Tau-U analysis, Theraplay was not effective at enhancing engagement-based interactions for any of the three families (see Table 18).

3.3.3. Nurture

Visual analysis evidenced a positive trend in nurture-based interactions during the intervention phase across all three families. During the intervention phase, Tom's family experienced more stability as sessions progressed whereas Lizzie's remained varied. Holly's interactions initially declined during the first sessions in the intervention phase. However, week four was observed to be a point of change. All three families experienced a 'dip' during intervention phase of nurture-based activities (Lizzie week four, Holly week three, Tom weeks four).

Theraplay was not effective at enhancing nurture-based interactions for any of the three families, using Tau-U analysis (see Table 18).

3.3.4. Challenge

Visual inspection of challenge-based interactions found a gradual, yet positive, trend during the intervention phase. All three families interactions were relatively stable. Holly's interactions remained stable throughout, whereas Lizzie and Tom's families experienced more variability during the final intervention sessions.

When using Tau-U analysis, Theraplay was found to not be effective at enhancing challenge-based interactions for any of the three families (see Table 18).

3.4. Combined Processes

Visual inspection allowed for the examination of points of convergence and divergence during the intervention phase (see Figures 6 and 7 of journal paper). Visual analyses evidenced points when there was a mirroring and convergence of dual processes. For Lizzie, at week six there was an increase in attachment, increase in Theraplay-based interactions, and a decline in challenging behaviours. For Holly, at week five there was a noticeable point of change, with a reported improvement in attachment and Theraplay-based interactions, alongside a decline in challenging behaviours. However, the noticeable change and variability at week five for Holly may have also been an outlier in intervention. Visual analysis also evidenced times of divergence. For example, for Tom during week ten the TOF evidenced fewer Theraplay-based interactions yet high scores in attachment.

The minimal points of divergence across all three constructs indicated no association in processes of Theraplay mechanisms, attachment, and challenging behaviours.

3.5. Individualised Goals

Further RCI and CSC analyses using Elliott et al.'s (2016) criteria were undertaken to assess any change in individualised problem statements from the PQ. The number of items on the PQ ranged from 6-10 (mean = 7.67). Results are tabulated for each participant in Tables 19-21.

'Lizzie and Rachel' (Participants One)

Mixed results were found in Rachel's individualised goals for Theraplay. An 'improvement' (i.e., a reliable reduction in scores) was observed post-intervention in Lizzie's mood fluctuations, and repeating/asking of lots of questions. A reliable deterioration was observed in Lizzie's behaviours of taking/eating food at night and throwing items. However, Lizzie's struggles in taking/eating food were seen to be at a subclinical level before Theraplay started (i.e., when asked to score this item in

relation to the week prior to the initial researcher meeting, Rachel scored it not being a problem ‘at all’).

Table 19

Individualised PQ items and pre and post scores for Rachel

Item	Pre	Post	Follow Up
1: ‘difficulties cuddling/touching strangers’	5	5 ^U	//
2: ‘difficulties repeating/asking lots of questions’	7	4 ^{R+}	//
3: ‘difficulties not taking information in’	5	4 ^U	//
4: ‘difficulties taking food and eating during the night’	1	6 ^{R-}	//
5: ‘difficulties throwing items’	2	5 ^{R-}	//
6: ‘difficulties mood changing quickly’	6	3 ^{R+C}	//
Mean Score	4.33	4.5	//

Notes: ^R denotes Reliable Change and ^C denotes Clinically Significant Change (from clinical to non-clinical range) compared to pre-intervention scores at $p < .05$; + or - indicates improvement or deterioration, respectively. ^U denotes unchanged, // participant declined to complete

‘Holly and Steve’ (Participants Two)

Mixed results were found in Steve’s individualised goals for Theraplay. When assessed during follow-up, an ‘improvement’ (i.e., a reliable reduction in scores) was found in Holly’s lying, distrust of others, and behaviours of taking/hiding food. Alternatively, Holly’s abilities to show/talk about feelings and to start conversations with her parents reliably deteriorated.

Changes observed during follow up for Holly and Steve may have been influenced by Theraplay sessions or other contextual factors related to COVID-19 restrictions.

Table 20

Individualised PQ items and pre, post, follow-up scores for Steve

Item	Pre	Post	Follow Up
1: 'difficulties in stealing'	5	/	7 ^{R-}
2: 'difficulties in lying'	7	/	5 ^{R+}
3: 'difficulties showing empathy to others'	4	/	5 ^U
4: 'difficulties showing or talking about feelings'	5	/	7 ^{R-}
5: 'difficulties with making and keeping friends'	4	/	4 ^U
6: 'difficulties starting conversations with parents'	5	/	7 ^{R-}
7: 'difficulties trusting other people'	7	/	4 ^{R+}
8: 'difficulties sleeping at night'	7	/	7 ^U
9: 'difficulties wetting the bed/underwear and hiding'	5	/	4 ^U
10: 'difficulties taking and hiding food'	6	/	4 ^{R+}
Mean Score	5.5	/	5.4

Notes: ^R denotes Reliable Change and ^C denotes Clinically Significant Change (from clinical to non-clinical range) compared to pre-intervention scores at $p < .05$; + or - indicates improvement or deterioration, respectively. ^U denotes unchanged, / participant not asked to complete

'Tom and Carl' (Participants Three)

Mixed results in Carl's individualised goals for Theraplay were found. An 'improvement' (i.e., a reliable reduction in scores) was shown post-Theraplay in Tom's management of transitions and difficulties within the relationship between Tom and Carl. The improvements in Tom and Carl's relationship was also shown to meet clinical caseness and maintained at follow-up. However, post-intervention there was a reliable deterioration in Tom's behaviours of going to strangers and separating at night, with the separation difficulties maintained at follow-up.

Changes observed during post-intervention and follow up for Tom and Carl may have been influenced by Theraplay sessions or other contextual factors related to COVID-19 restrictions.

Table 21

Individualised PQ items and pre, post, follow-up scores for Carl

Item	Pre	Post	Follow Up
1: 'difficulties 'lashing out' at other people	5	5 ^U	6 ^U
2: 'difficulties going to strangers too easily'	1	3 ^{R-}	1 ^U
3: 'difficulties separating from parents at night'	3	5 ^{R-}	5 ^{R-}
4: 'difficulties getting up really early, going to parents'	6	5 ^U	6 ^U
5: 'difficulties in transitions in day'	6	4 ^{R+}	5
6: 'difficulties going to school'	6	N/A	N/A
7: 'difficulties in relationship with Dad (e.g., not going to Dad)'	5	3 ^{R+C}	3 ^{R+C}
Mean Score	4.57	4.17	4.33

Notes: ^R denotes Reliable Change and ^C denotes Clinically Significant Change (from clinical to non-clinical range) compared to pre-intervention scores at $p < .05$; + or - indicates improvement or deterioration, respectively. ^U denotes unchanged, N/A: parent unable to complete item due to COVID-19 restrictions

3.6. Overall Summaries

Further visual and Tau-U analyses were conducted to investigate 1) trend across the summary of all three participant's data, and 2) across all three domains of challenging behaviours (BPM), attachment (MPCA), and Theraplay mechanisms (TOF). Figures 21 and 22 present overall summaries of the data collected on each scale for each family.

Visual analyses of the average scores across all three families in the first five sessions identified minimal trend in data. Results were similar across each of the three dimensions of challenging behaviours, attachment, and Theraplay-based interactions. Although minimal, each of the trend line gradients was in the intended direction; i.e., increase in attachment and Theraplay mechanisms, and a decline in challenging behaviours.

Visual inspection of the average scores of 12 sessions indicated an increased, positive trend for the domains of attachment and Theraplay mechanisms. Variance was observed across the Theraplay mechanisms; with session six observed to be a 'dip' across the families and week nine a 'peak'. Variance was also observed between weeks 4-7 for challenging behaviour. However, across the intervention phase, there was no trend in challenging behaviours.

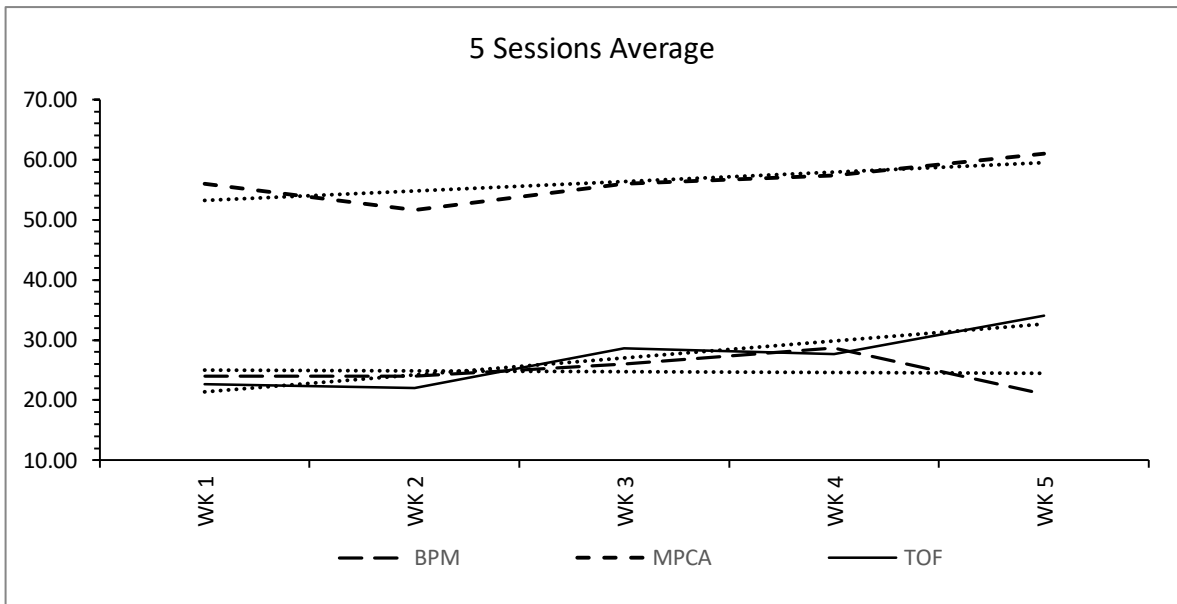


Figure 21. Summary of first five sessions attended by all three families; WK (intervention session); BPM (Brief Problem Monitor), MPCA (Maternal Perception Child Attachment); TOF (Theraplay Observation Form). Condensed dotted lines are trendlines for each measure.

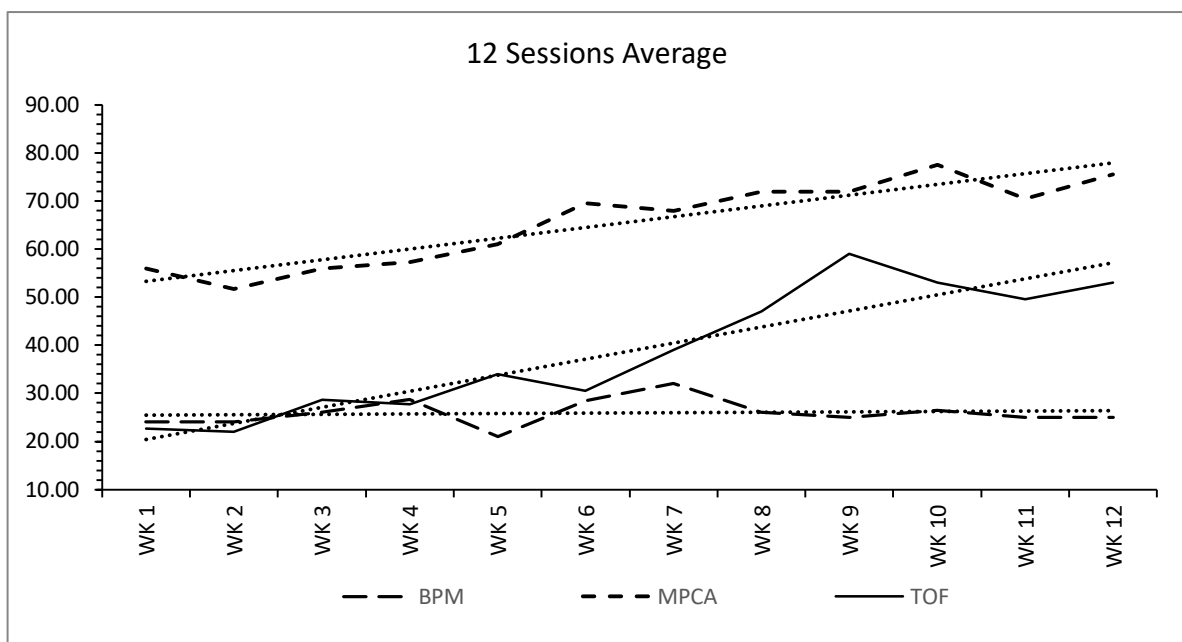


Figure 22. Summary of first twelve sessions attended by two families ('Lizzie and Rachel' [P1], 'Tom and Carl' [P3]); WK (intervention session); BPM (Brief Problem Monitor), MPCA (Maternal Perception Child Attachment); TOF (Theraplay Observation Form). Condensed dotted lines are trendlines for each measure.

Tau-U analysis found that Theraplay had no overall effect on childhood attachment and Theraplay-based interactions (results are tabulated in Table 22). When all data from the BPM was collated, Tau-U analysis indicated that Theraplay had a meaningful effect on childhood challenging behaviours. However, the use of visual analysis indicated that Theraplay made overall challenging behaviours worse. It is worth noting, however, the small baseline phases for two participants (Lizzie and Rachel, Tom and Carl), which may or may not have influenced results.

Table 22.

Tau-U analysis of overall data

	Visual Analysis		Tau-U	
	BL Trend	INT Trend	Tau-U	<i>p</i> value
All Participants				
Total BPM	No	-	0.75	0.01
Total MPCA	Yes*	-	0.06	0.83
Total TOF	**	-	0.17	0.65

Note: BPM: Brief Problem Monitor, MPCA: Maternal Perception Child Attachment, TOF: Theraplay Observation Form, BL: Baseline, INT: Intervention, *p* value associated with Tau-U. *Baseline trend corrected (Tau-U=0.67) **Due to only one data point in baseline, unable to ascertain baseline trend for TOF

3.7. Change Interview

Individual findings from the change interviews are tabulated in Table 23.

Table 23.

Parent responses from change interview

Question	Participants 1 'Lizzie and Rachel'	Participants 2 'Holly and Steve'	Participants 3 'Tom and Carl'
Experience of Theraplay	'Very good'; offered experiences the child had missed from early life, 'it has been so positive... so I'm really pleased'	'Confused' at first; child 'loved' it; offered some understanding into my child; felt underage at times	'Positive'; has helped strengthen the relationship between me and my child amongst some other factors (see below)
Any Changes	<p>In Child: Child is more receptive to nurture (cuddles); calmer in approach and with others; can play better with others.</p> <p>In Parent: I can stay calmer and approach times of difficulty less impulsively; I can understand and relate more to what [child] wants.</p> <p>In Relationship: Comes to me (instead of brother) if there's something wrong; we have more cuddles.</p>	<p>In Child: things (behaviours) would go 'downhill' for a day or two after sessions then would improve; would be more vocal in desires and intent (rather than just acting them out); able to engage in more conversations with parents; 10% more of the time approaching parents herself rather than going through others; playing more</p> <p>In Parent: adapted some ways of parenting or games with their child to a younger age; question and think about interactions more; had to change own parenting approaches to 'redirect' child's energy</p> <p>In Relationship: child wanting attention more when busy; struggles in recognising a parent to other children and other roles; more open conversations</p>	<p>In Child: Little bit calmer; appears to enjoy spending time with parent; bit more confidence; stopped bringing a transition toy to sessions (around 8/9);</p> <p>In Parent: No drastic changes in myself</p> <p>In Relationship: More balance in relationship between me and partner and my child coming to me not just them; More tactile with me (e.g., sitting on lap, cuddles);</p>

Attribution of Changes	Theraplay: nurture games (particularly feeding); adult starting to understand and moderate feelings to help child understand; games being targeted at a younger age.	Theraplay: Both being able to play games pitched at younger age which enabled the opportunity to have experiences parent missed out on; nurture tasks (lotion); MIM card tasks; having 1:1 time; enjoyed challenge games (e.g., feathers); joint experience of parenting in younger way and being parented in younger way.	Theraplay: Hide and seek games; tactile games (e.g., rocked or rolled up in a blanket); teamwork games with both parent and child;
	External: None reported	External: COVID-19 restrictions (final session/follow up); being at home a lot in recent weeks.	External: Other parent was away from home for a long period (due to health reasons) and child missed them; COVID-19 restrictions (final session/follow up)
Helpful Aspects of Theraplay	Having somebody who understood; learning different strategies to help control situations; particularly strategies to help calm her down (rather than going 'higher and higher'); 'touching' (nurture) based games with element of play (e.g. patter cake)	MIM tasks, felt personal and intimate; challenge games (e.g., feathers, bubbles); feeding game allowed closeness in more a playful way that felt less threatening; watching my child play and have fun	Sessions helped to create a more secure attachment (between child and parent)
Unhelpful Aspects of Theraplay	'Touching' (nurture) based games with lotion or talcum powder (child did not like); some games seemed 'weird' at the time	None	None
Missing Aspects from Theraplay	The time could have been longer; time seemed to go really quick so you didn't get long with each game	Adult was unsure when to join in or lead at times; Uncertainty at the beginning of how it would help (had considered not	None

attending initially).

Anything else	None	Child still struggles with closeness but really 'craves' it; Quite unusual not taking the lead and others doing so, but helpful to watch the therapists react differently; child still has some difficulties (e.g., stealing, poor sleep pattern)	Still struggles with tantrums and 'rages'
Theraplay/ Research Suggestions	None	None	None

Note: MIM (Marschak Interaction Method)

3.8. Participant Summaries

A narrative synthesis is provided for each participant, including quantitative and qualitative data for both parent and child. For tabulated/graphed results, please refer to the relevant sections in the journal paper and/or section 3 of the extended paper.

3.8.1. Participants One

'Lizzie [child] and Rachel [parent]'

Visual and Tau-U analyses found that Theraplay had no effect on Lizzie's reported attachment and challenging behaviours. A slight positive trend was observed in Lizzie's attachment during the intervention phase. However, the changes were minimal and did not have any influence on Lizzie's challenging behaviours. When the challenging behaviour measure was further analysed, a reliable deterioration in Lizzie's internalising and externalising difficulties were observed. However, it is likely that the RCI analysis was subject to Type 1 error (Tarlow, 2017).⁸⁷ Tau-U analysis found no meaningful and significant change between phases, with visual analysis evidencing the variance of data within both baseline and intervention phases.

Using visual analysis, there was a positive trend during the intervention phase in Lizzie and Rachel's Theraplay-based interactions. The positive changes were observed across all four dimensions of Theraplay when analysed individually. Visual analysis of the TOF data highlighted the variance in Lizzie and Rachel's interactions across the intervention phase, particularly during the final sessions. Despite the positive changes found using visual analysis, Tau-U analysis did not find any effect between the baseline and intervention phases in Theraplay-based interactions. This lack of effect, and the lack of other changes observed, indicated that Theraplay's hypothesised key mechanisms did not have any impact on Lizzie's attachment and challenging behaviours.

No change in Rachel's well-being was found post-Theraplay. Furthermore, no change was observed in the overall problem statements generated by Rachel. When broken down into individual items, there was some fluctuation with difficulties getting better (e.g., Lizzie's mood fluctuations) or worse (e.g., throwing items, taking/eating

⁸⁷ See section 4.6.5 in extended discussion for further elaboration on analyses and Type 1 error

food at night). Some of these results were supported using other measures (i.e., externalising difficulties). Qualitative data gathered through change interviews both supported and refuted quantitative data provided by Rachel. Rachel's reports of Lizzie being better at play and finding the nurture-based games most helpful could be supported within the engagement and nurture domains of the TOF. Both domains demonstrated a positive trend using visual analysis. Furthermore, Rachel verbally commented that Lizzie was 'calmer' which was also shown to be a reliably and clinically significant change on the PQ.

Rachel, however, verbally reported that her Theraplay experience was 'positive' and 'very good'. Despite Rachel's verbal feedback, her experiences did not support the quantitative data provided; no effective changes were observed, in fact some increased difficulties were found using the behavioural measure. Rachel declined to complete the follow-up measures so conclusions about Theraplay's long term effects for Lizzie and Rachel could not be commented on.

3.8.2. Participants Two

'Holly [child] and Steve [parent]'

Dependent on the analysis method, mixed results were found in Theraplay's effectiveness for Holly and Steve (see the journal paper and relevant sections in extended paper for exploration into the mixed results⁸⁸). It was concluded that Theraplay had some positive effect on Holly's attachment (using visual analysis). However, the effect was not deemed to be meaningful (using Tau-U). Theraplay had no positive effect on Holly's challenging behaviours. Alternatively, deterioration in Holly's attentional difficulties were consistently found across the three analysis methods during both post-intervention and follow-up.

Visual analysis found a positive trend in Theraplay-based interactions during the intervention phase. However, the effect was not deemed to be meaningful (using Tau-U analysis), with some variation across three of the four dimensions (structure, engagement, nurture) during weeks 2-3. For Holly and Steve, visual inspection revealed some degree of relationship between the hypothesised Theraplay mechanisms (measured by the TOF) and attachment. However, there was no

⁸⁸ See section 4.6 for further discussion around mixed results

relationship found between changes in attachment and challenging behaviours. Nonetheless, for the Theraplay-based interactions to be proposed as a mechanism of change, a lag in changes in attachment would have been anticipated rather than change occurring simultaneously.

Steve reported an improvement in his well-being during follow-up, yet there was no overall change in the individualised problem statements generated. During further analysis of the PQ, a reliable reduction was observed for some problem items (i.e., Holly's lying behaviours, distrust of others, and behaviours of taking/hiding food). However, Steve also reported a reliable deterioration in other areas (i.e., Holly's abilities to show/talk about feelings and to start conversations with her parents). Within the qualitative results, Steve shared that Holly was able to engage in more conversations with her parents. Steve's experiences provided in the change interview supported most of the quantitative data he had given; e.g., that Holly continued to struggle with challenging behaviours. Steve also commented on how he had noticed Holly's behaviours initially worsening for a couple of days after the sessions before improving.

It is worth noting that the changes observed during follow-up for Holly and Steve may have been influenced by Theraplay sessions or other factors related to COVID-19 restrictions.

3.8.3. Participants Three

'Tom [child] and Carl [parent]'

Mixed results were found into Theraplay's effectiveness for Tom and Carl. Results were dependent on the analysis method used (see the journal paper and relevant sections in extended paper for exploration into the mixed results⁸⁹). Theraplay had some positive effect on Tom's attachment to Carl, supported by visual and RCI analysis. Tom was the only person to complete the child reported measure of attachment throughout the phases, with the results partially supporting Carl's reports during follow-up. Tom did report a reliable deterioration in alienation post intervention, but not during follow-up. Theraplay was seen to have no effect on Tom's overall challenging behaviours.

⁸⁹ See section 4.6 for further discussion around mixed results

Visual inspection of the intervention phase found a positive trend in Theraplay-based interactions for Tom and Carl. There was variance across the different TOF dimensions, including during the initial sessions for engagement and nurture, and in the later sessions for challenge. Visual inspection revealed minimal relationship between the hypothesised Theraplay mechanisms and attachment for Tom and Carl. Changes in attachment were also observed to have no influence on Tom's challenging behaviours.

A reliable deterioration in Carl's well-being was found post-intervention and during follow-up. There was also no overall change in individualised problem statements. Further RCI and CSC analyses identified mixed results for individual items; including a reliable improvement in Tom's management of transitions and the relationship between Tom and Carl post-intervention. The improvements in relationship were also shown to meet clinical caseness and maintained at follow-up. Alternatively, a reliable deterioration in Tom's behaviours of going to strangers and separating from his parents at night were reported, with the separation difficulties maintained at follow-up. Qualitative data gathered during the change interview supported the quantitative data Carl had reported in questionnaires. Carl shared how he felt that Theraplay had strengthened the relationship between him and Tom, which was also shown in the MPCA and PQ. Carl's reports also consistently demonstrated that he found the nurture-based games helpful to support Tom in becoming more 'tactile', also shown using the TOF. Carl acknowledged that the Theraplay sessions had been 'positive'. However, he also acknowledged that Tom still experienced his 'rages', which was supported by the BPM results. Carl, however, attributed some of the changes he noticed to Theraplay, but also due to Tom spending more time with him due to external circumstances (Tom was spending less time with his Mother).

Changes observed during the follow-up for Tom and Carl may have been influenced by Theraplay sessions or other contextual factors reported (either COVID-19 restrictions or family circumstances discussed). Furthermore, it is difficult to ascertain changes between baseline and intervention phases due to the lack of baseline data.

4. Extended Discussion

The extended discussion will further expand the ideas explored in the journal paper. Reference will be made to psychological theory, existing research, and the strengths and limitations of the current project. Clinical implications will be offered, alongside recommendations into future research.

4.1. Childhood Challenging Behaviour

The current study found no evidence that Theraplay was effective at reducing childhood challenging behaviour. Evidence was based on parent's self-reports of the BPM, related items using the PQ, and qualitative feedback shared in the change interview (by Steve [P2] and Carl [P3]). Alternatively, there were times when a slight increase in challenging behaviours was reported during the intervention phase. Further analysis of the individual scales of the challenging behaviour measure (BPM) highlighted the variance across each of the three families in internalising, attentional, or externalising difficulties during intervention. There did not appear to be a specific presentation of challenging behaviour that was influenced by Theraplay intervention. The lack of points in the baseline phase for Lizzie and Rachel (P1), and Tom and Carl (P3), means that conclusions between the phases cannot be determined. For Holly (P2), however, her attentional-based behavioural difficulties were seen to worsen during the intervention phase and follow-up, this was consistently found across all three analysis methods. It is unknown why Holly's attentional difficulties were observed to increase during the intervention and follow-up phases. It could be hypothesised that Steve had become attuned to Holly's attentional difficulties following Theraplay intervention and therefore noticed these more.

Little was known about the degree of distress the child's challenging behaviour caused for the parents. Whilst parents accessed Theraplay due to experiencing their child's behaviour as challenging, the primary measure of challenging behaviour explored frequency as opposed to severity or impact (e.g., are the items 'not true', 'somewhat true', 'very true'), thus making it hard to draw conclusions about parental distress. The PQ, alternatively, offered some understanding into whether the item was a problem or not. However, few items were specifically related to challenging behaviour on the PQ.

The current findings both support and refute previous literature into Theraplay's effectiveness for childhood challenging behaviour. Theraplay has previously been shown to be effective for internalising (Bojanowski & Ammen, 2011; Siu, 2009; Wettig et al., 2011), externalising (Bojanowski & Ammen, 2011; Wettig et al., 2011) and total difficulties (Bojanowski & Ammen, 2011). The current results do not support these previous findings, with no changes observed in total, externalising, or internalising difficulties. The current results do, however, support other studies of Theraplay. Salisbury (2018) found that parents reported minimal change in challenging behaviours following the introduction of Theraplay games, and no change in behavioural difficulties were found following Theraplay for LAC (Francis et al., 2017). Additionally, when Theraplay was implemented with a family of twins, the Mother was also found to report an increase in internalising difficulties (Mahan, 2001).

Given the mixed understanding into Theraplay's effectiveness on childhood challenging behaviours, additional research would be warranted. As evidenced earlier, the current sample reported (on average) higher scores of challenging behaviours pre-treatment in comparison to the referenced data set. Thus, it could be hypothesised that the frequency or severity of the current sample was greater than the normed dataset. Therefore, the current findings may be at risk of being more sensitive to change using RCI/CSC analysis.

4.2. Parent-Child Attachment

Theraplay is underpinned by attachment theory (Bowlby, 1988, 1997, 2005) and is based on the premise that presenting difficulties are underpinned by a child's internal working model (Booth & Jernberg, 2009). Therefore, Theraplay sessions aim to provide the child with a reparative experience of early parent-child interactions to shape the child's internal working model into a more positive model (Booth & Jernberg, 2009; Booth & Winstead, 2015; Delius et al., 2008; Munns, 2009).

As shown by the attachment measures used in the current study, Theraplay had little influence on enhancing children's attachments towards their parent, with Tau-U analysis showing no overall effect. Visual analysis found a gradual, yet minimal, increased trend in attachment across the intervention phase for all three families. A reliable change and improvement was observed for Tom and Carl (P3),

whereas the use of multiple analysis methods indicated that Holly and Steve's (P2) reliable change was likely due to Type 1 error (Tarlow, 2017)⁹⁰. Single case designs require a replication of an effect across a minimum of three conditions to be deemed effective (Smith, 2012), which was not met in the current study and supported by Tau-U analysis.

Only one child in the study (Tom, P3) completed the child measure of attachment across more than one phase. Based on Tom's reports alone, Theraplay had little effect on Tom's attachment towards Carl post-intervention. Conversely, there was a reliable change during follow-up. The reasoning behind the changes during follow-up may have been influenced by other contextual circumstances, such as Tom spending all his time at home due to COVID-19 restrictions. When comparing Tom and Carl's post-Theraplay attachment measures, alongside Carl's qualitative feedback, there was a discrepancy between the two reports (in that Carl reported a reliable change in Tom's attachment, whereas Tom did not). Similar discrepancies have been shown in other studies, including parents reporting more changes than the child following Theraplay (Salisbury, 2018). Despite Theraplay's hypothesised underpinnings, these results may suggest that Theraplay may target change in the adult more than the child. This may be as a function of the parent becoming more attuned or positively attached to their child.

The current results do not support the theoretical underpinnings and proposed processes outlined by the Theraplay model, including previous conclusions made that Theraplay is effective at changing child attachments (Lindaman & Lender, 2009; Mahan, 2001; Hong, 2014; Weir, 2007, Weir et al., 2013). The current findings also differ from the conclusions drawn in Brayman's (2016) systematic literature review; which concluded that Theraplay was effective in facilitating positive changes to child attachment. The difference in findings may be related to the operationalisation and measures of attachment across the studies, particularly given the dearth of Theraplay research that utilises an attachment measure (Munns, 2009). Furthermore, the current study is the first study to implement a design that repeatedly measured attachment across baseline and intervention.

As evidenced earlier in the methods section (see Table 14), the current sample had a lower pre-treatment mean score on the attachment measure in

⁹⁰ See section 4.6.5 for further elaboration on multiple analyses and inconsistent findings

comparison to the referenced data set. This suggests that the current sample had poorer attachments to their parents in comparison to the referenced non-clinical data. The difference in averaged scores may have influenced the current results and may have led to the current study being sensitive to change using RCI/CSC analysis.

4.3. Attachment and Challenging Behaviour

No changes were observed in childhood challenging behaviour. Therefore, attachment and Theraplay's hypothesised mechanisms were not seen to be effective at reducing challenging behaviours. It could be hypothesised that the lack of change in childhood challenging behaviour was due to the lack of change in attachment. Furthermore, the lack of change may have also been influenced by the measures chosen for the current study⁹¹.

4.4. Theraplay's Key Mechanisms

Theraplay's hypothesised mechanisms of change are the 'games' based on the four core constructs of Structure, Engagement, Challenge, and Nurture. The current study found little evidence that Theraplay's key mechanisms of change contributed to change in childhood attachment, and no evidence that key mechanisms contributed to changes in challenging behaviour. Visual analysis of the TOF evidenced positive trends throughout each Theraplay construct for all three families. However, further analysis of each construct evidenced periods of variance and varying degrees of trend line gradient. Tau-U analysis found no meaningful change between baseline and intervention phases. However, Tau-U analysis may have been influenced by the lack of baseline points.

The current study is the first of its kind in its attempts to assess Theraplay's key mechanisms of change. Therefore, the current results cannot be reliably compared with previous literature as it is yet to exist. Nonetheless, a previous study using a pre-post design found significant changes in overall Theraplay-based interactions, especially the domains of challenge and nurture (Bojanowski & Ammen, 2011). Whilst not at a meaningful level (using Tau-U analysis), the current study did find a positive trend across intervention within the nurture domain, but not challenge, offering some support for Bojanowski and colleagues' findings. This was further

⁹¹ See section 4.5 for further discussion on measures

supported by qualitative feedback from all parents' who valued the nurture-based games and reported them being helpful. Despite the feedback shared, the nurture-based games had no impact on the outcome of either attachment or challenging behaviours. Further research exploring the relationship between the Theraplay concept of nurture and attachment is needed.

Despite Theraplay's hypothesised mechanisms of change being the child's attachment and internal working model (Booth & Jernberg, 2009; Booth & Winstead, 2015; Delius et al., 2008; Munns, 2009), Theraplay sessions appear to have positive influences on parents and parenting approaches. Qualitative feedback from all three parents highlighted that they found sessions helpful in adapting their parenting styles/approaches and interactions with their child. Parents also found Theraplay helpful in developing more understanding into their child's behaviours, which has been previously found in other studies (Brayman, 2016; Hong, 2014). Nonetheless, in the current study the reported adaptations to parenting approaches, and parent's increased understanding into their child's behaviours, did not contribute to any change in child attachment or challenging behaviours. Therefore, it could be hypothesised that parent attitudes towards childhood challenging behaviours may have changed rather than the child's behaviour itself.

4.5. Measures

A triangulation of measures was used in the current study. Randomisation was used for the repeated measures completed by parents (i.e., whether the BPM or MPCA was completed first). However, the repeated use alongside every session may have been compromised the psychometric properties and findings, e.g., due to practice effects, fatigue, boredom.

4.5.1. Measure of Challenging Behaviour

The BPM has high internal consistency ($\alpha = .91$), good consistency between respondents (e.g., birth or adoptive parent; Piper et al., 2014), and is designed as a repeatable measure alongside sessions (Achenbach et al., 2016). One limitation of the BPM measure, as described earlier, is the BPM may be more of a measure of frequency rather than distress/a problem. Furthermore, existing literature lacked normative data for a clinical population which could then be used in the current

RCI/CSC analysis. Earlier analysis highlighted the difference in means and standard deviations between the current sample and the referenced data (see Table 14), which may have influenced the outcome of the RCI and CSC analysis.

The sample consisted of three young people who had experienced some degree of disruption in their caregiving⁹². Standardised behavioural measures have been found to lack specificity to the range of challenging behaviours LAAC populations experience (Tarren-Sweeney, 2007). Furthermore, challenging behaviours that are hypothesised to be related to attachment difficulties are hard to assess (Harris-Waller et al., 2016). Therefore, the BPM measure may have lacked specificity and sensitivity to the degree and type of challenging behaviours the young people in the study presented with.

4.5.2. Attachment Measures

Two measures of attachment were utilised in the study; a parent self-report (the MPCA) and child self-report (IPPA-R). During the study design there were challenges in identifying a parent-completed attachment measure, with the MPCA deemed the most appropriate in line with the study aims. Both the MPCA and IPPA-R assess attachment as a continuum, rather than the concept of an internal working model (Bowlby, 1969; Zilberstein, 2014) or attachment style (i.e., secure or insecure, Ainsworth et al., 1987; Main & Solomon, 1986). The varying presentations outlined by Ainsworth and colleagues may have influenced the study outcomes, e.g., hypothesised differences in whether a child would more likely to be aggressive (i.e., anxious-ambivalent attachment style) or withdraw/self-reliant (i.e., anxious-avoidant attachment style). Furthermore, the measures were unlikely to assess the largely unconscious concept of a child's internal working model (Bowlby, 2005; Zimmerman, 1999) and at risk of participants responding in a socially desirable manner (Dallos, 2017; Kerns et al., 1996; Pietromonaco & Barrett, 2000; Zilberstein, 2014).

One of the key limitations to measuring attachment was the MPCA being completed by the parent. Previous reviews have highlighted the lack of reliable and available attachment measures (Jewell et al., 2019; Lim et al., 2010), and further highlighted concerns about the extent to which measures available in the literature

⁹² See section 4.6 of extended discussion for further exploration

assess an alternative concept to attachment (Pritchett et al., 2011). As the MPCA was a parental self-report measure, responses were mediated and based on the parent's response. There could be many factors that may have influenced the responses given by each of the three parents; including the parent's own well-being and their own attachment experiences. It could be hypothesised that the MPCA measured parental sensitivity and attunement to their child, rather than the child's attachment. Furthermore, the parent's own understanding of the measure being based on the child's attachment may have elicited some defensive responding and/or response bias (Dallos, 2017; Kerns et al., 1996; Pietromonaco & Barrett, 2000; Zilberstein, 2014).

4.5.3. Measure of Theraplay Mechanisms

The TOF was devised as a measure of Theraplay's mechanisms of change and informed by a previous qualitative measure for the MIM assessment (The Theraplay Institute, 2018). Each of the items on the TOF was based on the normative parent-child interactions necessary to foster healthy development, as suggested by the Theraplay Institute (Booth & Jernberg, 2009). The use of the TOF differed from other measures already available, as the observations aimed to capture the processes of change across assessment and intervention sessions, rather than assessment alone.

The reliability of the measure was deemed to be strong ($\kappa=0.89$; McHugh, 2012). However, it could be suggested that the observer was at risk of fatigue/practice effects when completing the TOF. Furthermore, the use of observers who had completed Theraplay training may have influenced the scoring of the TOF; e.g., they may have interpreted interactions in a manner that supported/refuted aspects of Theraplay processes that others would not. Because of these challenges, additional measures were put into place to enhance the validity of the scoring, e.g., randomising the observations of the video recorded sessions, watching sessions at different time points, use of impartial research supervision.

The scoring of the observations highlighted the dyadic and complex nature of Theraplay sessions. An example includes the therapist giving overall structure to the session, but then structuring the parent to take the lead more with the games whilst also offering structure to the child. Future research may wish to further explore the

complex nature of Theraplay sessions. An example includes further understanding into what contributes to change, i.e., within the child separately, the parent separately, and the dyad together.

4.5.4. Measurement Challenges

The current study was implemented from a pragmatic position. The concepts of challenging behaviours and childhood attachment that were being investigated highlighted the challenges in measuring abstract concepts. Challenging behaviours could be argued as a more concrete and observable concept to measure, aligning more towards the continuum of objectivity. However, as outlined during the discussion, it could be argued that the term 'challenging' is subjective; what does challenging behaviour consist of? And to whom is it challenging for? Attachment is a concept of greater measurement challenge given its abstract and hypothesised internal and unconscious underpinning. There is no consensus about what having a secure or insecure attachment means within a more objective and positivist stance. To minimise the challenges to measurement, the pragmatic research design enabled the plurality of views and assessment methods to answer the research question (Kaushik & Walsh, 2019).

4.6. Methodological Considerations

4.6.1. Recruitment and Attrition

Participants were recruited from clinical services and the design consisted of little adaptation to clinical practice for research purposes. Most of the Theraplay assessment and intervention sessions were delivered in line with the Theraplay standardised protocol. The research team had no influence on the content, structure, or facilitation of the sessions. Therefore, the study has good ecological validity due to the naturalistic design.

The current study managed to recruit four families. In line with COVID-19 restrictions some adaptations were made meaning only three families fully participated and provided both baseline and intervention data.⁹³ As outlined earlier, two families had expressed an interest in participating in the project but were unable to. Despite recruitment being open for a period of time there were struggles in

⁹³ See section 4.6.6 of extended discussion for further elaboration on COVID-19 restrictions

recruiting participants. Despite all efforts to reduce burden on participants it is hypothesised that the additional questionnaires/ data collection was too burdensome for these families who were already experiencing challenges in day to day life. Struggles in recruiting or collecting data have been acknowledged in other Theraplay studies (Mahan, 2001; Weir et al., 2013).

4.6.2. Design

The use of a case series design aided the research aims to see if, and how, Theraplay's proposed mechanisms contributed to any changes found. Due to the study recruiting from clinical services, the baseline and intervention phases were determined by the relevant services and therapists. An assessment phase is determined as standard protocol for Theraplay approaches (Booth & Jernberg, 2009; Booth & Winstead, 2015). Therefore, it is hypothesised that all families would have had a psycho-education session during the baseline phase. It is unlikely that this psycho-education session itself would have contributed to any change as the session does not include any of the proposed mechanisms of change (i.e., no games are played, and it is with the parent only). Similarly, the MIM assessment completed in the assessment (baseline) phase did not consist of the implementation of any key mechanisms of change, therefore was non-interventional in nature.

4.6.3. Intervention

Each family in the study experienced a different number of sessions partly due to restrictions in place due to COVID-19. The varied length of intervention phases is reflective of the literature, with significant variation in session length reported (e.g., four sessions, Francis et al., 2017, to 66 sessions, Wettig et al., 2011). It could be hypothesised that the families in the current study did not receive enough Theraplay sessions or an adequate 'dose' to see change in challenging behaviour and/or attachment. The current study also focused on the video-recorded sessions where the proposed mechanisms were being implemented (i.e., the 'games'). It is likely that there were times in between these sessions where the Theraplay therapist was in other contact with the parents, e.g., telephone calls and review sessions. However, any contact outside of the Theraplay game sessions was not captured in the current

study. Therefore, it may be that other factors in the Theraplay approach may contribute to change.

4.6.4. Follow-Up

Two of the three families completed follow-up data. Participants one (Lizzie and Rachel) declined to complete the follow-up questionnaires despite prompts and reminders by the researcher. In line with participant rights, Rachel had the right to not complete any part of the project she did not wish to. The lack of contact from Rachel during follow up was interpreted by the research team as Rachel declining to participate. The reasons for this are unknown, but it could be hypothesised that Rachel had become fatigued in completing the measures after completing them for several weeks. It could also be hypothesised that Rachel was no longer receiving sessions, therefore felt less obliged to contribute to the project. Finally, it could be hypothesised that Rachel did not see the changes she expected following intervention, therefore, she did not want to complete the measures at follow-up.

4.6.5. Analysis

Three types of analysis were implemented in the current study; visual analysis (Morley, 2018; Parker et al., 2006), RCI/CSC (Jacobson & Truax, 1991), and Tau-U analysis (Parker et al., 2011b). There were times in the study where all three methods complimented each other and allowed for further investigation into the effects of Theraplay. For example, there were occasions when the use of RCI and CSC analysis indicated times of reliable improvement and deterioration. However, using visual analysis alongside RCI analysis evidenced times of Type 1 error (Tarlow, 2017). For example, when using the MPCA measure of attachment, RCI analysis indicated a reliable change in Holly's attachment towards Steve (P2). However, visual analysis highlighted an outlier during the final point of the intervention phase which did not appear to reflect the overall intervention phase. It could be that the data point in session five was reflective of Holly and Steve's experiences, yet the use of follow-up data indicated an outlier and error in the RCI findings.

There were also times when the use of multiple analysis methods supported change. For example, all three types of analysis supported the effect of Holly's (P2) attentional difficulties getting worse over time. Carl (P3) also reported a reliable

improvement in Tom's attachment towards him (using the MPCA measure of attachment), which was supported using visual analysis. The overall effect, however, between baseline and intervention phases using Tau-U was not meaningful.

As discussed earlier, it could be that RCI/CSC analysis was influenced by the lack of available clinical normed data. Additionally, on average, the current sample experienced greater behavioural difficulties and lower levels of childhood attachment (evidenced by the mean and standard deviations of pre-treatment BPM and MPCA scores). Therefore, the results using Jacobson and Truax's (1991) methods may have been sensitive to change. The literature lacked guidance into the number of baseline points needed to use Tau-U analysis; however, it could be that the limited baseline points for Lizzie (P1) and Tom (P3) influenced the analysis.

4.6.6. COVID-19 Restrictions and Adaptations

As outlined throughout the journal and extended paper, external and extenuating circumstances in response to COVID-19 meant that two families intervention sessions abruptly stopped. Furthermore, an additional participant had nearly completed all baseline sessions before their involvement stopped. The impact of these changes resulted in two families not receiving the number of allocated sessions that had been contracted (Holly, 12 sessions, and Tom, 18 sessions). Whilst unknown to the researcher, the recruiting services will have had a rationale for the number of sessions each family had been allocated. Therefore, the lack of changes observed may have been due to families not experiencing the full intervention as planned. Despite these changes to planned interventions the study findings were similar across all families, including Lizzie and Rachel (P1) who received the full intervention.

4.7. Generalisability

The study recruited a range of children and families, including mixed ages, genders, and parent-child relationships. Whilst small, the sample variety aided generalisation. Despite challenging behaviours being largely recognised in boys (Ogundele, 2018; Samek & Hicks, 2014), two of the three children in the study were girls. It could be hypothesised that challenging behaviours are less socially accepted within girls therefore more likely to result in a referral to services.

Whilst not intentional, all the young people recruited in the study had experienced some degree of disruption in their primary caregiver (including those living with members of their birth family). The backgrounds of the participants may be reflective of the service designs and pathways, or the literature of attachment difficulties and challenging behaviours being more prevalent within LAAC, (Ford, Vostanis, Meltzer, & Goodman, 2007; McAuley & Young, 2006; Wierzbicki, 1993). It could be hypothesised that children with disrupted caregiving experiences and challenging behaviours may be more likely to be referred for an attachment-based intervention like Theraplay, rather than an alternative, such as Parent Training Programmes. Further research is warranted into the clinical decision-making around this.

The backgrounds of each of the three participants may also have contributed to the lack of findings. It has been suggested that young people who have experienced disruptions in their caregiving should receive a greater number of Theraplay sessions (Lindaman & Lender, 2009). Therefore, the number of intervention sessions facilitated in the current study may not have been enough to see change. However, literature is lacking into the number of sessions required to see change.

4.8. Strengths and Limitations

A review of the existing literature regarding Theraplay's effectiveness indicates that the current study is the first to assess the effectiveness of Theraplay using a single case design. Not only does the design offer an understanding into Theraplay's effectiveness, but it also allows investigation into the hypothesised mechanisms of change. Consequently, the current study offers a valuable contribution to the scant evidence-base, with several implications for clinical practice and services.

A strength of the current study was the triangulation of approaches. Triangulation can be implemented in several ways, including; methodological triangulation (i.e., use of multiple methods to investigate a single issue), investigator triangulation (use of different investigators), data triangulation (use of a variety of sources of data; Denzin, 1970; Patton, 1990), or analytical triangulation (Kimchi, Polivka, & Stevenson, 1991). Evidence of each method of triangulation in the current study is outlined below:

- methodological triangulation: the current study implemented a mixed method approach of quantitative and qualitative data collection;
- data triangulation; data was collected at various time points across baseline, intervention, and follow-up phases, and from various sources (researcher observations, parent and child self-report);
- analytical triangulation; the study utilised four methods of analysis across data collection, including visual, RCI/CSC, Tau-U, and framework analysis;
- investigator triangulation; including the dual observation and coding of the TOF, and during research supervision to ensure accuracy of interpretations.

The present study utilised multiple triangulation (Denzin, 1970), which enabled the validity of the findings to be enhanced (Denzin, 1989). Multiple triangulation offered a more in-depth and comprehensive understanding into Theraplay's effectiveness and hypothesised mechanisms of change. Furthermore, fidelity checks enabled conclusions to be made to be based on sessions that were coherent to the Theraplay model.

The challenges in measuring and investigating attachment were one of the main limitations within the study. The concept of attachment is widely acknowledged within clinical practice and literature, yet there are still inconsistencies in the application or operationalisation of the concept (Chaffin et al., 2006; Ratnayake et al., 2014). Assessing attachment during middle childhood also has additional challenges due to the developmental shifts in children (e.g., increased autonomy and responsibility in self-regulation; Brumariu, 2015) and lack of valid and reliable measures available. Despite the complexity and challenges in measuring attachment, the current study encourages critical thought and understanding into the role of attachment within Theraplay.

Another limitation of the current study relates to the difficulties in generalisability (e.g., the small sample size and difficulty controlling confounding variables). The length of intervention phases also varied for each participant, which makes it difficult to draw conclusions that would usually be available within single case research. However, as mentioned earlier, the study does have good ecological validity and offers sound and valuable contribution into a nascent, yet widely used therapeutic approach.

4.9. Clinical Implications and Future Research

Theraplay is a well-used intervention across the world. However, Theraplay remains nascent in terms of its evidence base and understanding of effectiveness and processes of change. The current study aimed to offer an investigation into Theraplay for hypothesised attachment-related challenging behaviours. Whilst maintaining rigour, the study was designed to be as close to usual treatment and clinical practice as possible to aid ecological validity.

Based on the current study's findings alone; Theraplay was not found to be effective at reducing challenging behaviours or enhancing child attachment. The study also found limited evidence to support Theraplay's hypothesised mechanisms of change. There are several limitations to the current study that may impair the validity and generalisability of the results; including adaptations made in line with governmental restrictions, challenges in measuring attachment, and the small sample used. However, the results found using multiple triangulation and in-depth investigation raise awareness into the clear need for further research and investigation into the Theraplay approach. More evidence is particularly pertinent given Theraplay's application within NHS provisions across the UK, and UK policy drivers of offering evidenced-base care pathways in CAMHS (Department of Health, 2015)⁹⁴.

The scarce evidence-base and findings from the current study indicate a lag between clinical practice and rigorous research. Theraplay would benefit from further study using in-depth designs, such as single case experimental designs or Randomised Control Trials (RCTs). Despite the overall approach of Theraplay being consistent across families (as outlined in the extended introduction), Theraplay sessions and 'games' are individually tailored to the recipient of the intervention. This causes challenges to RCT designs; therefore, Theraplay lends itself more easily to using single-case approaches in future research.

The multiple triangulation method used in the current study highlights the strengths in multiple informants and data points. Given the potential burden to families completing self-report measures, and the limitations in the responses using

⁹⁴ See section 4.9.1 for more information on broader service context and policy

self-report, future research should consider using independent assessors to investigate effectiveness and processes. The use of video-recorded sessions as standardised practice in Theraplay offers the opportunity for a wealth of information and research opportunities. For example, future research into the role of parents in sessions would be beneficial, such as whether parent change mediates changes in the child (and vice versa).

Further research could also involve comparative studies examining both Theraplay and Parent Training Programmes as interventions for childhood challenging behaviour. Comparisons into effectiveness would be advantageous, particularly as the current study has evidenced continual challenging behaviours post-intervention, which has also been acknowledged as a limitation to parent training programmes (Greene and Doyle, 1999). Furthermore, comparison of attrition and engagement between Theraplay and parent training programmes would be helpful. The current study struggled in recruiting families (which may have been more reflective of the research rather than intervention as usual treatment). However, there is also evidence that parent training programmes struggle with families accessing and/or engaging in intervention (Chacko et al., 2016; Koerting et al., 2013).

Qualitative feedback gathered in the current study and previous research has found Theraplay and Theraplay games to be a helpful and positive intervention (Francis et al., 2017; Hong, 2014; Salisbury, 2018). The voice and understanding from Theraplay therapists and parents (and/or other associated adults, e.g., teachers) is more widely captured (yet still limited). However, less is known about young people's experiences of Theraplay. Attempts were made to capture the child's voice in the current study using a child measure of attachment. However, completion of the child measure was minimal. Nonetheless, future research into young people's experiences of Theraplay, using qualitative methods, would be welcomed; such as a triangulation of views from the parent, child, and therapist.

4.9.1. Broader Policy and Context

Given Theraplay's implementation across the world, including in the NHS and other public and privately funded provisions in the UK (e.g., interventions funded through the Adoption Support Fund; Stock, Spielhofer, & Gieve, 2016), it is important to

consider the findings of the current study within a broader service, clinical, and policy context.

NHS England and the Department for Education contributed to two large policy drivers which have transformed NHS child and adolescent mental health care in the UK; Future in Mind (Department of Health, 2015) and Local Transformation Plans (NHS England, 2015). Both initiatives underpin the current planning of services to ensure that children, young people, and their families are offered and given evidence-based care whatever the presenting difficulty is. Evidenced-based practice is informed by rigorous research to ensure effectiveness, efficacy and safety, alongside the appropriate use of public derived funds within UK public services (Barkham & Mellor-Clark, 2003). Policy drivers have contributed towards CAMHS being outcome focused and evidenced-based (Fonagy, Pugh, & O’Herlihy, 2017). For an approach to be deemed evidenced-based, the model requires several studies proving effectiveness, including the use varied methodological designs (Byiers et al., 2012; Salkovski’s, 1995).

Around 2016, the Future in Mind initiative led to large transformations of UK CAMHS, with services transitioning towards the implementation of care pathways. CAMHS care pathways are frameworks informed by evidence-based practice and national guidelines (e.g., NICE). Care pathways also offer a clear trajectory of care for the presenting difficulty (Hinrichs, Owens, Dunn & Goodyer, 2012), including the use of Theraplay for various presentations (e.g., difficulties with challenging behaviour and/or attachment). Likewise in other UK services, for example public and private provisions offering intervention funded through the Adoption Support Fund, Theraplay is recognised as a recommended and approved intervention that can be commissioned for LAAC (Stock et al., 2016). As Theraplay is included within services which are underpinned by national policy, it is important to consider the current findings within service and wider systemic context.

The current study found no evidence for Theraplay’s effectiveness of reducing challenging behaviours and enhancing parent-child attachments. Furthermore, it offered no rigorous evidence to support Theraplay’s hypothesised mechanisms of change through enhancing child attachments. This, combined with equivocal previous research, call in to question why Theraplay is being offered in services that

require evidenced-based approaches. Furthermore, it poses questions into the effectiveness of Theraplay being offered as an evidenced-based attachment approach within attachment care pathways, when the current study findings provided no support for significantly changing child attachments. However, it is important to hold in mind that the current study was based on three families, with limitations acknowledged (see section 4.8). Therefore, generalisability of the results needs to be interpreted with caution. Nonetheless, the rigorous case series design and multiple triangulation of approaches in the current study offer important data to explore within the national policy drivers of children's services and evidenced-based care. For example, more critical thought into each of the key mechanisms being implemented by Theraplay clinicians, or exploration into the decision-making process when applying or utilising specific core concepts of Theraplay.

The lack of support found for Theraplay's effectiveness and processes raise the broader question about its use within service provisions which are underpinned by policies such as Future in Mind. It could, however, be argued that the use of Theraplay may be related to wider systemic barriers in; a) the challenges in measuring attachment-related challenging behaviours (Harris-Waller et al., 2016), b) the lack of evidenced-based attachment informed interventions (Wright & Edginton, 2016), particularly for certain age groups (Allen, 2011b), and c) attachment as a challenging concept to operationalise and measure (as discussed earlier). These challenges may be observed within the broad recommendations in the NICE guidelines for attachment related difficulties (NICE, 2015), which would contribute to the care pathway planning for attachment-related difficulties. It could therefore be hypothesised that Theraplay is being offered as a 'best approach' within a scant selection of attachment-informed evidenced-based approaches for children and young people.

5. Critical Reflections

This section offers my critical reflection on the research process, including; the development of the project, strengths and challenges experienced, and areas of learning and development. Consideration will be offered into ethical and theoretical issues encountered.

When reflecting on the research process I am drawn to using attachment theory. In particular, the understanding of myself having a disorganised attachment style with the project. There would be times where I would swing between being motivated, interested, and engaged, and others of frustration, rejection, and avoidance. My interests in the Theraplay approach started before clinical training. When reading the theses handbook and a potential Theraplay project being outlined, I was quickly interested and initiated discussions with supervisors early into first year. Similar to the current evidence base and literature, I was aware of the approach yet had a critical understanding of the approach's effectiveness and lack of literature. I knew about the games Theraplay sessions implemented and I had heard anecdotal feedback of how promising the approach was. Nonetheless, I was perplexed into how Theraplay games could facilitate the changes described.

The use of mixed methods aligned well with the lack of evidence-base into Theraplay's effectiveness. Despite RCTs being acknowledged as the 'gold standard' to investigate treatment effects, I was introduced to single case designs when designing my research protocol. Single case designs allowed the opportunity to learn and develop a way of working that could be applied both within research and clinical practice as a scientist practitioner. Furthermore, my systematic literature review (investigating the effectiveness of Theraplay for children under the age of 12, with any presenting difficulty) further confirmed the value of using a single case design to contribute to the literature. Not only could the use of a single case design explore Theraplay's effectiveness, but it could offer an understanding into if, why, and how the proposed key mechanisms contributed to any change; an area which was yet to be explored. The use of multiple forms of data collection and analyses also offered an in-depth investigation and rigorous research design. Designing the project was a time of motivation and interest; it enabled me to offer valuable contribution to child mental health literature.

Designing and completing the project also involved times of frustration and rejection. Early literature reviews raised my awareness of the lack of measures for middle-childhood attachment; the small number of measures that did exist had mixed reliability and validity. The barrier of an appropriate attachment measure temporarily de-railed the design of the current project. There was a period of consideration as to whether my thesis would instead focus on the design of a parent-completed middle childhood attachment measure. However, after advice from tutors and supervisors, it was agreed to acknowledge the limitations of the measures that were available and to continue with the current study. My interest in the study was sparked again and I made good progress in setting up the project.

A second challenge and barrier to the project was obtaining an observation measure of Theraplay sessions. As mentioned earlier there are a handful of measures already devised with emerging evidence bases. Nonetheless, constraints of the project (i.e., costings) or obtaining the measures themselves (i.e., training, authorship, lack of response) meant that none were suitable. Furthermore, none of the available measures had been devised to be used alongside the therapeutic sessions, only the MIM assessment. Being able to assess Theraplay's four mechanisms of change was felt an integral aspect of the study design and its uniqueness. Therefore, time was spent devising the Theraplay Observation Form, which acted as a measure of constructs across assessment (the MIM) and sessions themselves. As discussed, there are several limitations to the TOF, and further research into an appropriate measure would be of benefit for clinical practice and Theraplay's evidence base. However, I valued the data that the TOF could offer in the current project.

A final challenge to the project was participant attrition and recruitment. I had some anxieties around relying on services to identify eligible participants. On reflection, the study made me aware of why there may be a lack of research into Theraplay. Families who access Theraplay interventions are often juggling several sources of stress, with the intervention aiming to target the parent-child relationship (and the child attachment) to create change. The case series design presented some ethical dilemmas, in wanting a repeatable measure to assess change and key mechanisms whilst acknowledging the demands families are already experiencing. At times there were periods of guilt when sending prompt texts and emails for

measures to be completed. However, I reflected on the thoughtful decision-making when designing the project and in choosing appropriate (and lower burdened) parent measures, alongside participant's own decision-making process to consent. Furthermore, the most time consuming and burdensome process measure was the observational measure completed by myself (and supervisors).

At times I felt a great sense of responsibility for the project. I was contributing to a scarce evidence base for an intervention widely used and commissioned in services across the world (including the NHS). I was also the first person to investigate Theraplay's proposed key mechanisms of change. The use of supervision was helpful to remind myself that my role and responsibility as a researcher was not to confirm the current narrative and understanding surrounding Theraplay. Alternatively, my role was to objectively investigate all areas of Theraplay; its effectiveness, its unknowns, and its limitations. Given the findings from the current study, there is a sense of uncertainty into future ethical dilemmas both for services and clinicians. In particular, the use of Theraplay within the NHS, and the policy underpinnings of CAMHS care pathways of evidence-based practice. It also offers some ethical dilemmas and critical thought for further reflection if I am to use Theraplay within my own future practice.

My final reflection and sense of responsibility I hold for the project, despite my lack of control, was the world pandemic which abruptly ended the project. In March 2019, government restrictions in response to COVID-19 meant that all Theraplay sessions stopped, and as a result, my data collection ended. As I hope is evident throughout this thesis, Theraplay is a model which promotes appropriate physical contact and play therefore, Theraplay is an intervention which places individuals at greater risk and exposure to COVID-19. Clinicians and services sudden yet appropriate decision-making meant that Theraplay could not be offered face to face. During the initial weeks of restrictions there was a lot of uncertainty about the project. Nobody was sure how long restrictions would last and there were no plans to offer Theraplay remotely. Furthermore, there was a lack of evidence base and/ or guidance for Theraplay sessions to be offered remotely in the future. This may have led to significant (and unknown) gaps in intervention, or significant deviation from the current research design if sessions were to be offered remotely in the future (which was not guaranteed). As expected, this was a highly anxiety-provoking time for

myself amongst many others. With the other barriers I had faced and overcome, I was confronted with a barrier that I had no control over and little solution to. Thankfully supervision aided this process and the difficult decision that had to be made. Throughout the past few weeks/months since data collection ended, I have had to process that I was unable to complete those final parts of data collection. However, to maintain design rigour, individual safety, and adherence to the project and intervention, stopping data collection was an ethical and pragmatic response. Despite the limitations of the thesis project, I feel that the results and findings still offer a valuable contribution to the literature and demonstrate doctoral level research.

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Conference Poster

Theraplay® for Attachment-Related Challenging Behaviours: A Case Series Approach



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Trent Doctorate in Clinical Psychology



Introduction

Background

Services receive many referrals for childhood challenging behaviour¹. Recommended first line intervention are behaviourally informed parent training programmes (PTP¹). However, associations between challenging behaviour and attachment difficulties have been found³ and these associations may not be addressed in PTPs.

Theraplay is an attachment-informed, play-based intervention³, widely used across services including NHS CAMHS. Theraplay's hypothesised change mechanisms are implemented through games based on four core constructs; Structure, Engagement, Nurture, Challenge. The constructs target change in the parent-child interactions with the aim to enhance child attachment.³

Theraplay's evidence is limited yet promising for both attachment⁴ and challenging behaviours⁵. However, evidence lacking in rigorous design and is scarce; despite Theraplay's frequent use in services. Questions remain if, and how, Theraplay works, and if Theraplay is effective at reducing attachment-related challenging behaviours.

Aims

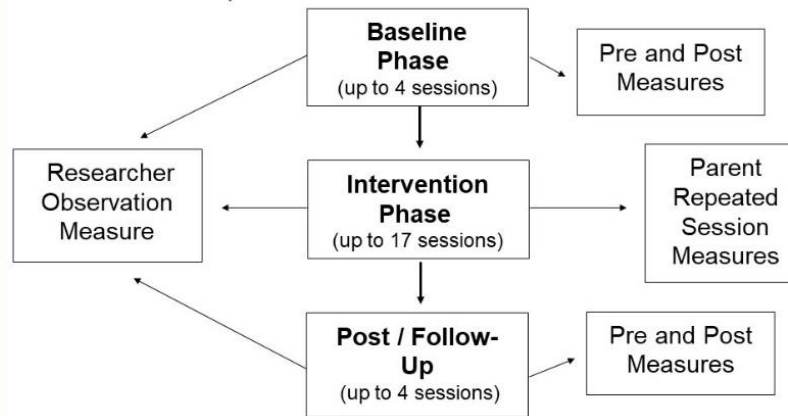
The study aimed to investigate the following questions:

- Is Theraplay effective at reducing challenging behaviour?
- Is Theraplay effective at enhancing parent-child attachment?
- Do any changes in attachment underpin any reported changes in challenging behaviour?
- Do Theraplay's reported key mechanism(s) contribute to any changes found?

Method

Multiple Case Series Design (n=3); families with children aged 6-10 years; final session parent change interview.

Pre/Post Measures: PQ, SWEMWBS (parent), IPPA-R (child)
Repeated Session Measures: BPM and MPCA (parent)
Researcher Measure: Theraplay observations (every video recorded session)



Analysis: Visual⁶, Tau-U⁷, Reliable and Clinically Significant Change⁸, and Framework Analysis⁹

Discussion

This was an innovative study for Theraplay literature. Results did not find Theraplay effective at either reducing childhood challenging behaviours or enhancing parent-child attachment. Theraplay-based interactions and mechanisms gradually improved during intervention; however, the mechanisms had no effect on either attachment or challenging behaviours. The results supported some previous findings of little effect¹⁰, and refuted others^{4,5}, including Theraplay's hypothesised processes³. The difference in findings may be due to the attachment measures used; and would warrant further research using gold standard measures of attachment.

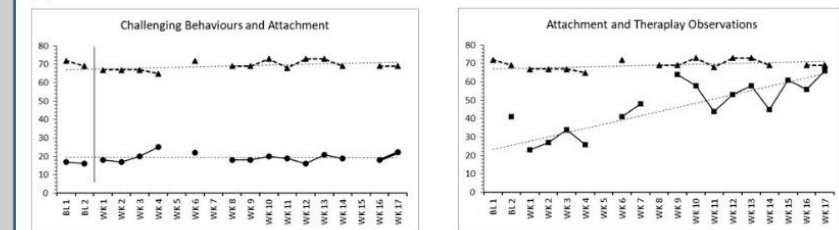
Results

Challenging behaviour? Visual, RCI/CSC, and Tau-U analysis found that Theraplay was not effective at reducing challenging behaviour.

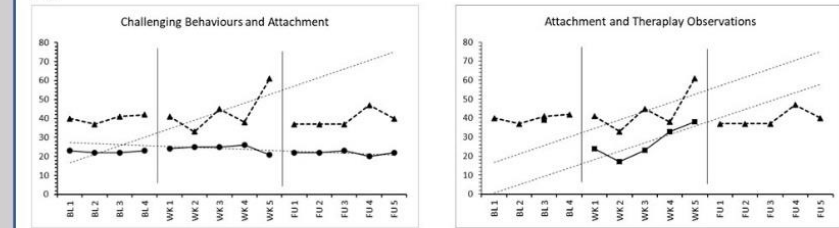
Parent-child attachment? Using Tau-U analysis, Theraplay had no meaningful effect on parent-child attachment. Mixed results were found using visual and RCI/CSC analysis; with P3 showing the most change.

Dual Processes? Theraplay interactions positively changed, but had no effect on challenging behaviour or attachment

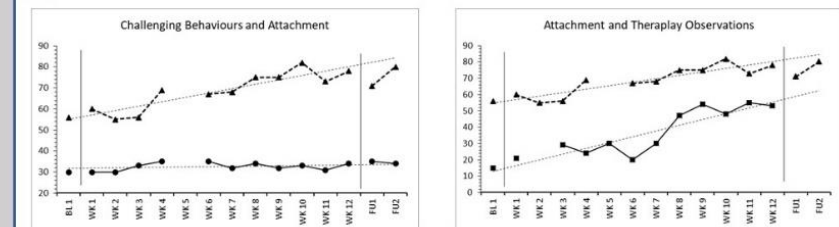
P1



P2



P3



▲ Attachment ● Behaviours ■ Theraplay Constructs

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**Small Scale Research Project
(SSRP)⁹⁵**

⁹⁵ Written to the author guidelines of the Clinical Child Psychology and Psychiatry Journal

Clinician's decision-making process when placing families on the attachment pathway within a Child and Adolescent Mental Health Service

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Abstract

The Future in Mind initiative (Department of Health, DOH, 2015) led to significant changes to service provision within child and adolescent mental health services (CAMHS). The Future in Mind initiative led to service transformations including the use of evidence-based care pathways, alongside emphasising the need for CAMHS to do more to support the most vulnerable children. This article presents an evaluation based within a CAMHS hub exploring clinician's decision-making when placing families on a pathway designed to offer intervention for childhood attachment difficulties (the 'attachment pathway'). Based on semi-structured interviews with four clinicians, thematic analysis identified three themes when making decisions about the attachment pathway; including gathering information beyond the young person, using various processes to make sense of the information, alongside several barriers when making decisions. Decision-making processes about placing families on the attachment pathway may be linked to wider difficulties in understanding and operationalising attachment difficulties. The findings informed service recommendations such as consideration into an agreed working definition of 'attachment difficulties' and the use of a structured observational measure during assessment.

Key Words: Attachment, children, CAMHS, mental health, care pathway, decision-making, clinician

Introduction

Childhood ‘attachment difficulties’⁹⁶ is a collective term often used to describe young people who experience emotional and behavioural difficulties stemming from insecure attachment patterns or diagnosable attachment disorders (Turner et al., 2019). Children who have difficulties with their caregiver attachment experiences are more likely to develop ‘insecure’ attachment styles, classified as either ‘ambivalent’, ‘avoidant’, or ‘disorganised’ (Ainsworth, Blehar, Waters, & Wall, 1978; Main & Solomon, 1986). Insecurely attached children often become distanced and either lack distress (avoidant) or become highly distressed (ambivalent) when separated from the caregiver. Insecurely attached children may also display an inconsistent behavioural pattern to their caregiver (disorganised), often due to their caregiver being perceived as both a source of threat and comfort. Children with attachment difficulties often display behavioural and relational difficulties (Chaffin et al., 2006), developmental, social, and educational difficulties (Ratnayake, Bowlay-Williams & Vostanis, 2014), alongside poor emotion regulation and problems experiencing empathy, guilt, or remorse (Hughes, 1999).

Attachment difficulties are often associated with young people who have had adverse early life experiences, e.g., looked-after and adopted children (LAAC⁹⁷) and those at risk of going into care (Chaffin et al., 2006; McAuley & Young, 2006; Turner et al., 2019). However, not all looked-after or adopted children have attachment difficulties, and attachment difficulties can often be overestimated within these populations (Woolgar & Baldock, 2015). Attachment difficulties may also present similar to other mental health difficulties (Ratnayake et al., 2014), with inconsistencies in the application or operationalisation of attachment difficulties in literature (Chaffin et al., 2006; Ratnayake et al., 2014; Turner et al., 2019). Therefore, attachment difficulties may present challenges to clinician’s assessing and deciding appropriate care.

There has been a 26.3% increase in referrals to child and adolescent mental health services in recent years (CAMHS; Crenna-Jennings & Hutchinson, 2018) and

⁹⁶ For the service evaluation, the term ‘attachment difficulties’ was used to capture all associated definitions (attachment disorders, difficulties, problems) in line with National Institute for Health and Care Excellence (NICE, 2015).

⁹⁷ Within the service evaluation, the term looked-after child refers to the definition outlined within the Children Act 1989, with children often ‘looked after’ by local authority care placements (e.g. foster care, residential homes, other relatives).

a large political drive to improve the access and quality of care in CAMHS (Mental Health Taskforce, 2016). The Future in Mind initiative (Department of Health, DOH, 2015) has been a large contributor to UK CAMHS change and has focused on initiatives such as a) developing the workforce, b) promoting prevention and early intervention, c) improving overall mental health care for young people, and specifically d) improving care and intervention for the most vulnerable children in society (e.g., LAAC). To improve access and quality of care, the policy focused on transitioning to the use of care pathways. Care pathways are frameworks defined for a group of individuals with a shared difficulty (e.g. diagnostically or needs-led; Hinrichs, Owens, Dunn & Goodyer, 2012) with clear trajectories of care identified, often informed by evidence-based treatment (DOH, 2015; NHS England, 2017). Pathways aim to improve quality of care whilst increasing efficiency of resources and patient satisfaction (De Bleser et al., 2006). However, care pathways may not always be appropriate (Whittle & Hewison, 2007), and create difficulties within services when individuals present with co-morbidities which are not consistent with the individualised pathway (e.g. combined low mood and anxiety). Pathways may not always be clearly defined when difficulties such as attachment may present similarly to other mental health difficulties (Ratnayake et al., 2014), and pathways differ in their design across the UK (Crenna-Jennings & Hutchinson, 2018).

The appropriate care pathway for a family to be placed on in CAMHS is often decided during initial assessments sessions. Initial assessments allow the clinicians to establish the presenting difficulty of the young person/family, with the presenting difficulty informing the care pathway and treatment decisions (Lee, 2017). Assessment sessions are regularly informed by underlying assumptions or psychological theory, with assessing clinician's pre-conceptions (e.g., information read from the referrer) potentially influencing the questions asked or the aims of the assessment (Dallos, 2017). CAMHS assessments also tend involve the view of the young person and key adult (i.e. parent; Hinrich et al., 2012). Consequently, CAMHS assessments involve making sense of lots of contradictory information from various sources, with the additional complexity of various treatment options (Garb, 2005; Tavakoli, Davies, & Thomson, 2000). Assessments, therefore, may become more complex when assessing presentations such as attachment that vary in their operationalisation and assessment.

Effective decision-making within assessments is important when identifying the most appropriate intervention options (Baker-Ericzen, Jenkins, Park, & Garland, 2015), with poor care decisions causing delays in individual's receiving appropriate treatment (Galanter & Patel, 2005). Differences in decision-making have been found between 'experts' or 'novices' in the field (Baker-Ericzen et al., 2015; Galanter & Patel, 2005) and whether a clinician had or had not been trained in specific evidenced-based therapeutic models used in interventions (Baker-Ericzen et al., 2015). However, clinical decisions based on expert experience can be subject to individual bias (Dowding & Thompson, 2009). A small-scale study reported that CAMHS clinicians based their decisions of appropriateness of psychotherapy on clinical experience and practice (i.e., practice-based evidence) rather than evidence bases and literature (i.e., evidence-based practice; Kam & Midgley, 2006). However, the findings are limited to a small-scale design and outdated in terms of policy drivers of CAMHS. Little information is known about the decision-making processes within psychologically-informed practice (Garb, 2005) and factors involved when determining the appropriate care pathway within CAMHS.

Decision-making processes are often an internal experience and create difficulties when attempting to assess or when asked to explain aloud (Kahneman & Klein, 2009). Naturalistic decision-making research focuses on decision-making processes within clinical settings and expert intuition (Galanter & Patel, 2005; Kahneman & Klein, 2009). Naturalistic processes allow for individual and intuitive factors, biases, clinician perceptions and errors (Parker-Tomlin, Boschen, Glendon, & Morrissey 2018) and are more representative of clinical practice within mental health settings. More information is needed into the internal experiences of decision-making that contribute towards the assessment of presentations in CAMHS that may be more complex to assess (e.g., attachment difficulties).

Informed by the Future in Mind initiative (DOH, 2015), ██████████ CAMHS transitioned to the use of a care pathway design in 2016 with twelve care pathways designed to meet the needs of young people and their caregivers. A pathway focused on the young person's presenting difficulty (e.g. Depression, Eating Disorders). The 'Attachment Pathway' (see Appendix X) was designed to offer intervention for childhood attachment difficulties and predominantly supporting the most vulnerable (i.e., LAAC and young people at risk of going into care). The

attachment pathway is informed by relevant guidance (i.e., the National Institute for Health and Clinical Excellence, NICE, 2015), with the pathway aiming to inform clinicians of suitable intervention when a child presents with attachment difficulties during initial assessment. The attachment pathway is comprised of three levels of intervention, including consultation/training with other services (level one), addressing other mental health needs as the primary focus (e.g. anxiety, level two), and a parenting group and specialist attachment-based dyadic interventions (level three), including Theraplay (Booth & Jernberg, 2010) and Dyadic Developmental Psychotherapy (DDP; Becker-Weidman & Hughes, 2008). Whilst the pathway offers guidance to clinicians of what appropriate interventions are available, little is known into how clinicians identify attachment difficulties and chose the 'Attachment Pathway' as the most appropriate forms of intervention. These decisions are important to be aware of to ensure that families, particularly of the most vulnerable children in society, receive the most appropriate care for their needs.

Given the complex process of clinical decision-making of appropriate pathways in CAMHS, and the challenges in distinguishing (Ratnayake et al., 2014) and operationalising attachment difficulties (Chaffin et al., 2006; Ratnayake et al., 2014; Turner et al., 2019), more information is needed into how decisions are made when determining the appropriateness of the attachment pathway for families in CAMHS. More information into this clinical decision-making is important as the attachment pathway is designed to often meet the needs of the most vulnerable children in society, i.e., LAAC (DOH, 2015). Furthermore, determining the appropriate pathway aims to ensure effective and appropriate care is offered (De Bleser et al., 2006; Galanter & Patel, 2005). An evaluation into how clinical decisions are made to place families onto the attachment pathway during initial assessments aims to aid a concurrent attachment pathway review within [REDACTED] CAMHS.

Aims

The current study aims to:

- Explore clinicians' perspectives of the factors involved in their own decision-making process when placing families on the attachment pathway⁹⁸;

⁹⁸ The term 'attachment pathway' will be used throughout the service evaluation and refers to the care pathway in CAMHS for the treatment and intervention for childhood attachment difficulties.

dissemination at team meetings and emails) with four clinicians volunteering to complete the interviews within the recruitment timeframe⁹⁹.

Semi-structured interviews were conducted by the researcher and consisted of an interview schedule (see Appendix Y). The interview schedule was devised following consultation¹⁰⁰ with Clinical Psychologists who had no prior experience of the attachment pathway and service, aiming to reduce the likelihood of service knowledge impairing the questions devised. During the interview schedule, a cognitive task analysis (CTA) method was employed (Kahneman & Klein, 2009). The CTA method aimed to elicit information from previous clinical examples (when clinicians had or had not placed a young person on the attachment pathway) and make inferences from clinical judgments. Additional questions and prompts were included in the interview dependent on responses to aid thought processes. Interviews were completed in the service hub and were audio-recorded and transcribed verbatim by the researcher.

No formal ethical review process was necessary due to the study falling within the remit of a service evaluation (National Research Ethics Service, 2009). The evaluation was conducted in line with ethical practice (British Psychological Society, 2014) and the local trust's Research & Development team were informed. Participants were aware that their involvement was voluntary and that all data was confidential and anonymised in any dissemination.

Analysis

Qualitative data was analysed using thematic analysis (TA). TA was decided as an appropriate method of analysis as the aims were interested in eliciting new information and participant's meaning-making of care pathway decisions. Other similar qualitative analysis (e.g. content analysis) may have been too limiting in its application, such as commonly using frequency of codes and previous theory and hypotheses to make sense of information (i.e. a primarily deductive approach, Willig, 2008).

⁹⁹ All eligible clinicians were able to participate between 1st May – 30th June 2019, in line with assignment guidelines and after the NHS Trust's Research & Development department had acknowledged the service evaluation. Recruitment ended after the 30th June 2019 to allow adequate time in line with assignment guidelines.

¹⁰⁰ Consultations occurred before the lead researcher had started their time on placement, and therefore had less experienced knowledge of the service and attachment pathway.

TA is deemed an appropriate method of analysis given its flexibility, accessibility, and ability to make sense of shared-meanings (Braun & Clarke, 2012). A criticism of TA is that it lacks consistency due to its flexibility in application (Howitt, 2010), therefore, Braun and Clarke's (2006) model of TA was implemented to enhance consistency. The model is comprised of six stages; 1) familiarisation of the data, 2) generating initial codes, 3) 'searching' for themes, 4) reviewing themes, 5) defining and naming themes, and 6) writing the report. TA was applied from a critical realist perspective (Braun & Clarke, 2006), with clinician's words providing access to their own versions of reality and truth shaped by their own constructions. However, there is recognition that a shared knowledge between individuals can exist (Robson, 2002; Clarke, Braun & Hayfield, 2015).

In line with the critical realist perspective, predominantly semantic analysis was used. Semantic analysis focuses on data that are explicitly stated, enabling the researcher to remain close to the participants own meanings (Clarke et al., 2015). Primarily inductive analysis was implemented, with the aim for the themes to be driven by data rather than prior theory or understanding (Braun & Clarke, 2012; Clarke et al., 2015). However, pure semantic and inductive analysis is not possible due to the reader rarely being able to fully ignore latent meanings or prior concepts and ideas (Braun & Clarke, 2012). Some element of deductive analysis was implemented due to the authors understanding of attachment theory and clinical practice (including the models of Theraplay and DDP within CAMHS). A reflective journal was kept reducing the author's pre-conceptions impacting the reliability of the data. Appendix Z and AA provide excerpts of the TA analysis and author's reflective journal.

Results

Demographic Data

Four (44%) of the nine eligible clinicians (i.e. those offering initial assessments) participated in the semi-structured interviews. The pseudonyms of Michelle, Ashley, Caroline and Georgie have been used to protect the participant's anonymity, with Table 24 presenting participant characteristics. Participants had been completing initial assessments in the CAMHS 'hub' ranging 6 months – 4.5 years (mean = 2 years) and had various professional backgrounds (e.g. Mental Health Nursing and

Clinical Psychology). The two clinicians who had placed families on the attachment pathway estimated that 5-10% of the initial assessments they had completed (in 2018-2019) resulted in the decision to place the family on the attachment pathway.

Table 24.

Anonymised participant characteristics

Participant Pseudonym	Gender	Placed Family on the Attachment Pathway	Offering Specialist Attachment Interventions*
Michelle	Female	No	No
Ashley	Female	Yes	Yes
Caroline	Female	No	No
Georgie	Female	Yes	No

**Note: Specialist attachment interventions are those on the attachment pathway (i.e. Theraplay, Dyadic Developmental Psychotherapy).*

Qualitative Data

The analysis identified three major themes when exploring clinicians' perspectives of decision-making when placing families on the attachment pathway; 1) Seeing beyond the young person, 2) Making sense of information and 3) Barriers to decision-making. The analysis will first focus on the facilitating factors involved in assessing clinicians decision-making when placing families on the attachment pathway, and then barriers experienced when trying to make decisions. Figure 23 presents a thematic map representing the relationships between the three themes.

1. Theme One: Seeing beyond the young person

Although the initial assessment session was based around the young person who had been referred to CAMHS, clinician's decisions about whether the attachment pathway was appropriate involved exploration of the wider family and system around the young person. Salient aspects of wider information included a) key experiences of family members, and b) relationships. Seeing beyond the young person helped the clinician to consider whether family-based factors may have contributed to the young person's current difficulties.

1a. Key experiences of family members. Whilst clinicians considered some of the specific life events the young person had experienced, individual events of the young person were not solely focused on. During the initial assessment session, clinicians were interested in the experiences the family had had together to explore intergenerational attachment experiences.

'It's [in] the context of the family, and you could understand that if things have happened in the family then the behaviours [are] going to be impacted' (Caroline)

Key experiences of the parent were also explored as a deciding factor when considering the attachment pathway. Experiences included the parent's early life history and individual adult experiences.

'I guess I'd [clinician] be looking at ideally parent's history and attachment, any key events that may have happened in their lives or with their parents' (Michelle)

1b. Relationships. When considering the attachment pathway within assessments, clinicians were interested in the relationship that young people had with significant others, particularly the parent. Information into relationships helped to offer information into potential attachment experiences.

'are they [parent] able to empathise with that young person, or are they more about their own stuff' (Ashley)

A salient narrative within clinician decision-making was the use of observational information about the parent and child relationship during the assessment and within the therapy room.

'it's that observation and seeing how they [parent-child] relate with each other, and how that fits in with why they are there' (Caroline)

Clinicians were particularly interested in the observational information about the use and response of care and nurture within the parent-child relationship.

'So, for this young person they were kind of needing Mum and that closeness and touch' (Georgie)

2. Theme Two: Making sense of information

Clinicians drew on various processes during decision-making in initial assessment sessions to make sense of both verbal and non-verbal information gathered. The processes included a) drawing on theory and knowledge, and b) clinicians being 'in' the assessment.

2a. Drawing on theory and knowledge. Using the information clinicians had gathered during initial assessment sessions, clinicians would utilise various theoretical perspectives, models, or their previous clinical experience to make sense of the information they had. The process of gathering information and making sense of the information tended to be ongoing and fluid throughout the assessment session.

'... I often think about the shield against shame concept, and trying to help think about well what is it, and what are some of these child's likely core beliefs, for a better word' (Ashley)

There was no consistency between clinicians in which model was being applied. Clinicians tended to process information by using a developmental framework and consider whether the information provided was typical of the young person's development. The processes involved in decision-making would often help clinicians make sense of the information being shared.

'...referral was around 99% about behaviour, what Mum and Dad said was around 99% about behaviour, my professional opinion about it was that it was an expression of other things going on' (Caroline)

2b. Clinicians being 'in' the assessment. Clinicians spoke about their own experiences of being part of the assessment and observing the parent-child relationship, with some of the information appearing to elicit an emotional response in clinicians. Some clinicians drew on their own experiences of being involved in those assessments to provide information when considering the attachment pathway.

'she [child] came running up, threw her arms around me [clinician] and said I've missed you, and I was like, you've not met me before. This is not quite normal' (Caroline)

'... I've [clinician] had some quite awkward and difficult assessments where parents have shared things in front of the young person... you can just see the young person just really struggle to hear that' (Ashley)

Not all clinicians had placed or considered families for the attachment pathway whilst working in the CAMHS 'hub', therefore not all clinicians contributed to the theme of being 'in' the assessment.

3. Theme Three: Barriers to decision making

Whilst several factors were identified that aided clinician's decision-making, there was a common narrative around various barriers that impacted clinician's decision-making process when considering placing families on the attachment pathway. Three subthemes of barriers included a) clinician uncertainty and reassurances, b) understanding of the attachment pathway, c) client openness and willingness.

3a. Clinician uncertainty and reassurances. All clinicians contributed data to this subtheme. Clinicians appeared indecisive and uncertain in recognising and identifying appropriate difficulties for the attachment pathway during the assessment process, especially pulling apart the complexity of the information gathered and often co-morbid presentation.

'because that was the main presenting issue. But where that behaviour was coming from, may have been very much attachment-based behaviour...but it wasn't as clear cut' (Caroline)

Clinicians also appeared to lack confidence in their ability to identify and appropriately place families on the attachment pathway. The role of reassurance seeking, clarification or consultation from colleagues was a strategy often used by clinicians; either by speaking to certain members of staff or taking the case to team meetings.

'It's a tricky one. I don't know if it's right or not' (Michelle)

'...then I just go to the Psychologist's and go 'help me'' (Georgie)

3b. Understanding of the attachment pathway. An additional barrier to clinician decision-making was the lack of clarity and clinician understanding of the attachment pathway. Clinicians themselves did not appear to have a clear understanding of the trajectory of care, any criteria etc., when considering placing a family on the pathway.

'I don't know much about the attachment pathway... I'm not sure how many referrals are being made' (Michelle)

'I put my hands up, I think my knowledge could be better' (Georgie)

For those that appeared to have a greater understanding of the attachment pathway, their decision-making was impacted by the design and structure of the pathway itself, indicating a lack of clarity from the service.

'I think the attachment pathway is quite vague, so it's a bit difficult sometimes to know like what's the criteria... maybe some clearer guidance about that would be helpful' (Ashley)

3c. Client openness and willingness. Clinician's spoke about the barrier of client openness and willingness when exploring referrals to the attachment pathway, particularly the openness and willingness of the parent.

*'...if we felt the carers were willing and open to work with us [clinician]. I think that's such a key thing particularly within the attachment pathway'
(Ashley)*

Motivation of the family related to their ability to engage with certain topics of discussion that may be more appropriate when considering the attachment pathway. Clinicians considered whether the family were able to contemplate or discuss a different way of understanding the young person's difficulties that differed from the client's own.

'...would be inappropriate if the family were not willing to engage, and it's something that we [clinician] think would be really useful for the family that they're really not wanting' (Michelle)

Some of the clinicians spoke about the potential negative associations or connotations with the attachment pathway, and the difficulties families (particularly parents) had when considering attachment difficulties.

'I think it's only that the family don't want to often associate it with being attachment' (Georgie)

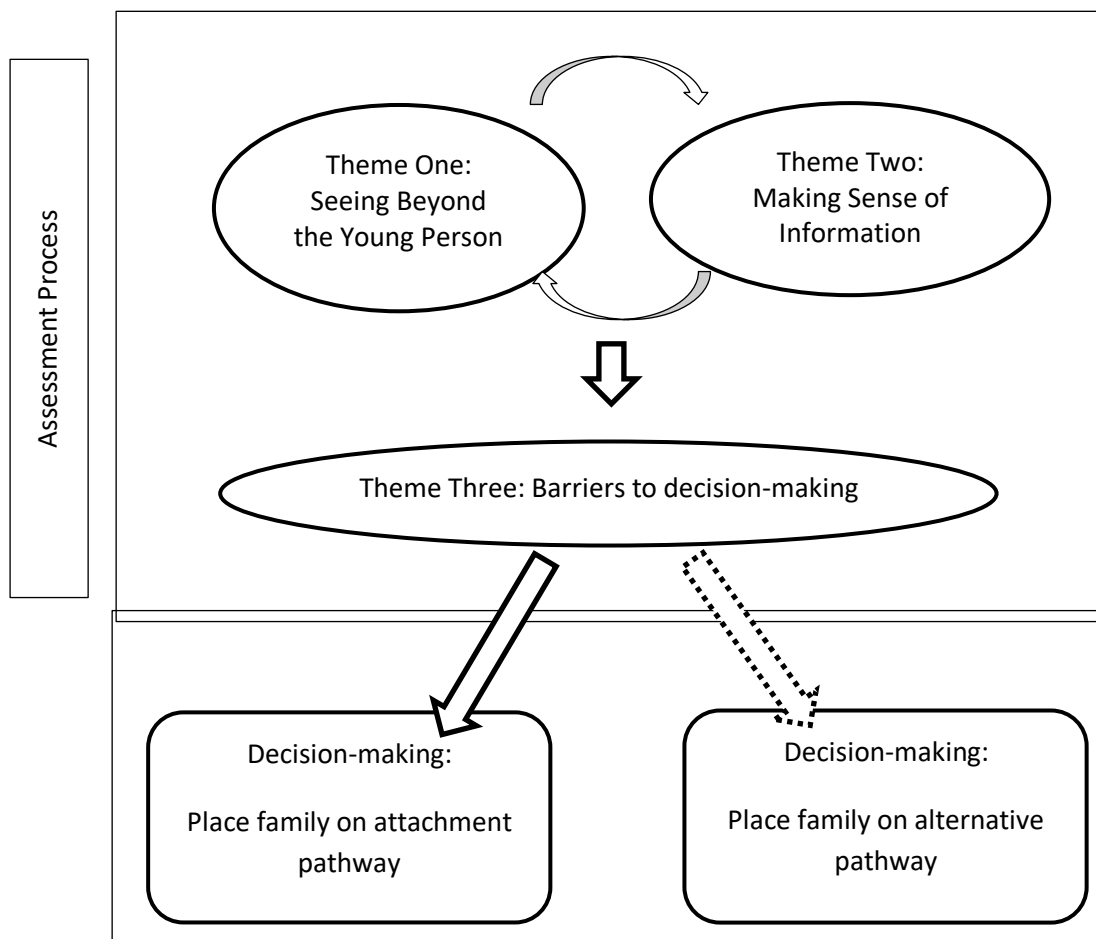


Figure 23: Thematic map

Themes one and two were the main contributing factors to clinicians decision making; often a fluid process of gathering and making sense of the information sought, with 'making sense of the information' also influencing their information

seeking (e.g., questions asked). Whilst all the clinicians experienced barriers to their decision-making, the barriers were managed in some instances (e.g., consulting other colleagues) which resulted in families being placed on the attachment pathway. In other assessments, barriers were not managed (e.g., parents not willing to engage in sessions themselves) and families were then placed on an alternative pathway (dashed-arrow).

Discussion

The current evaluation aimed to explore clinicians' perspectives of the factors involved in their own decision-making processes when placing families on the attachment pathway, and how the factors identified related to the current service provision.

Despite the challenges of decision-making as an internal process, the use of cognitive task analysis (Kahneman & Klein, 2009) aided the identification of three themes within assessing clinician's decision-making. To contribute to decisions, clinicians explored certain areas of information in initial assessments and utilised specific processes to make sense of the information gathered. Clinicians drew on information beyond the difficulties that the young person is reported to be presenting with, including a focus on the experiences of the parent's themselves and the relationship between young person and parent. Exploration beyond the young person supports national guidance when assessing attachment difficulties (NICE, 2015). Observations of the parent-child relationship provided clinicians with additional non-verbal information, including secure or insecure patterns of relating (e.g., when and how the parent provided care and nurture, and how the young person responded). Clinician's consideration into the parent-child relationship and use of observation data is supported by attachment perspectives when considering attachment styles (Ainsworth et al., 1978) and the security of the child's base (i.e., parent, Bowlby, 1997; Cassidy, 2016). Furthermore, clinician's exploration of the dyadic relationship when considering the attachment pathway is supported by previous meta-analyses into effective interventions for childhood attachment security (Bakermans-Kranenburg, Ijzendoorn, & Juffer, 2003). Results indicated that interventions including parents, with the focus of increasing parental sensitivity, were the most effective at enhancing attachment security within young people.

Several processes were identified to help clinicians make sense of the information gathered and aid decision-making; including theory and knowledge to make sense of the information gathered, but also the clinicians personal experience of being 'in' and part of the assessment. There was no clear or consistent model/framework that clinicians used when processing information, with the variation between each clinician potentially increasing the risk of different outcomes when considering the attachment pathway. Participants had different professional backgrounds and training in specialist attachment-based interventions. Previous literature has established differences in decision-making between clinicians who are deemed more of an 'expert' in the area (Baker-Ericzen et al., 2015), which may contribute to assessing clinicians judgment within the CAMHS 'hub'. The current data tentatively supports the viewpoint of 'expert' views; with one clinician trained in specialist attachment interventions being one of the two clinicians who had placed families on the attachment pathway. Conversely, it could also be suggested that 'expert' clinicians conduct more assessment sessions involving psychological assumptions or pre-conceptions informed by attachment theory and their understanding of attachment difficulties (Dallos, 2017). Therefore, 'expert' clinicians' assessment sessions may be at an increased risk of confirmation bias (Galanter & Patel, 2005).

Whilst facilitative factors were identified in clinician decision-making, several barriers influenced clinicians' abilities when considering the attachment pathway for families. The barriers and challenges appear to sit within a wider issue of operationalising, assessing, and understanding attachment difficulties (Chaffin et al., 2006; Ratnayake et al., 2014; Turner et al., 2019), and are likely to have influenced national guidelines which inform wider service practice (NICE, 2015). Current NICE Guidelines (2015) provide broad recommendations in the assessment and treatment of attachment difficulties, alongside combining attachment difficulties and LAC/those at risk of going into care. When considering the current service provision, the current attachment pathway is based on the NICE Guidelines (2015). Therefore, the broad recommendations by national guidelines may be contributing to the barrier's clinicians are experiencing. Barriers include the services lack of clarity in the design of the attachment pathway, alongside a lack of clinician confidence when making decisions, supported by other decision-making research (Tavakoli et al., 2000). Lack

of clinician confidence and knowledge about the pathway also supports other research into barriers when implementing care pathways (Evans-Lacko, Jarrett, McCrone, & Thornicroft, 2010; Whittle & Hewison, 2007). Only one clinician within the interviews commented on LAC within decision-making for the attachment pathway, suggesting that not all clinicians consider the child's care status when deliberating the attachment pathway, despite the current pathway design being for attachment difficulties/LAC. The discrepancy supports the understanding of not assuming LAC and attachment difficulties (Woolgar & Baldock, 2015), yet there are some inconsistencies in the pathway design and its use.

Limitations and Future Research

Participants were recruited on a volunteer basis and were informed of the service evaluation question prior to completing the interviews. Volunteer sampling methods could indicate that the participants may have had a vested interest in attachment, the attachment pathway or service delivery, or their answers may have been influenced by pre-conceptions (Dallos, 2017). Therefore, there may be missing data from clinicians who are less invested in the area or have specialisms within other areas yet still complete initial assessments.

The use of a recall based cognitive task analysis also increased the risk of clinician recall bias, with important decision-making factors potentially omitted. Furthermore, the lead author who facilitated the interviews was also a temporary clinician within the service, therefore participation and responses may have unintentionally been skewed by response bias. Future research could use pre-designed vignettes to standardise the information given to clinician's and use tasks such as the 'think aloud' task (Ericsson & Simon, 1993) for clinicians to verbalise their initial thought processes out loud.

The current service evaluation was based on a small sample of clinician interview data. What emerged from the data was the significance of the barriers clinicians experienced. However, the small and varied sample limited the opportunity for further analysis around decision-making barriers. Future research would be helpful to explore what factors did or did not help clinicians overcome the barriers, with the aim to support future assessment sessions when presented with similar barriers.

Recommendations

In line with the final service evaluation aim, the following service recommendations are made to aid clinician's decision-making processes when considering the attachment pathway, therefore improving access to the most appropriate care.

- To establish a clear and coherent definition of 'attachment difficulties' on the attachment pathway, aiding the assessment and identification of attachment difficulties;
- For the pathway structure to be reviewed with consideration into the use of an agreed model/framework to aid clinician understanding when considering treatment options. There was significant variance in what models/frameworks clinicians used in their decision-making for the attachment pathway;
- Staff training regarding attachment difficulties presentations and an agreed attachment model/ framework aligned to the point above, with the aim to enhance clinicians knowledge and confidence during decision-making about the attachment pathway;
- Consideration into the use of structured observational measures of parent-child relationships to aid the information gathering and decision-making process, given the significance of observational information shown in the results.

Acknowledgments: The author would like to thank all clinicians who participated in the service evaluation.

Funding: The author who completed the service evaluation was funded by [REDACTED] as a Trainee Clinical Psychologist and completed the project as part of the Doctorate in Clinical Psychology.

Notes

1. For the service evaluation, the term 'attachment difficulties' was used to capture all associated definitions (attachment disorders, difficulties, problems) in line with National Institute for Health and Care Excellence (NICE, 2015).
2. Within the service evaluation, the term looked-after child (LAC) refers to the definition outlined within the Children Act 1989, with children often 'looked

after' by local authority care placements (e.g. foster care, residential homes, other relatives).

3. The term 'attachment pathway' will be used throughout the service evaluation and refers to the care pathway in CAMHS for the treatment and intervention for childhood attachment difficulties.
4. All eligible clinicians were able to participate between 1st May – 30th June 2019, in line with assignment guidelines and after the NHS Trust's Research & Development department had acknowledged the service evaluation.
5. Consultations also occurred before the lead researcher had started their time on placement, and therefore had less experienced knowledge of the service and attachment pathway.

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Appendices

Appendix A

Sensitivity Search (July 2018)

OR ▾ Theraplay Select a Field (optional) ▾ Clear ?

AND ▾ Child* Select a Field (optional) ▾ + -

[Basic Search](#) [Advanced Search](#) [Search History](#) ▾

Search History/Alerts

[Print Search History](#) [Retrieve Searches](#) [Retrieve Alerts](#) [Save Searches / Alerts](#)

Select / deselect all [Search with AND](#) [Search with OR](#) [Delete Searches](#) [Refresh Search Results](#)

Search ID#	Search Terms	Search Options	Actions
<input type="checkbox"/> S3	DE "Play Therapy" OR Theraplay AND Child*	Expanders - Also search within the full text of the articles Narrow by Language: - english Search modes - Boolean/Phrase	View Results (3,572) View Details Edit
<input type="checkbox"/> S2	DE "Play Therapy" OR Theraplay AND Child*	Expanders - Also search within the full text of the articles Search modes - Boolean/Phrase	View Results (3,834) View Details Edit
<input type="checkbox"/> S1	DE "Play Therapy"	Search modes - Boolean/Phrase	View Results (3,801) View Details Edit

« **Refine Results** Search Results: 1 - 50 of 3,572 Relevance ▾ Page Options ▾ [Share](#) ▾ Folder has items [Internal family systems t...](#) »

Current Search ▾

'Play Therapy' (MeSH) OR Theraplay AND Child* (child, children, children's, childhood)

-full text search

-use of English filter

-3,572 results found.

Appendix B: Example Search Strategy and Results. July 2018

PsycINFO

Search History/Alerts

[Print Search History](#) [Retrieve Searches](#) [Retrieve Alerts](#) [Save Searches / Alerts](#)

Select / deselect all **Search with AND** **Search with OR** **Delete Searches** **Refresh Search Results**

Search ID#	Search Terms	Search Options	Actions
<input type="checkbox"/> S2	Theraplay AND Child*	Expanders - Also search within the full text of the articles Narrow by Language: - english Search modes - Boolean/Phrase	View Results (125) View Details Edit
<input type="checkbox"/> S1	Theraplay AND Child*	Expanders - Also search within the full text of the articles Search modes - Boolean/Phrase	View Results (130) View Details Edit

Refine Results Search Results: 1 - 50 of 125 Relevance Page Options Share

Current Search

Boolean/Phrase:

1. **Theraplay** impact on parents and **children** with autism spectrum disorder: Improvements in affect, joint attention, and social cooperation.

Theraplay AND Child* (child, children, children's, childhood)

-full text search

-use of English filter

CINAHL

Search History/Alerts

[Print Search History](#) [Retrieve Searches](#) [Retrieve Alerts](#) [Save Searches / Alerts](#)

Select / deselect all **Search with AND** **Search with OR** **Delete Searches** **Refresh Search Results**

Search ID#	Search Terms	Search Options	Actions
<input type="checkbox"/> S2	Theraplay AND Child*	Expanders - Also search within the full text of the articles Narrow by Language: - english Search modes - Boolean/Phrase	View Results (58) View Details Edit
<input type="checkbox"/> S1	Theraplay AND Child*	Expanders - Also search within the full text of the articles Search modes - Boolean/Phrase	View Results (65) View Details Edit

Refine Results Search Results: 1 - 50 of 58 Relevance Page Options Share

Current Search

Boolean/Phrase:

1. **Theraplay** impact on parents and **children** with autism spectrum disorder: Improvements in affect, joint attention, and social cooperation.

Theraplay AND Child*

-full text search

-use of English filter

MEDLINE

The screenshot shows the MEDLINE search interface. At the top, there is a search bar with the text 'Theraplay' and a dropdown menu for 'Select a Field (optional)'. Below this, there are two more search bars, each with 'AND' and 'Child*' and another 'Select a Field (optional)' dropdown. A green 'Search' button is to the right. Below the search bars, there are links for 'Basic Search', 'Advanced Search', and 'Search History'. The 'Search History/Alerts' section shows a table with two search results, both for 'Theraplay AND Child*'. The first result (S2) has 7 results and the second (S1) has 9 results. Both are refined by 'English Language' and 'Boolean/Phrase' search modes. At the bottom, there are options for 'Refine Results', 'Search Results: 1 - 7 of 7', 'Relevance', 'Page Options', and 'Share'.

Theraplay AND Child* (child, children, children's, childhood)

-full text search

-use of English filter

Web of Science

The screenshot shows the Web of Science search results interface. At the top, there are buttons for 'Save History / Create Alert' and 'Open Saved History'. Below this, there is a table with two search results. The first result (Set #2) has 17 results and is refined by 'LANGUAGES: (ENGLISH)'. The second result (Set #1) has 19 results. Both are refined by 'SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years'. To the right of the table, there are buttons for 'Edit Sets', 'Combine Sets' (with 'AND' and 'OR' radio buttons), and 'Delete Sets' (with 'Select All' and 'Delete' buttons).

Theraplay AND Child* (child, children, children's, childhood)

-use of English filter

Appendix C

Exclusion results from search

Reason for Exclusion	Number	
	Not in English	153
Not in peer reviewed article	Books	133
	Dissertations/Thesis	37
	Abstracts	3
	Magazine	8
	Films	6
	Poster Presentations	4
	Newspapers	2
	Newsletters	70
	Others (short course, question and answers script, report)	3
	Before 1970	8
	Qualitative Article	7
	No outcome measure/experimental design	17
	Adult/Adolescent Population	16
	Combination of Therapies	9
Not using Theraplay	Psychometric Assessment Design	10
	Other models (e.g. Play Therapy, Dyadic Developmental Therapy, Filial Therapy)	26
	Inter Library Loans/Theraplay Institute Unable to find	14
	Studies excluded following title/abstract review	526

Appendix D

Critical Appraisal Tool, Case Series (Moola et al., 2017)

	Yes	No	Unclear
Were there clear criteria for inclusion in the case series?			
Was the presenting problem measured in a standard, reliable way for all participants included in the case series?			
Were valid methods used for identification of the presenting problem for all participants included in the case series? Or had they been recruited via a specialist service for their presenting difficulty?			
Did the case series have consecutive inclusion of participants?			
Did the case series have complete inclusion of participants?			
Was there clear reporting of the demographics of the participants in the study?			
Was a clear description provided regarding the Theraplay intervention given? (e.g. number of sessions, structure, format)			
Is it clear that the therapist delivering the intervention has accessed Theraplay training to a minimum of Level 1 standard, as accredited by the Theraplay Institute?			
Was a standardised outcome measure used?			
Are changes in the four concepts of Theraplay explicitly monitored alongside the intervention?			
Were the outcomes or follow up results of cases clearly reported?			
Was statistical analysis appropriate?			
Does the study address how their presenting difficulty related the attachment-based theoretical underpinnings of Theraplay?			

Note: Y (Yes) the study clearly provides a rich description of item, N (No) little information is provided to be able to adequately assess this item, U (Unclear) full or partial missing information, therefore unable to fully assess whether it addresses the item.

Appendix E

Critical Appraisal Tool, Quasi-Experimental Designs (Tufanaru et al., 2017).

	Yes	No	Unclear
Is it clear in the study what is the 'cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?			
Were valid methods used for identification of the presenting problem for all participants included in the case series? Or had they been recruited via a specialist service for their presenting difficulty?			
Were the participants included in any comparisons similar?			
Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?			
Was there a control group?			
Was there clear reporting of the demographics of the participants in the study?			
Was a clear description provided regarding the Theraplay intervention given? (e.g. number of sessions, structure, format)			
Is it clear that the therapist delivering the intervention has accessed Theraplay training to a minimum of Level 1 standard, as accredited by the Theraplay Institute?			
Was a standardised outcome measure used?			
Are changes in the four concepts of Theraplay explicitly monitored alongside the intervention?			
Were there multiple measurements of the outcome both pre and post the intervention/exposure?			
Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analysed?			
Were the outcomes of participants included in any comparisons measured in the same way?			
Was statistical analysis appropriate?			
Does the study address how their presenting difficulty related the attachment-based theoretical underpinnings of Theraplay?			
<i>Note: Y (Yes) the study clearly provides a rich description of item, N (No) little information is provided to be able to adequately assess this item, U (Unclear) full or partial missing information, therefore unable to fully assess whether it addresses the item.</i>			

Appendix F

Critical Appraisal Tool, Randomised Control Trials (Tufanaru et al., 2017).

Note: Y (Yes) the study clearly provides a rich description of item, N (No) little information is

	Yes	No	Unclear
Were valid methods used for identification of the presenting problem for all participants included in the case series? Or had they been recruited via a specialist service for their presenting difficulty?			
Was there clear reporting of the demographics of the participants in the study?			
Was true randomization used for assignment of participants to treatment groups?			
Was allocation to treatment groups concealed?			
Were treatment groups similar at the baseline?			
Were participants blind to treatment assignment?			
Was a clear description provided regarding the Theraplay intervention given? (e.g. number of sessions, structure, format)			
Is it clear that the therapist delivering the intervention has accessed Theraplay training to a minimum of Level 1 standard, as accredited by the Theraplay Institute?			
Were treatment groups treated identically other than the intervention of interest?			
Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?			
Was a standardised outcome measure used?			
Were participants analyzed in the groups to which they were randomized?			
Are changes in the four concepts of Theraplay explicitly monitored alongside the intervention?			
Were outcomes measured in the same way for treatment groups?			
Were outcomes measured in a reliable way?			
Was appropriate statistical analysis used?			
Does the study address how their presenting difficulty related the attachment-based theoretical underpinnings of Theraplay?			
provided to be able to adequately assess this item, U (Unclear) full or partial missing information, therefore unable to fully assess whether it addresses the item.			

Appendix H

Letter Confirming Ethical Approval¹⁰¹



Dr Dave Dawson
Trent Doctorate in Clinical Psychology,
Sarah Swift Building
University of Lincoln, Brayford Wharf East
Lincoln, Lincolnshire
LN5 7AY

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

12 April 2019

Dear Dr Dawson

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

Study title:	Theraplay for attachment-related challenging behaviour: A case series approach
IRAS project ID:	244818
Protocol number:	190202
REC reference:	19/NE/0090
Sponsor	University of Lincoln

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.

Please now work with participating NHS organisations to confirm capacity and capability, [in line with the instructions provided in the "Information to support study set up" section towards the end of this letter.](#)

¹⁰¹ All ethical approval and project documents were written in the maiden name (Smith), with a name change to Money April 2019.

Appendix I



Project ID: 244818

Participant Identification Number for this study:

CONSENT FORM – PARENT/CARER

Title of Project: Theraplay for attachment-related challenging behaviour: A case series approach

Name of Researchers: Rebecca Smith, Dr Sarah Wilde, Dr Dave Dawson and Jo Williams.

Name of Participant: _____(parent)
_____ (child)

Please initial box

1. I confirm that I have read the information sheet dated 13/07/2019 (final version 5.0) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand that mine and my child's participation is voluntary and that we are free to withdraw at any time without giving any reason, without our care or legal rights being affected. I understand that should I withdraw then the information collected so far may not be erased and that this information may still be used in the project analysis.
3. I understand that relevant sections of my child's notes, video recordings of sessions and data collected in the study may be looked at by authorised individuals from the University of Lincoln, the research group and regulatory authorities where it is relevant to our taking part in this study. The NHS Trust R&D may also access medical notes (in case of audit).
4. I give permission for these individuals to have access to my records, and to collect, store, analyse and publish information obtained from mine and my child's participation in this study. I understand that my personal details will be kept confidential.
5. I understand that during the final session, part of my interview with the researcher will be audio recorded. I understand that anonymous direct quotations from the interview may be used in the study report.
6. I agree to my personal details being used by the research team to prompt the completion of the questionnaires.
7. I agree to my child's GP being informed of my involvement in the study.
8. (Optional) I understand that the information collected about me and my child will be used to support other research in the future and may be shared anonymously with other researchers. (Delete as appropriate) I am happy for the questionnaire data / video recording data / both questionnaire and video recording data to be shared anonymously with other researchers.
9. I would like to receive a summary of the results of the study Yes No

10. I agree to take part in the above study.

_____	_____	_____
Name of Parent	Date	Signature
_____	_____	_____
Researcher taking consent	Date	Signature

(OPTIONAL) Section for children to give assent

I agree to take part in this study

_____ (child)	_____ (date)	_____ (signature)
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Appendix J



Project ID: 244818

Participant Number:

Child Assent Form

Title of Project: Theraplay for attachment-related challenging behaviour: A case series approach

Name of Researchers: Rebecca Smith, Dr Sarah Wilde, Dr Dave Dawson and Jo Williams.

My name is: _____ **My parent/carer's name is:** _____

I have been asked to take part in a study which is trying to learn more about the 'Theraplay' games I am going to play with my parent/carer. I have been given you some information about the study (09/02/2019, final version 1.0).

I know that I may be asked to complete two questionnaires, and that there is no right or wrong way to complete these and I can say no. I also know that the adults involved in the study will also have access to my medical notes and will watch the video recordings of when we play the games.

I have had the chance to speak to the adults about this information and ask some questions.

I know that I don't have to be in the study if I don't want to, and that I can say 'yes' now but then say 'no' later if I want to. I won't be told off or upset anybody if I say no, and I can still play the 'Theraplay' games if I say no.

I know that any personal information about me (for example, my name) won't be shared. I know that the video recordings will not be shared with any other adults outside of the study team.

I am happy with everything. Some children will say 'yes' to taking part in the study, but do not want to sign this piece of paper. If this happens, the adults involved in the study will make a note of you telling us 'yes' on your records. If you say 'yes' to taking part and are happy to write your name, please write this at the bottom of this piece of paper. Your parent/carer will also be given a copy of this piece of paper.

_____ (name) _____ (date) _____ (signature)
_____ (adult) _____ (date) _____ (signature)

Appendix K



Participant Information Sheet (Final version 5.0 13/07/2019)



Title of Study: Theraplay for attachment-related challenging behaviour: A case series approach

Name of Researcher(s): Rebecca Smith (Lead Researcher, Trainee Clinical Psychologist), Dr Sarah Wilde (Clinical Psychologist), Dr Dave Dawson (Chief Investigator, Research Clinical Psychologist) and Jo Williams ([REDACTED])

Project ID: 244818

Contact Details of the Researcher(s) are given at the end.

We'd like to invite you to take part in our research study. Joining the study is entirely up to you, before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through this information sheet with you, to help you decide whether or not you would like to take part and answer any questions you may have. Please feel free to talk to others about the study if you wish.

What is the purpose of the study?

Theraplay has been shown to be an effective form of therapy for children with a range of presenting difficulties. However, further research is needed into whether Theraplay is effective for children presenting with attachment-related challenging behaviours. Similarly, few studies have monitored what aspects of Theraplay contribute to change. The study aims to monitor any changes to the child's attachment styles and behavioural difficulties, alongside the quality of the parent-child relationship. The study also aims to monitor the key mechanisms of change (i.e. 'games') and explore how these games contribute to any changes that may be found.

The study is happening across two sites ([REDACTED]) and is being undertaken for educational purposes as part of the Doctorate in Clinical Psychology through the University of Lincoln.

Why have I been invited?

You are being invited to take part because you have been accepted to the service for Theraplay. Theraplay-trained therapists within the service will be inviting all families who have a primary school aged child and those who can speak/read/understand English to a good standard, to be given the opportunity to engage in the study. We are inviting between 6-8 families (including both child and parent/carer) like you to take part.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and you will be asked to sign a consent form (on behalf of you and your child). If you decide to take part, you are still free to withdraw at any time and without giving a reason. This would not affect your legal rights or impact your therapy and involvement with the service. If you decide to not take part, you will still be offered Theraplay as this is your usual treatment.

What will happen to me if I take part?

If you agree to take part in the study, you would still receive treatment as usual and little would change in terms of your therapy. This will be decided and delivered by your Theraplay therapist. By taking part in the research, there would be some additional questionnaires for you and your child to complete, alongside two meetings with the researcher (at the beginning and end of Theraplay). These meetings with the researcher will last no longer than one hour.

Before starting your usual treatment, you will be asked by your therapist whether you are happy for your details to be shared with the research team. If yes, you will be invited to attend a meeting with the lead researcher (Rebecca Smith) to have the opportunity to ask questions. If you provide consent, you will also be asked to complete some of the questionnaires at the beginning. Depending on your situation, it may be that we need to ask your allocated social worker whether it is ok for you all to take part, and we would need their consent. This would be discussed with you.

Your usual treatment will involve both assessment sessions and Theraplay sessions. As recommended within the Theraplay model, sessions are video recorded. As part of the study the research team would also have access to these video recordings. Nobody outside of the therapy and research team will have access to these recordings. All video recordings will remain at the service you attend and will not leave the premises. When watching these videos, the researcher shall be completing an observation tool to capture changes in the parent-child relationship in line with the Theraplay model.

Alongside all the sessions you attend, as part of the study you will be asked to complete some questionnaires. For the questionnaires completed every session (1 and 5), you will be given the choice in whether you prefer to complete these in either online or paper format. If you consent, a prompt can be sent by the research team before each session as a reminder. For both formats, questionnaires need to be completed before each session. The table below shows what questionnaires you will be asked to complete and when. The questionnaires should only take around 5 minutes each.

Questionnaire Number	Questionnaire Information	Completed By	Frequency
1	Will ask you to identify any difficulties that you would like Theraplay to help with, and to see at the end whether these have changed.	Parent/ Carer	Three times – beginning, end, one month follow up
2	Asks questions about any difficulties (emotional or behavioural) that your child may experience.	Parent/ Carer	Every session including one month follow up

3	Asks questions about your own wellbeing.	Parent/ Carer	Three times – beginning, end, one month follow up
4	Asks your child questions about their 'attachment' (how they view themselves and others around them).	Child	Twice – beginning and end
5	Asks you questions about your child's 'attachment' (how they view themselves and others around them).	Parent/ Carer	Every session including one month follow up

The video observations and questionnaire data that you will be providing will try to track any changes Theraplay may have. Researchers will also have access to the session plans, questionnaire and assessment data. During the last session, the lead researcher will complete a short interview with you to get a verbal account of how you've found Theraplay. This will be audio recorded as a way of recording your answers but shall not be shared outside of the research team. One month after you have finished Theraplay, we will ask you to repeat some of the questionnaires to see whether any changes have been sustained. You will be given a pre-stamped and addressed envelope to return these.

Expenses and payments

Participants will not be paid to participate in the study.

What are the possible disadvantages and risks of taking part?

There are not deemed to be any significant risks in participating (for either the parents/carers or the child). Part of this research includes completing questionnaires alongside your usual therapy sessions, meeting with the researcher on two occasions and answering some questions about any changes. Therefore, you would be giving up some of your time. The questionnaires are not designed to be difficult or cause any distress. If you do find anything about the research upsetting or stressful, then you have the right to discontinue at any point. You do not have to give an explanation for stopping. You could also discuss these difficulties with your therapist, or by accessing the support services outlined at the bottom of this information sheet.

What are the possible benefits of taking part?

The literature and research into Theraplay is limited currently, particularly within the UK. Although Theraplay is used with many families, more research is needed into its effectiveness and how Theraplay's suggested mechanisms of change work. Therefore, your participation will contribute towards an understanding of how effective Theraplay is. Additionally, the current study is designed to research the underlying processes of Theraplay itself, and which aspects of Theraplay contribute to which changes. Therefore, your participation will contribute towards an understanding of how the model works the way it has shown to in other areas of research.

Will my taking part in the study be kept confidential?

Under UK Data Protection laws, the University of Lincoln is the Data Controller (legally responsible for the data security) and the Chief Investigator of this study (Dr Dave Dawson) is the Data Custodian (manages access to the data). The University of Lincoln and research team (lead researcher, Rebecca Smith) are responsible for looking after your information and using it properly. Your rights to access, change or move your information are limited as we need to manage your information in specific ways to comply with certain laws and for the research to be reliable and accurate. To safeguard your rights, we will use the minimum personally identifiable information possible.

This is so we can contact you about the findings of the study and possible follow-up studies (unless you advise us that you do not wish to be contacted). All research data (e.g. results from the questionnaires) will be kept securely for five years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality. Only members of the research team will have access to your personal data.

Although what you say during the researcher meetings and data collection is confidential, should you disclose anything to us which we feel puts you or anyone else at any risk (in relation to either parent/carer, child or others) we may feel it necessary to report this to the appropriate persons.

Privacy notice

The University of Lincoln is the sponsor for this study based in the United Kingdom. We will be using information from you and your child's medical records in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. The University of Lincoln will keep identifiable information about you one year after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information by contacting one of the members of the research team at the end of the information sheet, or looking at the university's Research Participant Privacy notice <https://ethics.lincoln.ac.uk/research-privacy-notice/>.

What will happen if I don't want to carry on with the study?

Your participation is voluntary, and you are free to withdraw at any time, without giving any reason, and without your legal rights or treatment being affected. If you withdraw from the study, we will keep the information about you that we have already obtained, unless deletion is requested. To safeguard your rights, we will use the minimum personally-identifiable information possible.

What will happen to the results of the research study?

The results of the current study will be written into part of a thesis project, for the Doctorate in Clinical Psychology at the University of Lincoln. The results may be further published

within research journal articles or conferences. You will not be able to identify any personal information (either the parent/carer or child) within any of the data. A copy of the study findings can be provided by the Chief Investigator on request.

Who is organising and funding the research?

This research is being organised by the University of Lincoln.

Involvement of the General Practitioner/Family doctor (GP)

Your child's GP shall be notified of their participation in the research project, as they provide an overview of all healthcare. The information shared will be a brief overview of what participation involves and what the study aims to measure. If you have any concerns with the sharing of this information, please discuss this with the lead researcher.

Who has reviewed the study?

All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the University NHS Research Ethics Committee.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you can do this by contacting ethics@lincoln.ac.uk.

If you feel that we have let you down in relation to your information rights then please contact the Information Compliance team by email on compliance@lincoln.ac.uk or by post at Information Compliance, Secretariat, University of Lincoln, Brayford Pool, Lincoln, LN6 7TS.

You can also make complaints directly to the Information Commissioner's Office (ICO). The ICO is the independent authority upholding information rights for the UK. Their website is ico.org.uk and their telephone helpline number is 0303 123 1113.

Further information and contact details

Lead Researcher: Rebecca Smith, Trainee Clinical Psychologist
(16662523@students.lincoln.ac.uk)

Address: Doctorate in Clinical Psychology, School of Psychology, College of Social Science, University of Lincoln, 1st Floor, Sarah Swift Building, Brayford Pool, Lincoln, LN6 7AY.

Under the Supervision of: Dr Sarah Wilde (SarahWilde@lincoln.ac.uk), Dr Dave Dawson (ddawson@lincoln.ac.uk) and Jo Williams ([REDACTED])

Support and Helplines

Samaritans: Helpline for all ages: 116 123, www.samaritans.org

Young Minds: Parents helpline: 0808 8025544, <https://youngminds.org.uk/>

Child helpline: 0888 1111, <https://youngminds.org.uk/>

Family Lives –Parents helpline: 0808 8002222, <https://www.familylives.org.uk/>

Alternatively, you may wish to speak to your GP.

PARTICIPANT INFORMATION SHEET

FOR CHILDREN

To be shown and read by parent/carer if required

Study title:

Theraplay for attachment-related challenging behaviour: A case series approach

Project ID: 244818

What is research?

Research is a way we try to find out the answers to questions.

Why is this project being done?

Lots of children come to buildings like this to play similar games with their parents/carers. These games are part of something called 'Theraplay'. We want to try and find out if Theraplay games help to improve the relationship you have with your parent/carer and try to find out more about how the games make changes.

Why me?

You have been chosen because you and your parents/carers have been accepted to take part in 'Theraplay' and on your behalf have said 'yes' to you taking part. You and your parent/carer will have been offered Theraplay which isn't part of the research. The part that makes it research is the extra questionnaires we are asking you and your parents/carers to do, and two extra sessions for your parent/carer to come to, to see how things were before starting Theraplay and after finishing. Some of the researchers will also be watching your sessions, but they won't show anybody else!

We are asking about 6-8 families all together.

Do I have to take part in the research?

You do not have to take part in the research, it is up to you. We would like you to read this information sheet.

What will happen?

As part of the research, we will ask you to fill out a piece of paper with questions on. It isn't a test and there are no right or wrong answers to these questions! There will then be lots of times where you and your parent/carer will play games with the Theraplay adult, and your parent/carer will be asked to fill out some questions on how things are going. These games

are not part of the research, but a researcher will watch the games you play and make notes on how these games are going. When these games have finished, you will be asked to fill out the piece of paper again. With all the questions and games, there are no right or wrong ways to do them!

What else might happen?

All the questions and games chosen are safe and we don't expect them to hurt or upset you.

What happens when the research study stops?

We will collect all the information together (from you and the other families) and see if it can help us to answer our question, of whether Theraplay helps families like yours. But do not worry, we do not use your name or any personal information about you. The information is given a special number that only the researchers know.

What if something goes wrong?

Your parent/carer will be able to talk to someone who will be able to tell them what they need to do about it.

What if I don't want to do the research anymore?

Just tell your parent/carer or Theraplay adult. They will not be cross with you. Not doing the research does not affect your care, so it may mean that you carry on playing the games which are not part of the research.

Will anyone else know I'm doing this?

The people in our research team will know you are taking part, plus the Theraplay adult, your parent/carer and your doctor (GP). No one else will know because we will not use your name or address. You will get a number which will be used instead.

What happens to what the researchers find out?

When we collect your information, we will make sure it is stored in a safe place and only the people doing the research study can look at it. The information will be written up into a paper or sometimes a presentation, but no-one will know you were in the study.

Did anyone else check the study is OK to do?

This study has been checked by several people, to make sure it is alright.

How can I find out more about this study?

Your parent/carer or other grownup you trust may be able to answer your questions. The Theraplay adult looking after you can also help you find out more about the study.

Thank you for taking the time to read this – please ask any questions if you need to.

Appendix M



UNIVERSITY OF
LINCOLN

GP Letter

Trent Doctorate in Clinical Psychology
Sarah Swift Building
University of Lincoln
Brayford Wharf East
Lincoln, Lincolnshire
LN5 7AY

Miss Rebecca Smith (Lead Researcher)
Email: 16662523@students.lincoln.ac.uk

DOCTORS ADDRESS

Date:

To whom it concerns,

RE: *Young person's name*

Date of birth:

The University of Lincoln is currently conducting a research study into the effectiveness of Theraplay for children with attachment-related challenging behaviours. This is a single-case study design monitoring whether Theraplay contributes to any changes in a child's attachment style, problematic behaviours, and the parent/carer-child relationship. The study aims to recruit between 6-8 families in total. This study will be written and submitted as a Thesis project as part of the requirements for the Trent Doctorate in Clinical Psychology.

Your patient, *CHILD'S NAME*, was recently accepted by [REDACTED] [REDACTED] for a period of Theraplay intervention with their parent/carer, *PARENT/CARER NAME*. The parent/carer has provided consent for them and their child to participate in the research alongside their usual treatment. They will receive Theraplay treatment as usual, which will be determined and delivered by their allocated Theraplay therapist and service. For the research study, they have consented to complete additional questionnaires alongside each session. These questionnaires will assess the child's attachment style, any problematic behaviours, the parent-child relationship and the parent's well-being. The parent/carer has also consented for their video recorded sessions to be observed by a member of the research team and for an observational measure to be used alongside this. This observational measure will be used to capture any changes between the parent-child relationship in line with the Theraplay model (based on the concepts of Structure, Engagement, Challenge and Nurture).

Enclosed with this letter is a copy of the Participant Information Sheet for your referenced. If you would like any further information about this project, please contact me using the details above.

Yours sincerely,

Rebecca Smith
Trainee Clinical Psychologist
Lead Researcher

Chief Investigator: Dr Dave Dawson

Appendix N



Project ID: 244818

Participant Debrief

(Final version 2.0 04/04/2019)

Title of Study: Theraplay for Attachment-Related Challenging Behaviours: A Case Series Approach

Thank you for participating in our study. This study was investigating the effectiveness of Theraplay interventions for children who experience attachment-related challenging behaviours and assessing the underlying mechanisms of change. This research will provide crucial information and broaden our understanding of the therapeutic intervention of Theraplay, both its effectiveness for change and how it works. If you are wanting to receive a summary of the results of the study, please speak to the research team.

If you have any further questions about the study, please feel free to ask the research team before you finish or alternatively contact the lead researcher on 16662523@students.lincoln.ac.uk (Rebecca Smith), or the Chief Investigator on ddawson@lincoln.ac.uk (Dave Dawson). If you have any ethical concerns regarding the current study please feel free to contact The School of Psychology Research Ethics Committee soprec@lincoln.ac.uk.

Your information will be kept anonymous and will be securely stored at the University of Lincoln for five years.

If any of the questions that you have been asked have given you cause for concern, please utilise the internet and phone services available here to contact the relevant service.

Samaritans: Helpline for all ages: 116 123, www.samaritans.org

Young Minds: Parents helpline: 0808 8025544, <https://youngminds.org.uk/>

Child helpline: 0888 1111, <https://youngminds.org.uk/>

Family Lives: Parents helpline: 0808 8002222, <https://www.familylives.org.uk/>

Thank you again for taking the time to participate in our study.

Appendix O



Updated Participant Information Sheet following COVID-19

(Final version 7.0 07/04/2020)

Title of Study: Theraplay for attachment-related challenging behaviour: A case series approach

Name of Researcher(s): Rebecca Smith (Lead Researcher, Trainee Clinical Psychologist), Dr Sarah Wilde (Clinical Psychologist), Dr Dave Dawson (Chief Investigator, Research Clinical Psychologist) and Jo Williams ([REDACTED])

Project ID: 244818

Contact Details of the Researcher(s) are given at the end.

We'd like to invite you to take part in our research study. Joining the study is entirely up to you, before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through this information sheet with you, to help you decide whether or not you would like to take part and answer any questions you may have. Please feel free to talk to others about the study if you wish.

What is the purpose of the study?

Theraplay has been shown to be an effective form of therapy for children with a range of presenting difficulties. However, further research is needed into whether Theraplay is effective for children presenting with attachment-related challenging behaviours. Similarly, few studies have monitored what aspects of Theraplay contribute to change. The study aims to monitor any changes to the child's attachment styles and behavioural difficulties, alongside the quality of the parent-child relationship. The study also aims to monitor the key mechanisms of change (i.e. 'games') and explore how these games contribute to any changes that may be found.

The study is happening across two sites ([REDACTED]) and is being undertaken for educational purposes as part of the Doctorate in Clinical Psychology through the University of Lincoln.

Why have I been invited?

You are being invited to take part because you have been accepted to the service for Theraplay. Theraplay-trained therapists within the service will be inviting all families who have a primary school aged child and those who can speak/read/understand English to a good standard, to be given the opportunity to engage in the study. We are inviting between 6-8 families (including both child and parent/carer) like you to take part.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and you will be asked to sign a consent form (on behalf of you and your child). If you decide to take part, you are still free to withdraw at any time and without giving a reason. This would not affect your legal rights or impact your therapy and involvement with the service. If you decide to not take part, you will still be offered Theraplay as this is your usual treatment.

What will happen to me if I take part?

If you agree to take part in the study, you would still receive treatment as usual and little would change in terms of your therapy. This will be decided and delivered by your Theraplay therapist. By taking part in the research, there would be some additional questionnaires for you and your child to complete, alongside two meetings with the researcher (at the beginning and end of Theraplay). These meetings with the researcher will last no longer than one hour.

Before starting your usual treatment, you will be asked by your therapist whether you are happy for your details to be shared with the research team. If yes, you will be invited to attend a meeting with the lead researcher (Rebecca Smith) to have the opportunity to ask questions. If you provide consent, you will also be asked to complete some of the questionnaires at the beginning. Depending on your situation, it may be that we need to ask your allocated social worker whether it is ok for you all to take part, and we would need their consent. This would be discussed with you.

Your usual treatment will involve both assessment sessions and Theraplay sessions. As recommended within the Theraplay model, sessions are video recorded. As part of the study the research team would also have access to these video recordings. Nobody outside of the therapy and research team will have access to these recordings. All video recordings will remain at the service you attend and will not leave the premises (see COVID19 section, page 3). When watching these videos, the researcher shall be completing an observation tool to capture changes in the parent-child relationship in line with the Theraplay model.

Alongside all the sessions you attend, as part of the study you will be asked to complete some questionnaires. For the questionnaires completed every session (1 and 5), you will be given the choice in whether you prefer to complete these in either online or paper format. If you consent, a prompt can be sent by the research team before each session as a reminder. For both formats, questionnaires need to be completed before each session. The table below shows what questionnaires you will be asked to complete and when. The questionnaires should only take around 5 minutes each.

Questionnaire Number	Questionnaire Information	Completed By	Frequency
1	Will ask you to identify any difficulties that you would like Theraplay to help with, and to see at the end whether these have changed.	Parent/ Carer	Three times – beginning, end, one month follow up
2	Asks questions about any difficulties (emotional or behavioural) that your child	Parent/ Carer	Every session including one

	may experience.		month follow up
3	Asks questions about your own wellbeing.	Parent/ Carer	Three times – beginning, end, one month follow up
4	Asks your child questions about their ‘attachment’ (how they view themselves and others around them).	Child	Twice – beginning and end
5	Asks you questions about your child’s ‘attachment’ (how they view themselves and others around them).	Parent/ Carer	Every session including one month follow up

The video observations and questionnaire data that you will be providing will try to track any changes Theraplay may have. Researchers will also have access to the session plans, questionnaire and assessment data. During the last session, the lead researcher will complete a short interview with you to get a verbal account of how you’ve found Theraplay. This will be audio recorded as a way of recording your answers but shall not be shared outside of the research team. One month after you have finished Theraplay, we will ask you to repeat some of the questionnaires to see whether any changes have been sustained. You will be given a pre-stamped and addressed envelope to return these.

COVID-19 Update

Since the outbreak of COVID-19, following the recent government advice and restrictions, many services like those you are accessing have restricted or ended face-to-face contact. These restrictions may or may not have impacted on your ability to attend Theraplay sessions. As a research team we have been following and adhering to advice and guidelines by the government and Health Research Authority (HRA). Many families are at different stages of their intervention, therefore different alternatives will be offered. However, all face-to-face aspects of the research project (e.g. meetings with the lead researcher) will be offered in an alternative format in line with guidelines.

For families who have had 12 Theraplay sessions or more, then the research team have decided to end the Theraplay session data collection at this point. For families in these situations, they will be contacted by the lead researcher to discuss the option to complete the post therapy meeting and follow up questionnaires remotely (e.g. via an online survey platform, over the telephone, or Microsoft teams/Skype – whichever is most suitable for the participant).

For families who have had less than 12 sessions of Theraplay, we are asking families to continue completing the session measures on a weekly basis (questionnaire 2 and 5) to help facilitate the research. Questionnaires will be offered remotely and in a format that is most suitable to the participant (e.g. via an online survey platform, over the telephone). If participants consent, then the prompting option can be used alongside these questionnaires.

For families who are still in the middle of intervention and are participating in the project (in either of the scenarios above), then they have the right to withdraw from the project and

decline completing either of the options above. Their involvement with the therapy services ([REDACTED]), will not be impacted.

If you consent, video recorded data shall be sent electronically and remotely via Microsoft OneDrive between the service you are accessing Theraplay ([REDACTED]) and the research team. This is due to the restrictions in accessing service bases during COVID-19 restrictions. Video recordings shall be sent securely and shared using a verification code only the research team will have access to. You have the right to decline sessions being sent in this format.

Expenses and payments

Participants will not be paid to participate in the study.

What are the possible disadvantages and risks of taking part?

There are not deemed to be any significant risks in participating (for either the parents/carers or the child). Part of this research includes completing questionnaires alongside your usual therapy sessions, meeting with the researcher on two occasions and answering some questions about any changes. Therefore, you would be giving up some of your time. The questionnaires are not designed to be difficult or cause any distress. If you do find anything about the research upsetting or stressful, then you have the right to discontinue at any point. You do not have to give an explanation for stopping. You could also discuss these difficulties with your therapist, or by accessing the support services outlined at the bottom of this information sheet.

What are the possible benefits of taking part?

The literature and research into Theraplay is limited currently, particularly within the UK. Although Theraplay is used with many families, more research is needed into its effectiveness and how Theraplay's suggested mechanisms of change work. Therefore, your participation will contribute towards an understanding of how effective Theraplay is. Additionally, the current study is designed to research the underlying processes of Theraplay itself, and which aspects of Theraplay contribute to which changes. Therefore, your participation will contribute towards an understanding of how the model works the way it has shown to in other areas of research.

Will my taking part in the study be kept confidential?

We will follow ethical and legal practice and all information about you and your child will be handled in confidence. If you took part in the study, your child's therapy records and the data collected for the study will be looked at. Only relevant data within the child's therapy records will be accessed. Data will be accessed by authorised persons from the University of Lincoln who are organising the research. The data and records may also be looked at by authorised persons to check that the study is being carried out correctly. All of those who see your data will have a duty of confidentiality to you as a research participant, and we will do our best to meet this duty. Any publication resulting from this work will report only data that does not identify individual participants. Participants' anonymised responses, however, may be shared with other researchers or made available in online data repositories. You have the right to opt out of this (in the consent form).

from the questionnaires) will be kept securely for five years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality. Only members of the research team will have access to your personal data.

Although what you say during the researcher meetings and data collection is confidential, should you disclose anything to us which we feel puts you or anyone else at any risk (in relation to either parent/carer, child or others) we may feel it necessary to report this to the appropriate persons.

Privacy notice

The University of Lincoln is the sponsor for this study based in the United Kingdom. We will be using information from you and your child's medical records in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. The University of Lincoln will keep identifiable information about you one year after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information by contacting one of the members of the research team at the end of the information sheet, or looking at the university's Research Participant Privacy notice <https://ethics.lincoln.ac.uk/research-privacy-notice/>.

What will happen if I don't want to carry on with the study?

Your participation is voluntary, and you are free to withdraw at any time, without giving any reason, and without your legal rights or treatment being affected. If you withdraw from the study, we will keep the information about you that we have already obtained, unless deletion is requested. To safeguard your rights, we will use the minimum personally-identifiable information possible.

What will happen to the results of the research study?

The results of the current study will be written into part of a thesis project, for the Doctorate in Clinical Psychology at the University of Lincoln. The results may be further published within research journal articles or conferences. You will not be able to identify any personal information (either the parent/carer or child) within any of the data. A copy of the study findings can be provided by the Chief Investigator on request.

Who is organising and funding the research?

This research is being organised by the University of Lincoln.

Involvement of the General Practitioner/Family doctor (GP)

Your child's GP shall be notified of their participation in the research project, as they provide an overview of all healthcare. The information shared will be a brief overview of what

participation involves and what the study aims to measure. If you have any concerns with the sharing of this information, please discuss this with the lead researcher.

Who has reviewed the study?

All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the University NHS Research Ethics Committee.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you can do this by contacting ethics@lincoln.ac.uk.

If you feel that we have let you down in relation to your information rights then please contact the Information Compliance team by email on compliance@lincoln.ac.uk or by post at Information Compliance, Secretariat, University of Lincoln, Brayford Pool, Lincoln, LN6 7TS.

You can also make complaints directly to the Information Commissioner's Office (ICO). The ICO is the independent authority upholding information rights for the UK. Their website is ico.org.uk and their telephone helpline number is 0303 123 1113.

Further information and contact details

Lead Researcher: Rebecca Smith, Trainee Clinical Psychologist
(16662523@students.lincoln.ac.uk)

Address: Doctorate in Clinical Psychology, School of Psychology, College of Social Science, University of Lincoln, 1st Floor, Sarah Swift Building, Brayford Pool, Lincoln, LN6 7AY.

Under the Supervision of: Dr Sarah Wilde (SarahWilde@lincoln.ac.uk), Dr Dave Dawson (ddawson@lincoln.ac.uk) and Jo Williams ([REDACTED])

Support and Helplines

Samaritans: Helpline for all ages: 116 123, www.samaritans.org

Young Minds: Parents helpline: 0808 8025544, <https://youngminds.org.uk/>

Child helpline: 0888 1111, <https://youngminds.org.uk/>

Family Lives – Parents helpline: 0808 8002222, <https://www.familylives.org.uk/>

Alternatively, you may wish to speak to your GP.


Appendix P

SWEMWBS Permissions

Submission (ID: 487845507) receipt for the submission of /fac/sci/med/research/platform/wemwbs/researchers/register - Message (Plain Text)

File Message Help Tell me what you want to do

Submission (ID: 487845507) receipt for the submission of /fac/sci/med/research/platform/wemwbs/researchers/register

 no-reply@warwick.ac.uk
To: Rebecca Smith (16662523)

[Reply](#) [Reply All](#) [Forward](#) [More](#)

Mon 11/02/2019 16:51

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

Question: Name:
Answer:
Rebecca Smith

Question: Email address:
Answer:
16662523@students.lincoln.ac.uk

Question: Institution/Organisation
Answer:
University of Lincoln

Question: Name:
Answer:


Question: Email address:
Answer:

Question: Institution/Organisation
Answer:

Question: Type of Study
Answer:
Other

Question: Description of proposed project:
(For translations, please state the language concerned)
Answer:
To be used in a doctoral thesis project for the Doctorate in Clinical Psychology. The questionnaire will be used pre-post intervention in a case series design.

Question: Description of participants
Answer:
Parents/carers of children aged 6-12 years old.

Question: Location
Answer:


Question: Gender
Answer:
Male and Femae

Question: Ages
Answer:
16 years plus

Question: Approximate Start Date
Answer:
29/03/2019

Question: WEMWBS version
Answer:

Appendix Q

MPCA Permissions

Re: Maternal Perception of Child Attachment Permission



Kimberly Hoppes <kimhoppes117@gmail.com>
To: Rebecca Smith (16662523)

[Reply](#) [Reply All](#) [Forward](#) [...](#)

Fri 23/11/2018 01:35

[Click here to download pictures.](#) To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

This is the measure and you have my permission to use it in your research. I can send you instructions on how to score this measure. Happy Thanksgiving.

Sent from my iPhone

On Nov 20, 2018, at 2:01 PM, Rebecca Smith (16662523) <16662523@students.lincoln.ac.uk> wrote:

Hi Kim,

I've had a chat with the admin teams at the University and they don't have access to a fax machine anymore unfortunately. I managed to find a copy of your original dissertation with the measure (see attached) if it happens to be the same/pretty similar to this? If not, could it be sent via email instead?

I appreciate that you're probably really busy with other things, but do you happen to know a rough timescale on when you can send this over? Just that I need a copy of the measure to submit for ethical approval and I'm in the process of doing this.

Kind regards,
Becky

From: Kimberly Hoppes <kimhoppes117@gmail.com>
Sent: 19 November 2018 00:31
To: Rebecca Smith (16662523) <16662523@students.lincoln.ac.uk>
Subject: Re: Maternal Perception of Child Attachment Permission

Hi Rebecca, I am in receipt of your email and request. It may take a little time to locate and prepare the the measure for sending it to you but I will certainly do so. Please send a fax number so that I can send it by fax. Sincerely Kim Hoppes

Psychology Today

Hi Dr. Kimberly A Hoppes,

This email comes to you via your profile with Psychology Today.

From: Rebecca Smith
[Email: 16662523@students.lincoln.ac.uk](mailto:16662523@students.lincoln.ac.uk)
Phone:

Subject: Maternal Perception of Child Attachment Permission

Dear Kimberly, I am a doctoral student and Trainee Clinical Psychologist from the University of Lincoln in the UK writing my thesis titled: 'Does Theraplay for Children with Attachment Difficulties Improve Parent-Child Relationships?'. This project is being supervised by Dr Sarah Wilde and Dr Dave Dawson, academic supervisors at the University of Lincoln, and is due to be submitted for ethical approval. I would like your permission to use the Maternal Perception of Child Attachment questionnaire in my research study. I would like to use and print your survey under the following conditions: - I will use the questionnaire only for my research study and will not sell or use it with any compensated or curriculum development activities. - I will include the copyright statement on all copies of the instrument. - I will send a summary of my completed research study to your attention upon completion of the study. If these are acceptable terms and conditions, please indicate so by replying to me through [e-mail: 16662523@students.lincoln.ac.uk](mailto:16662523@students.lincoln.ac.uk) Yours sincerely, Rebecca Smith Trainee Clinical Psychologist

Appendix R

Part of BPM Agreement



The University of Vermont

ASEBA

Research Center for Children, Youth & Families, Inc. ASEBA

A Non-Profit Corporation

1 South Prospect Street, St Joseph's Wing (Room #3207), Burlington, VT 05401

Telephone: (802)656-5130

Email: mail@aseba.org / Website: <http://www.aseba.org>

**Site License Agreement to Permit Rebecca Smith to Reproduce the
Brief Problems Monitor- Parent, Ages 6-18 (BPM-P/6-18).**

This Site License Agreement (the "Agreement") is entered into by and between Research Center for Children, Youth, & Families, Inc. ("Licensor"), and Rebecca Smith ("Licensee"). Licensee must sign and return the signed Agreement to Licensor. The Agreement shall not be effective until the date ("Effective Date") when signed by Licensor. The parties agree to the following terms and conditions:

1. License # 1886-03-18-19

In accordance with the terms herein, Licensor grants to Licensee a non-exclusive and non-transferable license to produce 360 administrations of the BPM-P/6-18. The Licensed Forms will be used between the "Effective Date" and October 2, 2020 solely for the "Doctorate in Clinical Psychology Thesis. Theraplay for attachment-related challenging behaviours: A case series design." study.

Appendix S

IPPA-R Permissions

Re: IPPA-Revised Assessment Measure



Eleonora Gullone <eleonora.gullone@monash.edu>
To: Rebecca Smith (16662523)

Reply Reply All Forward

Wed 21/11/2018 23:52

Yes. All the best with your research.

Eleonora Gullone, PhD,
Affiliate
Associate Professor
Centre for Developmental Psychiatry and Psychology
Monash University
Australia

Emails:

eleonora.gullone@monash.edu
eleonora.gullone@gmail.com

If you are emailing to request psychological measures see:

eleonoragullone.wordpress.com/2018/09/20/psychological-measures-for-downloading/

<https://eleonoragullone.wordpress.com/>

<http://www.palgrave.com/page/detail/animal-cruelty-antisocial-behaviour-and-aggression-eleonora-gullone/?K=9780230239234>

On Wed, 21 Nov 2018 at 18:02, Rebecca Smith (16662523) <16662523@students.lincoln.ac.uk> wrote:
Many thanks Eleonora, and for the quick reply. I shall assume from your response that you're happy for me to use the IPPA-R as part of my thesis project.

Kind regards,
Becky

Sent from my iPhone

On 21 Nov 2018, at 01:20, Eleonora Gullone <eleonora.gullone@monash.edu> wrote:

Please see the link at the end of this message.

Eleonora Gullone, PhD,
Affiliate
Associate Professor
Centre for Developmental Psychiatry and Psychology
Monash University
Australia

Emails:

eleonora.gullone@monash.edu
eleonora.gullone@gmail.com

If you are emailing to request psychological measures see:

Appendix T

Approved Amendment



Tel: 0207 104 8079

25 July 2019

Miss Rebecca Smith
Trainee Clinical Psychologist
Lincolnshire Partnership NHS Foundation Trust
Trent Doctorate in Clinical Psychology, Sarah Swift Building
University of Lincoln, Brayford Wharf East
Lincoln, Lincolnshire
LN5 7AY

Dear Miss Smith

Study title: Theraplay for attachment-related challenging behaviour: A case series approach
REC reference: 19/NE/0090
Protocol number: 190202
Amendment number: Substantial Amendment 1, 13/07/2019
Amendment date: 16 July 2019
IRAS project ID: 244818

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

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

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Notice of Substantial Amendment (non-CTIMP)	Substantial Amendment 1, 13/07/2019	16 July 2019
Participant consent form [Responsible Individual Consent Form]	3.0	09 April 2019
Participant consent form [Parent Carer Consent Form]	3.0	09 April 2019
Participant information sheet (PIS) [Participant Information Sheet]	5.0	13 July 2019
Research protocol or project proposal [Protocol]	2.0	13 July 2019

Appendix U

Personal Questionnaire Procedure

The Personal Questionnaire (PQ) is an expanded target complaint measure which is individualized for each client. It is generated from the PQ Problem Description Form, completed by the client during the screening process. It intended to be a list of problems that the client wishes to work on in therapy, stated in the client's own words.

Procedure

1. Generating Items. The items generated for the PQ should be the most important in the client's view. However, an attempt should be made to include one or two problems from each of the following areas:

- Symptoms
- Mood
- Specific performance/activity (e.g., work)
- Relationships
- Self-esteem

This means that if the client does not list a problem in a particular area, the interviewer should ask the client if s/he has any difficulties in that area that s/he wants to work on in therapy. If, however, the client does not wish to have an item for this area, the researcher does not insist on it.

This part of the procedure should be thought of as a brainstorming session, generating as many potential items as possible (around 15 is preferable). If the client has difficulty coming up with 10 problems, the interviewer can use other screening measures as sources of possible problems. For example, if the client has completed the SCL-90-R, the interviewer can ask the client about items with "3" or "4" ratings.

2. Refining the PQ items. Next, the interviewer helps the client to clarify his/her items and, if necessary, to rephrase the goals into problems. If necessary, the number of items is reduced to around 10.

2a. In this part of the procedure, the interviewer begins by writing each problem onto a separate index card, revising it in the process. Refining PQ items is not a mechanical procedure, but requires discussion with the client to make sure that the PQ reflects his/her chief concerns. It takes careful, patient communication to make sure that the PQ items truly reflect the client's experience of what is problematic.

PQ items should be present problems or difficulties, and should be worded "I feel," "I am," "I can't," "My thinking," and so on. It is useful to think of the list as things the client wants to change through therapy. A good PQ item has the following characteristics:

- It reflects an area of difficulty, rather than a goal (e.g., "I am too shy" rather than "I want to be more outgoing").
- It is something that the client wants to work on in therapy.
- It refers to a specific problem; that is, general, vague problems are specified.

- It refers to a single problem; that is, items referring to multiple problems (e.g., “I’m uncomfortable around other people and have trouble talking about myself.”) are divided up into multiple items.
- It is in the client’s own words, not the interviewer’s.
- It is not redundant with another PQ item.

2b. After the interviewer writes down the items, s/he then asks the client if anything has been left out, adding further items as needed, until the client feels that the list is complete.

2c. The interviewer next reviews the items with the client, asking the client to revise or confirm them. If the client has generated more than 10 items, the interviewer asks the client to delete or combine repetitive items. If there are still more than 10 items, the interviewer asks the client if s/he wants to drop any. The interview should not force the client to generate exactly 10 items; but try to obtain 8-12 items where possible.

Appendix V

Theraplay Observation Form

Observation completed by		Date	
Participant Number			
Parent/Carer 1 <i>(relationship)</i>			
Parent/Carer 2 <i>(relationship)</i>			
MIM Assessment OR Theraplay Session		Session Number	
	Parent/Carer(s) Involved	Theraplay Games/Tasks Observed	Theraplay Dimension
1			
2			
3			
4			
5			
6			
7			
8			
9			

Structure

0 Never	1 Rarely	2 Sometimes	3 Often	4 Always	
STRUCTURE					
The parent provides physical structure/directions for child.	0	1	2	3	4 N/A
The parent provides verbal structure/directions for child.	0	1	2	3	4 N/A
The child responds to and accepts structure/directions from adult.	0	1	2	3	4 N/A
The adult's delivery of structure/direction helps to regulate the child.	0	1	2	3	4 N/A
The parent-child dyadic relationship is maintained (i.e. parent doesn't take child role, give authority to the child, or be too 'rigid').	0	1	2	3	4 N/A
<i>Observation Notes:</i>					

Engagement

0 Never	1 Rarely	2 Sometimes	3 Often	4 Always	
ENGAGEMENT					
The adult can engage the child in the tasks given.	0	1	2	3	4 N/A
The child responds to the adult's attempts to engage in the tasks.	0	1	2	3	4 N/A
The parent shows awareness of the child's feelings.	0	1	2	3	4 N/A
The parent shows awareness of the child's feelings AND can respond appropriately dependent on the child's emotional state, developmental level and needs.	0	1	2	3	4 N/A
Parent/carer and child affect and behaviours indicate that they are having fun together.	0	1	2	3	4 N/A
<i>Observation Notes:</i>					

Nurture

0 Never	1 Rarely	2 Sometimes	3 Often	4 Always				
NURTURE								
			0	1	2	3	4	N/A
The parent/carer demonstrates a nurturing approach (e.g. soothing voice, touch, physical contact, and comfort).								
			0	1	2	3	4	N/A
The child can accept and appear comforted by the nurture given from the adult.								
			0	1	2	3	4	N/A
The parent-child dyadic relationship is maintained (i.e. the parent does not ask the child to take care of him/her).								
			0	1	2	3	4	N/A
The parent/carer recognises times when the child is stressed and when they need to help to calm/regulate the child's emotions.								
			0	1	2	3	4	N/A
The child responds to the adults' attempts to reduce stress.								
			0	1	2	3	4	N/A
The child can regulate their own emotions and self-soothe at a developmentally appropriate level.								
<i>Observation Notes:</i>								

Challenge

0 Never	1 Rarely	2 Sometimes	3 Often	4 Always				
CHALLENGE								
			0	1	2	3	4	N/A
The parent delivers challenge task at developmentally appropriate level.								
			0	1	2	3	4	N/A
The child attempts to engage with the task/game set by the adult.								
			0	1	2	3	4	N/A
Parent acknowledges child's achievements/successes and makes mastery appealing								
			0	1	2	3	4	N/A
The child can concentrate and focus on the task at that time.								
			0	1	2	3	4	N/A
The child can manage expectations and times of difficulty when unable to complete or achieve challenges.								
<i>Observation Notes:</i>								

Appendix W

Change Interview Schedule

Experience

1. What was your experience of Theraplay?

Changes

2. What changes in yourself have you noticed now you have finished Theraplay? *(both positive and negative)*
3. What changes have you noticed in your child now you have finished Theraplay? *(both positive and negative)*
4. What changes have you noticed between you and your child now you have finished Theraplay? *(both positive and negative)*

Attributions

(ask those that are applicable, dependent on answers above)

5. In general, what do you believe led to the changes in yourself? *(both inside and outside of Theraplay)*
6. In general, what do you believe led to the changes in your child? *(both inside and outside of Theraplay)*
7. In general, what do you believe led to the changes between you and your child? *(both inside and outside of Theraplay)*

Helpful

8. What parts of Theraplay have been the most helpful?

Unhelpful

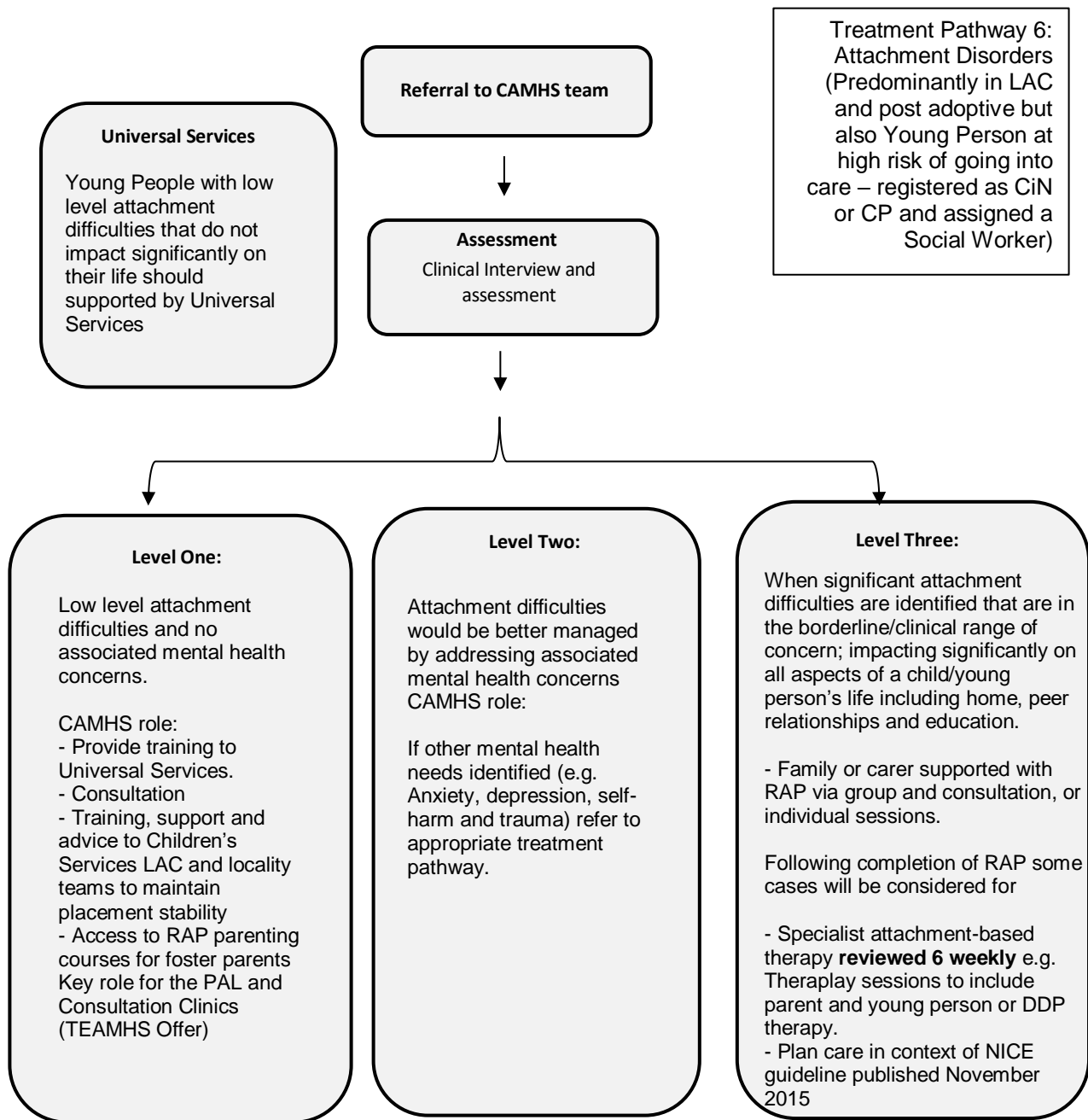
9. What parts of Theraplay have been the most unhelpful?
10. Was there anything missing for you from Theraplay? *(if yes, give specific examples)*

Suggestions

11. Do you have any suggestions, for either Theraplay or the research?

Appendix X

Attachment pathway in place within CAMHS



V2 amended 161216

Note: CAMHS (Child and Adolescent Mental Health Service), LAC (Looked After Children), RAP (Relational Awareness Programme), PAL (Professional Advice Line), TEAMHS (Targeted Early Access to Mental Health Support), DDP (Dyadic Developmental Psychotherapy), CiN (Child in Need), CP (Child Protection)

Appendix Y

Semi-structured interview schedule

	<p>Clinician title and background:</p> <p>How long have you been completing assessments in CAMHS:</p> <p>Do you offer any of the interventions for families on the attachment pathway?</p>
1	Can you describe the referral and assessment process in CAMHS.
2	Can you describe what you know about the attachment pathway within CAMHS. <ul style="list-style-type: none"> - <i>Are there any specific criteria that needs to be met within the attachment pathway?</i>
3	When you complete an assessment, what information do you keep in mind when considering placing a family on the attachment pathway? <ul style="list-style-type: none"> - <i>Do you have an attachment framework/model in mind?</i>
4	If you are considering placing a family on the attachment pathway, what information do you want to find out about during the assessment? <ul style="list-style-type: none"> - <i>Do you have any specific questions in mind?</i>
5	What makes an appropriate or an inappropriate referral to the attachment pathway?
6	In your experience, are there any downsides or risks when placing a family on the attachment pathway?
7	Have you ever placed a family on the attachment pathway? YES / NO
YES	
7a	Can you describe a recent case where you placed a child on the attachment pathway? <ul style="list-style-type: none"> - <i>What information led to that referral?</i> - <i>Why did you think the attachment pathway was the most appropriate referral for that case?</i>
7b	Can you think of a recent case where you considered a referral to the attachment pathway, but you chose to refer to an alternative pathway? <ul style="list-style-type: none"> - <i>What information led to you making a different referral?</i> - <i>What was the outcome of that referral?</i>
7c	Can you provide a rough idea of how many referrals you have made to the attachment pathway in the past year? <ul style="list-style-type: none"> - <i>What proportion is this in comparison to placing families on other</i>

		<i>pathways? Percentage/fraction/ratio?</i>
NO	8	Have there been any times when you have considered a referral to the attachment pathway, but you chose to refer to an alternative pathway? YES / NO
	8a	YES: Can you think of a recent case where you considered a referral to the attachment pathway, but you chose to refer to an alternative pathway? <ul style="list-style-type: none"> - <i>What information led to you making a different referral?</i> - <i>What was the outcome of that referral?</i>
	8b	NO: Can you think of any reasons to why you may have not considered the attachment pathway for a family?
	9	How do you think the attachment pathway is working?
	10	Are there any strengths or difficulties in placing a family on the attachment pathway?
	11	Is there anything else you would like to add about the attachment pathway that we have not discussed?

Appendix Z

Excerpt of initial coding from TA

Initial Codes	
Difficulties in defining Pathway not as clear-cut Other pathways clearer in guidelines and evidence base Feels quite vague Not knowing huge amount Couldn't tell you specific criteria If have question mark, read relevant pathways Not aware of the pathways Not knowing much about attachment pathway Not knowing much about Not knowing criteria Very little known Knowledge could be better	Subtheme: Understanding of the Attachment Pathway

Appendix AA

Excerpt from the author's reflective journal.

'I've now listened to and transcribed three of the four recorded interviews, and I've noticed the role of Psychology or the Psychologist's in the CAMHS team being discussed in clinician narratives. There appears to be some distinguishing features between Core CAMHS practitioners and Clinical Psychologists. I'm suddenly quite aware of my role as a Trainee Clinical Psychologist in the team and the person conducting interviews. I'm wondering how my role and position may or may not be impacting the interviews I'm conducting. It might be linked to how I'm seen as a member of the Psychology team, but also about being a trainee and maybe of a lesser 'power' in comparison to the qualified and permanent members of the Psychology team'.