CLINICAL PSYCHOLOGISTS' EXPERIENCES OF DELIVERING TRAUMA-FOCUSED THERAPY WITH INDIVIDUALS WITH INTELLECTUAL DISABILITIES

by

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Thesis Overview

This thesis is submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology at the University of Birmingham. The thesis comprises of three chapters. The first chapter presents a meta-analysis of *The association between maternal childhood maltreatment and mother-infant bonding in later life*. The second chapter presents a qualitative research study exploring *Clinical Psychologists' experiences of delivering trauma-focused therapies with individuals with intellectual disabilities*. Finally, the third chapter provides a press release document, offering an overview of the meta-analysis and qualitative study.

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Literature Review: Exploring the association between maternal experiences of childhood maltreatment and mother-infant bonding in later life: A meta-analysis

Abstract

Background

Child maltreatment is a global concern due to its significant, pervasive, and long-lasting impact on an individual's development. The impact of childhood maltreatment may not only span the lifetime of the survivor but may also be passed on to future generations. Given the impact of childhood maltreatment on an individual's interpersonal patterns, it can be proposed that a history of maltreatment may increase the likelihood of mother-infant bonding disruption. Disruption in mother-infant bonding has been linked to important outcomes for both the mother and infant. The current meta-analysis therefore aims to explore whether there is an association between women's experiences of childhood maltreatment and mother-infant bonding.

Method

A systematic search of the literature was completed across four electronic databases: Psychinfo, Medline, Web of Science, and EMBASE. A total of 422 papers were screened, resulting in the inclusion of 10 studies.

Results

Results revealed a small positive correlation (r=0.15, 95% CI = 0.10 to 0.19) between maternal experiences of childhood maltreatment and mother-infant bonding. The association remained consistent when the impact of overly influential studies, methodological risks of bias, and publication and small study bias were considered.

Conclusions

Findings indicate that mothers' higher rates of childhood maltreatment experiences are associated with greater difficulties in mother-infant bonding in later life. Firm conclusions about this association and recommendations for clinical practice are limited by the broad research question and the nature of correlational research. Further research is required, which should separate types of maltreatment and explore the impact of moderator variables.

Introduction

Childhood maltreatment

The World Health Organisation (2020) defines child maltreatment as "the abuse and neglect that occurs in children under 18 years of age. It includes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitations, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power". According to the Office for National Statistics (2020), child maltreatment is not an uncommon experience. In England and Wales, 1 in 4 adults aged 18 to 74 report they experienced at least one form of child abuse (physical, emotional, or sexual) before the age of 16, with a further 1 in 100 adults experiencing physical neglect. Furthermore, as many cases of child maltreatment remain hidden, rates may be higher than those reported in research (NSPCC, 2022; Office for National Statistics, 2020).

The frequency of child maltreatment is of growing individual, social, health, educational, and forensic concern (Robinson & Petherick, 2019). Childhood maltreatment is often experienced as a form of psychological trauma; an event or enduring conditions that overwhelm a person's resources or presents a significant level of threat, with potential long-term challenges in functioning or coping (Pearlman & Saakvitne, 1995). Research has drawn attention to the significant, pervasive, and long-lasting impact of childhood maltreatment on a child's development, influencing how they view themselves, others, and the world around them (Toth & Manly, 2019). Childhood is a time of rapid and critical development (Stiles, 2008). With safety and encouragement to explore their environment, a child develops key cognitive, affective, and behavioural capacities that they carry with them throughout life

(Cicchetti, 2016). Maltreatment within this period, therefore, has the potential to cause significant disruption to a person's development and trajectory (Toth & Manly, 2019). Research findings detailing the impact of childhood maltreatment on an individual's development, and protective factors, will be described in more detail below.

Cognitive development

Cognitive development refers to the process of learning to think, reason and use language (Friedman, 2015). It encapsulates patterns of thinking and neuropsychological domains such as attention and intellectual abilities, making it vital to a child's overall growth and development. Research indicates that childhood maltreatment can interfere with a child's cognitive development, with long-lasting impacts. Survivors of childhood maltreatment are shown to have distinct patterns of thinking, including overestimating danger and adversity and having low self-efficacy and self-esteem (Briere & Elliott, 1994; Kendall-Tackett, 2002). Impairments are also observed in the brain structures of victims of childhood maltreatment, impacting global IQ domains such as working memory, processing speed, attention, and reading ability (Cabrera et al., 2020; Delaney-Black et al., 2002; Enlow et al., 2012; Lim et al., 2016). The brain structures and cognitive abilities of individuals who have experienced childhood maltreatment may therefore be markedly different from those who have not lived through these experiences.

Emotional development

Emotional development involves the acquisition of skills in perception, interpretation, communication, and regulation (Pollak et al., 2019). Emotional intelligence is critical to an individual's everyday functioning. Skills in recognising emotions in the self and others provide vital interpersonal and environmental information, facilitating relationship development and survival (Lench et al., 2018; Oatley & Jenkins, 1992). Skills in regulating

emotions allow an individual to prevent high levels of distress and manage behavioural responses (Berking et al., 2008).

Emotions also have a strong impact on cognitive processes in humans, including perception, attention, learning, memory, and problem solving (Tyng et al., 2017). Disruption of emotional development can therefore have pervasive and long-lasting impact on an individual, adversely affecting their cognitive abilities, emotional wellbeing, and interpersonal relationships (Campos et al., 1989; Darling-Churchill & Lippman, 2016).

Research has shown that from as early as three months maltreated children display differences in emotions to non-abused children (Ayoub et al., 2006). This includes displaying a reduced range of emotional expressions and longer durations of negative affect. These effects are shown to extend into later childhood and adolescence, with maltreated children showing deficits in understanding, recognising and expressing emotions (Gaensbauer, 1982; Pollak et al., 2000; Shipman & Zeman, 1999; Young & Widom, 2014). Finally, research has shown that maltreated children go on to display significantly more emotional problems in adulthood, including somatisation, anxiety and depression (Arata et al., 2005; Malinosky-Rummell & Hansen, 1993). Such research highlights the long-lasting impact of childhood maltreatment on vital emotional skills.

Social development

Experiencing childhood maltreatment has also been associated with disruptions in social development. Social development refers to the process by which a person learns to interact with others around them (Davies, 2010). It is understood that children construct internal working models based on early relationships (Bretherton, 1992). These internal working models shape a person's view of themselves and others, setting patterns of interpretation and behaviour in subsequent social interactions. Interruptions in social development have been found to create long-lasting difficulties in relating to others

(DiTommaso et al., 2003; Hill et al., 1994; McCarthy & Maughan, 2010). Social difficulties have been found to be associated with increased stress, anxiety and isolation (Oltmanns et al., 2002; Segrin et al., 2007).

Given the negative experiences of social relationships that are associated with childhood maltreatment, it is unsurprising that survivors of such abuse and neglect often experience long-lasting social difficulties. Research has highlighted the impact of childhood maltreatment on how an individual views themselves and others. Experiences of childhood maltreatment have been associated with a reduced sense of self-worth, a more negative view of relationships, and feelings of mistrust and suspicion towards others (Harter & Taylor, 2000; Malinosky-Rummell & Hansen, 1993). Such negative views of relationships may create difficulties with interpersonal connections throughout life. Children who have experienced maltreatment are more likely to show delays in early social behaviours (Valentino et al., 2011), which may continue through to adolescence and adulthood, limiting and/or damaging peer and romantic relations (Cicchetti & Toth, 2016; Colman & Widom, 2004).

Behavioural development

Childhood maltreatment has also been found to impact an individual's behavioural responses over their lifespan. Behavioural development refers to the acquisition and growth of reactions and responses to different environments (NCI Thesaurus, 2021). Successful behavioural development allows an individual to develop a range of behavioural responses appropriate to the environment and situations, allowing them to function successfully in society (Robinson, 2010) and experiences of childhood maltreatment are associated with increased behavioural difficulties. A higher rate of externalising problems such as conduct disorder, aggression, and delinquency are reported in both children and adults who have experienced childhood maltreatment (Jung et al., 2017). Furthermore, although the majority

of people who have experienced childhood maltreatment do not go on to mistreat their own children, there are higher incidents of child maltreatment in this group compared to parents who were not abused or neglected in childhood (Yang et al., 2018). Finally, adults who abuse substances report a higher incidence of childhood maltreatment than the general population (Malinosky-Rummell & Hansen, 1993).

Protective factors

While a robust body of research has shown that childhood maltreatment has the potential to significantly impair an individual's developmental trajectory, negative outcomes are not inevitable. It is important to note that in the face of childhood maltreatment, protective factors can prevent long-term impacts on the individual. Research has highlighted an array of individual, social, and environmental factors that reduce the impacts of maltreatment.

Individual protective factors include personality traits, with extraversion, low neuroticism, agreeableness, and conscientiousness associated with higher psychological wellbeing and life satisfaction in survivors of maltreatment (Collishaw et al., 2007; Lee & Song, 2017; Meng et al., 2018). Research has also highlighted a positive effect of higher intelligence and cognitive ability (Marriott et al., 2014; Meng et al., 2018). Social support has been identified as a key protective factor against the long-term effects of childhood maltreatment. Systematic reviews have highlighted the importance of family circumstances, including stable family environments, feeling supported and understood by parents, and a positive relationship with a non-abusive parent (Afifi & MacMillan, 2011; Marriot et al., 2014). Support from other systems has also been found to limit the long-term effects of abusive experiences, including positive school experiences, relationships with teachers, interactions with spiritual organisations, support from clubs or formal support agencies, and supportive romantic relationships in adulthood (Afifi & MacMillan, 2011; Marriott et al.,

2014). Finally, environmental factors such as higher neighbourhood advantage and lower crime rates have been identified as protective factors against the long-term effects of maltreatment (Marriott et al., 2014). Therefore, while there is a substantial risk of long-lasting impacts of childhood maltreatment on survivors, negative outcomes are not inevitable.

The intergenerational transmission of trauma

As research on the effects of childhood maltreatment develops, we have become increasingly aware that the effects of abuse and neglect may not end with the survivor. Research has highlighted an interpersonal impact of trauma such as childhood maltreatment. The intergenerational transmission of trauma proposes that the effects of trauma on an individual's views, skills, and behavioural patterns, have pervasive impacts on those around them (Schwerdtfeger & Goff, 2007). In the absence of protective factors, such as social support, the effects of trauma such as childhood maltreatment are therefore likely to impact the experiences of the survivor's children, passing the trauma from one generation to another (Lev-Wiesel, 2007).

Children of parents who have experienced trauma show increased risks of negative outcomes. These include exposure to trauma themselves, violence towards others, insecure attachments, PTSD symptoms, poor psychosocial functioning, and mental illnesses including depression and anxiety (Assink et al., 2018; Iyengar et al., 2014; Leve, et al., 2015; Lünnemann et al., 2019; Randell, O'Malley et al., 2015; Robinson et al., 2018; Wamboldt et al., 1995). The intergenerational transmission of trauma means that the multiple and costly effects of trauma are long-lasting.

In order to interrupt the long-lasting impacts of trauma, it is important to seek to understand the transmission processes. However, despite the research evidence for

intergenerational transmission of trauma, the details of the underlying mechanisms are not yet fully understood.

Mother-infant bonding

As discussed above, one potential contributor to the transmission of trauma is poor mother-infant bonding. The mother-infant bond refers to the affective state of the mother towards her infant (Kinsey & Hupcey, 2013). It focuses on the mother's emotional relationship with their infant, as opposed to their observable behaviours towards them (Brockington, 1998).

Mother-infant bonding has been shown to have a significant impact on the wellbeing and development of both mother and infant (Mogi et al., 2011). Newborn infants are sensitive and social beings, relying on the adults around them to keep them safe (Trevarthen, 2015). Research indicates that the formation of a strong mother-infant bond provides a foundation for positive parenting behaviours and successful social, emotional and behavioural development (Bienfait et al., 2011; Kinsey & Hupcey, 2013). While the majority of mothers do not experience significant difficulties in developing a bond with their baby, approximately 7-11% of women experience disturbances in bonding (Chandra et al., 2015; Klier & Muzik, 2004). Disturbances in bonding are defined as "a lack of maternal feeling, irritability, hostility or aggressiveness, pathological thinking, and rejection of the infant" (Kleir, 2006). As noted by Nakano, et al. (2019), such difficulties in bonding have been found to be associated with higher risks of abusive parenting, poor mother-infant interaction, and emotional and behavioural problems in the child.

Research has highlighted a number of factors which can facilitate or hinder the bonding process, including socioeconomic status, pregnancy and birth-related factors, and infant-related factors (Hairston et al., 2016; Kinsey et al., 2014; Shreffler et al., 2021; Tolja et

al., 2020; van Reenen & van Rensburg, 2013). However, at the crux of the mother-infant bond, is the mother's perception and feelings towards the infant. Perinatal literature acknowledges the importance of a mother's cognitive, social and behavioural skills in this process and her ability to regulate emotions (Brockington et al., 2006). For example, a successful bond may depend on the mother's ability to infer mental states in self and others (Milne et al, 2018). Difficulties occur when an infant's behaviour is misinterpreted as coercive or manipulative, or as a reflection of negative feelings towards the mother. Successful bonding also depends on a mother's ability to identify and regulate both their own and their infants complex and changing emotions (Milne et al., 2018). The perinatal period is a challenging time for mothers and difficulties in emotion regulation may impede relationship development (Howard & Khalifeh, 2020; Ziv et al., 2000). A mother's own developmental trajectory therefore forms an important part of the bonding process (Brockington et al., 2006).

Given the impact of childhood maltreatment on an individual's cognitive, social, emotional, and behavioural development, it can be hypothesised that childhood maltreatment may impact future mother-infant bonding. A mother who has struggled to develop emotional and social skills, and cognitive flexibility due to their own early life experiences may struggle to access skills which facilitate mother-infant bonding, such as inferring mental states. The long-term impacts of childhood abuse and neglect on the mother may then impact the infant's developmental trajectory through a poor mother-infant bond.

Study aims

The current paper therefore aims to explore, by means of meta-analysis, the empirical evidence on whether there is an association between women's experiences of childhood maltreatment and mother-infant bonding in later life. Based on child maltreatment literature and perinatal literature, it can be hypothesised that impairments in development resulting

from childhood abuse and neglect may increase difficulties in establishing a mother-infant bond in later life. Given the significant and long-term impact of poor mother-infant bonding on both the mother and infant (Bienfait et al., 2011; Kinsey & Hupcey, 2013), establishing an association between these two variables would contribute to important research on risk-factors of mother-infant bonding impairments and the intergenerational transmission of trauma. Identifying risk factors may then facilitate the introduction of effective interventions and support. To date, there has been no systematic review of the empirical studies examining the association between maternal childhood abuse and neglect and poor mother-infant bonding.

Method

Search strategy

A systematic search of the literature was completed across four databases: *Psychinfo*, *Medline*, *Web of Science*, and *EMBASE*. Search terms are detailed in Table 1. The search identified articles published between 1946 and 24th May 2021. To enhance the search strategy, alongside electronic searches, reference lists of all included publications and relevant reviews were searched.

Table 1Search terms utilised in systematic literature search

Construct1	Construct2
Maternal childhood maltreatment	Mother-infant bonding
Trauma	Mother-infant bond*
'OR'	'OR'
Abuse	Mother-infant relationship
'OR'	'OR'
Maltreatment	Mother-baby bond*
'OR'	'OR'
Neglect	Mother-baby relationship
'OR'	'OR'
Violence	Maternal bond*
'OR'	'OR'
Post-traumatic stress disorder	Maternal relationship
'OR'	'OR'
PTSD	Postnatal bond*
	'OR'
	Postnatal relationship
	'OR'
	Postpartum bond*
	'OR'
AN	Postpartum relationship
Footnote: All key terms were exploded.	

Inclusion and exclusion criteria

Papers were screened according to a set of inclusion/exclusion criteria, details of which can be found in Tables 2 and 3. Studies were included if they measured and explored the relationship between maternal childhood maltreatment and mother-infant bonding within the first year of life. Maternal childhood maltreatment was defined as all forms of physical and/or emotional ill-treatment, sexual abuse, or neglect under the age of 18 (World Health Organisation, 2016). Mother-infant bonding was defined as the affective state of the mother towards her infant (Kinsey & Hupcey, 2013), as opposed to attachment or maternal behaviours. Only studies exploring these concepts as defined above were included, to increase the specificity of the analysis.

 Table 2

 Inclusion criteria and rationale

Inclusion Criteria	Rationale
Type of Study	The aim of the current review is to explore
Studies that examine and report on the	the association between maternal childhood
relationship between maternal childhood	maltreatment and mother-infant bonding.
maltreatment and mother-infant bonding.	Selected studies are needed to provide
	appropriate data.
Participant Focus	To increase the generalisability of findings,
Women of any age who have had a baby in	women of all ages are included.
the past year.	
	Participants are required to have had a baby
	within the past year to allow for a current
	assessment of mother-infant bonding, as
	opposed to a retrospective assessment.
Outcome	To ensure that outcomes can be calculated
Papers are required to report either means	into an effect size.

and standard deviations, F-test statistics, t-test statistics, an r, or a beta.

Table 3 *Exclusion criteria and rationale*

Exclusion Criteria	Rationale
Type of Study	These articles do not provide the outcome
Studies that measure but do not report on	data needed for this meta-analysis.
the association between maternal childhood	
maltreatment and mother-infant bonding.	
Studies that do not examine the direct	
association between maternal childhood	
maltreatment and mother-infant bonding	
(e.g. regression models).	
Study Data – Maltreatment	The current meta-analysis focuses on
Studies reporting on general childhood	maternal childhood maltreatment.
trauma.	
	This is to increase the specificity of the
Studies reporting on maltreatment	review.
experienced after the age 18.	
Study Data – Bonding	The current meta-analysis focuses on
Studies measuring attachment.	mother-infant bonding.
Studies measuring parenting interactions.	Mother-infant bonding is defined as a
	separate concept to attachment and
	parenting interactions.
	This is to increase the specificity of the
	review.
Type of Article	These articles do not provide the outcome

Meta-analyses, theoretical papers, literature	data required for this meta-analysis.	
reviews, commentaries, qualitative papers,		
non-peer reviewed studies (e.g. theses), and		
validation of psychometric scales.		
Language	Translating research papers is beyond the	
Language Full study texts that are not accessible in		

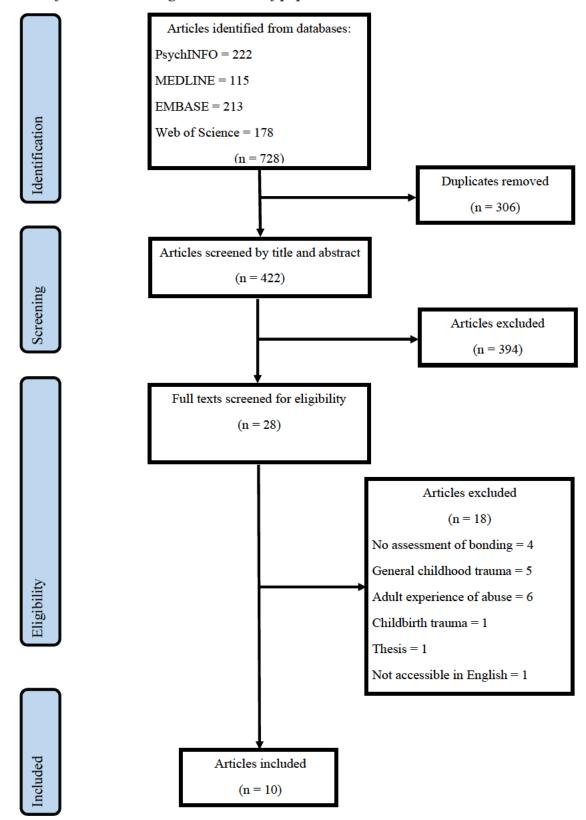
Paper selection

The paper selection process can be found in Figure 1. Following PRISMA guidelines, titles and abstracts were screened by inclusion and exclusion criteria and removed as appropriate. Full texts were then screened for suitability. The reference lists of papers that met the inclusion criteria were then searched.

The search yielded a total of 728 articles, 422 once 306 duplicates were removed. Following selection according to the set inclusion/exclusion criteria, 10 studies were included in the meta-analysis.

Figure 1

PRISMA flowchart showing the selection of papers



Data extraction

The author extracted all data. A summary of the information extracted from each study is detailed below.

Study sample and setting

Descriptive characteristics of the sample and setting were gathered. This included the year of publication, sample size, sample selection process, country, setting, and age, ethnicity and socioeconomic status of sample where possible.

Study measures

Measures of maternal childhood maltreatment and mother-infant bonding were extracted. Descriptive characteristics of measures included language, application process, validity and reliability, and types of maternal childhood maltreatment assessed.

Association data

To explore the association between maternal childhood maltreatment and mother-infant bonding, Pearson's R correlation coefficients were extracted from the studies. Where the association between maternal childhood maltreatment and mother-infant bonding was reported as a difference between group means (Buist 1998), the mean difference was transformed into a Pearson coefficient using the calculations reported by Lipsey & Wilson (2001). For two studies (Farre-Senderet al., 2018; Lehnig et al., 2019), bonding outcomes were reported in multiple subgroups of maltreatment. Multiple outcomes were combined in a single correlation outcome using the procedures described by Borenstein et al. (2009).

Pearson's R correlation coefficients were then transformed into z coefficients. Fisher's r-to-z transformation (Fisher, 1921) linearises the distribution of correlation coefficients. The transformation therefore overcomes potential issues of compression of

variance caused by skewed sampling distributions. Furthermore, it limits non-interpretable correlation coefficients caused by confidence intervals beyond the +1 or -1 coefficient boundaries. All calculations were therefore conducted on z transformed correlation coefficients and back-transformed for presentation in Tables and Figures.

Quality assessment criteria

The quality of the selected studies was assessed using pre-defined quality criteria. Quality criteria were adapted from existing risk of bias frameworks, including The Cochrane Collaboration Risk of Bias Tool (Higgins et al., 2011) and the Risk of Bias Assessment Tool for Nonrandomised Studies (Kim et al., 2013). Quality criteria were adjusted to capture the range of potential biases across the different studies and methodologies.

Table 4 presents the domains of bias assessed and descriptions of the grading of low risk, unclear risk and high risk, for each domain.

Table 4Quality criteria framework applied for assessing risk of bias

Domain	Details	Risk of Bias
Selection bias	Selection bias occurs	High Risk – The recruitment process/sampling
	when there is a systematic	method of individuals has not been reported or
	difference between the	is from an unrepresentative/biased sample.
	characteristics of those	Characteristics of participants are not reported
	selected for the study and	or there are significant a priori differences
	those who are not.	between groups.
	Have the selection	Unclear Risk – The characteristics of the study
	method and	population are not clearly or fully reported. This

Domain	Details	Risk of Bias
	characteristics of	includes country, setting, location, and
	participants been	population demographics (e.g. age and
	described adequately?	socioeconomic status). The
		recruitment/sampling method is unclear or from
		a potentially unrepresentative sample. There is
		evidence of some a priori differences between
		groups.
		Low Risk - The characteristics of the study
		population are clearly described and without
		evidence of bias. The source population is well
		described and is a representative population.
		The recruitment method is clearly reported.
Performance	Performance bias refers to	High Risk – Administrators of bonding tests not
Bias	differences that occur due	blinded to the participants' trauma history.
	to knowledge of study	
	group allocation, in either	Unclear Risk – The administration of measures,
	the researcher or	including the blinding process, are not clearly
	participant.	reported.
	Were administrators of	Low Risk – Administrators of bonding
	measures suitably blinded	assessment are blind to the participant's trauma
	to participant group?	history.
Detection bias	Detection bias refers to	High Risk – The outcome measures used have
	the ability of the study to	poor reliability and validity (Cronbach's Alpha
	detect the effect in	<0.6 and/or test/retest reliability <0.6). The
	question.	outcome measures were not implemented
		consistently across participants. The outcome
	Were measures reliable	measure has been translated without details of
	and valid?	translation process. Only one
		dimension/subscale has been used in the
	Were outcome measures	analysis.
	I	

Domain	Details	Risk of Bias
	implemented consistently	
	across participants?	Unclear Risk - Information regarding the
		outcome measures are either not reported or not
		clearly reported (e.g. validity and reliability).
		Cronbach's Alpha for outcome measures is
		between 0.6 and 0.7. Test/retest reliability for
		outcome measures is between 0.6 and 0.7. It is
		not clear if the measure was implemented
		consistently across participants. It is unclear if
		the measure was translated.
		Low Risk – The outcome measures are clearly
		defined, valid and reliable, and are implemented
		consistently across all participants.
Statistical bias	Bias resulting from the	High Risk – Statistics were not reported.
	(inappropriate) statistical	Statistical tests were conducted which were not
	treatment of the data.	appropriate for the study design. Data loss is
		reported at analysis at an unacceptable level
	Were appropriate	(>50%).
	statistical methods used?	
		Unclear Risk – It is unclear what statistical test
	Was the level of attrition	was used. Appropriate statistical test was used
	acceptable?	but the statistic cannot be transformed into a
		Pearson's value. Confidence intervals or exact
	How was attrition	p-values for effect estimates were not reported
	handled?	and could not be calculated. Data loss is not
		reported at analysis or data loss is between 30-
		50%.
		Low Risk – Appropriate statistical testing was
		used. The study has reported a Pearson's value
		or the statistic can be transformed into a
		of the statistic can be transformed line a

Domain	Details	Risk of Bias
		statistical equivalent. Confidence intervals or
		exact p-values for effect estimates are given or
		possible to calculate. Data loss is reported at an
		acceptable level (30%) or appropriate statistical
		analysis has been carried out to adjust for data
		loss.
Reporting bias	Bias resulting from	High Risk- Full outcome measures have not
	systematic differences	been reported (i.e. only a subscale or significant
	between reported and	results have been reported).
	unreported findings.	
		Unclear Risk- Not all descriptive statistics are
	Is there evidence of	presented. There is a narrative in the results but
	selective outcome	no clear reporting of statistics.
	reporting?	
		Low Risk- Outcome measures reported as
	Are there measures that	outlined in the methods.
	have not been reported in	
	the results that have been	
	mentioned in the method	
	section?	
Generalisability	Generalisability refers to	High risk – Small sample (<30) with or without
	the extent to which	idiosyncratic features.
	research findings can be	
	applied to other settings.	Unclear risk - Sufficient sample for
		generalisation (between 30-50) but with some
	Is the sample	idiosyncratic features.
	representative of the	
	target population?	Low risk- Sufficient sample for generalisation
		(>50) and representative of target population.
	Can the results be applied	
	to other populations	
	groups or settings based	

Domain	Details	Risk of Bias				
	on the sample used?					

Table 5 presents the risk of bias rating for each study. Each study is rated low, unclear, or high risk across the six risk domains.

Table 5
Summary of risk of bias ratings for each included study

Study	Selection Bias	Performance Bias	Detection Bias	Statistic al Bias	Reporting Bias	Generalisa bility
Buist (1998)	High	Low	Unclear	Low	Low	Unclear
Milan et al. (2004)	Unclear	Unclear	Unclear	Low	Low	Unclear
Hairston et al. (2011)	Low	Unclear	Low	Low	Low	Low
Muzik et al. (2013)	Low	Unclear	Low	Low	Low	Low
Seng et al. (2013)	Low	Unclear	Unclear	Unclear	Low	Low
Choi et al. (2017)	Unclear	Unclear	Low	Low	Low	Unclear
Farre-Sender et al. (2018)		Unclear	Low	Low	Low	Low
Lara- Cinisomo et al. (2018)	Cinisomo et Low Ur		Low	Low	Low	High
Lehnig et al. (2019)	Low	Unclear	Low	Low	Low	Low
Talmon et al. (2019)	Unclear	Unclear	Low	Unclear	Low	Low

Selection bias

The majority of studies presented a low risk of selection bias. Low risk studies recruited from diverse and representative populations, offering participation to all pregnant women within selected health services. Studies with an unclear risk of bias lacked sufficient details about the recruitment process or recruited in unrepresentative populations (e.g. low socioeconomic status areas). One study was identified as having a high risk of selection bias. Within this study (Buist, 1998), women were recruited from an inpatient sample, presenting with post-natal depression and anxiety. As such, the selection sample is unrepresentative.

Performance bias

Performance bias was largely unclear. The majority of studies relied on self-report measures of childhood maltreatment history (e.g. childhood trauma questionnaire) and mother-infant bonding (postpartum bonding questionnaire). Self-report measures are prone to social desirability bias, which may be exacerbated by social pressures to report positive mother-infant relationships and parenting (Wittkowski et al., 2020). Furthermore, studies failed to include clear descriptions of the application of self-report measures. It is unclear how researchers administered the mother-infant bonding questionnaires and whether they were blind to the participant's trauma history. One study had a low risk of performance bias (Buist, 1998). Within this study, bonding was assessed observationally, using a researcher blind to participants' trauma histories.

Detection bias

The majority of studies were rated as low risk of detection bias. Low risk studies utilised measures of childhood maltreatment and bonding with high reliability and validity

within the population. Three papers were rated as unclear risk due to a lack of assessment of the validity and reliability of applied measures (Buist, 1998; Milan et al., 2004; Seng et al., 2013).

Statistical bias

Eight papers were rated as low risk for this area of bias, with two rated as unclear. For the majority of papers, appropriate statistical tests were applied and attrition rates were low. Studies with unclear risk had attrition rates above 40%. In these studies, participants completed measures of childhood maltreatment, but did not complete measures of bonding post-birth. However, appropriate statistical analyses and adjustments for attrition were applied.

Reporting bias

All papers were deemed to have a low risk of reporting bias. Papers sufficiently reported on what they had set out to measure within their method section.

Generalisability

The level of generalisability was mixed across studies. Six papers were found to have a low risk of bias. Such papers had large samples sizes (150-725) recruited from representative samples (e.g. community clinics/hospitals). Studies with unclear generalisability lacked information about the sample characteristics, or were recruited from unrepresentative populations (e.g. low socioeconomic status or mental health diagnoses requiring inpatient admission).

Summary

Overall, there was an acceptable level of risk of bias across the included studies. Generally, studies had a low risk of bias across the domains. Performance bias provided the most unclear risk across studies, due to reliance on self-report measures and a lack of details on administration. Only two studies showed a high risk of bias in one domain (Buist, 1998; Lara-Cinisomo et al., 2018), due to sample selection and generalisability issues respectively. Therefore, despite the low number of studies available, they are of a reasonable quality.

Results

Characteristics of included studies

An overview of included studies is provided in Table 6.

 Table 6

 An overview of included studies, including participants, measures and maltreatment frequency

Study	N.	Mean Age (SD)	Country	Measures	Bonding Assessment Time	Type of Maltreatment	Maltreatment Frequency
Buist (1998)	56	28.45 (4.2)	Australia	Otago Women's Health Survey	Across the first year of life	Physical Sexual Emotional	66%
Milan et al. (2004)	203	17.4 (1.49)	America	Monash Mother-infant Scale Modified version of the physical assault domain of the Conflict Tactics Scale	4 months	Physical	77%
				Combination of questions from measures including the Parenting Stress Index and Revised Parenting Sense of Competence Scale			
Hairston et al. (2011)	184	27.5 (5.6)	America	Childhood trauma questionnaire	4 months	Physical Sexual Emotional	65%
				Postpartum Bonding Questionnaire		Emotional neglect Physical neglect	

Muzik et al.	150	29	America	Childhood Trauma	6 months	Physical	64%
(2013)		(5.66)		Questionnaire		Sexual	
						Emotional	
				Postpartum Bonding		Emotional	
				Questionnaire		neglect	
						Physical	
						neglect	
Seng et al.	566	27	America	Life Stressor Checklist	6 weeks	Physical	19.4%
(2013)		(5.4)				Sexual	
				Postpartum Bonding		Emotional	
				Questionnaire		Emotional	
						neglect	
						Physical	
						neglect	
Choi et al.	150	25	South Africa	Childhood Trauma	12 months	Physical	57%
(2017)		(5.8)		Questionnaire		Sexual	
						Emotional	
				Postpartum Bonding		Emotional	
				questionnaire		neglect	
						Physical	
						neglect	
Farre-Sender	251	34	Spain	Early Trauma Inventory self-	6-7 weeks	Physical	Not reported
et al. (2018)		(4.76)		report		Sexual	
						Emotional	
				Postpartum Bonding			
				Questionnaire			

Lara-	28	-	America	DSM and structured trauma	4 weeks	Physical	50%
Cinisomo				interview		Sexual	
(2018)						Verbal	
				Postpartum Bonding			
				Questionnaire			
Lehnig et al.	725	30.58	Germany	Childhood Trauma	4 months	Physical	45.7%
(2019)		(4.48)		Questionnaire		Sexual	
						Emotional	
				Postpartum Bonding		Emotional	
				Questionnaire		neglect	
						Physical	
						neglect	
Talmon et al.	394	30.96	Israel	Childhood Trauma	2 months	Emotional	Not reported
(2019)		(4.68)		Questionnaire		neglect	
				Postpartum Bonding			
				Questionnaire			

Sample characteristics

The ten studies included in this meta-analysis reported a total of 2707 participants. Sample sizes ranged from 28 to 725 (median = 184). Samples were recruited from different counties; however, the majority of studies were based in the United States. Participants were largely aged between 18-46. One study looked exclusively at adolescent mothers (Milan et al., 2004). Samples varied in the frequency of maltreatment experienced by participants. Generally, rates of childhood maltreatment were high, falling largely above 50%. For some studies this was due to purposeful sampling, whereas for others, this was explained by inclusion of physical disciplining.

Study design

Eight out of the ten included studies used a prospective case cohort design. Within these studies, trauma history was assessed during pregnancy and mother-infant bonding was assessed between 4 weeks and 1-year postpartum. Two studies (Buist, 1998; Lehnig et al., 2019) used a cross-sectional design, collecting both trauma history data and mother-infant bonding data post-birth.

Measures

A range of measures was used to establish maternal trauma history. Half of the included studies used the Childhood Trauma Questionnaire (CTQ). The CTQ is a 28-item scale exploring five types of childhood maltreatment: physical abuse, sexual abuse, emotional abuse, emotional neglect, and physical neglect. The measure is well validated, including within the populations included in the current studies (Bernstein et al., 2003; Spies and Seedat, 2014). The five remaining studies utilised different measures of maternal childhood trauma, as detailed in Table 6.

One of the included studies (Lara-Cinisomo, 2018) used a measure of childhood trauma that included childhood abuse (sexual, physical, and verbal) alongside parental loss in childhood. This produced an overall childhood trauma score. Given the dearth of research data available on the current research topic, the overlap of abuse and parental loss, and the low frequency of parental loss (mean = 10.5%) in the sample, a decision was made to include the study in the current analysis, utilising the childhood trauma score as the childhood maltreatment score.

Eight of the ten studies used the same measure of bonding: the Postpartum Bonding Questionnaire (PBQ) (Brockington et al., 2001). The PBQ is a widely used screening tool, validated across several populations (Brockington et al., 2006; Garcia-Esteve et al., 2016). The self-report measure consists of 25 items assessing the mother's feelings and attitudes towards her infant. Higher scores on the PBQ represent greater impairments in bonding. The remaining two studies assessed bonding through the Monash Mother-Infant Interaction Scale which is an observational measure (Buist, 1998) or a self-report measure constructed by the authors from validated measures (Milan et al., 2004). Across studies, bonding was assessed between 4 weeks and 1 year postpartum (mean = 4.8 months).

Types of maltreatment

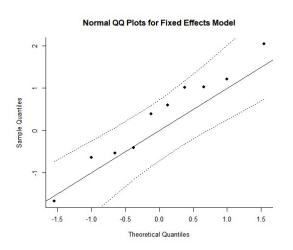
The current meta-analysis explores the association between maternal experiences of childhood maltreatment and mother-infant bonding. The types of maternal maltreatment explored differed across studies. Eight of the ten included studies report on a broad range of maternal childhood maltreatment, including sexual abuse, physical abuse, emotional abuse, and in three studies, neglect. One study (Milan et al., 2004) explored the effects of physical abuse alone, while another study (Talmon et al. 2019) reported on the impact of emotional neglect alone.

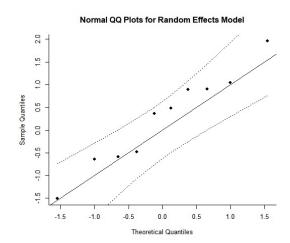
Selection of the meta-analytic model

The distribution of primary study effects is shown in Figure 2. The random effects model was calculated using the DerSimonian-Laird estimator (tau²).

Figure 2

QQ plots of the distribution of z transformed correlations within the primary studies within the (a) fixed effects model and (b) the random effects model





As can be seen from Figure 2, there is no evidence of marked deviation from normality in the distribution of z transformed correlations within the primary studies for either the fixed or random effects models. Therefore, it is appropriate to analyse the data with either the fixed or random effects model.

The omnibus test

The correlations between maternal childhood maltreatment and mother-infant bonding reported in the primary studies are reported in Table 7.

Table 7

	COR	Lower 95%-CI	Upper 95%-CI	%W(fixed)	%W(random)
Choi et al.	0.218	0.0598	0.3655	5.5	6.5
Hairston et al.	0.181	0.0373	0.3174	6.8	7.9
Buist	0.395	0.1474	0.596	2	2.5
Milan et al.	0.219	0.0838	0.3463	7.5	8.6
Lara-Cinisomo et al.	0.215	-0.1719	0.5444	0.9	1.2
Muzik et al.	0.219	0.0609	0.3664	5.5	6.5
Farre-Sender et	0.107	-0.017	0.2278	9.3	10.3
Seng et al.	0.077	-0.0054	0.1584	21	19.2
Talmon et al.	0.12	0.0215	0.2162	14.6	14.7
Lehnig et al.	0.119	0.0466	0.1902	27	22.5

Correlations between maternal childhood maltreatment and mother-infant bonding

A fixed effects model was calculated using the generic inverse variance method. A random effects model was calculated using the DerSimonian-Laird estimator of between study variance (tau²).

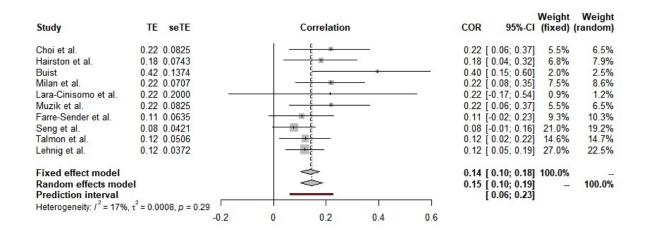
Similar weighted average correlations were produced using the fixed effects model and random effects model. The fixed effects model suggested a weighted average correlation of r=0.14 (z=7.23, p<0.01) and a 95% confidence interval of between 0.10 to 0.18. The

random effects model suggested a weighted average correlation of r=0.15 (z = 6.55, p < 0.01) and a 95% confidence interval of between 0.10 to 0.19.

A correlation of this magnitude would be considered small for both the fixed and the random effects models, accounting for only 2% to 2.25% of the total shared variance between maternal childhood maltreatment and mother-infant bonding later in life.

Figure 3

Forest plot of correlations between maternal childhood maltreatment and mother-infant bonding



There was an acceptable level of heterogeneity in the primary studies (Higgin's I^2 = 17%, tau^2 = 0.0008, Q = 10.86, p = 0.2856). This suggests that this body of studies is reporting a coherent and consistent effect size.

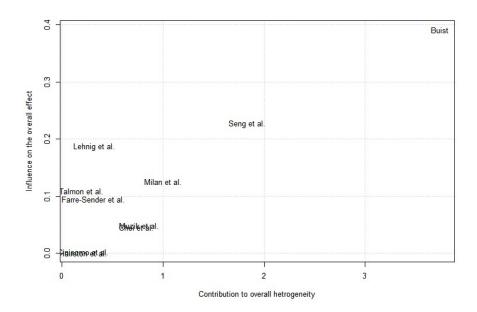
The impact of influential primary studies

To evaluate the impact of disproportionately influential studies, a "leave-one-out" analysis was completed. This analysis systemically calculates the random effects model with each of the primary studies removed in turn. Changes in weighted average effect size and

changes in heterogeneity are recorded. The result of this "leave-one-out" analysis is presented on the Baujat plot (Baujat et al., 2002) in Figure 4.

Figure 4

Baujat diagnostic plot of sources of heterogeneity. The vertical axis reports the influence of the study overall effect and the horizontal axis reports the discrepancy of the study with the rest of the literature.



As can be observed in Figure 4, Buist (1998) evidenced the greatest heterogeneity and influence on the overall effect. To determine whether findings were disproportionally influenced by this study, the random effects model was recalculated with the study removed. The corrected random effects model reported a synthesis of r = 0.1333 (95% CI 0.0956 to 0.1707). This indicates approximately an 11% reduction relative to the uncorrected random effects model and does not change the substantive conclusions of the meta-analysis.

The effect of risk of bias in the primary studies

A quality effects model was calculated using the total score from the risk of bias ratings reported in the quality assessment criteria section. This score considers the position of the study's overall design within the study design hierarchy and the ratings of risk of bias as reported in Table 5.

The quality effects model can be interpreted as the meta-analytic synthesis that would have been obtained had all of the studies been of the same methodological quality as the best study in the review. The quality effect model reported a synthesis of r = 0.144 (95% CI 0.0993 to 0.1887). This represents an approximately 4% decrease relative to the uncorrected random effects estimate. Therefore, when the synthesis includes information about the methodological quality of the studies there is only trivial change in the weighted average of these studies.

The impact of publication and small study bias

Publication bias is caused by the tendency for statistically significant results to be published and the reticence to publish papers with non-significant results. Small study bias is the tendency for studies with smaller sample sizes to show greater variability in their measurement of effect. Such biases may lead to an overestimation of effect size.

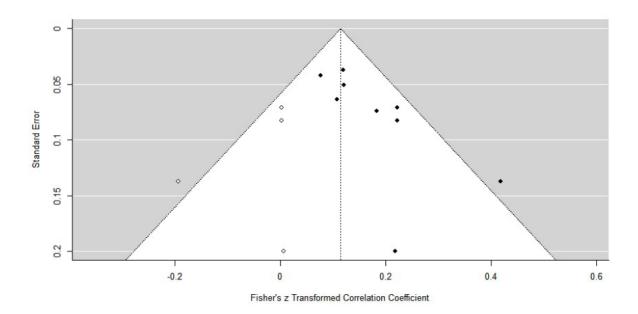
Publication and small study biases can be identified through funnel plots which plot the magnitude of the study's correlation estimate against the square root of the study's sampling variances ($standard\ error=\frac{\sigma}{\sqrt{N}}$). If there is an absence of publication bias and the fixed effect assumption is valid, 95% of studies should fall within the funnel. Effects from smaller studies are expected to scatter more widely at the bottom of the plot, while larger,

more powerful studies lie closer to the overall meta-analytic effect at the top. This creates a symmetrical funnel shape.

If there is an absence of studies in the area of the plot associated with small sample sizes and non-significant results (for this meta-analysis it will be the bottom left-hand corner) then it is likely there is some publication bias leading to an overestimation of the true effect. The funnel plot of correlations is presented in Figure 5.

Figure 5

Funnel plot of the correlation between maternal childhood maltreatment and mother-infant bonding. The 95% confidence interval of the expected distribution of correlations is shown as an inverted "funnel". Studies imputed by the trim and fill procedure are shown in white



As can be seen from Figure 5, there is clear evidence of publication bias in the distribution of correlations. To establish the potential impact of publication bias, a trim and fill procedure (Duval & Tweedle, 2000) was conducted. The trim and fill procedure builds on the assumption that publication bias would lead to an asymmetrical funnel plot. The procedure iteratively removes smaller studies causing funnel plot asymmetry, uses the

trimmed funnel plot to estimate the true centre, then replaces the omitted studies and their missing counterparts around the centre. This process provides an adjusted intervention effect, as well as an estimate of the number of missing studies.

The trim and fill procedure yielded a corrected random effects model of r = 0.11 (95% CI 0.0649 to 0.1641). The corrected random effects model evidences an approximately 26% decrease relative to the uncorrected random effects estimate. However, this estimate remained statistically significant, and a correlation of this magnitude would still be considered 'small'.

Rosenthal (1979) describes the calculation of a failsafe number that estimates the number of studies with non-significant results which would need to be included in the meta-analysis for the overall effect to be non-significant (p > .05). This procedure suggests that 208 studies would be required to reduce the observed r = 0.15 to non-significance, suggesting that the observed random effects model is robust to studies missing due to publication bias.

Subgroup analyses and meta regression

Due to the small number of primary studies, subgroup analysis could not be pursued.

This difficulty was compounded by researchers' use of different measures of bonding and a lack of clearly defined types of maltreatment across studies.

Discussion

Overview

The current review aimed to explore, by means of meta-analysis, the empirical evidence on whether there is a consistent and meaningful relationship between women's experiences of childhood maltreatment and mother-infant bonding in later life. Based on child abuse literature and perinatal literature, it was hypothesised that experiences of childhood maltreatment would increase difficulties in establishing a mother-infant bond. A search of the existing literature identified 10 primary studies reporting correlations or associated statistics between maternal childhood maltreatment and mother-infant bonding. Overall, the studies showed a promising level of quality. Generally, studies included large samples of participants recruited from diverse and representative populations. There was, however, an unclear level of risk in the reliability and application of self-report measures of bonding.

The consistent positive correlation between childhood maltreatment and mother-infant bonding aligns with initial study hypotheses. Research exploring the effects of childhood abuse and neglect has highlighted a pervasive and long-lasting impact of these early experiences (Toth & Manly, 2019). The impacts observed include emotional, cognitive, social, and behavioural difficulties (Cicchetti, 2016; Gaensbauer et al., 1982; Harter & Taylor, 2000; Jung et al., 2017). Bonding literature has highlighted the importance of a mother's cognitive, social, and behavioural skills and emotion regulation for mother-infant bonding (Brockington et al., 2006), including skills such as being able to recognise and regulate both their own and their infant's mental and emotional states (Milne et al., 2018). Given the impact of childhood abuse and neglect on an individual's development and skills, a positive correlation between women's reported childhood maltreatment and bonding with

their baby in later life was anticipated. However, while consistent, the observed association was small. These findings are considered below in the context of the review's research methodology and child abuse and perinatal literature.

Measure of bonding

Despite the overall quality of the primary studies, weaknesses were identified in the measurement of bonding. Although the importance of mother-infant bonding is well-established and research in the area is growing, it is recognised that bonding is a difficult variable to accurately measure (Wittkowski et al., 2020). Within the current meta-analysis, measures of bonding were largely self-report, with eight out of ten papers using the Postpartum Bonding Questionnaire (PBQ). The PBQ has been shown to have good reliability and validity (Brockington et al., 2006), however, it has largely been validated in the general population (Wittkowski et al., 2007; Wittkowski et al., 2020). In a recent review by Wittkowski et al. (2020), the authors discuss the challenges of measuring parent-infant relationships, including bonding. They stress that self-report measures are limited due to their potential for social desirability bias. That is, mothers may not report relationship issues with their infants due to fear of being stigmatised and/or referrals to social services (Morsback & Prinz, 2006; Wittkowski et al., 2020). Bonding issues may therefore be under-reported in studies using self-report measures such as the PBQ, limiting the association between maternal childhood maltreatment and mother-infant bonding.

The gold standard for the assessment of the mother-infant relationship is said to be direct observation (Brockington et al., 2006). Only one primary study used an observational measure of bonding (Buist, 1998). Interestingly, this study observed the largest correlation between maternal childhood maltreatment and mother-infant bonding (0.395). However, as this was the only study that employed an observational method, it is not possible to explore

the impact of measures on the association between the two variables. Furthermore, the validity of observational methods has also been called into question. It has been argued that observational measures cannot adequately assess mother-infant relationships as they do not access a mother's subjective experience (Wittkowski et al., 2020) and mother-infant bonding refers to the affective state of the mother towards her infant (Kinsey & Hupcey, 2013).

There are therefore ubiquitous weaknesses in the assessment of mother-infant bonding, which may impact the association observed within the current study. Future research should aim to continue to explore and improve measures of bonding (Wittkowski et al., 2020). Furthermore, recognising the flaws inherent in both observational and self-report measures, consideration should be given to employing a combination of such measures.

Childhood maltreatment measure

The current meta-analysis considered childhood maltreatment as a variable that may be associated with mother-infant bonding in later life. Child maltreatment is a broad term which encapsulates a range of experiences that children can face in which they experience harm. Childhood maltreatment can include harm from physical injury, such as hitting or choking, emotional mistreatment such as shaming and humiliating, and sexual assault including exposure and touching. It also includes harm resulting from a failure to meet a child's basic physical and/or psychological needs such as a lack of food or ignoring emotional distress (Legano, McHugh, & Palusci, 2009; Radford et al., 2011). Given the breadth of maltreatment experiences, childhood maltreatment can be a problematic variable. Individuals falling within this category are likely to have experienced a wide range of disparate experiences with different long-term consequences.

The breadth of child maltreatment as a variable has been noted in previous literature and research has made steps towards exploring the outcomes of different types of abuse and

neglect. It has been reported that different types of maltreatment can have differential outcomes across emotional, social, and behavioural factors. Arata et al. (2005) found that when comparing types of childhood maltreatment, emotional abuse was the only type of abuse that significantly predicted lower self-esteem scores, whereas neglect was the only variable that predicted higher substance abuse. Similar findings have been reported by Mullen et al. (1996) who found that emotionally abused individuals reported lower self-esteem than those who had been physically or sexually abused. Differences have also been observed across emotional intelligence. Young & Widom (2014) found that childhood physical abuse predicted less accuracy in identifying neutral pictures, whereas childhood sexual abuse and neglect predicted less accuracy in recognising positive pictures. Finally, research has highlighted variation in behaviours towards infants in later life, with maternal physical abuse histories increasing the risk of offspring physical abuse and neglect, while maternal neglect histories were associated with neglect only (Yang et al., 2018). In line with these findings, we may therefore also expect variations in mother-infant bonding across types of maltreatment.

The current meta-analysis adopted a broad definition of childhood maltreatment in order to capture as much relevant empirical evidence as possible. However, as highlighted above, the strength of association between childhood maltreatment and mother-infant bonding in later life, may depend on the type of maltreatment endured. While most of the primary studies use measures which distinguish between different types of abuse and neglect, the majority explore childhood maltreatment as a general variable. From the ten primary studies included, only three studies looked at the specific association of different types of abuse and neglect and mother-infant bonding (Buist, 1998, Farre-Sender et al., 2018; Lehnig et al., 2019). Within these studies, differences in the association with mother-infant bonding between types of abuse and neglect were observed. Emotional neglect and emotional abuse

appear to have the largest association with bonding in later life (Farre-Sender et al., 2018; Lehnig et al., 2019). However, due to the limited number of studies distinguishing between abuse and neglect types, it is not possible to draw any firm conclusions.

Therefore, the small strength of association observed in this paper may be due to an indiscriminate measure of maltreatment. By measuring childhood maltreatment as a broad variable, associations between particular types of abuse and neglect and bonding cannot be identified and a more detailed understanding of these associations may be missed. Future studies should therefore endeavour to separate and explore the different types of abuse and neglect and their specific association with bonding. However, it is acknowledged that this may be challenging given the high prevalence of multiple maltreatment (Arata et al., 2005).

Moderator variables

Another explanation for the small association observed in the current meta-analysis is the influence of moderator variables. The relationship between two variables rarely exists in isolation and other moderator variables frequently play a role in strengthening or weakening the association (Asamoah, 2014). In the current review, both the long-term effects of childhood maltreatment and the development of the mother-infant bond are likely to have been influenced by other factors.

In a systematic review, Meng et al. (2018) highlighted an array of individual, familial and societal factors that protected against negative consequences of childhood maltreatment. Individual factors included personality, cognitive ability and self-esteem. Familial factors included parenting, stable living situation and sibling warmth. Societal factors included neighbourhood economic advantage, local crime rate and social cohesion. In a narrative review looking at factors promoting resilience following childhood sexual abuse, Marriott et al. (2014) further highlighted the complexity of child abuse outcomes. These authors

identified protective factors including having a supportive family, stable caregiving by at least one parent, support from clubs and care agencies, positive school and education experiences, and highly supportive relationships in adulthood. Both these studies highlight the complex interplay of factors which determine the long-term effects of childhood maltreatment.

Establishing a mother-infant bond is also a complex process, influenced by an array of factors. Research has shown that a mother's relational and socioeconomic circumstances can influence bonding. High quality social support, practical partner support, and a positive romantic relationship quality are associated with good bonding (Dixon et al., 2009; Kinsey et al., 2014; Tolja et al., 2020). Contrastingly, unemployment and socioeconomic difficulties increase the risk of bonding impairments (Figueiredo et al., 2009; Kinsey et al., 2014). Pregnancy and birth-related experiences have also been shown to impact mother-infant bonding. Unintended or unwanted pregnancies and stressful or traumatic deliveries have been associated with bonding problems (Mayopoulos et al., 2021; Reid, 2011; Shreffler et al., 2021; van Reenen & van Rensburg, 2013). Infant-related related factors may also impact bonding. Research shows that infant sleep problems, severe colic, and difficult temperaments are associated with lower quality bonding (Hairston et al., 2016; Parfitt et al., 2014; Raiha et al., 2002; Tolja et al., 2020). Alongside infant-related factors, mother-related factors such as poor emotional intelligence, emotional issues, and ruminative thinking have been associated with impaired bonding (Gunning et al., 2011; Muller et al., 2013). This research highlights the complex multifaceted process of mother-infant bonding.

Exploring the association between childhood maltreatment and mother-infant bonding in later life is therefore problematic. Both variables interact with other factors which may influence the strength of the relationship. It is possible that moderator factors such as social support in childhood and the perinatal period may weaken the association between childhood

maltreatment and impaired bonding. To understand this properly, research is required to investigate and control for a number of factors including the mother's individual traits, her social circumstances, and birth and infant related factors. Within the current meta-analysis, primary studies varied in the information gathered about participants and whether/how this was used in the statistical analyses. While all studies collected information on potential moderator factors such as marital status and social support, the majority (70%) did not explore this further. Only two studies controlled for socioeconomic factors (Hairston et al., 2011; Muzik et al., 2013) and one study (Milan et al., 2004) investigated the strength of association between childhood maltreatment and bonding with and without the presence of one specific protective factor (supportive partner).

The lack of investigation of moderating variables makes it hard to understand the true nature of the association between childhood maltreatment and mother-infant bonding. The findings of the current meta-analysis suggests that there is an association between childhood maltreatment and mother-infant bonding, which may potentially be strengthened or weakened by a wide range of individual, social and environmental factors throughout an individual's life. However, currently the details of this complex process are unknown. In future research it would be valuable to explore the strength of the mother-infant bond in the presence and absence of different protective factors.

Strengths and limitations

This meta-analysis provides the first overview of the relationship between maternal experiences of childhood maltreatment and mother-infant bonding in later life. Research has highlighted the importance of mother-infant bonding for the wellbeing of both the mother and infant (Mogi et al., 2011). Identifying risk factors for bonding impairments is therefore an

important area of research and the meta-analysis approach provides an interesting overview of research so far and allows for an estimate of the association (Walker et al., 2008).

Despite the valuable new information provided by the current meta-analysis, it is important to acknowledge methodological limitations. First, data extraction and study quality ratings were conducted by a single author. It is therefore possible that author bias may have influenced the ratings. While it would have been preferable to conduct the review alongside a second author to minimise this bias, the review was conducted as part of a doctoral thesis and resources were therefore limited.

The current meta-analysis included a research study that incorporated parental loss within the measure of childhood maltreatment (Lara-Cinisomo, 2018). Inclusion of this paper has the potential to impact the validity of findings. However, given the dearth of research in the area and the low rates of parental loss reported in the study sample (mean = 10.5%), a decision was made to include the paper. The correlation observed in the study aligned with those reported in other studies, limiting the impact of validity concerns. The findings also highlight a potential area of further research, exploring the impact of a mother experiencing parental loss in childhood on mother-infant bonding in later life.

Further methodological limitations are due to the use of correlational research. Correlational research offers a good starting point for knowledge, establishing the presence of a relationship, its direction and strength (Asamoah, 2014). Given that the variables of interest within the current study are naturally occurring and cannot be ethically manipulated (and are therefore not suitable for an experimental design), a correlational methodology is valuable to gain insight. However, although correlational research can indicate the presence of a relationship, it cannot determine causality (Queiros et al., 2017). It is well acknowledged that relationships between variables often do not exist in isolation and other variables may explain

or impact this relationship (Asamoah, 2014). Therefore, the conclusions that can be drawn from this research are limited.

Finally, as discussed above, the current study employed a broad research question regarding the association between childhood maltreatment and mother-infant bonding. It is recognised that experiences of childhood abuse and neglect are varied and that the research included in the current review represents a high level of heterogeneity in terms of the childhood maltreatment variable. This heterogeneity may impact on the association explored and limits the conclusions that can be drawn from the current paper. Furthermore, by keeping the research question intentionally broad, further information about the interplay between protective factors and the association cannot be determined, further limiting our understanding. Nonetheless, this paper provides a useful starting point for further research.

Clinical implications

The findings of the current meta-analysis highlight a small but consistent relationship between maternal experiences of childhood maltreatment and mother-infant bonding in later life. Given the significant and long-lasting implications of poor mother-infant bonding, it is important to identify risk factors and consider what constitutes effective support for these mothers. While the current findings are not strong enough to suggest that interventions should be implemented as a matter of course for all women with maltreatment histories during pregnancy, they suggest that clinicians should be mindful of women's histories. Moreover, an awareness of this small but consistent association may help women with abuse and neglect histories make sense of, and possibly ameliorate, their bonding difficulties.

A further implication of these findings is that they may offer a sense of hope for women with maltreatment histories. The relatively small strength of the association indicates that while bonding impairments may be more likely for women who have experienced childhood maltreatment, other factors are also likely influence this relationship. Efficacy research may identify clinical interventions that can protect children from the long-term effects of maltreatment and in later life can enable mothers to establish good bonds with their infants.

Future research

This paper provides the first overview of research exploring the association between childhood maltreatment and mother-infant bonding in later life. While these findings offer a helpful initial insight, further research is required. Due to the relative dearth of work in the area, the current research question was kept intentionally broad. However, to better understand the observed relationship, more detailed research is required. As discussed above, this should include exploring the differential associations between mother-infant bonding and specific types of childhood abuse and neglect. It should also include further exploration of the impact of moderating factors, such as social support, on the strength of association. Moreover, to improve the quality of further research, consideration should be given to the development of more robust measures of mother-infant bonding.

Conclusion

This meta-analysis identifies a small but consistent association between maternal experiences of childhood maltreatment and mother-infant bonding in later life. Mothers who have experienced incidents of childhood maltreatment before the age of 18 show increased impairments in mother-infant bonding with their children. These findings align with research on the long-term impact of childhood abuse and neglect, which indicates that the abilities and skills required to form a mother-infant bond are impacted by childhood maltreatment.

However, the strength of association was found to be relatively small. This may be due to the inherent challenges of measuring the association between childhood maltreatment and mother-infant bonding. Research highlights the complex nature of both variables and while this meta-analysis explores a simple relationship between the two, it is likely that multiple factors interact with one another to determine the impact of maltreatment on the mother-infant bond.

Nonetheless, the findings of the current meta-analysis are valuable. They suggest that whatever the mechanisms, there is an association between the variables. Given the significant implications of poor mother-infant bonding, it is important for researchers to identify risk factors and effective support for women who have experienced childhood maltreatment. Furthermore, the findings offer hope to women with maltreatment histories. The small association indicates that for women who have experienced childhood maltreatment, poor mother-infant bonding is not inevitable. As discussed above, the relationship between the variables is likely to be impacted by an array of factors, making effective interventions possible. The current research should therefore be viewed as a starting point for further research, to better understand the link between childhood maltreatment and poor mother-infant bonding, and in particular the impact of preventative factors and effective clinical interventions.

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Empirical Paper: Clinical Psychologists' experiences of delivering trauma-focused therapy with individuals with intellectual disabilities

Abstract

Background

Individuals with intellectual disabilities are at increased risk of experiencing psychological trauma compared to the general population. Over the past decade, the availability and application of evidence-based models of trauma-therapy has increased. The delivery of such models is acknowledged to be a complex and demanding process for the therapist; however, currently little is known about the experience of therapists delivering these interventions. The current study therefore aimed to explore the lived experiences of Clinical Psychologists delivering trauma-focused therapies with individuals with intellectual disabilities.

Method

Six Clinical Psychologists were interviewed regarding their experiences of delivering trauma-focused therapies with people with intellectual disabilities. Interviews were analysed using Interpretative Phenomenological Analysis.

Results

Four superordinate themes were identified through the analysis: 'Therapists' confidence', 'Systemic challenges', 'Managing the emotional impact', and 'Accessible support'. Themes illustrated the challenges that Psychologists experience when delivering trauma-focused therapies and the emotional impact of these. A changing emotional impact was noted over time, with Psychologists adopting different approaches to managing emotional involvement. The importance of accessible external support was emphasised; however, difficulties in accessing this were highlighted.

Conclusion

The results of this study draw attention to the challenges Psychologists face in delivering trauma-focused therapies with individuals with intellectual disabilities. These findings prompt further consideration of how trauma-focused therapies fit within a wider context of clients' unmet social needs and inaccessible support for Psychologists.

Introduction

Trauma and Intellectual Disabilities

Psychological trauma can be defined as an experience that is emotionally painful, distressing, and shocking (Bradley et al., 2012). There are no finite sets of incidents that lead to trauma, but rather, trauma occurs when an individual experiences an event or enduring conditions, that overwhelm their personal resources (emotional, cognitive or physical) or present a significant level of threat (Pearlman & Saakvitne, 1995). Incidents that lead to trauma often include abuse of power, betrayal of trust, helplessness, pain, and/or loss (Giller, 1999).

People respond to trauma in different ways. While for some there is little or no long-lasting impact, others experience pervasive and enduring behavioural, social, and/or emotional issues. One potential long-lasting impact of trauma is Post-Traumatic Stress Disorder (PTSD). PTSD is an anxiety disorder characterised by the presence of three co-occurring symptom clusters: intrusions, avoidance, and hyperarousal/trauma-memory loss (World Health Organisation, 2019). The prevalence of PTSD in the general population has been estimated at approximately 4.4% (McManus et al., 2016). PTSD has been shown to have significant detrimental effects on both the individual and society. It has been associated with impairments in health (mental and physical), wellbeing and psychosocial functioning (Beck et al., 2009; Dorahy et al., 2013; Evren et al., 2011; Pacella et al., 2013; Warshaw et al., 1993).

Compared to the general population, people with intellectual disabilities are at a significantly increased risk of experiencing trauma. While estimations vary, one study found that 79% of people with an intellectual disability were exposed to at least one potentially traumatic event, with most exposed to multiple events (Scotti et al., 2012). Literature has

explored the reasons for high trauma rates within this population. Firstly, it is well acknowledged that due to cognitive and physical vulnerabilities, individuals with intellectual disabilities are more vulnerable to experiencing negative life events. Research has shown that people with intellectual disabilities are more vulnerable to being targets of crime and abuse, including sexual abuse, physical abuse, and maltreatment (Horner-Johnson & Drum, 2006; McCarthy & Thompson, 1997; Sinason, 2002). Furthermore, they are more likely to be exposed to challenging social factors, including poverty, poor housing, social exclusion, and overt discrimination (Graham, 2005). Alongside an increased risk of experiencing traumatic events, people with intellectual disabilities often have reduced personal resources. Cognitive deficits, a lack of effective coping skills, and poor social support, may place a person with intellectual disabilities at risk of becoming overwhelmed more easily and unable to access support (Giller, 1999; Sinason, 2002; Stenfert Kroese et al., 2013). Therefore, experiences that may not be traumatic for an individual of general cognitive ability, may be experienced as traumatic for a person with an intellectual disability.

In line with the high incidents of trauma, there is a higher rate of PTSD in the intellectual disability population compared to the general population. A recent review estimated a PTSD prevalence of 10%, with reported rates ranging from 0.3% to 23.4% (Daveney et al., 2019). Furthermore, PTSD within this population is often missed by professionals (Daveney et al., 2019), due to clients' communication difficulties, poor diagnostic processes and a lack of staff training and support (Byrne, 2018; Stenfert Kroese et al., 2013; Truesdale et al., 2019). True rates of PTSD may therefore be arguably higher than reported by many studies (Daveney et al, 2019).

While rates of trauma are said to be higher in the intellectual disability population, there is limited understanding of how trauma is experienced and displayed. Within National Institute for Health and Care Excellence (NICE, 2016) guidelines for mental health problems

in individuals with intellectual disabilities, it is noted that symptoms of complex mental health conditions may present in different ways (Hemmings et al., 2006; Hove & Havik, 2010; Moss et al., 2000). As noted by McCarthy (2001), developmental research has highlighted the importance of an individual's developmental level in the expression of mental health conditions, including their cognitive and emotional capacity. People who have difficulties communicating their thoughts and feelings may not express psychological difficulties in the same way and are therefore likely to have their responses to trauma mediated by their developmental level (McCarthy, 2001; Wigham et al., 2011). Wigham et al. (2011) conducted a review of current evidence of the effects of traumatic life events on people with intellectual disabilities. While there was an overlap with symptoms reported by the general population (including irritability, withdrawal, and crying), a number of posttraumatic symptoms not seen in the general population were highlighted. These included, challenging behaviours, inappropriate or unusual statements, reduced adaptive behaviours, hyperactivity, and stereotypical behaviours. However, this review highlighted methodological weaknesses in the studies, including a lack of accurate measurement tools. Therefore, while it is acknowledged that the psychological impact of trauma may present in different ways in the intellectual disability population, this is not yet fully understood. Nonetheless, the high prevalence of mental health problems, including post-trauma symptoms, in people with intellectual disabilities place significant strain on health and social services, and families (Cooper et al., 2007).

Psychological Therapy for Trauma

Evidence-based psychological treatments for trauma are well-established in the general population (Watts et al., 2013). UK NICE guidelines (2018) recommend

psychological therapies, including Trauma-Focused Cognitive Behavioural Therapy (TF-CBT) and Eye Movement Desensitisation and Reprocessing (EMDR), as first-line treatments for PTSD.

TF-CBT is a structured evidence-based treatment addressing the negative effects of trauma. CBT focuses on the relationship between thoughts, feelings, and behaviours, and their interplay in creating and maintaining symptoms of distress. TF-CBT employs cognitive and behavioural techniques to manage symptoms of trauma, including processing trauma memories, overcoming problematic thoughts and behaviours, and developing effective coping and interpersonal skills (de Arellano et al., 2014).

EMDR is a structured therapy that aims to support the processing of trauma, through bilateral stimulation (Shapiro, 1995). The underlying information processing theory posits that due to maladaptive processing at the point of trauma, trauma memories may become stored in an unhelpful way in which sensory information is not linked to episodic memory, creating ongoing trauma symptoms (Hill, 2020). The process of EMDR aims to induce a physiological and cognitive condition in which trauma memories can be effectively processed (Shapiro, 2007).

Despite the increased rates of trauma and PTSD in the intellectual disability population, there is a dearth of evidence-based trauma treatments. To date, there are no guidelines for working with trauma with people with intellectual disabilities. Instead, NICE guidelines (2016) recommend that treatment follows the recommendations for the general population, with adaptations made for communication and level of intellectual ability. Furthermore, research has shown that adults with intellectual disabilities who display PTSD symptoms are rarely treated with psychological therapies. Instead, pharmacological or

environmental interventions are applied, often failing to address the underlying cause for PTSD (Stenfert Kroese et al., 2001; Sheehan et al., 2015).

With recognition of this gap between need and provision, over the past decade, research has sought to determine the effectiveness of trauma therapies, such as EMDR and TF-CBT, in the intellectual disability population, with promising results (Gilderthorp, 2015; Mevissen et al., 2011; Stenfert Kroese et al., 2016). This research is summarised by a recent systematic review conducted by Byrne (2022). Reviewing current literature on EMDR and TF-CBT in intellectual disability populations, Byrne identified 11 studies, 8 utilising EMDR and 3 utilising CBT. Findings indicated that both EMDR and TF-CBT are suitable and effective interventions for the ID population. However, while findings are positive, firm conclusions are limited by methodological weaknesses. Across studies there was a lack of information about modifications applied to therapies to suit an intellectual disability population. As such, there is a lack of clarity about the mechanisms of change. Furthermore, there was a lack of standardised assessments, with different outcome measures used across studies. It is therefore not possible to draw firm conclusions and the review concludes that further research is essential, not only in order to continue to gather evidence for the effectiveness of therapy interventions, but also to identify the most effective adjustments to and features of psychological therapies for individuals with intellectual disabilities, and the ways in which these therapies impact on their lives.

Adjusting Psychological Therapies for Individuals with Intellectual Disabilities

Individuals with intellectual disabilities present with unique characteristics that have implications for psychotherapy. A key factor for consideration is a person's language and

communication skills. As aforementioned, developmental research has shown that an individual's level of language and communication can significantly impact how an individual expresses their distress and health needs (Emerson & Baines, 2011; McCarthy, 2001). Furthermore, it can impact how a person understands and manages their mental health needs, including understanding and engaging with support and resources (Boardman et al., 2014; NICE, 2016; Public Health England, 2015).

Impaired language and communication skills therefore create challenges for the therapist, both in gaining an accurate representation of an individual's distress and response to therapy, as well as providing complex psychological information in an understandable way (Jones & Donati, 2009). In the context of trauma, research shows language and communication abilities can impact how trauma is experienced, how it is understood, how it is held as a narrative/story, and how it is expressed (Bradley et al., 2012).

To meet the psychological needs of the intellectual disability population, it is therefore important to adapt interventions to take account of language and communication impairments. This is highlighted in NICE (2016) guidelines for the treatment of mental health difficulties in individuals with intellectual disabilities. Recommendations to adjust therapies for people with language and communication difficulties include using clear language, concrete examples, visual imagery, and practical demonstrations. These recommendations are supported by a literature within the area (Jones & Donati, 2009; Truesdale et al., 2019; Whitehouse et al., 2006).

Another consideration when working therapeutically with an individual with intellectual disabilities is the power dynamic. People with intellectual disabilities are often in less powerful positions in their relationships, due to their disabilities (Caine & Hatton, 1998; O'Malley et al., 2019). Further, individuals are often referred and brought to therapy by

others (British Psychological Society, 2018). This power imbalance may make individuals less confident and expressive in therapy, as well as less motivated to discuss difficult experiences (Caine & Hatton, 1998). In the context of trauma, this may be a particular challenge, as people are often asked to recall extremely distressing events and may not feel able to say 'no'. Nonetheless, it is possible to establish collaborative therapeutic dialogues with people with intellectual disabilities (Jahoda et al., 2009). However, specialist skills and adaptations are required to establish a collaborative and productive therapeutic alliance (Jones & Donati, 2009; Jahoda et al., 2009).

People with intellectual disabilities are often dependent on the systems around them for support (Hatton et al., 2015) and it is therefore important to consider the individual's social and environmental context. Community psychology highlights that the systems with which people interact affect the development and maintenance of psychological problems, as well as shaping coping strategies (Jahoda et al., 2017). Furthermore, it is acknowledged that for people to be able to engage with psychological therapy, they need to have a sense of safety and stability in their everyday environments (Ford et al., 2009).

The provision of psychological therapy to individuals with intellectual disabilities therefore requires specialist knowledge and skills. To develop this knowledge base, training and support is necessary to build clinicians' confidence (Mason, 2007). However, adequate training for working therapeutically with people with intellectual disabilities is often lacking, posing a barrier to delivering effective psychological therapies with people with intellectual disabilities (Man et al., 2016; Royal College of Psychiatry, 2004). The disparity between training need and provision has also been raised specifically within trauma-focused work. In a recent study by Truesdale et al. (2019), healthcare professionals (including Clinical Psychologists, Psychiatrists, Nurses, and Social Workers) identified a need for further support in developing knowledge and understanding of PTSD presentation in persons with

intellectual disabilities. Furthermore, in a study exploring the adoption of trauma-informed care (TIC) in intellectual disability services, researchers observed that knowledge about the impact of trauma and formal staff training were lacking (Rich et al., 2021). Participants highlighted a need for support at an organisational level in facilitating time and access to training. This suggests that despite the need for specialist knowledge and skills, professionals often do not feel adequately supported within their organisations to achieve an adequate level of expertise.

The Therapist's Experiences of Trauma Therapy for Individuals with Intellectual Disabilities

Another key consideration in trauma-focused work is the impact on the therapist. Research has found that therapists who work with trauma survivors are at increased risk of experiencing work-related distress. Chronic exposure to graphic descriptions of distressing events and witnessing clients' distress, can cause significant distress for the therapist and enduring cognitive, emotional, behavioural, and spiritual changes (Pearlman & Mac Ian, 1995). Cognitively, therapists have reported changes in the way they view the self, others, and the world (Sodeke-Gregson et al., 2013). Emotionally, therapists can often become emotionally numb as a reaction to intense feelings triggered by trauma stories (Hesse, 2002). Behaviourally, research has reported distancing from loved ones and a lack of intimacy due to working with traumatised clients (Hesse, 2002). These changes can be understood as forms of work-related distress, including therapist burnout, compassion fatigue, and in some cases vicarious trauma, which can have a significant impact on the therapist's wellbeing and life (Newell & MacNeil, 2010; Pearlman & Mac Ian, 1995).

Research in the area of work-related distress has identified a variety of strategies that clinicians use to reduce severity of symptoms. A summary of these findings can be found in Bober and Regehr's (2006) paper. Both qualitative and quantitative research has highlighted the value of clinical supervision in supporting therapists to make sense of, and process, clients' trauma (Pearlman & Saakvitne, 1995; Rasmussen, 2005; Sexton, 1999). For some therapists, personal therapy has been valuable in managing the symptoms of vicarious trauma, particularly when personal experiences are triggered (Hesse, 2002; Sexton 1999). Therapists have also valued training to increase feelings of efficacy in completing traumafocused work and having some sense of power over the distressing experience (Pearlman & Saakvitne, 1995; Truesdale et al., 2019). Alongside formal assistance, informal peer support is also highlighted as key to reducing isolation for the therapist and assisting processing (Iliffe & Steed, 2000; Jordan, 2010). Therapists have also reported valuing ongoing self-care, including physical exercise and engaging in enjoyable hobbies (Iliffe & Steed, 2000; Jordan, 2010; Lewis & King, 2019). Finally, on an organisational level, reducing the number of trauma cases on a clinician's caseload has been advised (Hesse, 2002; Pearlman & Saakvitne, 1995; Quinn, Ji, & Nackerud, 2019).

A recent increase in individuals with intellectual disabilities accessing trauma therapy (Byrne, 2022) places new demands on therapists working within this specialty. Working with people with intellectual disabilities can evoke particularly strong emotions and reactions in therapists (Jones & Donati, 2009). This is understood to be a reaction to the vulnerability of this population, making it more challenging for the therapist to hear the distressing experiences the client presents with (Bungener & McCormack, 1994; Hodges, 2003). This places additional strain on the therapist's resources, which can impact the therapeutic relationship. To cope with personal reactions to clients' stories, therapists often develop ways of protecting themselves. This can include disengagement within sessions, with the therapist

becoming tired and unable to remain alert (Jones & Donati, 2009). Alternatively, the therapist may fulfil urges to become a surrogate parent and protect the client (Caine & Hatton, 1998). Overall, there is an awareness that providing trauma-focused therapies for individuals with intellectual disabilities will place additional strain on therapists working with this population. However, currently there is a lack of exploration into this topic.

Focus of the current study

The past decade has seen a much-needed advancement in the availability of evidence-based trauma-focused therapies for individuals with intellectual disabilities. The delivery of such models is acknowledged to be a complex and demanding process due to ongoing challenges in the work, including poorly understood trauma symptoms, a need for bespoke adaptations, and a strong emotional impact of hearing trauma stories from a vulnerable population. However, little is known about the experience of this work in practice. The current study therefore aims to explore the lived experiences of Clinical Psychologists delivering trauma-focused therapies with individuals with intellectual disabilities.

Method

Design

To address the research question, a qualitative interview design was adopted, using Interpretative Phenomenological Analysis (IPA). Semi-structured interviews were conducted with six Clinical Psychologists, to explore their experiences and sense-making of traumafocused therapies with individuals with intellectual disabilities.

Procedure

Ethical Approval

The current study formed a sub-study of a larger national trial: 'Eye movement desensitisation and reprocessing for symptoms of post-traumatic stress disorder in adults with intellectual disabilities' (Trauma-AID). Sponsorship for the trial and sub-study was received from Birmingham Community Healthcare Trust. Ethical approval for the study was obtained as an amendment to pre-existing ethical approval under the Trauma-AID trial (Appendices 1 & 2). Amendments were sought to include the author as a researcher and the University of Birmingham as a data storage site.

Recruitment

Participants were recruited using a convenience sampling method. The current study forms part of a larger NIHR-funded research project, the Trauma-AID trial. For the purposes of this trial, Clinical Psychologists received training in adapted EMDR for individuals with

intellectual disabilities. Following training, Psychologists engaged in therapeutic work with clients with intellectual disabilities and trauma presentations.

All Psychologists involved in the Trauma-AID trial (N=40) were approached for participation via secure NHS email. Potential participants were provided information about the current study within a Consent to Contact form (Appendix 3). Those who consented to contact were provided a Participant Information Sheet (Appendix 4) and a Consent Form (Appendix 5). Participants were given two weeks to decide whether they would like to participate. Those who wished to participate completed and returned the Consent form and an interview was arranged. At this point participants also received a demographic questionnaire (Appendix 6) to complete and return prior to the interview. Inclusion and exclusion criteria for participants can be found below in Tables 8 and 9.

A sample of six Clinical Psychologists were recruited. The recommended sample size for doctoral IPA research is 4-10 (Smith et al., 2009). Recruitment stopped at six participants due to time limitations caused by the Covid-19 pandemic and saturation in interview data. In coding interviews, the researcher found that no additional themes were identified, indicating saturation (Saunders, 2018).

 Table 8

 Inclusion criteria for participants

Inclusion Criteria	Rationale	
Qualified Clinical Psychologists.	Clinical Psychologists are key facilitators of	
	therapeutic trauma work. The sample was	
	restricted to Clinical Psychologists to	
	increase the homogeneity of participants, in	
	line with an IPA approach (Smith, 2012).	

Completed the Trauma-AID adapted-EMDR training.

To increase the homogeneity of participants, in line with an IPA approach (Smith, 2012).

Delivered a minimum of 5 sessions of trauma-focused therapy with individuals with intellectual disabilities.

The aim of the study was to explore the experiences of Clinical Psychologists delivering trauma-focused therapy with individuals with intellectual disabilities. To ensure that participants had sufficient experience to reflect on, a minimum of 5 sessions was required.

 Table 9

 Exclusion criteria for participants

Exclusion Criteria

Qualified Clinical Psychologists who have completed the Trauma-AID trial's adapted EMDR training, but have not yet engaged in trauma work with an individual with intellectual disabilities amounting to 5 sessions.

Rationale

As an exploratory study, a minimum of five sessions was required to ensure that participants had sufficient experience to reflect on.

Other therapeutic professions including
Counselling Psychologists, CognitiveBehavioural Therapists and Nurse
Therapists.

To increase the homogeneity of participants, in line with an IPA approach (Smith, 2012).

Interview Process

Semi-structured interviews were conducted by the author between December 2021 and February 2022. Interviews were conducted and recorded via Zoom video platform. Duration of interviews was between 42 minutes and 61 minutes (mean=52 minutes).

An interview topic guide (Appendix 7) was used to guide the interview process. Questions were, however, flexible, adjusting to the content brought by participants. The interview guide explored participants' experiences generally, with additional guidance towards key areas of interest: therapeutic adaptations, impact of therapy on clients, key features of therapy, and personal impact of delivering trauma-focused therapy with individuals with intellectual disabilities. The guide was developed by the author, based on the literature relevant to trauma-focused therapy and psychotherapeutic practice with individuals with intellectual disabilities.

Ethical Considerations

Right to Withdraw

Participants were able to withdraw from the study any time before and during the interview. They were not required to provide a reason for withdrawal and withdrawal from the study had no consequences for participants. There were, however, limitations to withdrawal after the interview. Participants were given a two-week time frame to withdraw post-interview after which, participant data were entered into the IPA analysis and could not be extracted. Details of the withdrawal process were documented in both the Participant Information Sheet and the Consent Form. Participants were also reminded of their right to withdraw before the interview and at the end of the interview.

Anonymisation

Participants' data were pseudo-anonymised. Upon entering the study, participants were allocated a pseudonym. Audio interview data were transcribed by the author within two weeks of the interview. Upon transcription, interview data were destroyed. Transcripts were stored using the pseudonym only. Any quotes from interview transcripts have identifiable details removed.

Risks

Participation in the study carried a potential risk of distress. There was a possibility that participants may become distressed in discussing their experiences of trauma work and its personal impact. The risk of distress was, however, low as participants were qualified and supervised mental health professionals. Prior to agreeing to participate in the study, participants were provided with information about the interviews and interview topics. A two-week consideration period was provided to allow participants time to decide whether they felt able to discuss potentially distressing topics.

Disclosure of Concerning Information

Protocols were in place for the potential disclosure of concerning information. Issues of concern included safeguarding, fitness to practice and unsafe practice. These would have been reported by the author to the participants' local supervisor under the Trauma-AID trial. No concerning information was reported.

Information Storage

Upon entry to the study, participants were allocated a pseudonym. Interviews were recorded and stored on a secure database at the University of Birmingham, only accessible to researchers involved in the study. Research data were stored using pseudonym only. Research

data will be stored for 10 years following the completion of the study, in line with University of Birmingham policies.

Personal identifiable information, including consent forms, names and contact details, were stored with the corresponding pseudonym on a secure database at the University of Birmingham. Only researchers involved in the study were able to access the database.

Participants

Six participants took part in the study. Participants were all female and had been qualified in Clinical Psychology for an average of 16 years (3-29) and had been working with individuals with intellectual disabilities for an average of 20 years (4-34). On average, participants had been delivering trauma-focused therapy with individuals with intellectual disabilities for 9 years (2-20) and spent an average of 2 hours per week (0-5) delivering trauma-focused therapy. Participants' pseudonyms can be found in table 10 below.

Table 10Participant pseudonyms

Participant number	Participant pseudonym
1	Rachel
2	Laura
3	Charlotte
4	Parveen
5	Helen

6 Elizabeth

Data Analysis

Interpretative Phenomenological Analysis

The current research attempts to explore Clinical Psychologists' experiences of delivering trauma-focused therapy with individuals with intellectual disabilities. Interpretative Phenomenological Analysis (IPA) was selected as a suitable approach as the aim of IPA is to explore how participants make sense of their personal experiences (Eatough & Smith, 2008). It focuses on the complexities of an individual's personal perception of an event, as opposed to attempting to produce an objective, absolute statement of an event (Smith, 2012). Within this approach, a double hermeneutic position is adopted, recognising that the researcher takes an active role in the process. Therefore, the approach follows the researcher's attempts to make sense of the participants attempt to make sense of their own world.

Details of the IPA procedure are presented in Table 11. Examples of the process can be found in appendices 8-11.

Table 11Overview of the steps of IPA data analysis proposed by Smith et al. (2009)

Step	Step name	Details
number		
1	Reading and re-reading	Transcripts were read and re-read by the

		author to familiarise with participant's
		accounts.
2	Initial noting	A close analysis of transcript text was
		completed. Initial notes were made,
		commenting on content, language, and
		concepts. Initial reflections by the author
		were also recorded.
3	Developing emergent themes	Initial notes were reviewed to identify
		emergent themes.
4	Searching for connections	Emergent themes were reviewed to identify
	across emergent themes	connections. A thematic structure was
		developed detailing superordinate and
		subordinate themes.
5	Looking for patterns across	Superordinate themes were reviewed across
	transcripts	transcripts. Similarities and differences were
		observed to create superordinate and
		subordinate themes.

Ensuring validity

The data analysis was completed by a single author, thus leaving it vulnerable to bias and subjectivity. To enhance the validity and credibility of the analysis, a process of triangulation was used. The coding of transcripts, development of themes, and construction of an overall thematic structure was discussed in supervision and in IPA support workshops with fellow colleagues conducting IPA analysis. This process enabled alternative perspectives on participants' accounts and ensured that themes were grounded in the research data.

Reflective statement

The author adopts a critical realist epistemological stance. This perspective assumes that a reality exists independent from human perceptions. However, this reality cannot be known with certainty, as our world is mediated by the language and ideas used to describe the world (Pilgrim, 2020).

Throughout the research process, awareness of the author's personal positioning was facilitated by a reflective diary. The author's initial thoughts and reflections on the research process, content of interviews and data analysis were recorded in the reflective diary. This, alongside the use of triangulation, facilitated reflexivity and ensured that themes were grounded in research data.

The author gave consideration to their positioning in relation to the research and how this could shape the research process. While the author has not delivered trauma-focused therapies with individuals with intellectual disabilities, they have experience working within the intellectual disability population, prompting interest in the research topic. The author is also interested in a systemic perspective, considering the impact of an individual's context on their experiences.

Results

Analysis of the interviews revealed a breadth of information regarding the application of trauma-focused therapies with individuals with intellectual disabilities. This included information about practical adaptations and processes of trauma therapy. However, exploring these is beyond the scope of the current study. Results therefore focus on the lived experiences of Psychologists delivering this work.

Themes Summary

Four superordinate themes were identified through the analysis: 'Psychologists' confidence', 'Systemic challenges', 'Managing the emotional impact', and 'Accessible support'. Within these superordinate themes, 12 subordinate themes were identified. An overview of themes can be found in Table 12. Each theme is described in detail below, with example participant quotes.

Table 12Overview of superordinate themes and subordinate themes identified through analysis

Superordinate theme	Subordinate theme	Participants
Psychologists' confidence	Lack of confidence	1, 2, 4
	Fear of worsening distress	1, 3, 4
	Exciting new treatments	1, 3, 4, 5
Systemic challenges	Social issues	2, 3, 5, 6
	Poor networks of support	2, 5, 6

	Impact on therapist	2, 4, 5, 6
Managing the emotional	Desensitisation	2, 5, 6
impact	Balancing emotional	1, 2, 3, 6
	involvement with self-	
	preservation	
Accessible support	Sharing the load	1, 2, 3, 4, 6
	Containment of anxieties	1, 2, 3, 4
	Changing support over	1, 3, 5
	career	
	Organisational barriers to	1, 2, 3, 4, 5
	support	

Theme 1: Psychologists' confidence

This superordinate theme reflects participants' concerns about providing effective trauma-focused therapies with individuals with intellectual disabilities. Participants drew attention to the high levels of trauma in the intellectual disability population and discussed concerns about being able to adequately provide trauma therapies. Within this theme, a lack of therapist confidence and worries about worsening distress emerged, alongside excitement over the benefits of new evidence-based treatments, relieving some of these anxieties.

Lack of confidence

Participants discussed a lack of confidence when it came to working with trauma. There was acknowledgement of the need for trauma therapies in the intellectual disability population, given the high levels of trauma exposure. For example, Rachel noted: "Every referral we get, at some point there's an element of trauma involved" (Line 9). However,

participants felt that they were limited in what they could offer these clients. A sense of feeling under-skilled and uncertain within the trauma therapy process emerged. This lack of confidence remained present in the face of developing knowledge and skills across the clinician's career, as illustrated by Rachel:

"At the beginning of my clinical work, I think I felt very under-skilled when it came to trauma...I've gradually increased my knowledge of different models and approaches which has helped. But I still felt that I didn't have that much to offer service users."

(Rachel, line 11)

A lack of confidence in working with trauma was also highlighted in the application of trauma therapy models such as EMDR. There were reflections on the newness of applying these models and the uncertainty that this evokes for the Psychologist e.g.:

"I'm not sufficiently competent in EMDR yet and I feel quite unconfident about putting it all together. And feeling confident that people will be able to tell me when their distress is reducing, and I'll know when their distress is reducing."

(Laura, line 211)

Therefore, while participants were actively engaging in trauma-focused therapies, there was an overarching sense of uncertainty about their competence in providing this.

Fear of worsening distress

Alongside ongoing concerns about being able to provide appropriate trauma therapy, for half of the participants, there were also concerns about causing further trauma. Rachel, Charlotte and Parveen discussed their experiences of working with a vulnerable population and reflected on the pressure that this can add to the therapeutic relationship and process. With pre-existing high levels of trauma, there were concerns about further contributing to this within the therapeutic process by drawing clients' focus to trauma experiences. This is illustrated by Parveen:

"People with learning disabilities, they've had three times the amount of trauma compared to someone without a learning disability. So there feels like such a huge responsibility in kind of giving them a good experience...I think it's always at the back of my mind, like am I going to re-traumatise them? Am I going to make things worse for them?"

(Parveen, line 524)

Across all participants there was a lack of experience of clients being re-traumatised by trauma-focused therapy. Despite this, it remained a conscious worry for half of the participants.

Exciting new treatment

In the face of high levels of trauma, the emergence of evidence-based trauma therapies within the intellectual disability population was discussed as an exciting development. Participants noted that in recent years evidence-based models and training had

improved, aligning more closely to models available in the general population. Participants spoke positively about the efficacy of these trauma therapy models, such as EMDR, and noted feelings of enthusiasm and excitement about what they could now offer their clients. For example:

"With the EMDR at the moment we're finding some really exciting results and we're all reenthused with our jobs and our careers, which you know we're all a bit burnt out at the moment. So it's actually sort of really inspiring us all to be really positive about what we can achieve with people in the context we're currently in."

(Charlotte, line 53)

As well as excitement about what can be offered to clients through structured models, participants also valued the containment that a structured model provided them with. Reflecting on the high levels of uncertainty in engaging in trauma therapy, as exemplified by Parveen's recurring comment "Oh I don't know what I'm doing" (lines 32, 97, 217, & 505), having a structured model increased participants' confidence and helped them manage the anxiety that working with trauma evoked. Rachel summarises this:

"Having an overriding model or framework and a good formulation gives you that confidence that you've got a bit of direction to what you're doing. And if you've run up against a few barriers, don't panic because there's an overriding plan to it, kind of thing."

(Rachel, line 291)

Having a structured therapeutic model therefore provided participants with a sense of hope, usefulness, and containment in the face of high levels of vicarious trauma and the anxiety this evokes.

Theme 2: Systemic challenges

This theme details the systemic challenges that participants felt they faced in delivering trauma-focused therapy and the emotional impact of this. Participants highlighted the high levels of social problems for the intellectual disability population and reflected on the poor networks of support available to them. Within this theme, participants considered the personal impact of these challenges.

Social issues

In discussing trauma-focused therapy, the majority of participants raised the high prevalence of social issues as a barrier to the work. They highlighted that individuals with intellectual disabilities often face high levels of social problems with regard to living environments, finances, and a lack of social support. Social issues were perceived as a barrier to trauma therapy work in several ways. For some participants, social issues were noted as a distraction for the client, limiting their ability to effectively engage in trauma therapy as described by Laura:

"And so they'll come into a session and there's often more pressing stuff going on meaning that it's getting in the way of the trauma work. And this, this is a big thing actually. I think

that that happens a lot. That people's current lives are so difficult that they're focusing on surviving in the here-and-now."

(Laura, line 172)

Other participants raised concerns that even if people were able to engage in trauma therapy successfully, having an unstable or unsafe social environment was not conducive to supporting the work outside of sessions. For example:

"So I think it can be really difficult because in terms of doing the trauma work in a context where somebody isn't safe and doesn't feel safe, it's just not, like you can't do it. It's not right to do and it's not going to work."

(Elizabeth, line 167)

Social issues were therefore deemed as a key barrier to effective trauma-focused therapy within this population.

Poor networks of support

Despite the high levels of social issues faced by people with intellectual disabilities, participants felt that their networks of support were poor. Participants highlighted the value of support networks such as social care services and residential settings for people with intellectual disabilities. However, there was a consensus that these networks were diminishing as a result of austerity. Participants described difficulties accessing appropriate

social care, limited community activities for clients, and poor knowledge and training in residential settings. Consequently, Psychologists felt that clients were not appropriately supported and that they were left 'holding' the client. This is described by Helen:

"The networks around people with learning disabilities that were there when I started have just gone...as a result of austerity...When I first started, every client on my caseload had an allocated social worker...and now I phone up social services, if I can get through or a response...and it's like well let us, let us know when they hit crisis then do a referral, and then they're on a waiting list."

(Helen, line 390)

Awareness of the poor networks of support for people with intellectual disabilities prompted participants to consider how their trauma-focused therapy fits within this context. Participants questioned the value of the individual trauma work in the absence of adequate social support e.g.:

"It's no good me supporting her to talk about her feelings and experiences if there's nobody to listen to that...we work with lots of people who are just in completely inadequate social care environments...and often people just aren't getting, you know, aren't getting the support, the emotional support they need."

(Elizabeth, line 204)

The absence of important support systems was therefore noted as a key systemic barrier to individual trauma-focused therapy.

Impact on the therapist

Reflecting on systemic challenges for trauma-focused therapy, participants spoke about the impact that this has on them. Participants described being highly aware of the impact of systemic issues on their clients' wellbeing but feeling unable to address these due to poor funding and limited time resource. This led to feelings of helplessness and frustration:

"I came back from somebody's house the other day and this person was taking a real dip and

I felt absolutely useless. And I came home and I could have sobbed for what I'm not able to

do for this person."

(Helen, line 386)

For some, this was noted as the most emotionally challenging part of the work:

"I think it's more the frustrations, you know. Like I say about not being able to change.

Knowing where you need to be able to change and not being able to change it. So, like the support people have for example, and social care interface...it's the frustrations around the support around people sometimes rather than the distress about their distress and their

story."

(Elizabeth, line 506)

Systemic challenges therefore not only impacted the wellbeing of clients, but also the wellbeing of the Psychologists working with clients.

Theme 3: Managing the emotional impact

This superordinate theme describes participants' reflections on the emotional impact of engaging in trauma-focused therapy. There was a consensus across all participants that hearing clients' distressing stories had an emotional impact, triggering feelings of sadness. However, within this theme, participants noted a change in their emotional reactions over time and discussed how they manage emotional involvement with their clients.

Desensitisation

Across participants there was an acknowledgement of high exposure to trauma stories within the Psychologist's role. While participants spoke about finding trauma stories upsetting, half of the participants noted a cumulative effect of high exposure to trauma stories. Participants described becoming less upset by trauma stories. They understood this as a product of an increased awareness of the experiences people face, leading them to become habituated:

"I've been doing this for a long time so [laughs]...I think you get used, if that's the right word, to hearing some awful stories...Unfortunately a lot of people with learning disabilities have had some kind of horrendous experience. Umm [pause]...so I think probably the impact it has on me directly now is different to when I was starting out."

(Elizabeth, line 373)

For some participants, such as Laura and Helen, this desensitisation extended beyond the therapeutic relationship. Experiences of having reduced emotional reactions to news stories, TV programmes, and the difficult experiences of loved ones were described. This is discussed by Laura:

"I think [pause]. I think it's probably [pause] desensitised me a little bit, I think, to the world. I think probably because there's so much, you hear so many horrible stories...And I think it's probably desensitised me to some extent."

(Laura, line 582)

An overall reduction in emotional impact was noted, understood by participants as a normal process of becoming increasingly aware and accustomed to the bad things that can happen to people.

Balancing emotional involvement with self-preservation

As aforementioned, participants identified that delivering trauma-focused therapy with individuals with intellectual disabilities often triggered difficult emotions for the Psychologist. Across participants, there were differing views about managing this emotional response. For some, including Charlotte and Parveen, feeling and maintaining emotional

involvement in trauma-therapy work was regarded as important and fundamental. It was viewed as a way of staying connected to clients and validating their distress:

"With regards to sort of the emotional involvement, I mean, I've stayed emotionally involved with my clients because I believe if you switch off your emotions, you're not going to help anybody. But I contain them. I contain them in sessions."

(Charlotte, line 536)

However, other participants discussed a need to reduce their emotional responses. Participants, including Rachel and Laura, described cognitively detaching from clients' experiences, limiting the time and thought given to the client's trauma. This was understood by participants as a way of protecting themselves from emotional distress and ensuring that they could continue with the work. For example:

"If I'm honest...I've learned over the years to put up barriers so that it doesn't affect me. So, for example, I don't let myself, I don't allow myself to dwell too much on what the experience must have been like for the client."

(Rachel, line 359)

While this was described by participants as a form of self-preservation, the Psychologists who took this approach shared some reservations about its appropriateness:

"Sometimes I wonder or worry whether you can become too hardened to people's trauma.

I'm quite good at compartmentalising and not thinking too much about what's happened to people. Sometimes I wonder whether that's a bad thing, whether it makes me cold or shut off,

I don't know."

(Rachel, line 274)

Despite differences in levels of emotional involvement with clients and their stories, across the participants who discussed this theme, there was recognition of the importance of balance:

"That you're with them in the moment with their distress. I'm not saying you're going to fall apart with them and, you know, sob in the session, but show that, like of gosh that is really horrific and I'm really sorry you had to go through that."

(Parveen, line 719)

As discussed, balancing emotional involvement with self-preservation was therefore an ongoing journey for most participants.

Theme 4: Accessible support

This theme reflects the importance of accessible external support in participants' ability to manage the emotional experiences of engaging in trauma therapy work. External support included supervision, multidisciplinary team working, and informal peer support.

Within this theme the value of external support is discussed, including sharing the load and containment of anxieties. The accessibility of this support is also considered in the context of changing job roles and organisational pressures.

Sharing the load

Across participants there was acknowledgement of the high 'load' of trauma therapy work for Psychologists. This included the emotional load, the pressure of carrying high levels of risk, and the time-consuming nature of the work. When reflecting on the importance of having external support, all but one participant discussed the value of being able to share this 'load' with others. This included having peers and supervisors to talk through their experiences, facilitating sense making and an emotional release. The value of the accessibility of this support was discussed:

"I mean we're quite a tight psychology department. So we meet up. We set up through covid a drop in every Wednesday morning and then other meetings...So, you know, there's always somebody around to have a sort of chat to and, you know, that sort of helps."

(Elizabeth, line 470)

Sharing the load with others also extended to joint decision making and the support of the wider multidisciplinary team. Participants discussed the pressure and stress of working with trauma, including managing risk and engaging adequate support for clients. Participants highlighted the value of sharing this responsibility and not feeling like a lone worker:

"Umm, things that help are having support from the wider multidisciplinary team so that you feel that you're not, you're not the sole clinician. That's really helpful I think...Previously there was no one in the MDT who wanted to help and all of the responsibility was placed on you."

(Rachel, line 425)

Being part of a wider network, including psychology teams, multidisciplinary teams, and peer support groups provided ways of sharing emotional and practical demands, sustaining Psychologists in their work.

Containment of anxieties

As previously discussed, participants identified a lack of confidence in delivering trauma-focused therapy with individuals with intellectual disabilities, and anxieties about worsening distress. External support, particularly supervision, was identified by the majority of participants as containing these anxieties. Participants reported that supervision helped reduce their anxieties about delivering relatively new interventions by providing reassurance and practical guidance. This is described by Parveen:

"The supervision is also really helpful. I mean the supervisor is just absolutely fantastic. I think everyone, everyone agrees that she's a real saving grace. And so containing. You're like oh I don't know what I'm doing. She'll be like don't worry it's fine, but just just try these things out, come back and see how it goes. Which is really helpful and containing."

(Parveen, line 93)

External support, such as peer support, also offered Psychologists opportunities for valued sense making and containment for when clients' distress increased during the therapy process as described by Rachel:

"So the things that help would be speaking to colleagues. Someone going through the incident with you, working out what you, if anything, what you could have done differently.

Someone saying to you, actually it wasn't your fault kind of thing."

(Rachel, line 419)

Such containment allowed Psychologists to continue to deliver trauma-focused therapies despite high levels of anxiety and uncertainty.

Changing support over career

While external support was identified as central to managing the pressures of delivering trauma-focused therapy, half of participants noted that their access to such support had diminished over their career. Participants reflected on their progression to higher bandings and discussed how changing role expectations and time resources altered the level of support received. This is exemplified in the following quotes:

"In the early stages of your career there's more time and supervision to explore things like this...I think there's this view that if there's anything in your closet then you should have sorted it by the time you're like 4-5 years into your career."

(Rachel, line 493)

"I think once you reach a certain perceived level of banding in the NHS, particularly if you're a psychologist...I mean my Assistants get an hour of supervision a week and then management supervision, Any my qualified staff can book for supervision. I get, as I say, it's like that's it now, there's no one. There's just this vast void of support and that's it."

(Helen, line 417)

As Psychologists progressed in their career, they felt that they did not have the time to access support and also that the organisation no longer afforded them this support due to changed role expectations.

Organisational barriers to support

Alongside changing access to support due to career progression, all but one participant raised the role of the organisation in facilitating accessible external support for Psychologists. Participants discussed challenges in service resources, impacting the availability of support and the Psychologist's ability to access this. Organisational challenges such as high staff turnover and limited service resource were identified, alongside resource pressures on the Psychologist limiting the use they can make of support offers. This is discussed in detail by Helen:

"When I first started, each service had a service manager. We now have one service manager per four services. So he is now responsible for managing 80 staff. Now I can't be angry at him for not having time to fit me in...and before he came in post there was a manager who stayed for a year, she went. Prior to her there was a manager who stayed for 18 months and then she went. So, there's a complete lack of consistency and support."

(Helen, line 426)

"It's like they're saying we've given you all this stuff [wellbeing resources] but it's like, you can give us whatever you like but if we don't have the time at the moment to use the bathroom or have a lunchbreak, how do you think we're going to do the other stuff?"

(Helen, line 549)

Contrastingly, other participants noted organisational facilitators to accessing support.

This included having a limited caseload to allow time for accessing support and having ownership over personal workload. An organisational system that allows Psychologists to manage the pressures associated with trauma therapy is described by Parveen:

"There's not a lot of pressure on the work you take on. Like you can manage your own workload and can be trusted to get on with it...if you need to break after a session that's kind of respected if that's the way you need to look after yourself. Because you're not going to be very good to the team if you burn out."

(Parveen, line 743)

The organisation was therefore viewed as playing a key role in how accessible valued support is to Psychologists.

Discussion

Summary of findings

This study aimed to explore the experiences of Clinical Psychologists delivering trauma-focused therapy to individuals with intellectual disabilities. Interpretative Phenomenological Analysis (IPA) was used to explore participants' lived experiences, identifying four superordinate themes: 'Therapists' confidence', 'Systemic challenges', 'Managing the emotional impact', and 'Accessible support'. Within these themes 12 subordinate themes detailed the experiences of participants.

Connection to existing research and theory

The superordinate themes are considered in the context of existing research and theory, noting similarities, differences, and the emergence of new information and understanding.

Therapists' confidence

The present study found that Psychologists held concerns about providing effective trauma-focused therapy for individuals with intellectual disabilities. Participants expressed a lack of confidence in being able to adequately support these individuals. While Psychologists' confidence in delivering trauma-focused therapies has not explicitly been explored in previous research, these findings are somewhat unsurprising in the context of research which has highlighted a need for specialist knowledge and skills in working therapeutically with people with intellectual disabilities. This includes making adaptations to cater for differing intellectual and communication abilities (e.g., Jones & Donati, 2009; Whitehouse et al., 2006). In the context of trauma-focused therapy, Psychologists are also

required to be mindful of differences in how trauma is experienced, understood, and expressed in individuals with intellectual disabilities (Bradley et al., 2012). Despite the need for specialist knowledge and considerations, literature has highlighted a lack of training and guidance in working with trauma within this population (NICE, 2016; Royal College of Psychiatrists, 2004). Therefore, it is unsurprising that Psychologists within the current study reported limited confidence in delivering trauma-focused therapies.

Participants also raised concerns about worsening clients' trauma symptoms. Again, as yet, no studies have explored therapists' worries associated with delivering trauma-focused therapies with individuals with intellectual disabilities. However, the concerns raised in this study align with previous research regarding power dynamics in therapy. Research has highlighted that people with intellectual disabilities are often in less powerful positions in their relationships, limiting their confidence and expressiveness in therapeutic relationships (e.g., Jahoda et al., 2007; O'Malley et al., 2019). It is understandable that in the context of trauma therapy, Psychologists may therefore feel increased anxiety about managing the therapeutic relationship and the client's wellbeing, suggesting that trauma therapy presents an additional challenge to managing power dynamics. While no participants had experienced clients being re-traumatised by therapy, the anxiety remained and further research may be required to better understand the impact of this on the therapeutic process.

In discussing confidence and anxieties, Psychologists in the current study highlighted the importance of having an evidence-based trauma-focused therapy approach. Models such as EMDR were valued for providing a sense of structure, which reduced Psychologists' anxieties. As aforementioned, despite the high levels of trauma in the intellectual disability population, guidelines for therapy are limited (NICE,2016). It is therefore unsurprising that having a structured approach was perceived as a new, exciting, and containing experience.

The experiences of participants highlighted in this superordinate theme have resonance with Mason's (2022) republished model of safe uncertainty. Mason's model describes four quadrants people move between when facing a problem: unsafe uncertainty, unsafe certainty, safe certainty, and safe uncertainty. Within this superordinate theme, Psychologists describe anxieties akin to experiencing unsafe uncertainty. While Psychologists recognise that the high prevalence of trauma is a problem, they feel that they have no solution to offer. However, as evidence-based models emerge Psychologists describe moving towards a sense of unsafe certainty, whereby the model highlights a solution to the problem, but Psychologists struggle to have confidence in applying it. In line with Mason's model, the aim should then be towards safe uncertainty rather than certainty. Within this zone, therapeutic models create a sense of safety, while uncertainty maintains exploration and creativity. As evidence-based models are newly emerging within the specialty of intellectual disabilities (Byrne, 2022), Psychologists may not have had the opportunity to move towards safe uncertainty. Psychologist may be encouraged to move towards this zone through activities such as supervision, peer support, and multidisciplinary team working, all of which are highlighted as highly valued by participants of the study.

Systemic challenges

Within the current study, participants drew attention to systemic challenges in delivering trauma-focused therapy and discussed the emotional impact of this. Participants noted that their clients' often present with high levels of social issues, which impacted their engagement with trauma therapy work and its efficacy. The prevalence of social issues in the intellectual disability population is well-documented (Graham, 2005). The current findings also align with research noting the importance of clients having safe and stable environments in order to be able to meaningfully engage in psychological therapy with positive effects (Ford et al., 2009; Ramsden et al., 2016).

Participants of the current study noted that clients' social support is often inadequate and expressed grave concerns about this, highlighting the impact of austerity on social care provision. Concerns raised by participants align with recent UK health and social care research. In an online appeal called #socialcarecrisis, Mencap (2022) note reductions in the social care provided for people with intellectual disabilities, with 7 in 10 people have had their social care cut in the last 2 years. Furthermore, a thematic synthesis by Aikaterini et al. (2018) revealed that in the current climate of economic austerity, available funding to support people with intellectual disabilities is not aligned with their care needs. Participants' observations on the lack of social support are therefore well-supported by statistical data.

While previous research has drawn attention to systemic challenges in delivering psychological interventions to people with intellectual disabilities, the current study provides a new insight into the impact of these challenges on Psychologists. Participants noted feelings of frustration and helplessness in the face of social issues and their impact on their clients. Previous studies suggest that working with people with intellectual disabilities can evoke particularly strong emotions in therapists due to the vulnerability of this client group (Bungener & McCormack, 1994; Hodges, 2003; Jones & Donati, 2009). The findings of the current study add further support to this literature, drawing attention to the emotional challenges of working with a, not only vulnerable, but also poorly supported population.

Managing the emotional impact

Participants reflected on the emotional impact of engaging in trauma-focused therapy with individuals with intellectual disabilities. In line with published research, there was acknowledgement of emotional distress associated with hearing trauma stories (Craig & Sprang, 2010; Pearlman & Mac Ian, 1995). However, some participants noted a change in emotional impact over time. A process of 'desensitisation' was described in which

Psychologists became accustomed to trauma stories and their emotional impact reduced. There is a wealth of research looking at the impact of therapists' exposure to trauma stories, highlighting compassion fatigue and burnout over time (Craig & Sprang, 2010; Figley, 2002); however, what is described by participants in the current study differs from this. Compassion fatigue describes a diminished ability to empathise or feel compassion for others due to emotional and physical exhaustion (Figley, 2002). Contrastingly, in the current study participants described a higher tolerance of trauma stories as a result of being more consciously aware of what can happen to people and therefore becoming less shockable but without necessarily experiencing compassion fatigue or burnout. This aligns with the definition of desensitisation provided by the American Psychological Association dictionary (2022): a process whereby emotional responsiveness to aversive stimuli reduces due to repeated exposure. These findings therefore draw attention to a potentially additional impact of working with trauma that requires further consideration and research.

When considering the emotional impact of trauma-focused therapy, Psychologists also discussed the concept of balancing emotional involvement with self-preservation. Many reflected on the importance of staying emotionally involved, highlighting this as crucial to clients feeling heard and held. However, participants also discussed a process of detachment, limiting emotional involvement. Detachment from clients' experiences aligns with research into work-related distress, in which detachment is identified as a mechanism to prevent burnout and minimise therapist distress (Ludick & Figley, 2017; Sexton, 1999). However, what is less clear within the current research is whether this detachment represents a conscious choice by the therapist or is a manifestation of work-related distress. Research has shown that chronic exposure to populations that are vulnerable or suffering can create exhaustion in the professional, limiting their ability to attach to the client's story (Newell & MacNeil, 2010). Balancing emotional involvement in trauma-focused therapy work with self-

preservation techniques is therefore an area for further exploration, both in understanding the therapists' role in detachment and understanding how a helpful balance is achieved.

Accessible support

Within the current study participants highlighted the importance of having accessible external support to help manage the demands of delivering trauma-focused therapies. In line with previous research, participants reported that support such as clinical supervision, MDT working and peer support helped manage the emotional and practical strains of trauma-focused work through providing opportunities for sense-making, offering guidance, and reducing feelings of isolation. Interestingly, participants drew particular attention to the value of clinical supervision in containing feelings of anxiety associated with delivering a relatively new intervention. This was evident across participants regardless of their time working in intellectual disability services. These findings highlight the importance of clinical supervision across the career-span, particularly during the introduction of new models and approaches. This supports guidelines published by the British Psychological Society (BPS, 2017) advising that clinical supervision frequency be guided by factors including need and competencies required for practice.

Despite the importance of support, participants discussed a change in access to support across their careers. This was attributed to changing role expectations and time demands. According to the BPS Division of Clinical Psychology (2014), the amount of clinical supervision recommended for Psychologists changes throughout their career. While newly qualified Psychologists are recommended to receive an hour a week, senior Psychologists are recommended to receive an hour a month. The findings of the current study therefore align with what is expected in a Clinical Psychologists' career progression. However, the DCP (2014) and the BPS (2017) note that supervision frequency should be

reviewed and delivered based on context, experience, and work demands. Therefore, while a reduction in supervision may be anticipated throughout the career, these findings suggest that further consideration may need to be given to the unique demands of working with trauma and supporting Psychologists, regardless of experience, in delivering new models of therapy.

Within the current study, participants also highlight the role of the organisation in facilitating accessible support for Psychologists. For some, organisational challenges and structures, such as limited services resource and high staff turnover, inhibited access to necessary support. Research on wellbeing facilitation at work highlights similar barriers to access including time resource pressures and organisational value and promotion of these activities (Brooks et al., 2019; Health Education England, 2019). Furthermore, in a recent study exploring barriers to effective clinical supervision, Rothwell et al. (2021) identified a lack of time and space, and a lack of ongoing support from leadership as key barriers to supervision. Nonetheless, for some participants in the current study, organisational structures facilitated access to support. Organisational set-ups such as allowing Psychologists to manage their own caseload and workload allowed them to access the care they required.

Therefore, current findings add further support to the importance of organisational structures in enabling Psychologists to access the support required to deliver trauma-focused therapies.

Strengths and limitations

Findings of the current research should be viewed in the context of its strengths and limitations. To inform the evaluation of the study quality, the APA Journal Article Reporting Standards qualitative research framework was utilised (Levitt et al., 2018).

The study shows strength in the selection of a suitable inquiry approach for the research question. The IPA methodology explores, through detailed and rich analysis, how individuals make sense of their personal experiences, focusing on the intricacies and complexities of an individual's perception (Eatough & Smith, 2008). This aligns with the aim of the study and has provided interesting new insights into the lived experiences of Psychologists engaging in a relatively new form of therapy.

The study also has strength in its transparency. Descriptions and illustrations of the research process are provided by the researcher. This includes transparency in the development of analytic themes, through illustrations, and the researcher's statement of reflexivity and process of triangulation. This transparency is highlighted by Yardley (2011) as a key feature of quality qualitative research.

The current study is, however, limited by a small sample size. A small sample is common in IPA research and as noted by Hefferon and Gill-Rodriguez (2011), a detailed analysis of a small sample can provide richer data than a broader, shallow analysis of many individuals. Nonetheless, a small sample limits the generalisability of findings (Noon, 2018). It is therefore not possible to make general claims based on the findings of the current study.

Finally, the current study utilised convenience sampling, recruiting participants from a larger research trial and while it explore the experiences of delivering trauma-focused therapies in general, it is likely that participants reflected largely on their experiences of delivering EMDR. The findings of the current study may therefore not be representative of Psychologists' experiences of delivering other trauma-therapy approaches such as TF-CBT. In relation to the JARS framework, the sampling method may therefore threaten the data's ability to capture forms of diversity relevant to the research question. Nonetheless, these findings offer an interesting first insight into the area.

Implications for clinical practice

The findings highlight challenges in current clinical practices and systems that require further consideration. This includes the context in which trauma-focused therapies are delivered and organisational structures of support.

For the participants, one of the largest emotional impacts of delivering traumafocused therapy was not just hearing trauma stories, but also witnessing clients' poorly
supported social issues and being unable to address these. As aforementioned, these findings
add power to campaigns such as Mencap's #socialcarecrisis (Mencap, 2022) calling for better
social care for people with intellectual disabilities. These findings also call to question the
appropriateness of delivering trauma-focused therapies for clients in inadequate social care
environments.

Findings of the study also draw attention to the unique pressures on Psychologists delivering trauma-focused therapies to individuals with intellectual disabilities. Given the high pressures placed on Psychologists, it is concerning that within the current study participants reported organisational barriers to accessing valued support. Replicating previous research (e.g., Brooks et al., 2019; Rothwell et al., 2021), these findings highlight the importance of organisations facilitating access to support for therapists, regardless of their professional level, particularly when working with new models and challenges.

Future research

The current study provides a first insight into a previously unexplored area and several areas for further research were identified. Firstly, results highlighted the importance

for therapists of availability of evidence-based models of therapy suitable for the intellectual disability population. NICE (2016) places onus on the Psychologist delivering the intervention to make adjustments to models applied in the general population. However, the participants highly valued a manualised EMDR treatment approach and future research should therefore develop others evidence-based therapies for trauma in the intellectual disability population, such as TF-CBT.

Within the current study, attention was also drawn to the impact of social issues on trauma-focused therapy. While previous research has acknowledged that safe and stable living environments are conducive to meaningful engagement in therapy (e.g., Ford et al., 2009), less is known about the direct impact of social issues on the efficacy of trauma therapy models. Given the high prevalence of social issues in the intellectual disability population, further exploration of this would be helpful to guide clinical practice.

Finally, within the current research, participants discussed a process of desensitisation to trauma stories across their career. To better understand Psychologists' changing emotional reactions to trauma stories and the impact of this on the therapeutic process and their personal lives, further research is required. Such research is particularly relevant for Psychologists working with clients with intellectual disabilities, given the high exposure to trauma (Scotti et al., 2012).

Summary

Many of the findings of the present study support past research on the systemic challenges of delivering psychological interventions to people with intellectual disabilities, acknowledging Psychologists' emotional responses to working with trauma, and noting the importance of accessible support for Psychologists. However, the current study also provides

an interesting new insight into the unique challenges of delivering trauma-focused therapies within this population and the impact of these on Psychologists. Findings not only call attention to the emotional demands faced by Psychologists delivering relatively new models of trauma-therapy, but also highlight the challenges faced in accessing valued external support. These findings call for further consideration of the appropriateness of delivery of trauma-focused therapies for clients with inadequate social care environments and prompt the development of organisational structures of support for Psychologists. The findings also highlight areas for further research.

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LITERATURE REVIEW PRESS RELEASE

Pain across generations: The association between maternal experiences of childhood maltreatment and mother-infant bonding

A new meta-analysis from the University of Birmingham shows that experiencing maltreatment in childhood is associated with difficulties in establishing a mother-infant bond in later life.

The relationship between mother and infant has been one of interest for many years. The mother-infant bond refers to the emotional connection mothers feel towards their infants (Kinsey & Hupcey, 2013). While the majority of mother do not experience significant difficulties developing a bond with their infants, for those that do, there is an increased risk of poor outcomes for both the mother and infant (Mogi et al., 2011). It is therefore important to try and identify factors that increase the risk of poor mother-infant bonding. One factor that may place women at increased risk of poor mother-infant bonding is their own experiences of childhood maltreatment. Childhood maltreatment refers to "the abuse and neglect that occurs in children under the age of 18" (World Health Organisation, 2020). Research shows that experiences of childhood maltreatment can have significant and long-lasting impacts on survivors (Robinson & Petherick, 2019; Toth & Manly, 2019). This can include how well a person is able to develop interpersonal connections and their ability to manage the emotional challenges of relationships (Cichetti & Toth, 2016; Malinosky-Rummell & Hansen, 1993). Women's experiences of childhood maltreatment may therefore make it difficult to develop a bond with their infant. While studies have explored the association between maternal experiences of childhood maltreatment and mother-infant bonding in later life, to date no research has attempted to provide an overview of this data.

Lead researcher Georgia Stewart and colleagues at the School of Psychology, University of Birmingham conducted a meta-analysis on the association between maternal childhood maltreatment and mother-infant bonding in later life. All available research in the area was gathered through a systematic process. Ten published research papers were identified, involving a total of 2,707 participants. Researchers extracted data from each study to provide an overall level of association.

The meta-analysis revealed that there is a small but consistent association between maternal experiences of childhood maltreatment and mother-infant bonding. This indicates that higher experiences of childhood maltreatment are associated with greater difficulties with mother-infant bonding.

Given the significant impact of poor mother-infant bonding, these findings offer valuable new information about a potential risk factor to poor bonding – mothers' own experiences of abuse. However, as the association is small, lead researcher Georgia Stewart notes that: "findings offer hope to women with maltreatment histories. The small association indicates that for women who have experienced childhood maltreatment, poor mother-infant bonding is not inevitable".

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EMPIRICAL PAPER PRESS RELEASE

"I could have sobbed for what I'm not able to do for this person": Clinical Psychologists' experiences of delivering trauma-focused therapy with individuals with intellectual disabilities

Clinical Psychologists working with people with intellectual disabilities face significant challenges in delivering trauma-focused therapy and require further support, a new study from the University of Birmingham shows.

People with intellectual disabilities are at increased risk of being victims of crime and abuse (Horner-Johnson & Drum, 2006). As a result, there are high levels of psychological trauma within this population (Scotti et al., 2012). Over the past decade, there have been much-needed advancements in evidence-based trauma therapies for the intellectual disability population, to address this need (Byrne, 2022).

While trauma-focused therapies are being increasingly applied in the intellectual disability population, little is known about Psychologists' experiences of delivering this work. Lead researcher Georgia Stewart notes: "The increase in individuals with intellectual disabilities accessing trauma therapy places new demands on therapists working within this specialty". Intellectual disability research highlights that the delivery of psychological therapies for people with intellectual disabilities is a complex and challenging process, placing high demands on Psychologists (NICE, 2016). Furthermore, literature points to additional challenges that may be faced in delivering trauma-focused therapies in this population, including managing the emotional impact of hearing trauma stories from a vulnerable population (Jones & Donati, 2009). Understanding Psychologists experiences of delivering trauma-focused therapies with individuals with intellectual disabilities therefore promises to offer new and interesting insight.

Lead researcher, Georgia Stewart, and colleagues at the School of Psychology, University of Birmingham explored the experiences of six Clinical Psychologists delivering trauma-focused therapies with people with intellectual disabilities. Interviews were carried out to gain further insight into Psychologists' experiences and to identify common themes across participants.

The findings of the research highlighted a range of challenges that Psychologists face in this work and the emotional impact of these. Psychologists reported experiencing anxiety when delivering trauma-focused therapies to this vulnerable population. This was attributed to a lack of personal confidence and feeling responsible for providing positive experiences for this vulnerable client group. Having an evidence-based model to work from helped relieve some of these anxieties.

Psychologists also discussed the impact of working with clients who often had ongoing social difficulties, such as housing issues. Social issues were identified as a common barrier to trauma-therapy work and Psychologists felt that the networks of support to address these issues, such as social services, were diminishing. As a result, Psychologists felt frustrated and helpless and questioned the value of their work in the face of clients' ongoing social issues.

Psychologists acknowledged an emotional impact of engaging in trauma-focused therapy with the intellectual disability population. However, Psychologists observed that they had become less emotionally distressed by trauma stories over time. Participants understood this as a result of them becoming used to hearing trauma stories and being less shocked by peoples' experiences. There were different approaches to managing emotional involvement in trauma-therapy, with some participants becoming increasingly detached from client's experiences and others staying emotionally involved.

Finally, the Psychologists discussed the value of external support, such as clinical supervision, in helping them manage their difficult feelings. However, participants identified organisational barriers to accessing this support, including job pressures and service resources. They therefore often felt unsupported in their trauma-therapy work.

The findings of this study offer interesting new insight into the experiences of Clinical Psychologists delivering trauma-focused therapies for people with intellectual disabilities. Lead researcher Georgia Stewart says: "These results shine a light on the challenges faced by Psychologists delivering trauma-therapies and their lack of support". Such findings prompt further consideration of the application of trauma-focused therapies in the presence of unaddressed social issues. They also remind services of the importance of facilitating appropriate support for Psychologists as they support their clients.

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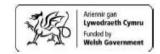
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Appendix 1: Trauma-AID Trial Health Research Authority

Approval Letter





Wales REC 3
Health and Care Research Wales Support Centre
Castlebridge 4
15-19 Cowbridge Road East
Cardiff CF11 9AB

Telephone: 029 2078 5741 E-mail: Wales.REC3@wales.nhs.uk

31 July 2019

Professor Paul Willner Emeritus Professor Swansea University c/o Swansea Trials Unit Institute of Life Science 2 Medical School, Singleton Park SA2 8PP

Dear Professor Willner

Study title: Eye movement desensitisation and reprocessing for

symptoms of post-traumatic stress disorder in adults with

intellectual disabilities

 REC reference:
 19/WA/0173

 Protocol number:
 IRAS:260514

 IRAS project ID:
 260514

Thank you for your letter of 26 June 2019, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information was considered in correspondence by a Sub-Committee of the REC at a meeting held on 26 July 2019. A list of the Sub-Committee members is attached.

Confirmation of ethical opinion

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

Conditions of the favourable opinion

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

Confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or NHS management permission (in Scotland) should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for HRA and HCRW Approval (England and Wales)/ NHS permission for research is available in the Integrated Research Application System.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

Registration of Clinical Trials

It is a condition of the REC favourable opinion that all clinical trials are registered on a publicly accessible database. For this purpose, clinical trials are defined as the first four project categories in IRAS project filter question 2. For clinical trials of investigational medicinal products (CTIMPs), other than adult phase I trials, registration is a legal requirement.

Registration should take place as early as possible and within six weeks of recruiting the first research participant at the latest. Failure to register is a breach of these approval conditions, unless a deferral has been agreed by or on behalf of the Research Ethics Committee (see here for more information on requesting a deferral: https://www.hra.nhs.uk/planning-and-improving-research/research-planning/research-registration-researchproject-identifiers/

As set out in the UK Policy Framework, research sponsors are responsible for making information about research publicly available before it starts e.g. by registering the research project on a publicly accessible register. Further guidance on registration is available at: https://www.hra.nhs.uk/planning-and-improving- research/research-planning/transparency-responsibilities/

You should notify the REC of the registration details. We will audit these as part of the annual progress reporting process

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators Notification of serious breaches of the protocol
- Progress and safety reports

 Notifying the end of the study, including early termination of the study
- Final report

The latest guidance on these topics can be found at https://www.hra.nhs.uk/approvals-amendments/managing- your-approval/.

Ethical review of research sites

NHS/HSC sites

The favourable opinion applies to all NHS/HSC sites listed in the application subject to confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or management permission (in Scotland) being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS/HSC sites
I am pleased to confirm that the favourable opinion applies to any non-NHS/HSC sites listed in the application, subject to site management permission being obtained prior to the start of the study at the site.

Approved documents

ente reviewed and approved by the Committee is as follo

Document	Version	Date
Contract/Study Agreement template [Data Monitoring Committee Charter-DRAFT]	V0.2	26 June 2019
Covering letter on headed paper [Cover Letter]	V1	26 June 2019
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Swansea Liability Certificate]	=	16 July 2018
HRA Statement of Activities	1	03 June 2019
Initial Assessment for REC	1	07 June 2019
Interview schedules or topic guides for participants [Interview Topic Guide]	V1	04 January 2019

Interview schedules or topic guides for participants [Distress Protocol for Therapists]	V1	16 June 2019
IRAS Application Form [IRAS_Form_07052019]	*	07 May 2019
IRAS Checklist XML [Checklist_02072019]	-	02 July 2019
IRAS Checklist XML [Checklist_10072019]		10 July 2019
Letter from funder [NIHR HTA Funder Award letter]		13 February 2019
Participant consent form [ICF Carer - Main Trial]	V1	26 June 2019
Participant consent form [ICF Carer - Preliminary Study]	V1	26 June 2019
Participant consent form [ICF Service User - Main Trial]	V1	26 June 2019
Participant consent form [ICF Service User - Preliminary Trial Non- referred participant]	V1	26 June 2019
Participant consent form [ICF Service User - Preliminary trial Referred participant]	V1	26 June 2019
Participant consent form [ICF Therapist]	V1	26 June 2019
Participant information sheet (PIS) [EMDR Access Information Sheet - Pictorial PIS]	V1	26 June 2019
Participant information sheet (PIS) [PIS Carer, Main trial]	V1	26 June 2019
Participant information sheet (PIS) [PIS-Carer Preliminary Study]	V1	26 June 2019
Participant information sheet (PIS) [PIS Service User-Main Trial]	V1	26 June 2019
Participant information sheet (PIS) [PIS Service User-Preliminary Study]	V1	26 June 2019
Participant information sheet (PIS) [PIS Therapist]	V1	26 June 2019
Participant information sheet (PIS) [Information Script - Main Trial]	V1	26 June 2019
Participant information sheet (PIS) [Information Script - Preliminary Trial Non-referred participant]	V1	26 June 2019
Participant information sheet (PIS) [Information Script - Preliminary study, Referred]	∨1	26 June 2019
Participant information sheet (PIS) [Information Summary - Main trial]	V1	26 June 2019
Participant information sheet (PIS) [Information Summary - Preliminary Non-referred participant]	V1	26 June 2019
Participant information sheet (PIS) [Information Summary - Preliminary Referred participant]	V1	26 June 2019
Research protocol or project proposal [Signed Protocol]	V1	26 June 2019
Summary CV for Chief Investigator (CI) [Chief Investigator CV]		03 May 2019

Statement of compliance

This Committee is recognised by the United Kingdom Ethics Committee Authority under the Medicines for Human Use (Clinical Trials) Regulations 2004, and is authorised to carry out the ethical review of clinical trials of investigational medicinal products.

The Committee is fully compliant with the Regulations as they relate to ethics committees and the conditions and principles of good clinical practice.

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/

HRA Learning

We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities- see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/

19/WA/0173 Please quote this number on all correspondence

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

Yours sincerely

Mrs Helen Williams Approvals Officer Health and Care Research Wales

Email: Wales.REC3@wales.nhs.uk

Enclosures: List of names and professions of members who were present at the meeting and those who submitted written comments "After ethical review – guidance for researchers"

Copy to: Dr Christine Burt, Birmingham Community Healthcare Trust

Lead Nation England: HRA.Approval@nhs.net

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Appendix 2: Health Research Authority Amendment

Confirmation Email

Thank you for sending the final amendment pack.

Please accept this email as approval to implement the amendment at sites that are open to recruitment. It is noted that 35 days have been passed since you notified them and sites have not raised any objections.

Please notify the sites that the you are implementing the amendment.

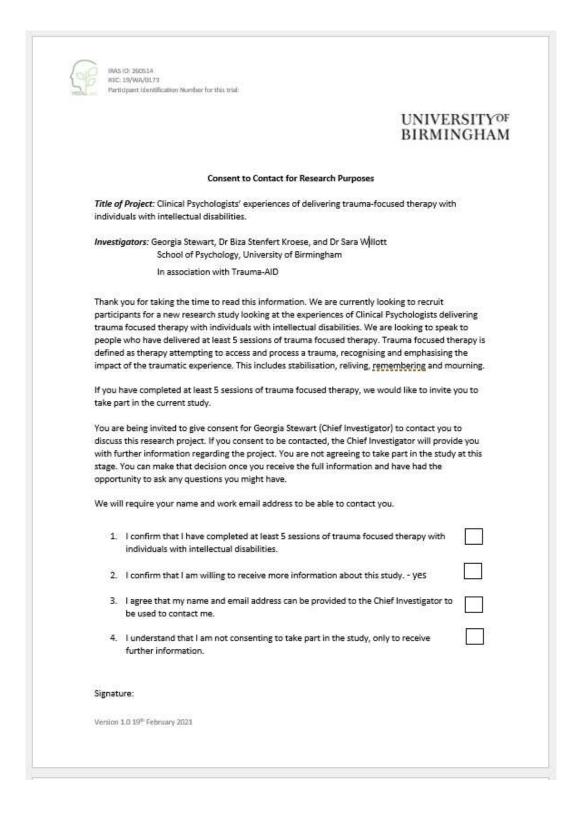
Please also let me know if you need any further information from BCHC as Sponsor.

Best wishe

Priti

Priti Parmar Research and Innovation Manager

Appendix 3: Consent to Contact Form



5	RAS ID: 260514 REC: 19/WA/0578 Partisipant Mentification Stember for this trial:
	Date:
	Local supervisor signature:
	Name:
	Email address:

Appendix 4: Participant Information Sheet



UNIVERSITY^{OF} BIRMINGHAM

Participant Information Sheet

Title of Project: Clinical Psychologists' experiences of delivering trauma-focused therapy with individuals with intellectual disabilities.

Investigators: Georgia Stewart, Dr Biza Stenfert Kroese and Dr Sara Willott.

School of Psychology, University of Birmingham
In association with Trauma-AID and Swansea University

Dear Participant,

We would like to invite you to take part in a research study looking at the experiences of Clinical Psychologists working therapeutically with individuals with intellectual disabilities who have experienced trauma. Before you decide to take part in this study, please take some time to read the following information. If anything is not clear to you, or if you would like more information about the study, please contact Georgia Stewart at georgia.stewart3@nhs.net

Study overview

The study aims to explore Clinical Psychologists' experiences of working therapeutically with individuals with intellectual disabilities who present with complex post-traumatic symptoms. It has been recognised that individuals with intellectual disabilities are more likely to experience traumatic events and/or to experience life events as traumatic (Beadle-Brown et al., 2010; Wigham, Hatton & Taylor, 2011). In line with this, psychological trauma interventions for individuals with intellectual disabilities have recently been developed. However, there is, as yet, little information about how clinicians experience this work in practice. The study will therefore explore, by means of 1:1 interviews, clinical psychologists' experiences of engaging in this work, including benefits and challenges, and the personal impacts.



Why have I been asked to take part?

You have been identified as a potential participant for the study as you are currently participating in the Trauma-AID trial, a national research trial involving the psychological treatment of trauma for adults with intellectual disabilities. As such, you have experience of trauma work with individuals with intellectual disabilities and we think you could make a valuable contribution to this study.

Do I have to take part?

Participation in the study is entirely voluntary. Although linked to the Trauma-AID trial, the current study is a separate research project. Participation in the study is therefore not expected as part of your engagement with the Trauma-AID trial. If you choose to take part, you will be asked to complete the interview in your spare time.

There will be no consequences if you decide not to participate. You will be contacted by the Chief Investigator via email two weeks after receiving this information sheet to ask if you would like to take part. At this point you will be able to opt-in or opt-out of involvement.

If you do decide to take part in the study, you will be able to withdraw at any point prior to or during the interview, without providing a reason. To do this, you should alert the Chief Investigator that you no longer wish to participate. Following the interview you will be given a two-week period to withdraw your information from the study by emailing the Chief Investigator. After this time period, the information will be entered into analysis and it may not be possible to erase, and therefore may be included in the analysis and publication of findings.

What would taking part involve?

If you agree to take part in the study, the Chief Investigator (Georgia Stewart) will make contact with you to arrange an interview session. The interview will last up to 60 minutes and will be arranged for a time, date and location at your convenience. If face-to-face interviews are not possible due to COVID-19 restrictions or location, interviews will be conducted on Zoom video platform.



Prior to the interview session, you will be sent a short questionnaire via email asking questions about your demographic information and your experience working in the research area (trauma in individuals with intellectual disabilities). You will be asked to complete this and return it via email to the Chief Investigator prior to the interview.

The interview session will consist of a number of questions about your experiences of engaging in therapeutic trauma work with individuals with intellectual disabilities. This will include questions exploring the benefits and challenges of the work, and any adaptations made within sessions. There will also be questions considering the personal impact of engaging in this work, and how you manage this. Within the interview there will be an opportunity for you to discuss any other relevant areas.

Interviews will be recorded. You are able to withdraw from the interview and recording at any point during the interview.

Benefits and risks of taking part

A benefit of taking part in the study is the opportunity to share your experiences and contribute to psychological knowledge.

There is, however, a potential risk of distress. You will be asked to think about your experiences of working with trauma, which may bring up some difficult memories and experiences. Furthermore, you will be asked to reflect on the personal impact of this work, which may evoke some difficult emotions.

Your data

If you decide to take part in this study, some personal details including your name and email address will be recorded. This information will be stored on a secure database (BEAR Datashare) at the University of Birmingham. The data will only be accessible to those involved in the study.



Prior to the interview you will be asked to complete a short questionnaire about your experiences of working with individuals with intellectual disabilities and trauma. This data will be stored on a secure database (Research Data Store) at the University of Birmingham. Following the completion of the study, the research data will be stored for 10 years on a secure databases at the University of Birmingham and Swansea University, in association with the Trauma-AID study. Data will only be accessible to those involved in the study and the data coordinator of the Trauma-AID study.

The interview session will be recorded on an encrypted and password protected device. If interviews are conducted via Zoom video platform, interviews will be recorded via Zoom. Recordings will be anonymised and stored on a secure database (Research Data Store) at the University of Birmingham. Data will be accessible only to those involved in the research. Data will be transcribed within two weeks of the interviews and the audio files will be safely disposed of. Anonymised transcriptions will be stored on a secure database (Research Data Store) at the University of Birmingham. Following the completion of the study, the research data will be stored for 10 years on a secure database at the University of Birmingham and Swansea University, in association with the Trauma-AID study. Data will only be accessibly to those involved in the study and the data coordinator of the Trauma-AID study.

Selective quotes from the interview may be used within the published report to illustrate findings. These will be anonymised, with great care taken to ensure that any quotes cannot be attributed to you or your organisation.

If you decide to opt-in to receiving a summary of the study findings, your personal information will be stored to contact you at a later date. This information will be stored on a secure database (BEAR Datashare) at the University of Birmingham. Once findings are shared, the information will be safely disposed of.

Will my data be shared outside of the study?



Your data may be shared outside of the study if we think there is an indication of risk of harm to yourself or others. In this case, the Principal and Chief Investigator will share information with your local supervisor under the Trauma-AID trial.

Who has reviewed the research project?

The research project has been reviewed by the University of Birmingham Ethics Committee.

The study also has ethical approval under the Trauma-AID NHS REC approval (19/WA/0173).

Who is funding the research project?

The current research project forms part of the Trauma-AID study. In line with this larger project, the current study is being funded by the National Institute of Health Research (NIHR).

What will happen to the results of the research project?

Results from the study will be written up as a Thesis project as part of a ClinPsyD qualification at the University of Birmingham. After interview, you will be asked if you would like to be sent a summary of the results. Results may also be published in a scientific journal at a later date. If any individual data are presented, the data will be anonymised, without any means of identifying the individuals involved.

Complaints

If you have a complaint that you wish to direct to members of the research team, in the first instance please contact:

Biza Stenfert Kroese

b.stenfert-kroese@bham.ac.uk

You also have the right to complain to the Information Commissioners Office (ICO) about complaints relating to your personal identifiable information:

0303 123 1113

www.ico.org.uk

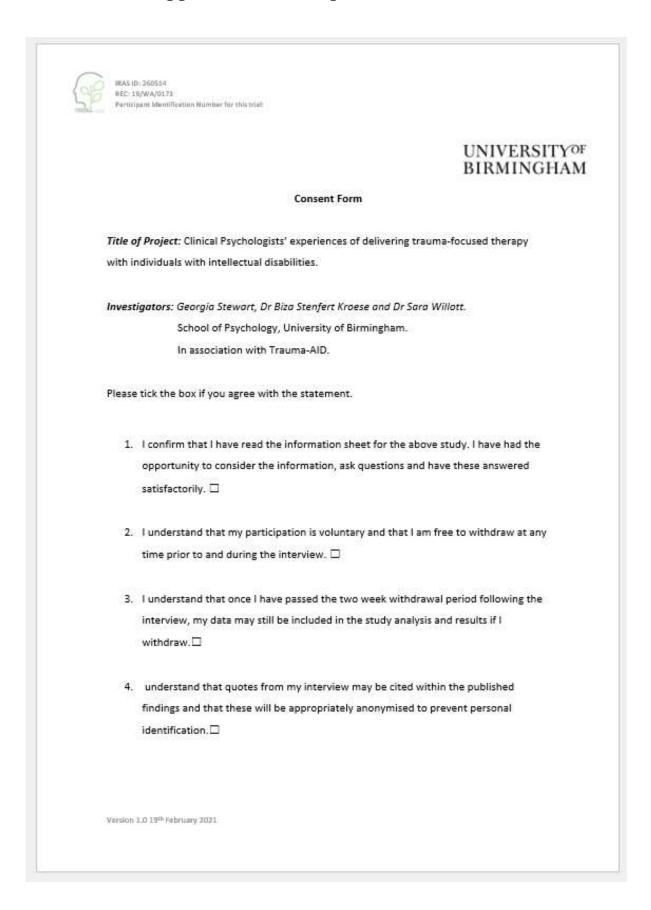


Thank you for taking the time to learn more about the study. You will be contacted by the Chief Investigator via email two weeks after receiving this information sheet. At this time, you will be given the opportunity to ask any questions about the study and you will be asked if you would like to participate. If you choose to participate, you are asked to complete and sign the consent form and return it to the Chief Investigator when contacted.

If you have require any further information about the <u>study</u> please contact: Georgia Stewart – georgia.stewart3@nhs.net

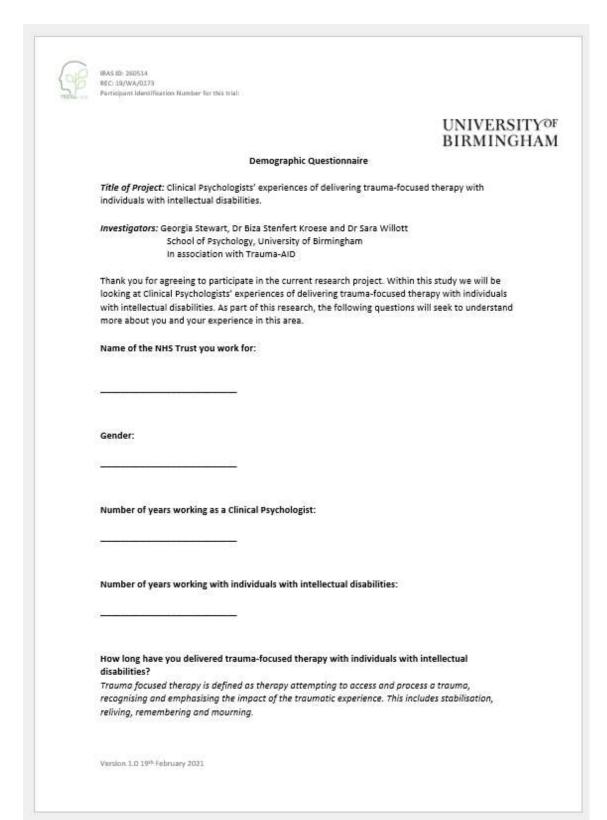
Version 1.0-19th February 2021

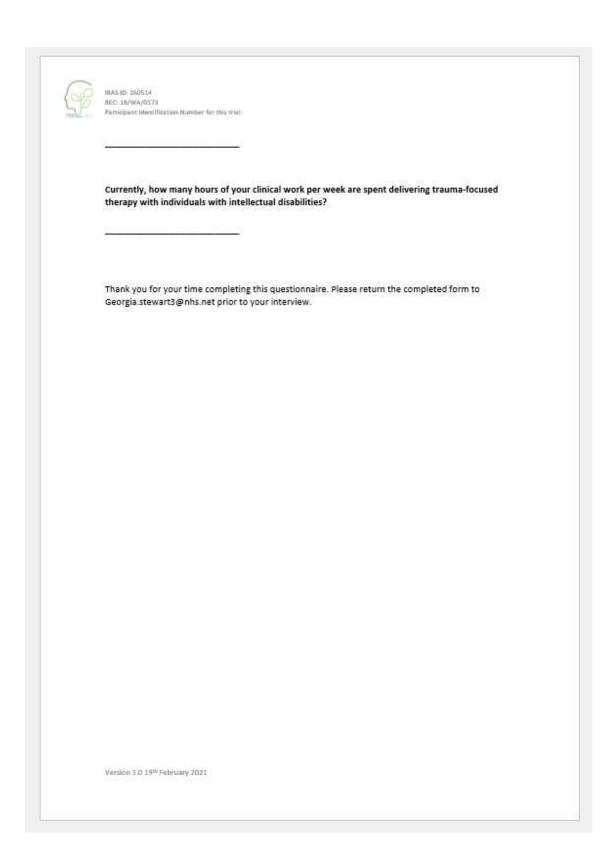
Appendix 5: Participant Consent Form



REC: 19/WA/0173 Participant Identification Number	her shis trials		
5. I understand the	potential benefits and risk	s of participating in the study, including	
the potential for o			
6 Lunderstand how	the information collecter	about me will be used within the study	
and how it will be		,	
7. Lagran to take pa	rt in the above study. \Box		
7. Tagree to take pa	rt in the above study.		
9			
Name of Participant	Date	Signature	
Name of Person	Date	Signature	
taking consent	Date	Signature	
Version 3.0 19th February 2021			

Appendix 6: Demographic Questionnaire





Appendix 7: Interview Topic Guide



UNIVERSITYOF BIRMINGHAM

Interview Topic Guide

Title of Project: Clinical Psychologists' experiences of delivering trauma-focused therapy with individuals with intellectual disabilities.

Investigators: Georgia Stewart, Dr Biza Stenfert Kroese and Dr Sara Willatt.

School of Psychology, University of Birmingham In association with Trauma-AID and Swansea University

Introduction:

Thank you for agreeing to participate in this interview. Today I am going to be asking you same questions about your experiences of delivering trauma focused therapy with individuals with intellectual disabilities. Trauma focused therapy refers to any therapy attempting to access and process a trauma, recognising and emphasising the impact of the traumatic experience. This includes stabilisation, reliving, remembering and mourning.

Experiences of Trauma Work

- 1) Can you tell me a bit about your experiences of using trauma-focused therapy with adults with intellectual disabilities? Prompts: Think of the different models you have used to work with trauma, what were your experiences?
- 2) Can you tell me a bit about any adaptations you have made when delivering trauma-focused therapy to clients with intellectual disabilities? Prompts: What works well? What is most challenging?
- 3) How do you think that this therapy affects your clients? Prompts: Benefits? Barriers? Negative impact?
- 4) From your experiences, what is important in trauma-focused therapy with individuals with intellectual disabilities? Prompts: Think of the different models you have used to work with trauma, what were your experiences?

Personal Effects of Trauma Work

- 5) How do you think this work has affected you? Prompts: As a therapist and in your personal life:
 - a. What impact has it had on you emotionally?
 - b. Have you noticed any changes in your thoughts or beliefs?
 - c. How has it affected your behaviour?



6} How do you cope with hearing about clients' distressing experiences? Prompt: Use of supervision?

Appendix 8: Analysis Process – Initial Noting

100	30	Original Transcript	Exploratory Comments
			Descriptive, linguistic, conceptual,
			and direct quotes
3	58 59 60	Rachel: If I'm honest, I think this is probably not a good thing, I've learned over the years to put up barriers so that it doesn't affect me. [Pause]. So, for example, I don't let myself, I don't allow myself	Learned to put up barriers from thoughts and feelings-not a good thing?
3	61	to dwell too much on what the experience must have been like for the client. I think about it a bit, but then I somehow I just shut, shut	Don't let/allow myself – <u>active role/control over</u> thoughts and emotions (dwelling)
	63 64	it down and move on. Not consciously, it just happens, it maybe it's my own like <u>self protection</u> .	Shut it down and move on – <u>avoidance?</u> <u>Detachment?</u>
3	65	I: Yeah.	Unconscious process - <u>Self-protection/learning?</u>
3	666 667 668 669	Rachel: I, and I think I've always been like that really even when I was training i've always been able to do that. But there have been occasions when people's stories are more more poignant or they they ring a bell or you know, whatever it is about them that it touches you a bit more.	Personal trait throughout career Times when things 'attach'/get through — personal link/emotions cause distress
3	71	I: Mmm. Rachel: And not to the point where it's caused me distress, but it it	Stories can cause clinician distress <u>Changed world view</u> <u>Strong empathy</u> (Guilt?) I'm so lucky
1.7	73 74	it's made me think that some people are really horrible, some people have like incredible bad luck in the situations that they find	Triggered clinician to think about what this means
1.5	75	themselves in and the flip side of that is in comparison im so lucky	for them? E.g. their position in the world and their view of others
1 -	76 77	so [pause] yeah there was something else as well that I was going to add to that, but now the thought is gone.	their view or others
	78 79	I: That's fine, it'll probably pop back in a minute. But it sounds like it's had some impacts emotionally but you're able to manage that	
1.7	80	and it has impact on some thoughts and beliefs about the people.	
	81	And I was wondering whether you think it impacts on your	
350	82	behaviour at all, whether at work or in day-to-day life?	

Appendix 9: Analysis Process – Development of Emergent Themes

Emergent Themes		Original Transcript	Exploratory Comments
50		7 1	Descriptive, linguistic, conceptual,
	100		and direct quotes
	358	Rachel: If I'm honest, I think this is probably not a good thing, I've	
Active compartmentalising/detachment	359	learned over the years to put up barriers so that it doesn't affect	Learned to put up barriers from thoughts and feelings- not a good thing?
	360	me. [Pause]. So, for example, I don't let myself, I don't allow myself	
Questioning appropriateness of coping strategy	361	to dwell too much on what the experience must have been like for	Don't let/allow myself – active role/control over thoughts and emotions (dwelling)
	362	the client. I think about it a bit, but then I somehow I just shut, shut	and and an action of the control of
Unconscious self-protection	363	it down and move on. Not consciously, it just happens, it maybe it's	Shut it down and move on – avoidance? Detachment?
	364	my own like <u>self protection</u> .	<u>betachment?</u>
	365	I: Yeah.	Unconscious process - <u>Self-protection/learning?</u>
	303	i. reali.	
	366	Rachel: I, and I think I've always been like that really even when I	Personal trait throughout career
Penetration of barrier	367	was training i've always been able to do that. But there have been	
Personal link to story	368	occasions when people's stories are more more poignant or they	Times when things 'attach'/get through – personal link/emotions cause distress
	369	they ring a bell or you know, whatever it is about them that it	personal many amorphis and a series
	370	touches you a bit more.	
		39	
	371	I: Mmm.	Stories can cause clinician distress
			Changed world view
	372	Rachel: And not to the point where it's caused me distress, but it it	Strong empathy
Altered world view	373	it's made me think that some people are really horrible, some	(Guilt?) I'm so lucky
	374	people have like incredible bad luck in the situations that they find	Triggered clinician to think about what this means
Prompting difficult self-reflection	375	themselves in and the flip side of that is in comparison i'm so lucky	for them? E.g. their position in the world and their view of others
Trompang amount sent-enection	376	so [pause] yeah there was something else as well that I was going	their view of others
	377	to add to that, but now the thought is gone.	
	378	Is That's fine it'll probably non-back in a minute. But it seemed like	
	378	I: That's fine, it'll probably pop back in a minute. But it sounds like	
	380	it's had some impacts emotionally but you're able to manage that and it has impact on some thoughts and beliefs about the people.	
	381	And I was wondering whether you think it impacts on your	
	382	behaviour at all, whether at work or in day-to-day life?	
	302	penaviour at air, whether at work or in day-to-day life:	

Appendix 10: Analysis Process – Developing Thematic Structures

Peer support		
Sense making	18.419	"Someone going through the incident with you, working out what you, if anything, what you could have done differently"
Shared responsibility	18.425	"Support from the wider MDT so that you feel that you're not the sole clinician"
	20.462	"All the responsibility was placed on you"
Changing support over career		90 10 10 10 10 10 10 10 10 10 10 10 10 10
Job role & expectations	21.493	"In the early stages of your career there's more time and supervision to explore things"
	21.505	"I think there's a view that if there is anything in your closet then you should have sorted it out by the <u>time</u> you're 4-5 years into your career"
	22.521	"Once you qualify you kind of just get on with it"
	22.520	"Generally there's just not ever that much time"
Supervision	21.495	"Now my supervision is very much hardly ever about clients"
	22.513	"Less likely to be open about things because your relationship becomes more"
	22.518	"If it was a trainee and a more transient relationship"

Appendix 11: Analysis Process – Identifying Connections Across Participants

