

**Exploring Associations Between Childhood Emotional Abuse, Suicidal Behaviour and  
Deliberate Self-Harm: The Mediating Role of Distress Tolerance**

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### Abstract

Childhood Emotional Abuse (CEA) has been linked extensively with psychological difficulties such as deliberate self-harm (DSH), and suicidal behaviours (SB), indicating that they may represent considerable risk factors for later psychopathology. CEA is associated with poorer emotional coping skills, which may mediate the severity of later outcomes. Low distress tolerance (DT) is associated with DSH and an increased capacity for suicide that can be understood within a negative reinforcement framework. DT has been found to mediate associations between negative life events and maladaptive emotional coping. No study to date, however, has explored whether DT mediates the relationships between CEA and DSH, and CEA and SBs. The study reported here was conducted with a clinical population accessing psychological support ( $n=70$ ) and aimed to explore whether experiencing CEA was associated with difficulties tolerating distressing situations, and maladaptive coping mechanisms such as DSH and SBs. Correlations found significant relationships between all variables. The study also investigated whether DT mediated the relationship between CEA and DSH, and CEA and SBs. Mediation analysis showed that DT did not mediate the relationship between CEA and DSH. However, DT significantly mediated the relationship between CEA and SBs. The study has implications for future clinical practise and makes suggestions regarding clinical interventions that focus on DT skills as a way of reducing SBs.

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## Preface

The research portfolio presented here consists of three sections: a review of the extant literature, an independent empirical research study (method, results, discussion), and a critical appraisal of the research process from the perspective of the author. This study examines the relationships between four variables of interest; the experience of childhood emotional abuse (referred to as CEA hereafter), and later engagement in maladaptive coping mechanisms, namely deliberate self-harm (DSH) and suicidal behaviour (SB). The ability to manage distressing encounters, referred to as distress tolerance (DT), was investigated as a potential third factor variable that might mediate these relationships.

In chapter one existing literature will be reviewed, ensuring detailed examination of relevant contemporary findings to inform the chosen research questions. The aim of the literature review was to identify gaps within the literature, and areas requiring further investigation. The literature review will explore the study variables from an interpersonal neurobiology framework (Siegel, 2001); analysing literature surrounding the relationships between attachment, developmental trajectories, and neurobiological growth that contribute to adult outcomes. Current understandings of all forms of abuse (Cawson et al., 2000) will also be explored with reference to prevalence, types, current definitions, and exploring why CEA has been under-researched. The components of CEA will be examined along with mediating variables that could explain why CEA is thought to pose such deleterious adult outcomes. The aetiology of DSH and SBs will then be explored, followed by a review of contemporary clinical interventions. The review will then focus on understanding how mental processes might be shaped by negative interpersonal experiences, with the introduction of DT as a potential mediating process. The current empirical research will then be introduced,



identifying gaps that lead to the research question and hypotheses. Chapter two, three and four comprise of the method, results, and discussion. Finally, chapter five discusses the researcher's reflexivity, ontological and epistemological positioning, and a review of the research process as a research-practitioner.

**Key Definitions:**

- ***Childhood Emotional Abuse (CEA)***: The intentional and persistent emotional maltreatment of a child that conveys the message that they are worthless, inadequate, or valued only in relation to their ability to meet another's needs. CEA typically involves parental antipathy, treatment that is humiliating or demeaning, denial of affection, or developmentally inappropriate expectations. Parental or caregiver interactions that are unintentional, such as overprotection and limitation of exploration and learning are also classified as CEA. CEA is often also referred to as psychological abuse in the literature.
  
- ***Childhood Physical Abuse (CPA)***: Defined as the intentional use of physical force (including the use of instruments or objects) on a child that results in, or could result in, a physical injury, such as burning, hitting, shaking, and suffocating.
  
- ***Childhood Sexual Abuse (CSA)***: Defined as any sexual activity between an adult and a child, including completed or attempted penetrative acts, non-penetrative sexual contact (such as touching, kissing), or non-contact sexual interaction such as grooming, exhibitionism and child pornography.

- **Childhood Neglect (CN):** Often split into two subcategories of physical (CPN) and emotional (CEN) neglect. Defined as the persistent failure to meet the basic physical or psychological needs of a child. Childhood neglect is likely to result in impairments to the child's health or psychological development and can occur before the child is born, due to maternal substance abuse, for example. Neglect may also include failure to provide adequate food, clothing or shelter, abandonment, failure to protect a child from harm (both physical and emotional), and inadequate access to required medical care or treatment. Under emotional neglect is included neglect, or unresponsiveness to, a child's emotional wellbeing and needs. (Gilbert et al., 2009; Howe, 2005; SafeLives; 2014)
  
- **Distress Tolerance (DT):** The perceived or actual ability to tolerate emotional distress (Simons & Gaher, 2005)
  
- **Deliberate Self-Harm (DSH):** Overt behaviours that intentionally cause harm to the body, such as cutting, burning, poisoning, and preventing healing, without direct intent to die (Fliege, et al., 2009; Gratz, 2001).
  
- **Suicidal Behaviour (SB):** suicidal ideation, planning of suicide and suicide attempt (Hamza et al., 2012; Millner et al., 2017).

## Chapter 1: Literature Review

*“In every adult dwells the child that was, and in every child lies the adult that will be”*

*(John Connelly, 2006)*

The key issue that this study addresses is the contribution of historical factors towards the mental health outcomes of deliberate self-harm (DSH) and suicidal behaviours (SB). A greater understanding of how people come to depend on these behaviours to manage their distress is of fundamental importance to clinicians working therapeutically on developing specific psychological skills could minimise these high-risk behaviours. The aim of the study is to explore relationships between variables that are associated with poor mental health outcomes; childhood emotional abuse (CEA) and distress tolerance (DT). More specifically, the study aims to investigate whether DT mediates the relationship between CEA and DSH, and CEA and SBs. Research in this area is important because it will identify potential areas to focus interventions within NHS services, in line with the UK Government’s initiatives to reduce rates of DSH and SBs (National Institute for Health and Care Excellence, 2019).

The findings of this study are hoped to aid in the understanding of prevention strategies for these behaviours, addressing a gap within the empirical evidence-base. Furthermore, the timeliness of research focussed on these issues is highlighted with respect to future child protection. The review examines discrepancies concerning key terms, and historical research surrounding these constructs. The review then explores the most recent evidence to identify theoretical limitations, and inconsistencies that informed the chosen research questions. The literature review concludes by introducing the present study.

### **1.1 Context and Rationale**

Experiencing abuse as a child is associated with a multitude of psychological and systemic difficulties, which are often captured as psychiatric diagnoses in adulthood (Dye, 2019; Read & Bentall, 2012). The negative impacts of abuse have been shown to traverse all aspects of living; damaging social circumstances, economic opportunities (Bruner, 2017), physical health, and general quality of life (Appendix A, Felitti, et al., 1998). These long-term consequences often include unemployment, interpersonal relationship dysfunction, involvement with the criminal justice system, and cardiovascular and autoimmune disease, the effects of which typically lead to chronic pain and premature death (Cecil et al., 2017; Felitti et al., 2019; Glaser, 2002; Howe, 2005; Kaleycheva et al., 2021).

Attitudes towards childrearing, and the shared understanding of what constitutes abusive behaviour, have altered dramatically in recent years (Cross & Hershkowitz, 2017). Earlier positions, as argued by Bronfenbrenner (1977), frequently disregarded the child as an 'active participant' in their existence. This offered little in the way of child protection, as this enabled a parent to retain control and responsibility for a child regardless of whether their behaviour was abusive or in the child's best interests. A change welcomed in the United Kingdom in 1989 (Children's Act, 1989), ensured children were granted rights to protection and care (Briggs & Hawkins, 2020). The introduction of this law acted as a key driver of an ongoing movement to prevent overt abuse. Since then, there has been significantly more societal awareness and discussion of what abusive practices are, and further legislative changes in an attempt to safeguard children (Barlow & Schrader-McMillan, 2010; Teo & Griffiths, 2020; Wang, 2001). This includes new laws banning traditional physical punishments

such as spanking that are being developed in parts of the United Kingdom (UK), the implementation of which is set to occur in 2022 (Purcell, 2020).

Despite these efforts, childhood abuse remains a significant public health and social welfare concern (Gilbert et al., 2009). Preston-Shoot (2018) conducted an analysis of serious case reviews in the UK, questioning the effectiveness of such reviews on the improvement of child protection. One of the key messages from this analysis cited the lack of social and relational change alongside written policy and practice. When addressing the high prevalence of childhood abuse (Cawson et al., 2000), considering the family context and systemic factors impacting the child is essential. Currently, however, there is concern that the provision of education, support and guidance, that may lead to a reduction in abuse in the communities that are most impacted by childhood adversity, is lacking or inadequate (Preston-Shoot, 2018).

Current estimates indicate approximately 8.5 million adults, or one in five people, experience at least one form of abuse before the age of 16 in the UK (Office for National Statistics, 2020). There are clear gender differences, with prevalence of abuse being higher for women in all abuse types except physical abuse (Office for National Statistics, 2020), although this could be due to reduced help seeking in men (J. S. Brown et al., 2019; Lisak, 1995). Despite gender differences, childhood emotional abuse (CEA) was found to be the most frequently occurring abuse type overall (Office for National Statistics, 2020).

According to the Office for National Statistics (2020), over 80 percent of adults in the UK who reported having experienced childhood abuse reported that they were emotionally abused, with around 44 percent experiencing multiple abuse types. SafeLives (2014) collated the experiences of children receiving support from domestic abuse charities around the UK,

to explore the prevalence of abuse within the home, and found comparable results. Ninety-five percent of participants reported that they had experienced emotional abuse (CEA), 45 percent reported the experience of physical abuse (CPA), five percent reported the experience of sexual abuse (CSA), and 30 percent reported the experience of neglect (CPN or CEN). CEA has been found to be equally as widespread worldwide. Stoltenborgh et al. (2012) conducted a meta-analysis including over seven million participants from 46 samples. The analysis found an occurrence of CEA in 363 out of 1000 children (36.3%), with no significant differences between geographical location, ethnicity, or the economic development of the country of origin (Stoltenborgh et al., 2012). This large study suggests that the prevalence of CEA is consistent regardless of cultural differences.

Research by Doyle (1997) and Hart and Brassard (1987) theorised that CEA constitutes a 'core component' of all other forms of childhood abuse and neglect. It was also argued that CEA is unique, being hypothesised as the only form of abuse that occurs independently without any other abuse types (Hart & Brassard, 1987). Research by Claussen and Crittenden (1991) provided support for this theory, finding that over 90 percent of children experiencing CPA and CN also reported experiencing CEA. As a result, many contemporary studies identify CEA as an embedded component within all abuse categories (Spinazzola et al., 2014). Despite this, CEA is a vastly under-researched area when compared to overt abuse types. CEA is often cited as the least researched, recognised, and reported abuse type, and the most difficult type to identify (Newton & Gavin, 2020).

In the last two decades, more research has begun to show the deleterious impact of CEA on a wide variety of adult outcomes (Dye, 2019; Felitti, 2019; M. T. Merrick et al., 2017; Riggs, 2010), with findings suggesting that CEA often poses higher impact outcomes than

other abuse types (Binggeli et al., 2001; de Araujo & Lara, 2016; Nock, 2010). The identified relationships between CEA and high-risk behaviours such as deliberate self-harm (DSH) and suicidal behaviour (SB) (Allbaugh et al., 2018; Liu et al., 2017; Smith et al., 2018) is of particular relevance, as these behaviours constitute a growing health concern within UK mental health services (such as the National Health Services, NHS). According to the Office for National Statistics (2019), the rates of completed suicides registered within the UK in 2018 indicated a 15% increase compared to data over the previous five years, at 6,507 deaths: a rate of 11.2 deaths per 100,000 (16.9 deaths per 100,000 for men). Reported cases of DSH have also increased significantly within the UK, having tripled within the last ten years (Mayor, 2019; McManus et al., 2019); the highest increase being seen in women aged 16-24 (Office for National Statistics, 2019).

Despite suicide occurring across all ages, the number of individuals under the age of 25 completing suicide has significantly increased, the lowest age being 10 years old (Office for National Statistics, 2019). Hanging was the most common method used, by 61.7% of men and 46.7% of women. The rate of suicide completion for men was statistically higher than for women, and the predominant age group for both was 45 – 49 years (Office for National Statistics, 2019). Included within these statistics were individuals aged 10 and above who engaged in intentional self-harm that led to death, and harm where intention was undetermined, highlighting comorbidity between DSH and SBs (Office for National Statistics, 2019). As the most frequently observed method of DSH is skin-cutting, this can result in serious ligament damage, infection, and fatality if not treated adequately (Gratz, 2001; Klonsky, 2007). For mental health services, DSH and SBs are a serious and costly issue affecting the clinical effectiveness and quality of services (Townsend, 2019).

The commissioning of clinical services and treatment pathways is organised around the quality of evidence collated and reviewed by the National Institute of Health and Care Excellence (NICE guidelines) and Cochrane reviews. The current UK Government initiative to reduce rates of DSH and SBs is a five-year reduction plan (initiated in 2016; National Institute for Health and Care Excellence, 2019; 2020) which relies heavily on mental health campaigns, and changes in laws (such as a reduction in paracetamol purchases; Sarchiapone et al., 2011). Despite a coherent policy regarding DSH and SBs (National Institute for Health and Care Excellence, 2019; 2020), there is no specific guideline for working with individuals who present as highly suicidal or at risk of harming themselves (National Institute for Health and Care Excellence, 2019; 2020). Moreover, there is a lack of consistency between the application of clinical treatment models and the use of current overarching theoretical frameworks to target treatment for these behaviours (Dueweke & Bridges, 2018). The NICE guidelines currently favour interventions such as safety planning, Cognitive Behavioural Therapy (CBT) and Dialectical Behaviour Therapy (DBT), or pharmacological treatment such as antidepressants (National Health Service, 2016; National Institute for Health and Care Excellence, 2019; 2020).

Treatments such as DBT are time consuming however, and typically last up to a year (DeCou et al., 2019; Linehan, 1998; 2018), which can pose difficulties when aiming to time-effectively reduce risk. Due to pressure on services and the time-critical nature of these behaviours, in practice, clinicians often utilise a combination of techniques or aspects of a psychological model (safety planning, psychoeducation or skills-based tasks) for short term relief and symptom management (Iyengar, 2018). As a result, individual clinicians must apply



available theoretical models in an idiosyncratic way to target DSH and SBs (Roth & Fonagy, 2006; Zilcha-Mano, 2019).

A further barrier to a coherent approach to DSH and SBs is that specific, focused interventions addressing these behaviours are often restricted to individuals with high-risk who have a DSM-V (Diagnostic and Statistical Manual of Mental Disorders; American Psychiatric Association, 2013) diagnosed disorder such as borderline personality disorder (BPD) (Kinderman, 2015; Linehan, 2018). There are both limited resources and evidence-bases for moderate to high-risk individuals who do not have this diagnosis, but have similar childhood trauma histories (Brown et al., 2020). Unfortunately, when service users have received full NICE guidance recommended treatments, and fit the diagnostic criteria, outcomes studies show that these interventions have only small to moderate effects in reducing overall DSH and SBs, in both community and inpatient settings (McCabe et al., 2018; Yiu et al., 2021). Recent research has also indicated that the effects of anti-depressant prescribing on the reduction of DSH and SBs have not been demonstrated (Witt et al., 2021). Consequently, treatments that target the psychological processes that underpin DSH, and SBs are becoming more sought after (Bacon et al., 2018, Dueweke & Bridges, 2018; Tunno et al., 2021; Zalewski et al., 2018).

At present there is a very limited research evidence base for the internal processes associated with DSH and SBs, with available data favouring external epidemiological factors such as the socioeconomic gradient, education, deprivation, and other forms of adversity (Franklin et al., 2017). Exploring proximal factors can aid understanding of the risk faced by vulnerable populations. However, this does not facilitate our understanding of processes that might explain why these factors are related, or how they can be ameliorated (Wainberg et al.,

2017). Indeed, although more recent attention has been paid to the influence of CEA (de Araujo & Lara, 2016; Dye, 2019; Nock, 2010), specific psychological mechanism(s) that connect CEA to DSH and SBs have not been clearly elucidated. The lack of empirical research that focusses on underlying processes that contribute to the relationship between these variables not only adds to a significant gap within the literature, but also delays the development of contemporary interventions.

A clear theoretical model that identifies mediating factors and explains how risk variables interact to influence certain behaviours is necessary to move away from looking at causation and towards developing practical interventions. Without an explanatory model that explores why people engage in DSH or SBs after experiencing CEA there is limited opportunity to develop specific interventions for people who are struggling with these behaviours (Wainberg et al., 2017). As a corollary, the lack of a convincing evidence base here limits access to potential funding streams for intervention for those in need now (Baker, 2020).

One set of psychological processes hypothesised as important to managing the impulse to harm oneself or attempt suicide is the ability to tolerate distress (psychological pain) and regulate overwhelming feelings (Bartlett et al., 2021; Linehan 1993; 2018; Nock & Mendes, 2008; Simons & Gaher, 2005). Thus, alternate intervention focussing on the development of distress tolerance (DT) skills could be important to consider as a first approach to treatment. Initial support for this has been identified following research on the contemporary treatment modality of Eye Movement Desensitisation Reprocessing therapy (EMDR). This modality has been found to effectively reduce symptoms of trauma through the processing of traumatic memories in up to 90 percent of cases (Proudlock & Perris, 2020; Shapiro, 2017), however emotional stabilisation (risk reduction and coping skills) is often

required before this treatment is appropriate and safe due to the exposure aspect of this approach. It has been theorised that this is because of a reduced capacity for emotional tolerance (low distress tolerance) in at-risk individuals, resulting in difficulty accessing safe coping strategies (Ashfield et al., 2021; Hershler, 2021; Siegel, 1999).

If DT was found to be a factor that mediates the relationship between CEA and subsequent DSH and SBs, this could open useful avenues for psychological intervention. There are a small number of interventions that reference DT skills more broadly (Linehan, 2018), however this finding could aid development of treatments that specifically target the safe reduction of these behaviours, prior to accessing focussed therapy for processing psychological trauma. Without an adequate evidence base confirming a relationship between these variables, however, it is difficult to justify and make use of such interventions (McHugh & Barlow, 2012; Southam-Gerow & Prinstein, 2014). A recent study explored whether solely emotion-focused interventions (Bacon et al., 2018) could be effective to reduce risk as a first step within treatment planning, however more investigation is needed to understand the relationships between high-risk outcomes and the association with specific emotional regulation processes following childhood abuse. Contemporary research has indicated that both childhood abuse and emotional dysregulation increase the risk to which an individual may self-harm or experience thoughts of suicide (Cole et al., 2004; Cole & Hall, 2008; Dye, 2019). Despite this, it is still not clear how these factors interact to influence such psychological presentations.

In the literature, DT has been found to be related to both experiences of childhood abuse and high-risk behaviours such as DSH and SBs (Leyro et al., 2010), and is the emotional regulation process that underpins the 'Window of Tolerance' theory (Hershler, 2021; Ogden

et al., 2006; Siegel, 1999). DT is identified loosely within contemporary interventions such as DBT and EMDR (Linehan, 1993; 2018; Shapiro, 2017), but is often addressed in conjunction with other techniques and practices, such as mindfulness and resilience. DT has been found to independently mediate the relationship between CEA and anxiety (Banducci et al., 2017b), SBs and post-traumatic stress disorder (PTSD) (Anestis et al., 2012), and DSH and hospital admissions (Yardley et al., 2019). However, no study to date has explored DT as an independent process that might mediate the relationships between CEA and the high-risk outcomes of DSH and SBs, indicating a gap in the literature.

### ***1.1.1 Section summary***

Childhood emotional abuse (CEA) and its association with many psychopathological outcomes in adulthood were introduced, with particular focus on deliberate self-harm (DSH) and suicidal behaviours (SB). Currently, there is no coherent theoretical framework to support the effective treatment of these behaviours, despite coherent government policy highlighting a need for this. The emotional regulation process of distress tolerance (DT) was introduced as a potential area for intervention. However, it was cautioned that there are currently gaps in the research. Whilst the evidence base to support the implementation of DT skills is developing apace, few studies have explored DT as an independent mediator to childhood abuse and negative adult outcomes. The hypothesis that DT could mediate the relationships between CEA and DSH, and CEA and SB, was then introduced. To better understand these phenomena, it is helpful to situate these experiences within a theoretical framework, which will be discussed in the following section.

## 1.2 Theoretical Framework

To locate the current study, a framework that encompasses both childhood experiences and emotional regulation within the context of adult outcomes, is required. Research investigating the connections between child development and adult mental health is, however, a relatively young field (Barbu, 2019). Early literature examining childhood experiences in relation to adult psychopathology typically focusses on one explanatory model such as attachment theory (Bowlby, 1958) or personality factors (Duggan et al., 2003). Attachment theory is the most widely used model and was initially outlined by Bowlby (1958; 1969) and Winnicott (1965). Attachment theory defines the parent-child attachment as an evolutionary, biological tool for survival, and has been found to be the strongest predictor of adult outcomes (Fraley & Roisman, 2019). Nurturing interactions between parent and child enable the child to develop a sense of safety and security, defined within the literature as a 'secure attachment' (Bowlby, 1958; 1969). This enables the child to trust in their attachment figure's emotional and physical availability (Vondra et al., 2001), and to supply the foundations to develop their 'internal working model'; the frame of reference by which an individual views the world (Bowlby, 1958; Bretherton & Munholland, 2008).

Despite the evidence base citing attachment theory as the strongest predictor of adult outcomes (Fraley & Roisman, 2019), the theory alone does not address underpinning processes which may identify why this is the case. This is important to consider in the context of this study, as one of the key aims is exploring underpinning emotional regulation processes that may influence adult outcomes. Indeed, though several studies argue that a lack of secure attachment is causally responsible for negative outcomes such as depression, anxiety, and low self-esteem (Colonnesi et al., 2011; Foster et al., 2007; Scharfe, 2007), utilising a unitary

approach to attachment does not effectively explain the variance in adult outcomes (such as those identified by the following works; Bruner, 2017; Cecil et al., 2017; Cicchetti & Rogosch, 1996; Felitti et al., 2019; Howe, 2005; Kaleycheva et al., 2021). It can therefore be argued that attachment theory alone does not adequately account for this. This is evident from studies following successful adoption cases, whereby secure attachments have been formed after adversity and abuse (Corral Gilsanz et al., 2021; Paine et al., 2021). The findings from these studies have identified that adoptees still experience increased levels of psychopathology comparative to non-adoptees who have not experienced adversity (Paine et al., 2021; Sonuga-Barke et al., 2017). The meta-analysis conducted by Corral Gilsanz et al. (2021) adds further support for this observation. The analysis consisted of 18 studies conducted between 1993 and 2019, and found that adults who were adopted had a higher chance of having difficulties in all areas under study, despite developing new, and secure, attachment relationships. These studies suggest that attachment security alone lacks the explanatory power one might expect as it fails to encapsulate why adults may still experience negative outcomes despite the development of new secure attachments.

A critique of a unitary approach to theory application is that it can be reductionist, as developmental processes are not necessarily linear and often involve multiple factors (Cicchetti & Rogosch, 1996). As a consequence of this, attachment theory on its own is difficult to practically apply within treatment (Roth & Fonagy, 2006), despite many therapeutic models emphasising the importance of the therapist as a 'secure base' for patients first and foremost (Holmes & Slade, 2017). Evidence based therapies that integrate attachment theory-focused intervention with practical activities or tasks that target specific underlying mental health processes (such as graded exposure; Bosmans, 2016; Levy & Johnson, 2019; Ogden & Fisher,

2015) have shown greater clinical gains. These findings suggest that interacting processes, such as neurological development, childhood experiences, and attachment security combined (Dallos & Vetere, 2021; Roth & Fonagy, 2006; Teicher, 2002) could better explain outcomes and aid treatment processes.

As a consequence of the above considerations, the choice of theoretical framework for the current study is the contemporary integrative discipline of interpersonal neurobiology (IPNB; Siegel, 1999; 2001; 2015), which has a foundation in early attachment theory. The concepts espoused by IPNB have been refined by Siegel (1999), to encompass the idea of consilience (Panksepp, 1999; Siegel, 2001), the notion that several theoretical principles and approaches to knowledge can overlap to form a comprehensive theory. Pluralistic in nature, IPNB (Siegel, 1999) is underpinned by the principles of contemporary attachment theory (Bowlby, 1958; Bowlby & Ainsworth, 2013; Schore, 2013), systems theory (Bronfenbrenner, 1977), and neurobiology (Bear et al., 2020; Teicher, 2002). The framework was developed to promote a neurobiological understanding of the mind and offer an inter-disciplinary lens with which to view the development of mental health problems as fundamentally relational phenomena (Siegel, 2015; Figure 1). The IPNB framework argues that the mind encompasses both an internal physiological context (the developing brain and conscious thought), as well as an embedded external one (relationships), and highlights the influence of early attachment experiences on later brain development (Schore, 2013; Siegel, 2001).

Focusing on how attachment experiences can influence emotions, behaviour and memory, Siegel (1999) proposed that insecure attachment in early developmental years can result in physical changes in the infant or toddler's brain structure, which can subsequently influence emotional intelligence, behavioural rigidity, and psychopathology. IPNB is also

foundational for more recent theories relevant to this study, such as Britto and colleagues' study on the impact of nurture on brain development (Britto et al., 2017), Riggs' theory on the effects of CEA on the attachment and emotional regulatory system across the lifespan (Riggs 2010), and the development of Simons and Gaher's scale to measure DT (Simons and Gaher, 2005). Drawing on systems theories (Bronfenbrenner, 1977), IPNB theory argues that the function of the brain and mind is to regulate information about external and internal stimuli at the individual level through its neurocircuitry. This synthesis is then shared and regulated interpersonally through engagement and social communication, with others (Siegel, 2015) and the wider system (Bronfenbrenner, 1977). Thus interpersonal (specifically attachment) relationships can shape the maturation of the developing nervous system and brain; a finding supported by contemporary neuroscientific study (Ludy-Dobson & Perry, 2010; Perry et al., 2017; Teicher, 2002; Teicher & Khan, 2019).

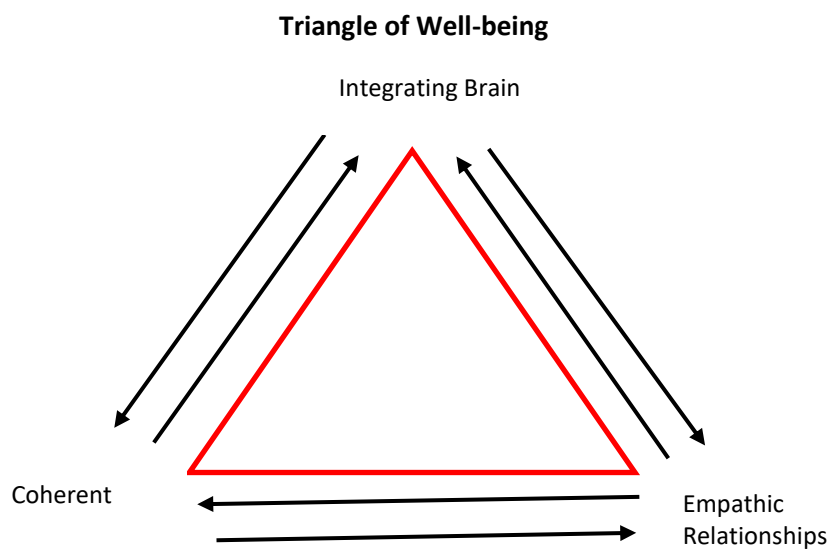
The IPNB framework offers important theoretical and practical considerations for how the outcomes of abuse can be conceptualised (Siegel, 2015). Through utilising an IPNB perspective, the breadth and complexity of the childhood experience from the individual internal level, and within the wider family system (Bronfenbrenner, 1977; Misca & Smith, 2014), can be examined. In the context of the present study, this framework offers an explanation for how and why CEA may have a long-term effect on adult experiences and behaviour, particularly when considering the influence of abusive encounters on early emotional development. Through this, IPNB allows both researchers and clinicians to gain a more holistic, comprehensive understanding of childhood abuse (Siegel, 2001; 2015). The IPNB framework (Siegel, 1999) coheres with the developmental concept of multifinality and equifinality (Cicchetti & Rogosch, 1996), thus supporting the available literature, and enabling



theorisation of differing developmental outcomes, and behavioural presentations. This framework therefore served as a guide to inform the conceptualisation of the study, and the subsequent research questions.

### Figure 1

*The Triangle of Wellbeing (Siegel, 2015).*



## 1.3 Childhood Emotional Abuse

### 1.3.1 Defining terms

There has been considerable ambiguity with regards to what constitutes “childhood emotional abuse”, and this lack of a concise definition has hindered the progression of research into CEA compared with other abuse types (O’Hagan, 1993). A lack of clarity regarding the definition of CEA has led to the use of different measurement instruments and differing methodologies, with the subsequent result of difficulties in effectively comparing studies and replicating findings (O’Hagan, 1993). A clear definition of CEA also aids in the

identification of affected clinical populations, and reduces theoretical disorganisation (S. M. Brown et al., 2019). This section aims to highlight frequently used terms within the literature which encompass CEA.

Experiences of child abuse differ considerably dependent on the nature of the abuse, the perpetrator's relationship to the child, and the circumstances surrounding the event (Cicchetti et al., 1989; Johnstone et al., 2016). Indeed, it is argued that child rearing exists on a continuum ranging from competent, nurturing care, to murder (Finkelhor et al., 1983). In the literature, the term 'emotional abuse' is used synonymously with 'emotional maltreatment', 'mental injury', 'psychological abuse', 'verbal abuse', 'psychological maltreatment' and 'psychological battering' (Glaser, 2002; Howe, 2005; O'Hagan, 1993; 1995; Riggs, 2010; Sacks, 2017; Spinazzola et al., 2014). These terms have been the subject of much discussion, with propositions for specific definitions for each term previously suggested (O'Hagan, 1995). Despite this, there appears to be little clinical regard towards these distinctions in terminology, and as such are often used by researchers interchangeably (Glaser, 2002). When presented with vignette examples, both professionals and lay persons have been found to accurately recognise emotionally abusive interactions (Glaser, 2002; Schaefer, 1997); suggesting the concept of emotional abuse can be globally understood regardless of definitional discrepancies.

Rather than focusing on the multitude of definitional and syntactical discrepancies within the literature regarding CEA, this review takes the position that CEA is an umbrella term for a variety of damaging emotional experiences that occur in childhood (Glaser, 2002), utilising the definitions outlined by Gilbert et al., (2009), Howe (2005), and the SafeLives report (2014). In this review, and subsequent empirical research, CEA is understood as

recurrent behaviours that convey to a child a culture-specific message of rejection (Hamarman & Bernet 2000). This includes through humiliating, demeaning, and threatening language, intentionally denying affection and love, or isolating a child to impede the development of self-esteem and elicit considerable emotional pain (Binggeli et al., 2001). CEA is also understood as a core component of other abuse types on a continuum of abuse severity (S. M. Brown et al., 2019; Hart et al., 2002), and is most frequently reported as occurring within the parent-child relationship in families but can be perpetrated by anyone in the child's life.

The definitions outlined by Gilbert et al., (2009), Howe (2005), and the SafeLives report (2014) include four blanket categories of direct childhood abuse (emotional, physical, sexual, and neglect) highlighting the other types of maltreatment that a child may experience. Child abuse encompasses acts of commission (the act of abusive treatment) or omission (failure to act upon, or take responsibility for a child, such as neglect), and can include direct harm, potential for harm, or threat of harm to a child, even if harm was not the intended result (Gilbert et al., 2009). These other abuse categories will also be referred to throughout.

### ***1.3.2 Barriers to emotional abuse research***

Childhood emotional abuse is a relatively recent psychological construct when compared to wider childhood maltreatment research (Cicchetti et al., 1989; Egeland, 2009), and as such historical context is important to understand the complexities of these experiences, and why this area is the focus for the current study. This section discusses the spectrum of abusive experiences, examining the role of CEA in underpinning all abuse, as well

introducing developmental processes that may influence outcomes. This section also highlights areas where research has historically lacked, and how this relates to current prevalence statistics and research. This review will specifically be focusing on research involving primary family members and caregivers but acknowledges the damaging impacts of secondary systemic abuse (such as abuse from peers or within an organisation such as a religious institute; Duncan 1999; McPhillips, 2019).

Throughout history there has been extensive evidence of global maltreatment in which children have been habitually exploited and abused, often in conjunction with the societal norms at the time (Cicchetti et al., 1989; Egeland, 2009; O'Dougherty Wright, 2007). Despite this, psychological research regarding the multiple components, and subtleties, of childhood abuse is a young field; predominantly established during the end of the 20<sup>th</sup> Century (Cicchetti, 1989; J. Merrick et al., 2017). Childhood physical abuse (CPA) was one of the first categories of abuse to be formally recognised and discussed globally; with conversations regarding this accelerating significantly in the 1960's, when Kempe and colleagues (1962) defined what was then referred to as the 'battered child syndrome', described as a 'disease' in which children are physically abused (J. Merrick et al., 2017).

Due to delays regarding the formal recognition of overt abuse (Kempe et al., 1962), the recognition and examination of covert abuse types, such as CEA, has been a subsequently slower process. The first references to CEA in the literature date back to the 1970's (Fraser, 1974), with this research being predominantly limited to acknowledgement of the existence of this abuse type, and the importance of assigning it a definitional category within legislation (Garbarino, 1978). This delay reduces the progress of understanding, and reducing, maltreatment as a whole entity; particularly as the CEA embedded within other abuse types,

alongside the more discrete forms of CEA, have not been adequately addressed within research and clinical practice (Binggeli et al., 2001; Dye, 2019; J. Merrick et al., 2017). Indeed, recent longitudinal studies, such as that by Degli Esposti et al. (2019) which analysed maltreatment trends within England and Wales between 1858 and 2016, have found an overall decrease in maltreatment over time, but noted an increase in CEA and CN (CEN and CPN). It was cited that in 2016, 67,000 children were placed on child protection registers, with CEA and CN cited as the most common reasons, highlighting the negative consequences of limited research in these areas.

One of the barriers to developing the evidence base on CEA is, arguably, the difficulty in defining what counts as abuse, the type of acts, as well as their frequency over time and severity. In recent times this is, however, becoming more readily discussed and explored (Dye, 2019; O'Dougherty Wright, 2007). Understanding abuse as a continuum is particularly important to address the nuances of these phenomena. CEA (alongside CEN and CPN), for example, often implies a sustained pattern of maladaptive interactions with the primary caregiver, whereas CPA or CSA could be an isolated occurrence (Glaser, 2002). CEA has also previously been unrecognised as psychologically damaging (O'Dougherty Wright, 2007); a factor which must be considered when exploring historical literature.

CEA cases often remain hidden from society, and do not enter the criminal justice system, perhaps due to biases around what an abusive encounter is (May-Chahal & Cawson, 2005; Office for National Statistics; 2020). Other reasons for this have been cited to include under-reporting of abuse by parents of younger children, and under-detection of abuse in older children (Gilbert et al., 2009). May-Chahal and Cawson (2005) conducted the first study exploring multiple abuse types in the United Kingdom (UK), examining the prevalence of

childhood maltreatment. The aim of the study was to investigate the prevalence of hidden abuse in the UK, exploring why certain interactions are not commonly reported to authorities. 2869 randomly selected young adults (18-24) were interviewed. Many described abusive encounters, but did not recognise that they had experienced abuse, leading to lack of legal intervention. May-Chahal and Cawson's (2005) work addresses bias surrounding the focus of abuse literature, which is predominantly CSA and CPA, and highlights a gap in abuse research regarding CEA which the present study is set to address.

Analysing statistical trends within the 2,090 childhood maltreatment articles published between the years of 1977 and 1998, Behl et al. (2003) also found consistent underrepresentation of CEA, which was identified in only 4.2 percent of articles compared with 32.7 percent for CSA and 20.2 percent for CPA (child maltreatment was ambiguously referenced for the remaining percentages). For articles examining only a single type of abuse, the percentage of CEA coverage was much lower, at 0.8 percent ( $n = 16$ ). In global terms, CEA is still rarely addressed in prevention or treatment programs, as found in a study conducted in the United States by Spinazzola et al. (2014).

A possible explanation for this is that CEA is more difficult to identify in children from higher socioeconomic backgrounds where physiological and educational needs are well met (Iwaniec, 2006; Pelton, 2015), and the processes that may mediate adult outcomes are little understood as a result. CEA, alongside CN (both physical and emotional), is also absent from the most recent Diagnostic and Statistical Manual of mental health disorders (DSM-5) for posttraumatic stress disorder, despite references to other types of abuse as causal contributors to this condition (American Psychiatric Association, 2013). This omission from such an influential and widely used diagnostic manual undermines the impact of CEA;

devaluing the complexity of childhood trauma (Degli Esposti et al., 2019; Karatzias et al., 2021). Clinically, this also makes it difficult to address psychological processes that could prevent the negative adult outcomes CEA is associated with.

Historically, CEA has been considered less serious than other abuse types (Spinazzola et al., 2014); despite a lack of evidence to support this (Behl et al., 2003; Christ et al., 2019; Egeland, 2009, Gavin, 2011; O'Dougherty Wright, 2007). Indeed, much to the contrary, CEA has been identified as a significant risk factor for poor child development and enduring adult psychological dysfunction. CEA has also been found to exacerbate the negative consequences of physical or sexual violence in cases where more than one type of abuse has occurred (Hart et al., 2002). Recent research from Dye (2019), for example, found that individuals who experienced CEA obtained higher scores for a variety of enduring mental health difficulties, including anxiety, depression, personality disorder and chronic stress, when compared to individuals who reported only CPA, CSA, or a combination of the two. Adults who experienced CEA have also been found to be more likely to face later victimisation, psychosomatic disorders and poor intersubjectivity (Felitti, 2019; Gavin, 2011; O'Dougherty Wright, 2007; Riggs, 2010). Considering the harmful long-term effect of CEA outlined above, and the dearth of research evidence, the present study was designed with a view to contribute to the research gap in order to better understand CEA. The following section aims to address the developmental implications of CEA, in order to conceptualise the aetiology of adult outcomes.

### ***1.3.3 Emotional abuse and child development***

This section aims to explore the influence of CEA on a child's development, so processes that might affect adult outcomes can be identified within the context of the current study. Childhood can be described as the 'intervening process' between infancy and adolescence (Bogin, 1990; Siegel, 2001; 2015) that offers the opportunity to learn skills, understand and apply cultural behaviours, and develop neurobiologically through attachment and play (Bethell et al., 2019; Siegel, 2015). According to the literature, a 'good' childhood, in which these developmental and sociocultural needs were well met, dramatically increases the likelihood of positive self-esteem, social adjustment, and emotional resilience in adulthood (Black & Schutte, 2006; Britto et al., 2017; Ermisch et al., 2012). Research has found that without adequate caregiver support, as is the case with experiences of CEA, the influence of these learning experiences is significantly reduced. This then negatively affects an individual's cognitive ability (Baltes & Smith, 2004), mentalization skills (Bateman & Fonagy, 2012) and behavioural plasticity (Kolb & Wishaw, 2016; Perry, 2008). There are many theories which influence our current understandings of the psychological development of the child (Siegel, 2015; Thomas, 2000), however, as discussed in section 1.2, the parent-child attachment relationship, and the subsequent influence on a child's neurobiological development, has been found to be the strongest predictor of adult outcomes, both positive and negative (Fraleley & Roisman, 2019; Puig et al., 2013; Siegel, 1990; 2001).

First hypothesised by Winnicott (1965), the core components of nurturing, 'good enough' care from primary caregivers are environment stability (a stable home, consistent parenting), consideration of the child's health and nutritional needs, protection from threat, early learning opportunities, and responsive interactions that offer the child both emotional



support, and developmental stimulation (Britto et al., 2017, p.91). It is proposed that caregivers who provide this offer a safe predictable environment first and foremost (Hoghughi & Long, 2004; Smith, 2011), and meet their child's biological needs (feeding, hygiene, sleep). Crucially, they are also able to offer the sensitive attuned caregiving (attachment and bonding; Bowlby, 1978) that has been deemed fundamental for the promotion of healthy emotional development (Bowlby & Ainsworth, 2013, World Health Organisation, 2018). Attachment can be described as a bi-directional process (Bowlby, 1978); thus, a child's attachment behavioural system must align with that of their primary caregiver (Siegel, 1999; 2001). A child who experiences attuned caregiving, particularly comfort and soothing during distress (also referred to as co-regulation), is more likely to develop skills that enable them to self-soothe and gain positive self-perception, both of which are associated with good mental health outcomes (Britto et al., 2018; van der Kolk, 2005). The core components of CEA (rejection, criticism, and denial of comfort; Gilbert et al., 2009) contradict attuned caregiving, however as the attachment system is a bi-directional process this means that alternate learning and adaptation must occur to ensure the child's survival (Siegel, 1999; 2015).

The neuronal circuitry necessary to facilitate an attachment to a caregiver and to detect threat has been found to be preadapted at birth (Siegel, 1999; 2015). It is theorised that the brain is developed this way to enable the child to first identify, and then reduce distress through care-seeking behaviour (Lyons-Ruth, 2003; Siegel, 2015). An evolutionary tool for survival, the attachment system is comparable to a "psychological immune system", and actively monitors personal safety and caregiver accessibility (Siegel, 1999; 2001). The activation of this system is particularly noticeable in a child's external behaviour when in an

emotionally dysregulated state, such as when feeling tired, scared, or unwell (Riggs, 2010). The child's behaviours are driven by the intention of securing physical and emotional proximity to the caregiver, to receive soothing and reduce distress (Bowlby & Ainsworth, 2013). When CEA occurs, this need is unable to be met (Howe, 2005).

Nurturing care and attachment security have been found to facilitate neurological growth and integration (Perry, 2008; Siegel, 2015). This factor is particularly important due to the high degree of structural re-organisation the brain undergoes during early childhood and adolescence (Teicher, 2002). This significant period of experience-dependent neuroplasticity provides the neural substrate for the acquisition of developmental milestones and achievements across developmental domains (Kolb & Whishaw, 2016). Enhancing the quality of caregiving whilst a child matures thus offers long-term protection from the deleterious impacts of stress and adversity (such as reduced grey matter in the amygdala and hippocampus; Janiri et al., 2017) during critical windows of early development (Britto & Pérez-Escamilla, 2013).

Focusing on familial CEA, it is therefore possible to explain the variance in adult outcomes from an attachment and neurobiological lens (Siegel, 1999; 2015). Though CEA may be perpetrated by individuals outside of the family system, there is evidence to suggest that the continuity, accessibility, and timing of CEA perpetrated by family members (specifically parents or primary caregivers) influences the severity of later symptoms (Riggs, 2010; Spinazzola et al., 2014). Evidence suggests that when CEA is committed by the child's primary caregiver either in the early phase of childhood (during critical windows, Teicher, 2002), or chronically throughout childhood and adolescence, the effects are more deleterious on overall socioemotional development (D'Andrea et al., 2012).

To understand this further, Riggs (2010) proposed that, in the absence of early intervention, CEA follows a linear intergenerational cycle. The model argues that CEA enacted by primary caregivers contributes to the development of attachment insecurity, which subsequently impairs the child's development of emotional regulation skills. A critique of this model is the lack of clarity regarding what specific emotional regulation skills might be impaired following these experiences, or why this might be the case, as emotional regulation is frequently used as an umbrella term within the literature (Gross, 2013). Despite this, further studies such as mediation analysis conducted by Burns et al. (2010) offer support to this model, finding that CEA was the strongest predictor of later emotional regulation difficulties when other abuse types were controlled for. Riggs (2010) argued that this impairment contributes towards the development of negative internal working models of the self and others (Bowlby, 1969; 1973), and ultimately leads to maladaptive coping and poor regulation strategies. The linear nature of this model indicates that adaptive emotional regulation processes could potentially mediate negative outcomes.

Without appropriate support, or with continued CEA, Riggs' (2010) argues that social vulnerabilities are created that contribute to poor peer relationships as the child ages, and later romantic relationship dysfunction and revictimization (Riggs, 2010). The model theorises that without intervention or an alternative relating framework, the CEA cycle has the potential to negatively impact an individual's own parenting behaviour, increasing the likeliness of a victim's engagement in emotionally abusive behaviour towards their children; thus, continuing the cycle. Similar findings were obtained by Montgomery et al. (2019) in a systematic review, where results showed parental trauma significantly increased the likelihood of abuse perpetration.

Considering Riggs (2010) model, and expanding on this theory from a neurobiological perspective, it is widely accepted that responsive caregiving aids the growth of the neural pathways involved in emotional development (Britto et al. 2017; Siegel, 2015; Troisi, 2020). This means that responsibility falls to the caregiver to provide external regulation to an infant until they develop their own capacity to do so (Ludy-Dobson & Perry, 2010). Observation studies have also found that children learn to regulate their behaviour and emotions based on their caregiver's responses to them (Bowlby, 1969; Bretherton et al., 1990; Bretherton & Munholland, 2008). It is theorised that it is through these interactions, and by internalising the responses of their caregiver, that children develop their own understanding of relationships (including the relationship with themselves; Bowlby, 1969; Siegel, 1990; 2015).

Following on from this, it is thought that the development of self-worth and identity is dependent upon positive parental feedback, with corresponding research finding that individuals who have experienced CEA are more likely to subconsciously internalise the imposed view that they are unworthy of care or belonging (Cramer, 2000). Positive social cues and relational reciprocity have been found to reduce the physiological stress responses associated with danger and fear, allowing us to thrive following stressful life experiences (Levine & Kline, 2014; Karatzias et al., 2021). Rejection or hostility from primary attachment figures, on the other hand, have been found to increase the child's physiological stress responses, which is then suggested to elicit attachment insecurity (Lyons-Ruth, 2003). Others are then perceived as an unpredictable source of fear and emotional pain (Lyons-Ruth & Spielman, 2004; O'Dougherty Wright, 2007; Schuder & Lyons-Ruth, 2004).

Without positive relational interactions, it is suggested that a child will find it difficult to deactivate their stress system and regulate their autonomic nervous system to promote a

sense of safety and wellbeing (Perry, 2008; Schuder & Lyons-Ruth, 2004). Put simply, because emotionally abusive interactions disrupt the attachment system, which results in the activation of the sympathetic nervous system within the body (distress signalling), a child will engage in safety behaviours in an attempt to contain their distress (Hoeboer et al., 2021; Siegel, 2015; van der Kolk, 2005). The activation of this system leads the child to instinctively alter their behavioural responses, with the aim of gaining relational security (Siegel, 2001). It has been observed that this often results in the child unconsciously adjusting their externalised and internalised behaviour to reduce rejecting behaviours from their attachment figure, despite their attachment figure presenting as the source of distress (Troisi, 2020). This can result in damaging neuropsychological learning experiences that are difficult (sometimes impossible, based on severity) to reverse later (Teicher, 2002; Perry, 2008).

Indeed, it has been found that children who are exposed to chronic and enduring states of threat often develop overactive, or chronically under-reactive, physiological stress responses as a consequence of living in persistently dysregulated emotional states (Ludy-Dobson & Perry, 2010). Adult survivors of CEA often report experiencing either higher levels of chronic anxiety, and relational hypervigilance (increased amygdala sensitivity; Janiri et al., 2017; van der Kolk, 2005), or increased hypoarousal (reduced grey matter in the anterior cingulate cortex; Yip et al., 2019) because of this. It can be argued that this altered neurological development following CEA offers an explanation as to why so many find it difficult to self-soothe and tolerate negative affect (Siegel, 2015), though more understanding is needed of the specific regulatory processes that could ameliorate this. Due to the brain's capacity for neuroplasticity, targeting specific processes for intervention could strengthen the neuronal circuitry that supports healthy behaviours (Teicher, 2002).

Furthermore, it has been hypothesised that CEA has a unique predictive relationship with self-worth and regulatory capabilities (Gibb et al., 2007), whereby children who have experienced CPA or CSA alone are more able to attribute their adverse experiences to external, rather than internal, factors (Hankin, 2005). This can be accounted for by the interpersonal aspects of CEA (Siegel, 2015). For example, it has been found that a child whose emotional distress is not tolerated or soothed by their caregiver later internalises this experience, by interpreting their emotional distress as intolerable, unmanageable, and shameful (Barrett, 2010; Cloitre et al., 2008; Naughton et al., 2017). This subsequently causes the child to experience difficulties in identifying, and feeling a sense of agency over, their emotional experiences (van der Kolk, 2005). These difficulties can then lead to learned hopelessness, and an inability to develop appropriate strategies to manage stressful situations (Iwaniec, 2006; Riggs, 2010). A multitude of mental health related outcomes, of varying degrees of severity, are associated with CEA (Cicchetti, 1989; O'Dougherty Wright, 2007). Emotional regulation difficulties have been identified as an area that is associated with CEA, but the specific processes of this have not been identified clearly within the literature. Negative outcomes of CEA will be discussed in the following section, before exploring the potential of emotional regulation as a protective process that might mediate the negative long-term impact of CEA.

#### ***1.3.4 Section Summary***

This section defines and examines the construct of childhood abuse, specifically focusing on emotional abuse as a key abuse typography. The section identifies historical gaps within the emotional abuse literature, and explores the discrepancies and biases associated

with this construct. The relationship between attachment insecurity and emotional abuse was introduced, and the potential consequences of experiencing a caregiver as both a source of comfort and fear. The negative effects of emotional abuse on a child's development are then conceptualised utilising the IPNB framework, with regards to the child's ability to manage emotional affect following attachment disruption. It was argued that CEA from a primary caregiver disrupts the attachment system, and that this is associated with alterations in the way the brain develops to manage and cope with negative affect. It was identified that the specific processes of emotional regulation that are disrupted are unclear within the literature, as emotional regulation is an umbrella term for a variety of different constructs. The current study aims to delve deeper into the disparities arising from the extant literature summarised in this section.

#### **1.4 Adult Outcomes of Childhood Emotional Abuse**

The outcomes that have been investigated stemming from the experience of childhood emotional abuse are broad and diverse. They include many mental health disorders such as anxiety, depression, psychosis, complex post-traumatic stress disorder, eating disorders and personality disorder (Lyons-Ruth et al., 2013; O'Hagan, 1993; 1995; Pirkola et al., 2005; van der Kolk, 2005), behavioural difficulties such as substance abuse, trait aggression, deliberate self-harm (Bingelli et al., 2001; Chandler, 2012; Norman et al., 2012) and revictimization (Lee, 2015). The specific focus of this literature review is the evidence that relates CEA to deliberate self-harm (DSH) and suicidal behaviours (SB), as these outcomes represent significant public health concerns within the United Kingdom. These factors are the most consistent predictors of who will attempt suicide within the general population, and

within psychiatric in-patient populations (Hamza et al., 2012; Klonsky et al., 2013; National Institute for Health and Care Excellence, 2019; Townsend, 2019). As such, these high-risk behaviours require careful management involving intensive clinical interventions and safeguarding. DSH and SBs often co-occur (Mars et al., 2019), and it is common for DSH to precede SBs in a transitional relationship which has been noted in the literature (Hamza et al., 2012; Mayor, 2019). Thus, it is of academic and clinical interest as to whether a shared mediating process influences the strength of this relationship, hence the focus on both outcomes within the chosen research questions.

Although there are many different outcome pathways, in their text discussing clinical interventions for adult survivors of childhood trauma, Everett and Gallop (2000) highlight what they define as four 'key defining signs'. These signs address the most severe outcomes for an individual that has experienced childhood abuse; DSH, SBs, dissociation, and revictimization. From an attachment and self-regulation perspective (Bowlby, 1978; Gerhardt, 2006; Lyons-Ruth, 2003; Siegel, 1999; 2015), the prevalence of these signs in survivors of abuse is linked with the deprivation of nurture and attunement within the parent-child dyad, and subsequent difficulties regulating emotions (Bowlby, & Ainsworth, 2013; Britto et al., 2017). Indeed, Everett and Gallop (2000, p.31) state "because the desire for comfort and solace is ever present, they (survivors) find alternative and unhealthy ways of relieving internal tension", offering insight into potential internal processes behind these behaviours. There is, however, a very limited literature available regarding specific intervening processes between CEA, and later engagement in DSH, SBs, or both. Therefore, the present study sought to examine potential mediating variables associated with emotional



regulation that may influence the likelihood of DSH and SBs. The available literature exploring these processes will now be discussed.

#### **1.4.1 Defining terms**

Within the literature, both deliberate self-harm and suicidal behaviours have been defined in a broad variety of ways, often determined by aspects of each phenomenon in the context of the researcher's overarching theoretical orientation. The term 'suicidal behaviour', for example, has previously been used in literature as an umbrella term that encompasses ideation, self-harm, and parasuicide (Silverman, 2011), though it can be argued the inclusion of self-harm in this category renders the definition ambiguous; particularly as self-harm can often occur without suicidal intent (Gratz, 2001).

Alternately, Hamza et al. (2012) describe the term 'self-injurious behaviour' as referring to behaviours that cause direct and deliberate harm to the self. This term is often used to encompass both suicidal behaviours (such as ideation, planning) and suicide, and deliberate self-harm (Lohner & Konrad, 2007; Nock, 2010; Turecki & Brent, 2016); highlighting not only their shared diathesis but also the complexity of these constructs. A systematic review by Meszaros et al. (2017) found eleven different phrases associated with self-injurious behaviour, emphasising the difficulties in categorising this phenomenon. Out of these eleven terms, the predominant terms utilised within research are deliberate self-harm (DSH) and nonsuicidal self-injury (NSSI).

In Muehlenkamp and colleagues' review on the language used to identify self-harm it was found that there are differences in the terms' usage across European studies when

compared to those conducted in the US and Canada, despite finding statistical similarities with regard to prevalence and occurrence (Muehlenkamp et al., 2012). Typically, the terms are used interchangeably, although NSSI is understood to only include behaviours without suicidal intent. DSH is often recognised as a more flexible term that can encompass behaviours with or without suicidal intent; although it more commonly refers to behaviour where there is no intent to die (Gratz, 2003). Due to the ambiguity in the language used, more recent studies reference both terms (for example, Masana et al., 2020).

Everett and Gallop (2000) argue that individuals engaging in self-harm or suicidal behaviour cognitively differentiate between the two actions, but may experience them both simultaneously; thus, the need for separate, clear definitions. A recent systematic review of longitudinal studies involving individuals experiencing DSH and SBs added support for this theory (Cha et al., 2019). Therefore, for conceptual clarity, the DSH and SBs will be viewed as independently occurring behaviours, although comorbidity will be acknowledged where applicable. The term deliberate self-harm will be used, with DSH understood as overt behaviours that intentionally cause harm to the body, such as cutting, burning, poisoning, and preventing healing, without direct intent to die (Fliege, et al., 2009; Gratz, 2001). This definition was deemed appropriate because it recognises the potential experience of suicidal behaviour alongside self-harm, as well as the act of suicide, that can be inadvertently caused by severe DSH. The term suicidal behaviour will also be used, and will refer specifically to suicidal ideation, planning of suicide and suicide attempts (Hamza et al., 2012; Millner et al., 2017); phenomena which can occur independently or alongside DSH.

#### **1.4.2 Processes associated with Deliberate Self-Harm and Suicidal Behaviours**

CEA is thought to be a core component of all abuse types (Hart et al., 2002), with findings suggesting that CEA makes a greater contribution to the development of long-term psychological difficulties than other forms of abuse (Binggeli et al., 2001; Spinazzola et al., 2014). This is particularly the case for the development of SBs (de Araujo & Lara, 2016; Liu et al., 2017) and DSH (Buser & Hackney, 2012), with considerable evidence supporting the theory that CEA is a predictor factor in the development of these behaviours (Klonksy, 2007; Lee, 2015). Parental antipathy, such as that which commonly occurs in CEA, has been found to significantly influence both SBs and DSH, with maternal antipathy more associated with suicide attempt, and paternal antipathy with DSH (Johnstone et al., 2016).

DSH is a behaviour that commonly occurs at the beginning of adolescence in typically developing populations. Without adequate psychological intervention DSH behaviour often continues across the lifespan (Lyons-Ruth et al., 2013). DSH behaviour has been found to be strongly linked with experiencing CEA (Doyle, 1997; Glassman et al., 2007; Gu et al., 2020), with Buckmaster et al. (2019) finding that abusive environments and insecure attachments to primary caregivers predicted the long-term maintenance of DSH engagement. It has been hypothesised that this could be due to the relationship between early invalidating environments and the development of poor strategies for emotional coping (Linehan, 1993; Gratz, 2003). As there are links between attachment insecurity, CEA, and disrupted emotional development, it can be theorised that a lack of emotional coping skills may be an underpinning factor that influences the longevity of externalised coping mechanisms.

There is a growing literature focussing on the inter-relationships between childhood trauma, emotion dysregulation, and negative adult outcomes. Nock (2010), for example,

developed a theoretical model based on the existing literature, to explore the mediating variables leading to DSH. This model highlighted intrapersonal vulnerability factors that limit a person's ability to respond to challenging events in an adaptive way. These vulnerability factors (such as experiencing CEA) then increase the likelihood that a person will engage in DSH as a coping strategy. More specifically, individuals with a history of DSH struggle with aversive thoughts and feelings (Najmi et al., 2007), and experience a lower tolerance for emotional distress (Sim et al., 2009).

Engaging in DSH behaviour serves many reported interpersonal and intrapersonal functions. These include reducing an individual's negative affect, as a means to access support and as a form of self-punishment (Gratz, 2003). Many individuals who engage in DSH have reported suffering severe emotional dysregulation when experiencing stressors (Brereton & McGlinchey, 2019; Gratz, 2003). This has been associated with an increase in behavioural impulsivity, and likelihood of engaging in DSH to cope (Buckmaster et al., 2019; van der Kolk et al., 1991). Common reasons people engage in DSH include to punish oneself, to prevent a suicide attempt or to reduce dissociation (Gratz, 2003). However, in Klonksy's (2007) systematic review of the DSH literature, studies consistently linked affect regulation with engagement in DSH in both clinical and non-clinical populations. This finding suggests that emotional regulation may be a more significant mediating variable between CEA and later engagement in DSH than other variables.

In support of this, Chandler (2012) found that DSH is most often used by individuals who feel emotionally overwhelmed; to enable them to regain a semblance of control over emotions that are perceived to be unmanageable. This behaviour is thought to be adopted as an attempt to self-soothe; the aim of which is to provide the individual with short-term

emotional relief (Gilbert et al., 2008). Similarly, Mars et al. (2019) found that some individuals also engage in DSH as a regulatory mechanism to avoid attempting suicide, a factor which is also linked to later attempts. Brereton and McGlinchey's (2019) systematic review also cited experiential avoidance and poor emotional regulation as the most reported reason for DSH engagement. These findings suggest that regulation of negative emotions (i.e., tolerating distress) may be an important intervening process that influences DSH behaviour.

Uniquely associated with CEA (Lee, 2015; Millner et al., 2017), SBs (ideation, plan, and attempt; Miller et al., 2017), like DSH, present a high-risk concern for mental health services. Adults who have experienced CEA have been shown to be five times more likely to engage in SBs, and 12 times more likely to attempt suicide than adults who experienced CPA (Kaplan et al., 1999; Mullen et al., 1996). In de Araujo and Lara's (2016) more recent study, involving 71,429 participants, CEA was associated with higher rates of both suicidal ideation and serious attempts, particularly for individuals who progressed from ideation to attempt.

There are many proposed explanations for experiencing thoughts of suicide, including emotional dysregulation (Anestis et al., 2011), limited access to emotional regulation strategies (Rajappa et al., 2010), distorted sense of worth, and perceived lack of social belonging (Everall et al., 2005). One potential explanation for this is that individuals who experience SBs are also more likely to have developed insecure or disorganised attachment styles (Boyda et al., 2018); thus, reducing the likelihood of developing self-regulation skills (Ludy-Dobson & Perry, 2010; Vohs & Baumeister, 2016). Attachment insecurities such as those experienced following CEA have been found to be both a predictive and facilitatory factor in SBs (Boyda et al., 2018), and are linked to emotional regulation skills and negative internal working models (Siegel, 2015).

Whilst exploring the effects of adverse childhood experiences on mood disorders, Janiri et al. (2018) found that CEA specifically predicted lifetime suicide attempts. In this study, it was found that individuals who had experienced CEA reported hypersensitivity to emotional stimuli, and reduced ability to cope with emotional distress. The frequency, duration and intensity of SBs has been found to be directly associated with the severity of emotional distress (Anestis et al., 2011), suggesting emotional regulation may also be a mediating process for this behaviour.

Much research identifies shared processes between DSH and SBs. Klonsky et al. (2013) found that both DSH and suicidal ideation were strong predictors of attempted suicide; a result that was also found in a systematic review by Meszaros et al. (2017). Both Anestis et al. (2013), and Mars et al. (2019), found DSH was specifically associated with the transition from suicidal thinking to action, although characteristics (such as frequency and method) did not influence this. Individuals engaging in DSH and experiencing suicidal ideation simultaneously, were particularly vulnerable to future attempts (Mars et al., 2019). These findings suggest that a shared emotional regulation process may contribute to the transition from DSH to SBs. Gordon et al. (2016) found that emotional dysregulation mediated the relationship between CEA and both suicide attempts and DSH in women with bulimia nervosa, and that this relationship was particularly sensitive to the intensity of negative affect experienced.

Findings from the current literature indicate that emotional regulation can be a significant mediating process in the development and maintenance of both DSH and SBs (Anestis et al., 2013; Linehan, 1993; Gross, 2013). A considerable limitation of these studies is the broad use of emotional dysregulation as a construct, however, and lack of clarity regarding specific processes. A more tightly operationalised construct of emotional

dysregulation would improve the clinical utility of future studies, particularly with regards to effective intervention planning. Indeed, more investigation must be given to the specific aspects of this process in order to understand which areas are the most influential. As the term “emotional regulation” is broadly used to refer to a variety of processes involving difficulty with tolerating or regulating negative affect or emotional distress, the following chapter will focus on the meta-emotional processes of distress tolerance.

### ***1.4.3 Section summary***

This section defines the terms “deliberate self-harm” and “suicidal behaviour”. The comorbid relationship between these variables was identified, and the potential for a shared mediating process between the two was theorised. The relationship between CEA, DSH and SBs that has been identified within the literature was introduced. The importance of CEA as a precursor to DSH and SB was highlighted, particularly when compared with other abuse types. Processes associated with both DSH, and SBs were identified, with poor emotional regulation skills consistently associated with engagement in both outcomes. The lack of research regarding specific emotional regulation processes was identified, with many studies referencing multiple factors of emotional regulation that could influence these outcomes. The following section aims to isolate these factors in order to better conceptualise these processes, specifically focussing on the concept of distress tolerance.

### **1.5 Emotional Regulation through Distress Tolerance**

Although Riggs (2010) model provides a useful scaffold to explore the developmental ripple effect caused by experiencing childhood emotional abuse (CEA), this model does not explore the underpinning processes which could mediate the variance or severity of adult outcomes. It is supported in the literature that the development of emotional regulation skills through the parent-child dyad is a key aspect of healthy development (Lyons-Ruth, 2003), and that this can be disrupted following CEA. It has also been identified within the literature that CEA is often associated with engagement in DSH and SBs. The aim of the following section is to explore emotional regulation as a construct, the internal neurological processes by which regulation occurs, and how this can be impacted following abuse, in order to inform the research questions of this study.

Regulation of emotion has been proposed as a potentially unifying explanation for diverse symptom presentations. A large body of research suggests that disruption to emotion regulation (or, emotional dysregulation) increases the likelihood of mental health difficulties and maladaptive behaviours (Crow et al., 2014; Lee, 2015; Riggs, 2010). Neuroplasticity, or the brain's ability to adapt and form new neural connections over time, ensures that adaptive strategies can be learned and strengthened such that they are more likely to be selected in the future (Sege & Browne, 2017). Thus, it is reasonable to explore whether the processes involved in emotion regulation mediate the relationship between experiencing CEA and engaging in DSH and SBs in adulthood. Distress tolerance is a key factor identified in a large number of studies, and it refers to the specific emotional regulatory process of adaptively tolerating and responding to negative affect (Levine & Kline, 2014; Linehan, 2018; Karatzias et al., 2021; Sim et al., 2009).



### **1.5.1 *Defining emotion regulation***

There is often a confusing overlap within the literature concerning the constructs of emotion and emotion regulation due to overlapping processes that encompass both (Gross, 2014). Typically, emotions consist of cognitive, behavioural, and physiological information, based on the current stimulus and the individual's previous emotional experiences (Gross, 2014; Pessoa, 2019). Emotional regulation on the other hand, refers to the process by which a person interprets and responds to this information. Emotional regulation encompasses several processes (both extrinsic and intrinsic) through which an individual attempts to manage emotional stimuli. The aim of emotion regulation is to support the individual to meet their personal needs and accomplish goals, particularly in the face of overwhelming emotions (Gross, 2013). These processes are said to exist on a continuum, spanning from conscious and controlled regulation on one end, to unconscious, automatic regulation on the other (Gross & Thompson, 2006). Distress tolerance is defined as an individual's ability to withstand and tolerate emotional states so that adaptive emotional regulation can occur (Lass & Winer, 2020; Siegel, 1999).

To understand these constructs further, Gross and Thompson (2006) devised a modal model of emotion. This model proposes that the process of emotional regulation is based in transactional interactions between situation, attention, appraisal, and response, involving multiple emotion-related systems in the brain (Thompson et al., 2008). These processes include reflection, and the formulation and use of context-dependent rules to act upon the emotion-relevant situation, such as responding to an angry bypasser or losing a job (Gross, 2013). Automatic neural activation in the thalamus and subsequently the amygdala, occurs as information relevant to the emotional stimuli (Thompson, 2011), are processed. It is

theorised that this activation leads to a motivational 'approach/avoid' response to the stimulus, determining the individual's initial behaviour (Thompson et al., 2008). The modal model argues that the impact emotions have on an individual influences how they are regulated. According to the modal model adaptive emotion regulation is viewed as a component of emotional activation.

Therefore, dysregulation and the inability to tolerate distress, are posited to be a core feature of most forms of psychopathology (Cole & Deater-Deckard, 2009). Indeed, deficits in emotional regulation have been found to be both predictive of psychopathology, and associated with maladaptive symptomology (Aldao et al., 2010; Cole & Hall, 2008). This has been theoretically linked to the inability to tolerate and modulate negative affect in a situationally appropriate manner (Gratz & Roemer, 2004; 2008; Lass & Winer, 2020; Linehan, 2018; Siegel, 1999).

The 'window of tolerance' model, first coined by Siegel (1999) and expanded upon by Ogden et al. (2006), postulates that each individual has an 'optimal zone' of arousal within which effective regulation and emotional coping can occur. This model argues that the experience of childhood trauma reduces the size of the window, meaning that, as the individual's reaction to stressors intensifies, ability to tolerate stressors in order to access adaptive regulation strategies reduces (Hershler, 2021; Lass & Winer, 2020; Ogden et al., 2006). It is proposed that the zone of optimal autonomic and emotional arousal (or, optimal distress tolerance) falls between the states of hyperarousal and hypoarousal (Lohrasbe & Odgen, 2017; Siegel, 1999), whereby emotions can be processed without disrupting a person's functioning. As a core focus of emotional regulation theory is the control or management of emotional experiences and expression, with a predominant focus on

reducing and inhibiting negative emotions (Aldao et al., 2010; Gross, 2013), the window of tolerance model is of particular relevance. Cole and Hall (2008), for example, found that a reduced capacity to experience and differentiate between negative emotional states is inherently dysregulating for the individual. This suggests that toleration of, and attendance to, distressing emotional experiences is important for adaptive regulation strategies that reduce the intensity of the emotion (Gaher et al., 2013). When adaptive strategies are not accessible (such as co-regulation, reappraisal or problem solving; Gross, 1998), it is theorised that the individual then engages in maladaptive strategies to manage negative affect, such as engaging in DSH or SBs to reduce emotional overwhelm (Gratz, 2003; Klonsky et al., 2013). This theory suggests that, without an optimal window of tolerance, successful regulation cannot be achieved (Ogden et al., 2006; Siegel, 1999; 2015).

### ***1.5.2 Deficits in emotion regulation***

The capacity for emotional regulation is widely understood to develop between infancy and adolescence, as this is the period where temperamental, neurobiological, conceptual (understanding of emotional processes) and social factors combine to create a foundation upon which the individual differences seen in adulthood develop (Gross, 2013). Influenced by constructivist and relational approaches to emotional development, there is an emphasis on the in-person context (Siegel, 2001; Thompson & Lagattuta, 2006), with some factors being viewed as more influential in developing self-regulation skills. The quality of caregiver-child interactions has been identified as pivotal to the child's later ability to regulate their own emotions (Cole et al., 2004). Linehan (1993; 2018) conducted comprehensive research regarding emotional dysregulation and poor mental health outcomes (with a specific

focus on borderline personality disorder), and the role of the 'invalidating environments' that lead to this. In the context of the present study, the definition of an emotionally invalidating environment used by Linehan (1993) aligns well with current definitions of CEA and its consequences, particularly where private emotional experiences are disregarded, belittled, or punished to undermine the child.

Childhood trauma, and specifically CEA, is associated with neurobiological deficits, such as altered grey matter volumes of the amygdala and hippocampus (McCrory et al., 2013); key areas of the brain used for mood regulation (Gross, 2013). Together, hypersensitivity to negative emotional stimuli because of increased amygdala activation and a lack of adaptive regulation skills due to inattentive caregiving, has been theorised to lead to the inhibition (or suppression) of negative emotions through externalising behaviours such as suicide attempt and DSH (Alink et al., 2009; Giletta et al., 2017; Neacsiu, et al., 2018).

### ***1.5.3 Modulation through distress tolerance***

Much like emotional regulation, emotional dysregulation is a multidimensional construct (Gross, 2013), hence the need for a narrower focus within contemporary literature aimed at targeting negative symptomology. Predominantly focussed on negative affect, the construct encompasses: (a) a lack of awareness, understanding and acceptance of distress; (b) limited adaptive strategies to modulate intensity and duration of emotional responses; (c) unwillingness to experience emotional distress to pursue goals; and (d) inability to engage in goal-directed behaviour when distressed (Gratz et al., 2006; Gratz & Roemer, 2004).

Although emotional awareness, understanding and acceptance are integral to adaptive emotional regulation skills, the modulation of emotions, that is, modifying the intensity or duration of the emotion (positive or negative, context dependent), has been identified as a central component of adaptive emotional coping (Gross & Thompson, 2006; Gross, 2013). Successful modulation has been found to increase an individual's ability to control their behavioural responses to an emotion, rather than the emotion itself (Leyro et al., 2010). Linehan (1993) argues that distress tolerance (DT) skills are essential for achieving successful modulation, as they prevent impulsive actions that may exacerbate the situation that has caused distress and enable adaptive strategies to take place. This is further supported by Ogden et al. (2006) and Ashfield et al. (2021), whose work showed that increasing an individual's window of tolerance can increase an individual's ability to integrate information about emotions, whilst remaining aware of thoughts, sensations, and impulses.

Linehan (1993; 2018) states that individuals who have inadequate modulation skills because of adverse childhood experiences show emotional instability; with DSH and SBs occurring in attempt to alleviate, or avoid, emotional overwhelm. Exploring this in more detail, Chapman et al. (2006) found that an inability to tolerate distress led to experiential avoidance in order to escape unwanted emotional experiences (i.e., negative reinforcement). In this study the maintenance of DSH was reinforced due to the individual's lower tolerance for emotional arousal (rather than heightened occurrence of emotional arousal as previously hypothesised; Herpertz et al., 2000). Lower tolerance for distress was found to increase the likelihood of individuals attempting to eliminate emotional arousal, perpetuating the DSH cycle.

In support of these findings, Gratz et al. (2006) used an experimental measure for DT to explore dysregulation in more depth, finding that individuals with a diagnosis of borderline personality disorder (who likely also experienced childhood abuse; Ball & Links, 2009; Kuo et al., 2015; Linehan, 1993) were less willing to experience distress to pursue goal-directed behaviour, and more likely to engage in destructive behaviours as a result. Similar results were found in adults who experienced CEA, where low DT led to emotional nonacceptance and avoidance of negative affect in substance users (Gratz et al., 2007). Destructive behaviours such as substance misuse, DSH and SBs have been found to provide initial, short-term emotional relief from overwhelming negative affect, however in the longer term these behavioural strategies often increase both the intensity of affect and the corresponding physiological arousal (Nock & Mendes, 2008), resulting in increased symptomology (Linehan, 2018).

Following on from the window of tolerance theory (Ogden et al., 2006; Siegel, 1999), Leyro et al. (2010) argue that DT, as a construct, may theoretically 'drive' a variety of forms of emotional avoidance including disengagement coping and suppression. DT is a theoretically narrower construct than other emotional dysregulation theories, which encompass multiple difficulties in both emotional functioning and control (Simons & Gaher, 2005). DT is conceptualised as a higher order component of emotional regulation and behaviour (Zvolensky et al., 2010). There is increasing evidence in the extant literature (for example, Chapman et al., 2005; Lass & Winer, 2020; Macatee et al., 2013; San Martín et al., 2020; Stanley et al., 2018) for the significance of DT as a transdiagnostic marker across various forms of psychopathology. Due to this, researchers have begun to explore DT as a potential

mediator for various psychopathologies, developing insights about both onset and maintenance of psychopathology as well as prevention (Zvolensky et al., 2011).

#### **1.5.4 Distress Tolerance as a mediator**

Distress tolerance can be understood as an individual's ability to withstand negative emotional states (Hershler, 2021, Lass & Winer, 2020; Siegel, 1999; Simons & Gaher, 2005). As such, DT is thought to affect the individual's assessment of exposure to unpleasant emotional stimuli, as well as their subsequent behavioural responses (Zvolensky et al., 2011). DT has been found to be a relatively stable, trait-like risk marker for psychopathology (Leyro et al., 2010). However, recent research has demonstrated that DT-focussed interventions can reduce an individual's symptomology (Banducci et al., 2017a; 2017b; Linehan, 1993; 2018; Lotan, et al., 2013). Thus, it seems DT could be an important process in mediating long term outcomes following CEA.

Exploring this in greater depth, Simons and Gaher (2005) conceptualise DT as a multidimensional meta-emotion construct that encompasses an individual's "evaluations and expectations of experiencing negative emotional states" (Simons & Gaher, 2005, p. 83). This process involves an individual's (1) tolerability or aversiveness to negative emotion, (2) appraisal (of coping) and acceptance of distress, (3) regulation to alleviate distress (avoid or attenuate), and (4) attentional absorption of emotional states and disruption to functioning. It has been postulated that individuals who report low DT (or 'narrow' windows of tolerance; Siegel, 1999) follow a process of maladaptive regulation (Simons & Gaher, 2005). After failure to alleviate their affective arousal, emotional overwhelm is experienced in the form of

hyperarousal or hypoarousal (Ogden et al., 2006), which results in the individual's attention being absorbed by the presence of the distress. This subsequently disrupts the individual's functioning (Simons & Gaher, 2005). As such, it is anticipated that DT can influence regulation styles, with lower capacity for DT (self-perceived or physiological) associated with maladaptive behavioural responses, particularly behavioural reactivity or avoidance, and psychopathology (Leyro et al., 2010).

Low DT has been linked to anxiety, depression, substance misuse, obsessive compulsive disorders, eating disorders, increased SBs and DSH (Allan et al, 2014; Anestis & Joiner, 2012, Bartlett et al., 2021; Cogle et al., 2011; Gratz et al., 2006; Lass & Winer, 2020), as well as histories of childhood maltreatment (Banducci, et al., 2017b; Hershler, 2021; Robinson et al., 2021). These observations led Linehan (1993; 2018) to include DT skills as a primary component of Dialectical Behaviour Therapy (DBT). Similarly, many third wave therapies such as Mindfulness (Lotan et al., 2013) and Acceptance and Commitment Therapy (ACT) utilise DT skills to promote emotional acceptance (Hayes et al., 2009); indicating the increasing relevance of this construct as both a potential resilience, and risk, factor.

DT is a relatively understudied construct in comparison to wider emotion regulation research (Leyro et al., 2010), however, research examining DT alone has found that DT mediates the impact of a variety of outcomes. Felton et al. (2018) found that DT mediates the impact of negative life events on depressive symptoms, whilst Bartlett et al. (2021) found DT mediated severity of childhood maltreatment on severity of suicidal ideation. Anestis et al. (2012) found that DT moderated the relationship between PTSD symptoms and SBs, and Yardley et al. (2019) found that DT focussed interventions mediated the relationship between hospital admissions and DSH behaviour. Waller et al. (2007) found that DT mediated the



impact of experiencing CEA on eating disorder behaviours, and, more recently, Banducci, et al. (2017b) found that DT mediated the relationship between CEA and anxiety. Despite this, no study to date has explored whether DT mediates the relationship between CEA and the adult outcomes of DSH and SBs. The wide-ranging involvement of DT in mediating deleterious outcomes relating to later adult psychopathology makes DT of significant interest to this study.

### ***1.5.5 Section summary***

This section introduces the construct of emotional regulation, and the process of distress tolerance as a meta-emotional construct which aids successful regulation of affect. DT was discussed as a construct developing apace; however, it was noted that this is an area in relative infancy. The significance of DT in the modulation of negative emotions was introduced, and corresponding studies identifying DT as a single factor which can mediate the relationship between psychopathological outcomes. A gap within the current literature was identified, informing the hypotheses for the empirical study.

## **1.6 Exploring Associations Between Childhood Emotional Abuse, Suicidal Behaviour and Deliberate Self-Harm: The Mediating Role of Distress Tolerance**

### ***1.6.1 The current study***

Self-injurious thoughts and behaviours impact over 10 million individuals worldwide each year (Mann, 2013), with rising numbers of UK hospital admissions recorded for

deliberate self-harm (DSH) and suicidal behaviours (SB) (Office for National Statistics, 2019). According to Carroll et al. (2014) one in 25 patients presenting to hospital for DSH will die by suicide; highlighting the importance of investigating the underlying mechanisms that contribute to DSH and SBs. Childhood Emotional Abuse (CEA) has been identified as a significant predictor for SBs and DSH (Miller et al., 2017), whilst factors such as positive social support and adaptive emotional regulation skills have been identified as mediating the impact of this relationship (Thompson & Kaplan, 1996). Distress tolerance (DT; the perceived or actual ability to manage and cope with negative experiential states and emotional distress; Leyro et al., 2010) may also be a potential mediator for these outcomes.

Despite separate established theoretical links, no study to date has explored the relationships between DT, CEA, DSH, and SBs together. Research conducted by Banducci et al., (2017b) explored the relationship between CEA and DT in individuals experiencing anxiety disorders, finding a correlation between the severity of CEA experienced and probability of having low DT as an emotional regulatory style. DT significantly mediated the relationship between CEA and anxiety. This finding supports the tentative hypothesis that there may also be a mediating relationship between DT and CEA for DSH and SBs.

### **1.6.2 Aims, Objectives, and Hypotheses**

This research study aims to address a gap in the literature by investigating whether DT mediates the relationship between CEA and DSH, and CEA and SBs. The research aims to examine DT as an underlying process that may indicate why there is an associated relationship between CEA and later engagement in DSH and SBs in adulthood within the literature. A

quantitative approach was necessary to conduct a mediation analysis, but this methodology was primarily chosen so that the study might have clinical utility (generalisability), particularly because the participants were sampled from an NHS service.

The first objective was to examine the relationship between CEA on a person's self-perceived DT; as it was hypothesised that higher levels of CEA would be associated with lower DT. The next objective was to explore whether CEA would be associated with SBs and DSH in a clinical sample. It was hypothesised that higher levels of reported CEA would lead to higher levels of SBs and DSH. Next, the relationship between DT, SBs, and DSH was examined. It was expected that low levels of DT would be associated with increased levels of SBs and DSH. The final objective of the study, and the main study hypotheses, was to examine the mediating role DT may have on the relationship between CEA, SBs, and DSH. It was hypothesised that DT would significantly mediate the relationship between both CEA and DSH, and CEA and SBs.

## **Chapter 2: Method**

### **2.1 Design**

As observations around the chosen topic have been identified throughout the literature, and the relationships between some of the variables previously tested, a quantitative approach was deemed most appropriate for this study. This was to enable the testing of new hypotheses involving the relationships between the chosen variables and add to the empirical data base. The current study employs a non-experimental correlational design, using four questionnaires. Participants were recruited from a clinical population accessing psychological support. All participants completed self-report measures which provided scores on familial childhood abuse, engagement in deliberate self-harm and suicidal behaviour, and tolerance to distress.

### **2.2 Ethical approval and considerations**

Due to the recruitment of a clinical population within the NHS, HRA (Health Research Authority) ethical approval was sought and attained through the Integrated Research Approval System (IRAS), the NHS ethics board (Appendix B). Approval was also gained from the University of Wolverhampton. Gatekeeper access was granted by the clinical lead of the psychological service for the duration of the project.

Consideration was given regarding the sensitive nature of the questions within the study measures. Asking participants about childhood trauma, self-harm and suicidal behaviour can potentially bring stressful past experiences to the participant's awareness, leading to distress. Similarly, reported engagement in self-harm may have raised safeguarding

concerns, particularly if current engagement is newly disclosed. Further risks for consideration were potential disclosures of childhood abuse that had not previously been disclosed, whereby a participant may have wanted to report this formally. As participants within this study were all individuals who, at the time of recruitment, were accessing psychological support within an NHS psychological service, this potential risk was managed through following service safeguarding protocols and liaising with assigned clinicians.

Risk management was also addressed throughout the data collection process, informing participants prior to participation that questions involving sensitive topics would be asked. Participants were aware of any potential distress the questions might elicit before providing consent to the study and were offered the right to withdraw from the research up until the point of data analysis. Participation was voluntary, with service users informed that they could decline participation. Participants were offered time at the end of data collection to debrief, answer questions and discuss any feelings of distress. Any distress that a participant experienced following participation would be managed by the researcher, and the participant's clinical team would also be informed and notified.

A systematic review conducted by Alexander, Pillay, and Smith (2018) explored the experiences of vulnerable participants who were asked sensitive questions within research (such as those related to childhood trauma), both quantitative and qualitative in nature. The review found positive responses, with participants finding meaning (altruism, importance) in sharing their experiences; many reporting that the benefit of being asked sensitive questions outweighed any feelings of distress they experienced. This highlights the importance of continuing to offer the potential to participate to vulnerable populations, as long as adequate support is offered during participation and at debrief. This protocol (Alexander et al., 2018)

was followed throughout, with all measures used within the study validated within previous clinical research, and appropriate for use in vulnerable populations.

It is also important to acknowledge when addressing risk management that contemporary research has found asking about suicidal thoughts does not increase risk of suicide. Asking questions around suicide has been found to create awareness, reduce stigma, and reduce the risk of suicide, whilst also increasing help-seeking behaviours in those with mental health concerns (Dazzi et al., 2014). As potential participants were seeking support for psychological difficulties, and part of the assessment procedure within the service involves asking risk related questions to safeguard patients, all participants were familiar with questions regarding their engagement in suicide and self-harm. This further reduces the potential for distress induced by questions around suicide and self-harm.

As the principal researcher was, at the time of recruitment, working as a trainee counselling psychologist within the trust, there was the potential that the boundary differences between the patient-therapist relationship and the participant-researcher relationship could bias the data and impact the self-report measures. To minimise this, the researcher established clear, separate boundaries prior to participation. This ensured participants understood that emotional containment would be offered in the event of distress, but that the researcher was working in a data-collection context. Participants were aware that other clinicians would be available if further support was required. Contact details for further support were also provided on the participant debrief form. None of these ethical concerns occurred throughout data-collection for the study.

### **2.3 Participants**

Potential participants for this study were individuals accessing psychological support (in the form of one-to-one therapy, group interventions or other service-offered support) within an enhanced primary care mental health service for adults in the NHS. This site was selected due to researcher gatekeeper access through clinical placement, with a loose data collection period set at 12 months. Patients supported within this service experience a wide range of moderate to enduring mental health difficulties and are typically assessed as low to medium risk for engagement in harm to themselves or others. To facilitate case control, service users could participate regardless of whether they had previous engagement in self-harm or suicidal behaviour or not. Exclusion criteria for the study included: anyone under the age of 18, any individuals who do not have a good comprehension of English language, and individuals who lack capacity for informed consent (such as individuals with a learning disability or anyone exhibiting neuropsychological difficulties). Participants were only able to participate once. Potential participants were either verbally invited to participate in the study by the researcher, or could request to participate through poster advertisements (Appendix C) that were located in the service waiting areas. Due to the low-risk nature of the service, and exclusion of individuals lacking capacity for informed consent, participants were offered the option to take away the questionnaires to complete in their own time if they preferred, returning them to the researcher in a sealed envelope at their following appointment. Following disruption caused by COVID-19, a total of 70 participants were recruited within the timeframe. Sample characteristics can be found in Appendix L.

## 2.4 Procedure

As potential participants were out-patients accessing a psychological service, recruitment took place on site. Potential participants were invited to participate by the researcher in the service waiting room or at group interventions facilitated by the service. Upon introduction, the researcher clearly stated the purpose of their role, and offered opportunity to ask questions. Service users were also informed that participation (or declining to participate) would not impact the support received from the service.

Service users who expressed interest, and were identified as suitable, were informed verbally about the purpose of the research, what participation involved and the content of the questionnaires prior to giving consent. The service users were informed that the research involves completing a questionnaire that asks sensitive questions about their childhood experiences, how they manage feelings of distress, and if they have engaged in self-harm or suicidal behaviour. The service users were also be informed that they could still participate if they have not engaged in self-harm or suicidal behaviour. Potential participants were then presented with an information sheet (Appendix D) outlining further details regarding confidentiality, data protection, participation time and the withdrawal procedure. All data collected by the researcher is anonymous and was separated from the participant's consent form once the questionnaire was completed. Potential participants were informed of the possible risks in participating and offered support by the researcher throughout the procedure if requested. The researcher and research supervisors' contact details were provided on the information sheet and could be accessed after participation if the participant had any further questions. If the service user agreed to participate, they were then presented with a consent form to sign (Appendix E). Research would only proceed when informed consent was obtained.



Individuals accessing the service for treatment are assessed for suitability prior to admission by qualified mental health professionals and psychologists. Thus, individuals accessing the service have the capacity to understand the context and procedure of the research in order to make an informed decision to take part. Whereby an individual accesses reasonable adjustment within the service (for example, neurodivergence such as autistic spectrum condition, or translation needs) capacity to make informed consent was assessed by the researcher. This ensured that any participants taking part in the study understood the purpose and nature of the research and the benefits and risks involved. This also ensured that all participants were able to retain information to make an informed decision, and in the timeframe offered. If a participant did not understand this information, they would be excluded from participation.

After the participant completed the consent form, they were given a series of questionnaires (Appendix F, G, H, I, J). The researcher then asked if the participant would prefer to complete the questions independently or if they would prefer the researcher to read the items aloud and record the participant's responses. This was offered to ensure that individuals were able to participate regardless of reading ability. All but one individual requested to complete the measures independently with the researcher present.

Upon completion of the questionnaires, participants were offered an opportunity to ask further questions about the research and offer feedback regarding their experience of the procedure. Participants were offered the option of having the summary results of the research emailed to them at the end of the research process. Participants were provided with a debrief sheet. The debrief sheet (Appendix K) included follow up information if the participant required further support. Contact details of the researcher and research supervisors was also included to ensure the participant could ask further questions, and to

enable requests for information about data results. The debrief sheet also provided free sources that participants could contact if they required.

The time frame for the procedure, from expression of interest to completion of participation ranged from ten minutes to half an hour, dependent upon participant reading capacity and time taken for additional questions and feedback.

## **2.5 Demographic Information**

Participant demographic information was collected to further understand the participant sample and adjust for possible relationships between outcome measures. Demographic information and sample characteristics were obtained via a self-report questionnaire (Appendix F).

## **2.6 Measures**

The participant sample completed four self-report measures (Appendix G, H, I, J)

1. The Childhood Trauma Questionnaire – Short Form (CTQ-SF; Bernstein et al., 2003)
2. The Distress Tolerance Scale (DTS; Simons & Gaher, 2005)
3. The Deliberate Self-Harm Inventory (DSHI; Gratz, 2001)
4. The Suicide Behaviours Questionnaire Revised (SBQ-R; Osman et al., 2001)

### **2.6.1 *The Childhood Trauma Questionnaire - Short Form (CTQ-SF)***

The Childhood Trauma Questionnaire – Short Form (CTQ-SF; Appendix G) is a 28-item (25 clinical items and 3 validation items) retrospective self-report measure, used for assessing history of childhood abuse and neglect. Adapted from the original 70-item Childhood Trauma

Questionnaire (Bernstein et al., 1994; 1998; Bernstein & Fink 1998) to overcome time limitations, the CTQ-SF can be completed in approximately five minutes. For accessibility, the items are written at a sixth grade (approximately 10 – 12 years) reading level. This enables prompt and efficient screening within both clinical and non-clinical populations. This version of the measure is particularly useful where participants are under time constraints and can be administered both in groups and individually due to the structure of the measure.

The CTQ short form was deemed the most appropriate version for this study for multiple reasons. Firstly, due to the population recruitment occurring between appointments and group interventions where participants may be short on time. The CTQ-SF is also more appropriate when in accompaniment of other measures, as fewer questions reduce participant burden and fatigue (Bernstein et al., 2003). When compared against other measures of childhood maltreatment, such as the Childhood Trauma Interview (CTI), the CTQ-SF was found to be more sensitive in detecting emotional abuse and emotional neglect; supporting the choice of this measure for the current study (Spinhoven et al., 2014; Tonmyr, et al., 2011). Following hierarchical analyses, the CTQ-SF scale was also found to adequately represent the broad dimensions of childhood abuse, when compared to other measures (Spinhoven et al., 2014; Tonmyr, et al., 2011).

The CTQ-SF has a simple five-factor structure scale, consisting of five abuse categories in subscales. This structure enables the researcher to operationalise childhood trauma as a whole, as well as isolating different abuse types. The subscales are Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional Neglect and Physical Neglect. Five items are presented for each subscale, and each item is scored using a 5-point Likert scale ranging from Never True (1) to Very Often True (5). Raw scores are then added together and converted to scaled scores, quantifying the severity of abuse in each area. Scores range from 5 to 25 points for

each subscale. Total scores range from 25 to 125. This is to assess both the occurrence of childhood abuse and the frequency of abusive incidents. Three items within the questionnaire are also included as a Minimisation/Denial subscale, to assess for false-negative, or socially desirable, responses. The measure does not assess other traumatic events that may occur in childhood, such as major illness or death of a parent.

CEA is conceptualised throughout this study as a core component of all abuse types, and a common factor in many experiences of childhood trauma. The CTQ-SF links with the chosen theoretical framework and definitions within the study by measuring each abuse type separately. This means that individual abuse scales could be administered dependent upon a study's question. As the research leans from the perspective of CEA as a core component of other abuse types, all scales on the CTQ-SF were administered. This is to ensure that severity of experience could be monitored, whilst also accounting for co-occurring experiences of abuse alongside emotional abuse. This was to gain a broader understanding of the spectrum of childhood experiences, and responses to emotional coping. Due to the nature of the research question, the CTQ-SF subscales were operationalised separately, rather than encompassing the CTQ-SF as a total score, at analysis.

The CTQ-SF was created by using exploratory and factor analyses of the original CTQ; testing measurement invariance of the CTQ-SF across four different participant samples. Findings showed that the CTQ-SF held measurement invariance, equivalent to the original CTQ, and demonstrating its applicability within diverse populations. The factors also had good criterion-related validity when tested on patients receiving psychiatric support, particularly when compared with therapist's ratings and available data on patient history (Bernstein et al., 2003). The CTQ-SF has also demonstrated high internal consistency ( $\alpha = 0.89$ ; Kim et al., 2013), test-retest reliability (stability coefficients of .80 over an average 3-to-6-month period

Bernstein et al., 1998) and construct validity (Bernstein et al., 2003). The psychometric properties of the CTQ-SF have been extensively investigated in many countries, yielding good validity and reliability, and indicating the measure's applicability worldwide (Viola et al., 2016).

The CTQ-SF showed discriminant validity between all factors. Physical abuse was, however, found to be co-occurring with emotional abuse in almost all samples during initial scale development. Exploring the intercorrelation between the physical abuse ratings and emotional abuse ratings of the CTQ-SF, when compared to therapist's ratings, the therapist's ratings also indicated similarities in occurrence of emotional abuse and physical abuse concordantly, though the factors were recognised as separate. As discussed within Bernstein et al. (2003) and Claussen and Crittenden (1991), physical abuse occurs most often in the context of emotional abuse. Emotional abuse occurring as the only abuse form is also common.

### **2.6.2 *The Distress Tolerance Scale (DTS)***

Distress tolerance is the ability to experience and accept negative emotional states to enable problem solving and social functioning (Linehan, 2018). The Distress Tolerance Scale (Appendix H) is four-factor, 15-item self-report questionnaire that aims to measure an individual's perceived capacity to tolerate their distress from a multidimensional framework (Leyro et al., 2011; Simons & Gaher, 2005). Previously, distress tolerance has been measured as a meta-construct within other related, broader, constructs such as experiential avoidance, mood acceptance and emotion-focussed coping strategies (Linehan, 2018; Simons & Gaher, 2005). As the only validated quantitative measure that explicitly measures distress tolerance independent of other constructs, this was deemed appropriate for the study.

Overall distress tolerance is represented by a total score, ranging from 15 (low tolerance) to 75 (high tolerance). There are four subscales within the measure that represent the first order factors of distress tolerance. The subscales are:

1. Tolerance (3 items; 1, 3 and 5) – individual’s perceived ability to tolerate emotional distress
2. Appraisal (6 items; 6, 7, 9, 10, 11 and 12) – individual’s assessment of the emotional situation as tolerable or intolerable
3. Absorption (3 items; 2, 4 and 15) – the level of attention absorbed by the negative emotion, and relevant interference with functioning
4. Regulation (3 items; 8, 13, and 14) – individual’s degree of urgency in desire to alleviate the negative emotion

All items are scored using a 5-point Likert scale (1) Strongly agree to (5) Strongly disagree, with higher scores corresponding to greater levels of perceived distress tolerance; item 6 (appraisal) is reverse scored. Total scores were used for data analysis.

Originally 16 items, the DTS was developed by Simons and Gaher (2005) in two studies, with the aim of creating a measure that explicitly measures distress tolerance as a construct. College students were used as participants for both studies, with predominantly female participants (70%). Using related measures (such as the Negative Mood Regulation Questionnaire; Catanzaro & Mearns, 1990) to establish concurrent and discriminant validity for the DTS, results found that 14 of the 16 items loaded strongly on one factor; resulting in a

14-item single factor solution. The measure had good convergent validity; showing strong negative correlations between distress and dysregulation lability ( $r = -.59; -.51$ ) and positive correlations with mood acceptance, positive affectivity, regulation expectancies and mood typicality ( $r = .47, .26, .54, .17, p < .05$ ). Findings suggested that females typically displayed lower distress tolerance, but this could be due to the participant imbalance.

In the second study, a confirmatory factor analysis was conducted to assess the DTS across two different time periods over six months. The DTS showed good test-retest reliability ( $r = .61, \alpha = .85$ ), and was temporally stable over the 6-month period. A previously deleted item was re-introduced following findings that the DTS as a single-factor solution was a poor fit; resulting in the change to a multifactor 15 item version which included the four first order factors that the single, second-order factor of distress tolerance predicts.

Results also indicated that the DTS was negatively correlated with external regulatory mechanisms such as drug and alcohol use (e.g., when feeling depressed or anxious), but not associated with enhancement motives (e.g., drinking for fun); further indicating discriminant and criterion validity. This finding also demonstrates the DTS's applicability to alternate external and internal coping mechanisms such as self-harm and suicidal behaviour as an emotional regulatory tool.

### **2.6.3 The Deliberate Self Harm Inventory (DSHI)**

The Deliberate Self Harm Inventory (DSHI, Gratz, 2001; Appendix I) is a 17-item retrospective self-report questionnaire designed to assess the behavioural aspects of deliberate self-harm. The questionnaire takes participants on average four minutes to complete, with the median time being 2.7 minutes. Less than 10% of participants take longer than 10 minutes (Fliege et al., 2006; Gratz, 2001). This demonstrates the DSHI's usability

within settings where completion time might be limited, such as in an outpatient setting or for research purposes. The DSHI has also been translated into multiple languages, including German (Fliege et al., 2006), Iranian (Nobakht & Dale, 2017), Italian (Somma et al., 2017), and Norwegian (Vigfusdottir et al., 2020), demonstrating its universality.

The DSHI encapsulates type, severity, frequency, and duration of self-harm within one composite variable to create a total score. Simple in structure, the DSHI asks a binary yes or no question 'Have you ever intentionally (i.e., on purpose) done any of the following (without intending to kill yourself)', followed by five follow up questions. This was computed as a dichotomous self-harm variable by assigning a score of '1' to participants who answered yes, and a score of '0' to all other participants. The follow up questions include frequency (how many times), duration (how many years behaviour occurred, when was the last time), and severity of injury (hospitalisation, also assigned dichotomous 'yes' or 'no'). Frequency and duration variables were continuous and were converted into discrete (or interval) variables, and rank-ordered to assess overall severity of behaviour across the sample (Fliege et al., 2006; Gratz, 2001; Gratz, et al., 2014). This was done by assigning numerical values to each rating scale category and calculating means across these scores (Table 3).

The first question ('Have you ever intentionally (i.e., on purpose) done any of the following (without intending to kill yourself)') is followed by a series of specific self-harming types (each type labelled as one of 17 items, such as cutting, burning, and preventing wounds from healing); which are used for demographic purposes within the study. The specific self-harming behaviours chosen in the DSHI were selected by Gratz (2001) following clinical observations of the most frequently occurring self-harming behaviours, personal testimonies from individuals who engage in self-harm and behaviours that are frequently referenced within literature. Skin cutting and severe scratching was noted as the most common self-



harming behaviour (Gratz, 2001). Assessing type alongside other factors was important information for potential follow up studies utilising the current data sample, as well as increasing the questionnaire's accuracy (Fliege et al., 2006). Participants are more likely to accurately record self-harming behaviours when presented with names and descriptions of different self-harming methods; this is because certain habitual behaviours may not be perceived as 'harming', and as such may not be automatically recognised in this way (Vigfusdottir, 2020; Warner & Spandler, 2012).

Initially developed using a student sample, construct validity was measured by evaluating the DSHI against other measures of self-harm (such as the General Self-Harm Questionnaire) and a measure for borderline personality disorder. The DSHI was found to report cases of self-harm with higher levels of accuracy than similar measures, demonstrated high internal consistency ( $\alpha = .82$ ), and adequate construct, discriminant, and convergent validity. The DSHI also had adequate test-retest reliability when measured over a period of two to four weeks ( $r = .91$ ).

As the original study used student participants, it was important to ensure the DSHI's appropriateness for use in clinical populations before deeming it suitable to use within the current study. Fliege et al. (2006) assessed three different scales for deliberate self-harming behaviour in a population of 361 hospital patients with complex mental health diagnoses. The study found that the DSHI had a higher sensitivity than clinician's ratings or the ratings of the Self-Harm Behaviours Inventory (SHBI); finding 10% more participants reported self-harm than in the SHBI and 18% more than clinician's ratings. There is evidence that this higher sensitivity may be due to the more operational approach of the DSHI, and the lack of explicit naming and describing of certain behaviours within other measures and methods of assessment (Fliege et al., 2006; Vigfusdottir et al., 2020). Fliege et al. (2006) also found

similarities between the original study (Gratz, 2001) and findings of prevalence of self-harm. Age, for example, appeared to be a noticeable factor; with college aged individuals appearing at higher risk of engagement, similar to the findings by Gratz (2001). The study also found rates of self-harm for the hospital patients to be higher than reported in literature for psychiatric patients.

The study by Fliege and colleagues (2006) found associations between the DSHI and symptoms of perceived stress; highlighting the link between self-harm as a coping mechanism to alleviate negative affect. Due to these associations, the DSHI's higher accuracy than other measures, and the focus on behavioural engagement, it was deemed an appropriate measure for use within this research.

#### ***2.6.4 The Suicide Behaviours Questionnaire Revised (SBQ-R)***

The Suicide Behaviours Questionnaire Revised (SBQ-R; Osman et al., 2001; Appendix J) is a four-item retrospective self-report questionnaire that takes under five minutes to complete. The SBQ-R has been developed for use in both clinical and general populations, and is appropriate for both children, adolescents, and adults due to the sixth grade (10-12 years) reading level. Initially developed by Linehan and Nielson (1981), the original measure consisted of 34 items that were then reduced into two separate versions respectively; the 14-item version, and the four-item Likert-type version that is commonly used in both clinical screening and research (Osman et al., 2001). The four-item scale is comprised of questions that explore an individual's previous suicidal thoughts and behaviours, as well as investigating future potential.

As such, the SBQ-R has been found to be a reliable (0.91 specificity in clinical populations) measurement of suicidal behaviours under its four dimensions, with moderate-

strong evidence supporting internal consistency, criterion validity and structural validity (Cassidy et al., 2018a; Cotton et al., 1995; Osman et al., 2001). The first dimension is lifetime ideation and/or attempt (on a scale ranging from 1. Never, to 4b. I have attempted to kill myself, and really hoped to die). The use of letters in the scale aids later risk categorisation, with question one indicating a 'non-suicidal subgroup', two a suicide risk ideation subgroup, 3a and 3b a suicidal plan subgroup, and 4a and 4b categorised as the suicide attempt subgroup. The second dimension investigates the frequency of ideation over 12 months (scaled from 1. Never to 5. Very Often). Thirdly, an individual's previous communication of suicidal behaviours to others (scaled from 1. No to 3b, Yes, more than once, and really wanted to do it), the letters in this category indicate frequency of communication, 2a and 2b being 'once' and 3a and 3b being 'more than once'. The fourth category measured risk of suicide attempt in the future (on a scale from 0. Never to 6. Very Likely). The total score of the SBQ-R ranges from three to 18, with higher scores indicating higher risk of suicide. The SBQ-R variable was operationalised as a total score within the study.

A cut-off score of seven in non-clinical populations indicates clinically significant risk of suicide (Osman et al., 2001), requiring further intervention. For ethical considerations and assessment of risk, these cut off scores were considered when data collecting. As all participants were receiving psychological support for a variety of different mental health difficulties, however, individual risk of suicide was well documented and assessed. Thus, any individuals scoring above seven were known within the service and receiving adequate support, requiring no further action from the researcher.

Cotton et al. (1995) applied the SBQ-R to outpatients in a mental health facility and to two populations of students to measure the internal consistency and test-retest reliability, finding adequate internal consistency in both samples (clinical sample  $\alpha = .75$ , student sample

$\alpha = .80$ ) and significant test-retest reliability ( $r = .95$ ). The SBQ-R was also found to be significantly correlated with the Scale for Suicide Ideation ( $r = -.34$ ). In a later study by Rueda-Jaimes et al. (2017), the SBQ-R was also found to have positive correlations with the Beck Hopelessness Scale; a scale which has been validated in its prediction for future suicide attempts. The SBQ-R also positively correlated with suicide risk assessed by psychiatrists, demonstrating measurement invariance.

In a systematic review comparing 19 measures of suicidal ideation and behaviours against six criteria, Batterham et al. (2015) evaluated the psychometric properties, utilities, and appropriateness of these measures for use within large population samples. Only three of the brief measures included in the evaluation met all the criteria and displayed adequate financial and psychometric properties; including the SBQ-R. Due to the SBQ-R being free to use and easily accessible, this measure is especially useful within both clinical and general research; with recommendations for use by both researchers and clinicians. With this in mind, and the SBQ-R's strong construct and face validity, the SBQ-R was deemed the appropriate measure to use within this research.

## **2.7 Examination of data**

Prior to statistical analysis, the data were examined for overall distribution. This was explored by analysing skewness and kurtosis, examining the Shapiro Wilk test, and exploring Q-Q plots and histograms. Calculations showed positive skewness and kurtosis for all subscales of the CTQ-SF in varying degrees, with CEA and CEN nearing normality. Scores for the DTS, SBQ-R and DSHI were also positively skewed. The Shapiro Wilk test indicated that the scores were not normally distributed. In attempt to improve normality, log

transformations were conducted, however this did not substantially improve distribution. As assumptions for normality were not met across the measures, non-parametric tests (Spearman's correlation) were used for initial data analyses (Clark-Carter, 2018).

Examination of box plots indicated one outlier. This outlier was deemed acceptable as the value was valid for the measures and produced further information regarding deliberate self-harm and childhood history (CEA). The outlier was not removed and was included within analyses; as supported by Clark-Carter's (2018) justification for the inclusion of outliers that represent values within the range of the scales used. No individual data items were missing in the sample.

## **2.8 Statistical Power**

The participant sample size numbers required to achieve statistically significant results were determined prior to analysis. This was achieved through examining Clark-Carter (2018), whereby it was determined a sample size of between 60 - 80 participants would be needed to achieve a power at 0.8 where  $\alpha = .05$  in a mediation analysis with two dependent variables, one independent variable and a mediator. Fritz and Mackinnon (2007) explored statistical power for mediation analyses amongst all sample sizes (the smallest being  $n = 20$  and largest  $n = 16,466$ ), finding that the bias-corrected bootstrap was the most consistently powerful mediation test across conditions (when compared to Baron & Kenny, 1986, Sobel and others; Fritz & Mackinnon, 2007); thus, this method was deemed appropriate for the current sample ( $n = 70$ ).

## 2.9 Analytic Plan and Data Analysis

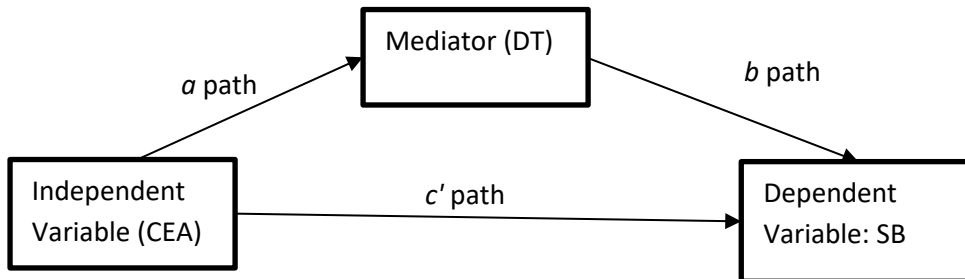
SPSS 19 and the PROCESS macro were used to conduct data analysis. Including exploration of data (Spearman's correlations, descriptive statistics), mediation model and indirect effect analyses. Following guidance from Aguinis et al. (2017) and Hayes (2013), if the independent variable (CEA) and dependent variables (DSH and SBs) were found to have a significant relationship, direct effects would be assessed; if there was no significant relationship between the independent variable and dependent variables, then indirect effects would be assessed.

### 2.9.1 Mediation model

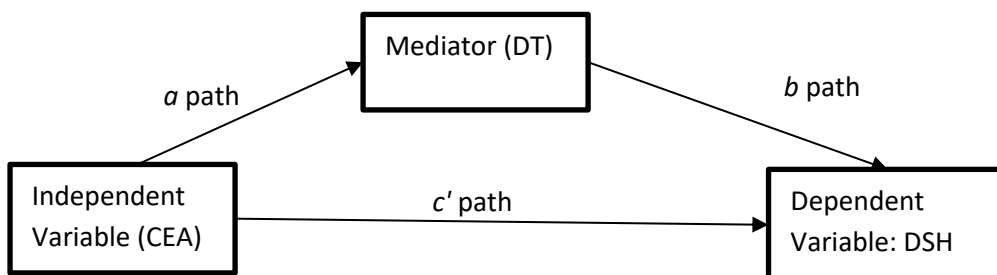
For the main hypothesis, direct effects ( $c'$  paths) from the childhood emotional abuse subscale (CEA; CTQ-SF) to SBs and DSH were estimated. Second, the mediating variable (DT) was introduced to the model, with the direct effects between the CEA subscale to the mediator (DT;  $a$  paths) and the mediator to the dependent variables (SBs and DSH;  $b$  paths) were estimated whilst controlling for DT ( $c'$  paths). Indirect effects were calculated using two standardised paths which linked the predictor (CEA) to the dependent variables (SBs and DSH) through the mediator (DT;  $a1 \times b1$ ). All covariates were included in the analysis, and data was bootstrapped using the bias-corrected bootstrap to account for sample size and population skew. Confidence intervals set at 95%, based on a 10,000 bootstrap sample, were used to assess indirect effects of CEA on DSH and SB, through the mediating variable of DT. The model was specified and estimated using the PROCESS macro in SPSS 19 (Abu-Bader & Jones, 2021), with the proposed mediation model presented in Figures 2 and 3.

**Figure 2**

*Proposed mediation model with Suicidal Behaviour as the dependent variable*

**Figure 3**

*Proposed mediation model with Deliberate Self-Harm as the dependent variable*



## Chapter 3: Results

### 3.1 Descriptive statistics

Descriptive statistics were used to analyse participant demographic information, with all variables presented in Appendix L. The sample majority was white British ( $n = 67$ , 95.7%; Asian  $n = 1$ , 1.4%, Mixed  $n = 2$ , 2.9%) and female ( $n = 48$ , 68.6%; male  $n = 22$ , 31.4%) with a mean age of 39.6 years. Most participants were in a relationship ( $n = 42$ , 60%). Education levels varied, with most frequent educational attainment being A Level ( $n = 27$ , 38.6%). Most participants reported receiving treatment for support with emotions ( $n = 26$ , 51.4%) or past trauma ( $n = 18$ , 25.7%). The means, standard deviations, and ranges of scores across measures were also explored, beginning with the CTQ-SF subscales (Table 1). The mean scores for CEA and CEN sat in the moderate range, with CPA, CPN and CSA in the low range for CTQ-SF scoring.



**Table 1**

*Means, standard deviations and range of scores for Childhood Trauma Questionnaire - Short Form subscales*

CTQ-SF Subscales			
Subscale	M	SD	Range (min-max)
Emotional Abuse (CEA)	10.78	6.76	0-20
Emotional Neglect (CEN)	9.62	5.82	0-20
Physical Abuse (CPA)	4.30	5.77	0-20
Physical Neglect (CPN)	4.64	4.52	0-17
Sexual Abuse (CSA)	2.41	5.25	0-20

Frequency scores for the DSHI and the SBQ-R can be found in Table 2 and 3, and the mean scores and standard deviations can be found in Table 5. 70% ( $n = 49$ ) of the participants reported experiencing suicidal thoughts, with 20% ( $n = 14$ ) indicating that they had attempted suicide and intended to die. 48.6% ( $n = 34$ ) of participants had engaged in DSH, with the average age for this behaviour beginning at ( $n = 7.21$ ). DSHI data such as type of self-harm type was also collected for qualitative purposes, supporting findings that the most common typography of DSH behaviour was cutting (Gratz, 2001).

**Table 2***Suicidal Behaviours Questionnaire - Revised frequency data*

SBQ-R					
Variable	N=	%	Variable	N=	%
Thought or Attempted	70	(100)	Told someone		
Never	7	(10.0)	No	33	(47.1)
Brief thought	19	(27.1)	Yes, Once No Intent to die	11	(15.7)
Plan once, No intent to die	12	(17.1)	Yes, Once, Intent to die	11	(15.7)
Plan once, Intent to die	11	(15.7)	More than once, No intent	10	(14.3)
Attempt, No intent to die	7	(10.0)	More than once, Intent	5	(7.1)
Attempt, Intent to die	14	(20.0)	Future Attempts		
Frequency of suicidal thoughts			Never	17	(24.3)
Never	21	(30.0)	No Chance	11	(15.7)
Rarely	9	(12.9)	Rather Unlikely	12	(17.1)
Sometimes	11	(15.7)	Unlikely	12	(17.1)
Often	20	(28.6)	Likely	14	(20)
Very Often	9	(12.9)	Rather Likely	3	(4.3)
			Very Likely	1	(1.4)

**Table 3***Deliberate Self-Harm Inventory Frequency data*

DSHI									
Variable	N=	%	M	SD	Variable	N=	%	M	SD
Engaged in					Last 2 Years	4	(5.7)		
Yes	34	(48.6)			Last 5 Years	5	(7.1)		
No	36	(51.4)			Last 10 Years	6	(8.6)		
Type					Over 10 Years	5	(7.1)		
Cut	25	(35.7)			Not applicable	36	(51.4)		
Punched	5	(7.1)			Years engaged			2.14	2.52
Banged	2	(2.9)			1 year plus	3	(4.3)		
Carved	1	(1.4)			2 years plus	1	(1.4)		
Scratched	1	(1.4)			3 years plus	3	(4.3)		
None	36	(51.4)			5 years plus	5	(7.1)		
Age began			7.21	8.79	10 years plus	10	(14.3)		
Frequency			1.34	1.49	20 years plus	11	(15.7)		
Once	2	(2.9)			Not applicable	37	(52.9)		
Up to ten	9	(12.9)			Hospitalised				
Over 10	23	(32.9)			Yes	9	(12.9)		
Not					No	24	(34.3)		
applicable	36	(51.4)			Not applicable	37	(52.9)		
Last time			1.51	2.08					
Last 1 Year	14	(20.0)							

Mean scores (Table 4) for the DTS subscales show low distress tolerance scores across the data ( $M = 19.54$ ,  $SD = 13.02$ ); a score expected in a clinical sample (Simons & Gaher, 2005). In the subscales for DTS, tolerance ( $M = 3.61$ ,  $SD = 3.17$ ) and absorption of distress ( $M = 3.25$ ,  $SD = 2.91$ ) were scored as particularly low, where appraisal of distress averaged as moderately high by comparison ( $M = 8.34$ ,  $SD = 5.52$ ).

**Table 4**

*Distress Tolerance Scale means, standard deviations, and ranges*

Variable	M	SD	Range (mins-max)
Distress Tolerance (all)	19.54	13.02	0-57
Tolerance of distress	3.61	3.17	0-12
Appraisal of distress	8.34	5.52	0-21
Absorption of distress	3.25	2.91	0-12
Regulation of distress	4.32	2.95	0-12

The means, standard deviations, and ranges of scores for the four key study variables (CEA, DT, DSH and SB) are displayed in Table 5.

**Table 5***Main study variables*

Variable	M	SD	Range (min-max)
Independent variable			
CTQ Emotional Abuse	10.78	6.76	0-20
Mediator			
Distress Tolerance	19.54	13.02	0-57
Dependent Variables			
Self-Harm	6.11	6.42	0-17
Suicidality	7.60	5.04	3-17

**3.2 Bivariate correlations**

Results for Spearman's correlation analyses can be found in Table 6. The Spearman's correlation test found numerous significant relationships between study variables. CEA was found to be significantly positively correlated with CPA ( $r_s = .545, p < .000$ ), CPN ( $r_s = .710, p < .000$ ) and CEN ( $r_s = .774, p < .000$ ), but not CSA ( $r_s = .214, p = .076$ ). CEA was also positively correlated with DSH ( $r_s = .239, p = .046$ ) and SB ( $r_s = .409, p < .000$ ), alongside CSA and CEN for DSH, and CPN and CEN for SB. CEA was significantly negatively correlated with DT ( $r_s = -.439, p < .000$ ). DT was significantly negatively correlated with SB ( $r_s = -.345, p = .003$ ) and with DSH ( $r_s = -.232, p = .03$ ). DT was also significantly negatively correlated with CPA ( $r_s = -.265, p < .05$ ), CPN ( $r_s = -.348, p < .001$ ) and CEN ( $r_s = -.389, p < .001$ ). SB and DSH were also significantly positively correlated with each other ( $r_s = .413, p < .000$ ). Age was the only demographic variable that showed a significant relationship with the study variables, being

negatively correlated with DT ( $r_s = -.262, p = .029$ ). No other demographic was correlated with relevant variables.

**Table 6**

*Bivariate correlations between childhood abuse subscales, distress tolerance, suicidal behaviours, and DSH, as well as demographic variables of age and education*

Variable	Age	Education	SH	SB	DT	CEA	CSA	CPA	CPN	CEN
Age	-	-.041	-.056	-.090	-.262*	-.016	.003	.147	.037	.163
SH			-	.413**	-.232*	.239*	.239*	.150	.174	.279*
SB				-	-.345**	.409**	.032	.227	.305*	.330**
DT					-	-.439**	-.089	-.265*	-.348**	-.389**
CEA						-	.214	.545**	.710**	.774**
CSA							-	.431**	.262*	.226
CPA								-	.709**	.541**
CPN									-	.758**
CEN										-

Note: \* =  $p < 0.05$ , \*\* =  $p < 0.001$

### **3.2.1 Multicollinearity**

Multicollinearity occurs when there is a strong statistical relationship between an independent, predictor or mediator variable (Hayes, 2013). Some degree of collinearity is to be expected, however high levels may result in altered standard error sizes, which then lead to unreliable regression coefficients. High levels of multicollinearity can also conceal the effects of stronger predictors, which can make it difficult to verify the effects of each variable (Hayes, 2013). Multicollinearity can, in the first instance, be assessed by examining correlation coefficients for variables with strong correlations. Traditionally, variables with a correlation of .80 or greater are considered to have high levels of collinearity (Daoud, 2017), however this method alone has been criticised for not detecting subtler levels of multicollinearity, thus it is important to examine the Variance Inflation Factor (VIF) and tolerance statistics, also (Kim, 2019). The VIF score indicates the strength of the linear relationship between variables, with the tolerance statistic (the VIF reciprocal) representing the quantity of independent variables that are not predicted by other independent or covariate variables included in the analysis (Hayes, 2013). Guidelines for interpretation indicate that problematic scores include if the VIF score is above 10, or if the tolerance statistic is below 0.2 (O'Brien, 2007). VIF scores between one and five indicate that there is moderate correlation, but that this is not severe enough to justify corrective measures (Daoud, 2017).

Correlation results indicated that, though no variables had a relationship of 0.8 or above, there was high correlation between CTQ-SF subscales. Review of the VIF and tolerance statistics found that no VIF values were greater than five, with the average VIF score being ( $VIF = 2.61$ ). No tolerance levels were lower than 0.2 (see Table 7), indicating that the levels

of collinearity between variables were within the moderate range; requiring no further correction.

**Table 7**

*Variance Inflation Factor and Tolerance statistics for CTQ-SF subscales*

	Tolerance	VIF
CEA	.343	2.913
CPA	.386	2.593
CSA	.728	1.374
CPN	.330	3.029
CEN	.318	3.147

### **3.2.2 Covariance**

Covariance refers to variables which are not being measured as a part of the main statistical model, but which may create an effect on the dependent variables; directly or through confounding effects when in association with other variables. Including covariates within a mediation model allows for the effects to be controlled for. Covariance, and co-occurrence across childhood maltreatment types is common (O'Dougherty Wright, 2007), with each type being linked theoretically with both outcome variables being measured (suicidal behaviours and deliberate self-harm). Thus, relationships between these variables were assessed for prior to mediation using Spearman's correlation. CPA, CSA, CPN and CEN all significantly correlated with one or more of the main study variables; therefore, following checks for multicollinearity, all these variables were included as covariates within the



mediation model as there could be potential confounding effects. Demographic variables were also assessed for covariance, with age being found to have a significant relationship with one of the main study variables (DT). Due to this, these variables were also included as covariates within the mediation model.

### **3.3 Regressions**

Initial regressions were run to check a significant relationship between the dependent variables (SB and DSH) and the independent variable (CEA), the *c* pathway, or Total Effect model. Using steps outlined by Baron and Kenny (1986) and Hayes and Little (2018), it was first checked whether CEA was a significant predictor for both SB and DSH (the *c* pathway); shown in Tables 9 and 10. CEA was found to be significantly associated with both SB and DSH, though was only significant for SB when covariates were controlled for. Both overall model summaries were significant. Prior to mediation, all assumptions for regression were checked and appeared satisfactory. Mediation analysis was run for the proposed mediation model (Figure 2 and 3) to explore direct and indirect effects.

### **3.4 Mediation model**

#### ***3.4.1 Childhood Emotional Abuse to Distress Tolerance (a pathway)***

CEA was used to predict the mediating variable of DT, as shown in Tables 8 and 9. The observed results showed a significant negative relationship between CEA and DT ( $\beta = -.484$ , 95% *CI* = -1.67, -.193,  $p < 0.01$ ).

### **3.4.2 Distress Tolerance to Suicidal Behaviours and Deliberate Self-Harm (b pathway)**

The results showed a significant negative relationship between DT and SBs ( $\beta = -.316$ , 95%  $CI = -.220, -.025$ ,  $p < .05$ ), and are shown in Table 8. A non-significant negative relationship was found between DT and DSH ( $\beta = -.181$ , 95%  $CI = -.218, .040$ ,  $p = 0.2$ ) shown in Table 9. Examining covariates, none in the SB model were significant, however in the DSH model CEN was statistically significant ( $\beta = .474$ , 95%  $CI = .064, .982$ ,  $p < .05$ ).

### **3.4.3 Mediated effects (c' pathway)**

The observed results from the mediated model showed DT mediated the association between CEA and SB through a direct effect. Full mediation occurred, with CEA becoming non-significant when DT was added ( $\beta = .252$ , 95%  $CI = -.112, .488$ ,  $p = 0.2$ ). DT did not mediate the relationship between CEA and DSH, with the confidence intervals for the indirect effects containing a 0 value ( $\beta = .08$ , 95%  $CI = -.046, .232$ ,  $p = 0.2$ ). The standardised regression coefficients for the mediated effects are shown in Tables 8 and 9. Visual presentation of results can be found in figures 4 and 5.

**Table 8**

*Regression coefficients (a, b, c and c' pathways) and mediated effects (ab path) for Suicidal Behaviour*

Suicidal Behaviours Model					
Effect	$\beta$ coefficient	CI (95%)	SE	t	p
CEA (IV)					
IV to M (a)	-.484	-1.67, -.193	.369	-2.52	.014*
Total Effect (c)	.302	.004, .600	.149	2.03	.05*
Direct effect (c')	.188	-.112, .488	-.112	1.25	.2
DT (M)					
M to DV (b)	-.316	-.220, -.025	.049	-2.50	.015*
Indirect effect (ab)	.114	-.037, .241	.07		0.6
Partial effect of CV					
Age	-.180	-.146, .023	.042	-1.45	.151
CPA	.127	-.207, .429	.159	.696	.489
CSA	-.141	-.389, .115	.125	-1.078	.285
CPN	-.272	-.728, .121	.212	-1.427	.158
CEN	.206	-.169, .526	.174	1.029	.308
Model Summary (R2)					.02*

Note: \* =  $p < 0.05$ , \*\* =  $p < 0.001$

**Table 9**

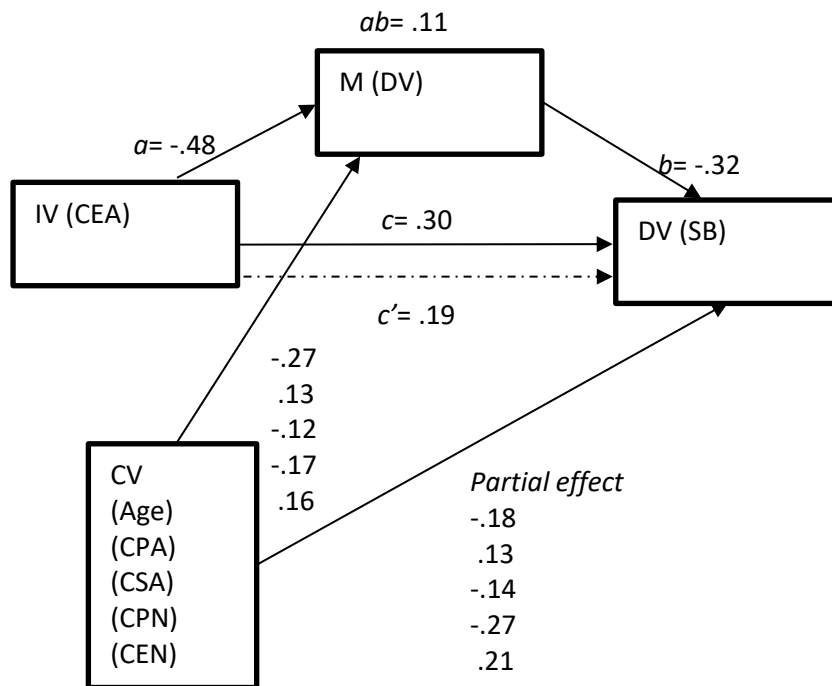
*Regression coefficients (a, b, c and c' pathways) and mediated effects (ab path) for Deliberate Self-harm*

Deliberate Self-Harm Model					
Effect	$\beta$ coefficient	CI (95%)	SE	t	p
CEA (IV)					
IV to M (a)	-.484	-1.67, -.193	.369	-2.52	.014*
Total Effect (c)	-.035	-.383, .322	.177	-.174	.86
Direct effect (c')	-.126	-.478, .257	.184	-.601	.55
DT (M)					
M to DV (b)	-.187	-.205, .034	.06	-1.43	.16
Indirect effect (ab)	.08	-.046, .232	.07		0.2
Partial effect of CV					
Age	-.206	-.187, .020	.052	-1.61	.113
CPA	.144	-.240, .538	.195	.764	.448
CSA	.214	-.064, .549	.153	1.58	.118
CPN	-.329	-.953, .086	.260	-1.67	.100
CEN	.473	.058, .908	.213	2.274	.03*
Model Summary (R <sup>2</sup> )					.03*

Note: \* =  $p < 0.05$ , \*\* =  $p < 0.001$

**Figure 4**

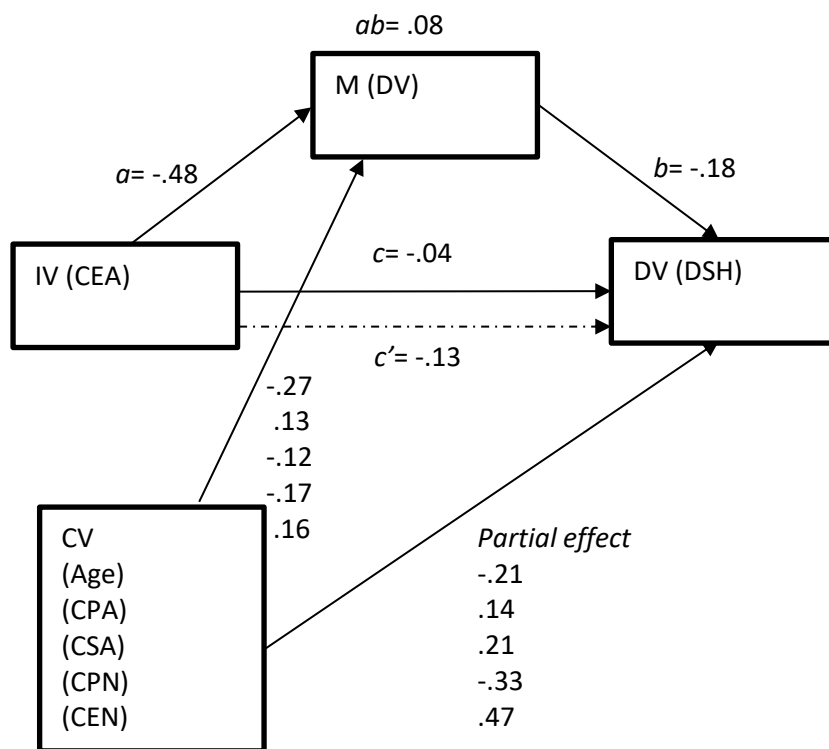
*Regression coefficients (a, b, c and c' pathways) and mediated effects (ab path) for Suicidal Behaviour*



Note. Arrows represent paths of interest. IV = Independent variable; M = Mediator; DV = Dependent variable; CV = Covariate(s)

**Figure 5**

*Regression coefficients (a, b, c and c' pathways) and mediated effects (ab path) for Suicidal Behaviour*



Note. Arrows represent paths of interest. IV = Independent variable; M = Mediator; DV = Dependent variable; CV = Covariate(s)

## Chapter 4: Discussion

Contemporary studies have begun to establish the role of distress tolerance (DT) as an intervening factor between childhood trauma, deliberate self-harm (DSH; Nock & Mendes, 2010) and suicidal behaviours (SBs) in adulthood (Bartlett et al., 2021). The current study aimed to extend this research by compartmentalising sub-types of childhood maltreatment; specifically examining whether DT mediates the relationship between childhood emotional abuse (CEA) and both SBs and DSH within a clinical sample. Aiming to further current knowledge of childhood abuse by exploring specificity effects, the isolated impact of CEA was examined whilst controlling for the effects of other key forms of maltreatment (namely childhood physical abuse, sexual abuse, emotional neglect, and physical neglect; CPA, CSA, CEN and CPN). CEA was chosen due to being the most commonly occurring abuse type, with the highest prevalence within UK society (ONS, March 2020), as well as due to the limited attention CEA has received from a theoretical and research perspective (Binggeli et al., 2001; Dye, 2019). The main study hypotheses were theorised due to rising curiosity surrounding DT as a first step for adaptive modulation, and regulation, of emotions (Hershler, 2021; Lass & Winer, 2020; Leyro et al., 2010). It was hypothesised that distress tolerance (DT) would mediate the relationship between childhood emotional abuse (CEA) and suicidal behaviour (SB), and childhood emotional abuse (CEA) and deliberate self-harm (DSH).

### 4.1 Childhood Emotional Abuse and Distress Tolerance

It was hypothesised that higher levels of CEA would significantly negatively correlate with, and predict, lower levels of self-perceived DT. This hypothesis was accepted. CEA was negatively associated with all factors of the DT scale (Table 4; 6). Thus, individuals who

reported experiencing higher levels of CEA also reported experiencing a lower tolerance for emotional distress. This finding aligns with the literature, supporting the theory that CEA has a significant negative effect on the development of a child's emotional regulatory processes (Linehan, 2018; McCrory et al., 2013), and the ability to tolerate stressful situations (Iwaniec, 2006). Out of the maltreatment types investigated here, CEA had the strongest association with DT; though CEN, CPA and CPN also showed negative relationships. CSA showed a negative relationship; however, this was not statistically significant. In this study, it is possible that a type II error occurred due to sample size; as only 15 participants reported CSA in this sample.

These results suggest that, out of all abuse types, CEA was most strongly associated with low DT; a significant finding for understanding childhood maltreatment, and furthering abuse research (Siegel, 2015). This finding supports the work of Cloitre et al. (2008), who found that children who had experienced CEA from a caregiver were more likely to perceive their distress as intolerable. They were also more likely to have difficulties in applying adaptive emotional regulation skills such as the ability to self-soothe. This is important because in Riggs (2010) theoretical model of the outcomes of CEA, it is argued that CEA can inhibit the development of effective emotional regulation skills.

#### **4.2 Childhood Emotional Abuse, Distress Tolerance and Suicidal Behaviour**

It was hypothesised that there would be a positive correlation between childhood emotional abuse (CEA) and suicidal behaviours (SBs), particularly as this sample was drawn from a population using clinical services. In line with a substantial body of research (de Araujo & Lara, 2016; Janiri et al., 2018; Kaplan et al., 1999; Lee, 2015; Millner et al., 2017; Mullen et



al., 1996), the relationship between CEA and SBs was found to be significant. It was also hypothesised that CEA would act as a predictor variable for later suicidal behaviour in a regression analysis; this relationship was also found to be significant. This finding indicates that individuals who had historically experienced high levels of CEA reported the highest frequency and severity of SBs, when compared with individuals who reported experiencing other abuse types. This result concurs with findings from the existing literature (including studies by Buser & Hackney, 2012; de Araujo & Lara, 2016; and Spinazzola et al., 2014) that found CEA was significantly associated with increased SBs in adulthood.

DT was found to be significantly negatively correlated with SBs, supporting the third secondary hypothesis. This would suggest that individuals who report having difficulties tolerating emotional distress (low DT) engage in higher levels of SBs, and that those who report less difficulties with DT do not engage in SBs to the same extent. The first mediation analysis findings were also significant, supporting the first main hypothesis that DT would mediate the relationship between CEA and SBs. The mediation analysis indicated a direct effect of DT on the relationship between CEA and later SBs after controlling for other forms of maltreatment. This would suggest that a person's ability to tolerate distress can mediate the likelihood that they will engage in SBs if they have reported experiences of CEA. This means that the relationships between CEA and SBs is complex, as an individual who experienced CEA, but also reports higher levels of DT, is less likely to report engaging in SBs. This finding was comparable to that of Stanley et al. (2018) conclusions, where DT mediated the impact of occupational stress on SBs in firefighters.

This result also supports findings by Anestis et al. (2012), Bartlett et al. (2021) and Kratovic et al. (2021), that found that DT acted as a significant mediator for later SBs. This has

important implications for practice as DT is theorised to be the first step towards modulation of emotion (and subsequent regulation skills). This study was unique in its exploration of isolated abuse types in the context of DT and SBs. The mediation model, as a result, offers an important theoretical finding. When CEA occurs, and without adequate intervention to support the development of DT skills, exposure to precipitating factors that cause distress (such as life stressors), are more likely to lead to SBs rather than other, more adaptive responses. This has practical implications as isolating a mediating variable between CEA and engagement in SBs can provide useful information regarding future resiliency factors for individuals who have this history.

#### **4.3 Childhood Emotional Abuse, Distress Tolerance and Deliberate Self-Harm**

It was hypothesised that childhood emotional abuse (CEA) would positively correlate with deliberate self-harm (DSH) in a clinical sample, meaning that higher levels of CEA would be associated with higher levels of DSH. It was also hypothesised that CEA would be found as a significant predictor for DSH in regression analysis, prior to mediation. In line with the research (Buser & Hackney, 2012; Doyle, 1997; Glassman et al., 2007; Gu et al., 2020), the relationship between CEA and DSH was found to be significant. However, although CEA was correlated with DSH, an unexpected finding was that childhood emotional neglect (CEN) had the strongest relationship (largest positive correlation) with DSH. This means that it was individuals who experienced high levels of CEN, who were the most likely to report the highest levels of DSH behaviour. This finding will be considered as a potential avenue for future research in section 4.5.

A significant negative correlation between DT and DSH was also found, indicating that experiencing low DT was associated with increased engagement in DSH behaviour. This finding is consistent with the existing theoretical literature, which has identified a relationship between low DT and DSH behaviours (Chapman et al., 2006; Linehan, 2018; Nock & Mendes, 2010). No significant mediation or indirect effects of DT were found in the relationship between CEA and DSH, however, suggesting that DT does not influence the relationship between CEA and DSH. The covariate CEN was significant within the mediation model, indicating that, for the individual, experiencing CEN alongside CEA may be a significant process when considering engagement in DSH behaviours. This is an important finding, as this also means that an individual who reported experiencing both CEA and CEN were more likely to then engage in higher levels of DSH, than those who experienced CEA alone. When CEN was controlled for in mediation, the relationship between CEA and DSH was found to reduce in significance. This data suggests that a number of variables are significant in the aetiology of DSH behaviour following CEA, including factors associated with comorbidity of other abuse types such as CEN.

A systematic review of the DSH literature (Klonsky, 2007) found multiple processes effecting engagement in DSH behaviour, from emotional regulation difficulties and difficulties in conscious awareness (dissociation). More recent data has suggested that emotional regulation is the most reported reason for engagement (Brereton & McGlinchey, 2020; Mars et al., 2019), however it is possible that other interacting processes, like dissociation, influenced the relationships between variables. For example, theoretically, dissociation is associated with processes of detachment and numbing, derealisation (perceiving the world as 'unreal'; Dewe et al., 2018), and depersonalisation (the sensation of being outside of your

body; Dewe et al., 2018). It is argued that these unconscious phenomena are utilised outside of a person's awareness to prevent access to painful emotions (van der Kolk, 2005). Briere and Eadie (2016) found that DSH can occur to ameliorate high levels of dissociation and hypoarousal (emotional numbness, anhedonia, and the "freeze" response; Siegel, 2015). Thus, contemporary trauma theory would view DSH as an individual's attempt to regulate their autonomic nervous system (referred to in a clinical context as "grounding", and "returning to the window of tolerance"; Siegel, 1999; 2015) or to connect with their affective experience to reduce the experience of numbing and anhedonia (Siegel, 2015).

These experiences have been observed in individuals who have experienced high levels of CEA, and hypoarousal is frequently associated with an increased likelihood of dissociation (Ludy-Dobson & Perry, 2010; van der Kolk, 2005). Of relevance here is that these processes are also frequently associated with CEN within the literature (Vonderlin et al., 2018), and as such highlight an area for further investigation. The current findings argue that engagement in DSH may be mediated by numerous psychological processes, such as experiencing CEA and CEN, DT, and detachment and numbing.

#### **4.4 Strengths and Limitations**

This was a preliminary study examining distress tolerance (DT) as a mediator between childhood emotional abuse (CEA) and suicidal behaviours (SBs), and CEA and deliberate self-harm (DSH) in a cross-sectional data sample. For this study, this provided the most practical and ethical means to assess the proposed model, as participants were patients accessing psychological support within an NHS mental health service. The main hypotheses were concerned with developing an initial understanding of the processes that influence the

predictor (CEA) and the outcome variables (SB and DSH), contributing to literature that has indicated a potential temporal sequencing between variables (Hayes, 2013; Riggs, 2010).

Taking place within an enhanced primary care mental health population, a strength of this study is the access to a population not typically measured within psychological research (Reilly et al., 2012; Rohricht et al., 2017). Due to a lack of unified mental health care across the UK, research populations explored are commonly service users receiving support from secondary care community services, IAPT (improving access to psychological therapies) services that traditionally focus on mild anxiety and depression, or inpatient settings (Fusar-Poli, 2019). Enhanced primary care psychological services for moderate and enduring mental illnesses are novel, and transformative, offering a unique perspective into a population often missed (Martin et al., 2021).

This is particularly the case for DSH and SB engagement within this population (Carr et al., 2016), and as such presents potentially novel findings. Recruiting from a population accessing support in primary care provided a sample that were lower risk, with less severe and complex mental health difficulties than individuals accessing secondary care or inpatient services. Despite this, engagement in DSH and SBs, alongside experiences of childhood abuse, were still prevalent. This highlighted the occurrence of these phenomenon even when symptoms are recorded as less severe. This provides valuable insight into the spectrum of experiences following childhood maltreatment, as well as raising concerns about symptom management long-term to prevent negative outcomes.

A significant limitation of the study, however, was that it lacked a control group with which to compare the experimental group. This was due to predicted difficulty in recruiting a large enough sample size. It will therefore be important for future studies to address the

research questions using a comparison or control group to eliminate the possibility that the results presented here are due to the impact of other variables or unique to this particular sample.

Although the sample size was adequate (see method), and was reinforced via bootstrapping, the overall sample size was smaller than expected due to the impact on recruitment during the COVID-19 pandemic. As a result of this, caution should be exercised with regard to generalising the results to the wider mental health population, and further exploration of this model would be beneficial. The number of participants engaging in DSH was also lower than expected ( $n = 34$ , 48.1%). One potential explanation for lower reported engagement with DSH within the sample is due to the role of protective factors, or Healthy Outcomes from Positive Experiences (HOPE), in reducing the severity of symptomology (Sege & Browne, 2017). Factors such as educational attainment and being in a supportive relationship have been found to positively impact help-seeking and maladaptive symptomology following adverse life experiences (Troya et al., 2019; Williamson et al., 2019). The sample was sourced from a lower-risk primary care setting, which predominantly assesses risk in association with these protective factors. As such, the sample had relatively high levels of educational attainment ( $n = 53$ , 76% of participants being educated at A-Level or above) and high levels of external support ( $n = 42$ , 60% in committed relationships), which may explain the number of individuals who did not engage in DSH behaviour.

A further limitation of this study is the cross-sectional design. Although this study offers an evidence-based, theoretical framework from which to develop future hypotheses, traditionally mediation analysis examines data over multiple time periods (Maxwell et al., 2011). This is due to bias in interpretations of causality, meaning that it is possible that the

occurrence of SBs and DSH could lead to inability to cope with distressing emotions rather than vice versa. As such, longitudinal studies are needed to establish the directionality of the relationship between CEA, DT, and DSH and SBs.

#### ***4.4.1 Validity of retrospective recall***

Another limitation of the study was the reliance on retrospective self-report questionnaires. Self-report measures may be influenced by inaccurate responding styles, such as minimisation and denial, exaggeration, social desirability and recall bias (Stone et al., 1999). Mental health related factors could also influence accuracy. Dissociation, for example, can impact ability to accurately self-report due to disruption to the integrated functions of consciousness and perception (Krause-Utz et al., 2017). This is important in the context of this study, as dissociation can also inhibit the experience of strong negative emotions, which were being measured within the DT scale.

Despite this, research exploring the reliability of retrospective self-reporting of childhood maltreatment indicates that retrospective measures are predominantly reliable (Mathews et al., 2020), though this is not without its limitations. There is potential for vulnerability to under-reporting in abuse records (Hardt & Rutter, 2004; Pinto & Maia, 2013). CEA, in particular, has been observed to be vulnerable to underreporting in clinical and general populations (Stoltenborgh, 2012). These limitations might be addressed more effectively using a mixed methods approach that incorporates qualitative interviews (Oppenheim, 2000), or through the use of quantitative questionnaires.

To assess potential bias in retrospective self-reports of adverse childhood experiences, however, Hardt et al. (2010) conducted a comparison study of a longitudinal prospective

cohort against a retrospective study. Findings suggested significant long-term sequelae for childhood trauma in both cases, with no bias found in retrospective reporting. For the CTQ-SF, the potential for this is also managed through the minimisation and denial subscale; enabling the researcher to gauge accuracy of participant reporting. Thus, any bias from underreporting is unlikely to impact the conclusions drawn from the study, however this limitation is still important to acknowledge.

Within the current study, relatively high levels of CEA were reported throughout the sample, with 83% ( $n = 58$ ) reporting at least one incidence of CEA, despite 41.3% ( $n = 29$ ) of participants endorsing items for the 'Minimisation and Denial' subscale of the CTQ-SF. This subscale of the CTQ-SF indicates that a high number of participants may have minimised their experience of maltreatment to some degree; a factor which has been highlighted as a protective coping mechanism to ensure relational security within the family unit following childhood abuse (North, 2019). CEA is also associated with high levels of guilt and shame, and decreased self-compassion (Ross et al., 2019); factors which also contribute to the minimisation and denial of abusive experiences. Endorsement of these items was an expected response (Kim et al., 2013), and as such could account for variance in severity of scores (Macdonald et al., 2016). This is particularly the case for individuals at earlier stages of therapeutic treatment, who have perhaps not developed awareness that their experiences were abusive (Iverson et al., 2015).

#### **4.5 Implications for future research**

The current findings are relevant for many reasons. Firstly, the findings offer support for Everett and Gallop's (2000), and Cha et al. (2019) argument that engagement in SB and



DSH follows cognitively differentiated processes. This is important because although they are both similar (and both associated with experiencing CEA), individuals engaging in these behaviours may require alternative treatment approaches. It is also important to consider these factors when assessing for risk within clinical populations. Some psychological processes underlying DSH have been found to lead to increased capability for suicide (Klonksy 2007), so it could perhaps be that this pathway is related to DT and affect regulation to a higher degree in lower risk populations, and that other processes (such as dissociation and unconscious affect-avoidance) influence DSH engagement independently. More investigation is required in this area, and as such poses an opportunity for further study. Exploring the study variables alongside other mental health related markers may provide further insights into the aetiology of these outcomes.

In relation to this, and a consideration for later study, are the findings from Johnstone et al. (2016) study, which found the gender of the perpetrator (maternal or paternal) influenced the selection of maladaptive behaviour later. The study found that a maternal perpetrator was associated with SBs, and paternal associated with DSH. This is significant as it could indicate that the type of abusive parental relationship (and societal roles, such as mothers being associated with nurture to a higher degree; Britto et al., 2017) contributes to the development of different emotional processing pathways. This could explain the variance in results within the current study. It may be important to consider examining type of abuse experienced, alongside identifying familial perpetrators, for future replication studies.

For replication it may also be significant to explore the impact of intervention timings on individuals' self-reported scores, first assessing at the beginning of a therapeutic intervention and again once treatment has been completed. This would enable the research

to gauge whether the minimisation and denial subscale varied over time, and whether retrospective scoring altered. This would also lend support for the temporal sequencing of CEA prior to DSH and SBs and provide a tool to support clinical formulation of psychopathology.

Large longitudinal studies could be particularly useful with a view to examining critical windows in child development (Teicher, 2002), for example, exploring whether age of onset of CEA influenced later ability to tolerate distress, and subsequent outcomes. Time series analysis could then be used to help predict the time lapse between onset of SBs and DSH engagement. Replication would be important in this instance to determine statistical robustness across a variety of samples; particularly in exploring whether the mediation result between DT and DSH found within this study was a unique occurrence.

The study has also highlighted that further examination of the relationship between childhood emotional neglect (CEN) and DSH is required. Like CEA, CEN is an area of research that is theoretically lacking, despite links to negative adult outcomes (Glaser, 2002; Ross et al., 2019). This would be particularly relevant to explore in a later study due to the high correlation found between CEN and DSH in the current results (Table 6), and the significance of CEN as a covariate within the mediation model (Table 9). It may perhaps be the case that CEN is linked in a theoretically stronger way to DSH than other abuse types. This could be due to lack of parental responsiveness to a child's need for soothing which results in higher engagement in DSH as a maladaptive self-soothing mechanism (Ludy-Dobson & Perry, 2010; Sim et al., 2009), rather than emotionally abusive interactions, which would have important clinical implications for early years provision. It may also be of interest to gain further insight into the interactions between CEN and DT, as current literature suggests that individuals who

have experienced CEN are more likely to internalise their emotional experience and expect little support, in contrast with CEA which is associated with higher emotional reactivity (Mulholland 2010). As a result of this internalisation, individuals who experienced CEN may be less likely to access support services and interventions for emotional regulation difficulties, which could explain the limited literature surrounding this area (Ross et al., 2019; Teicher, 2002). This also suggests that CEN and CEA, though similar, could follow separate psychological processes, and as such could benefit from alternate interventions within services.

#### **4.6 Application to clinical practice**

This research has significant implications for practice, as evident from a pilot programme that has been initiated and informed by this research. The current findings suggests that childhood emotional abuse (CEA) is associated with the inhibition of adaptive distress tolerance (DT) skills and later suicidal behaviours (SBs), and that higher DT skills mediated the risk of the development of SBs following CEA experiences. The study also found associations between childhood abuse (combined CEA and childhood emotional neglect; CEN) and deliberate self-harm (DSH), and DT and DSH independently. Since both SBs and DSH pose significant risk factors within clinical populations, this study highlights a potential area of focus for psychological interventions aimed at individuals with a history of CEA (as well as other forms of childhood maltreatment), through the development of DT skills. This study has aided with the development of a new emotional regulation pilot project within the NHS trust in which the study took place, with specific focus on DT skills development to aid modulation of emotion and reduce experiential avoidance. The intended aim of the pilot project is to teach

patients how to develop their DT skills, whilst enabling them to recognise and understand their early histories and reduce high-risk behaviour. Currently the intervention is running with success (based on outcome measures at beginning and end of treatment) and has received positive feedback from participants.

A further application stems from the finding that CEN and DSH had the most significant relationship when compared to other abuse types. As there is very limited data surrounding the long-term effects of CEN (Glaser, 2002; Perry, 2008; Spinazzola et al., 2014), this finding will aid future clinical decision-making regarding the psychological formulation of these experiences. Furthermore, if our understanding of which specific abuse histories contribute to high-risk behaviours were developed, this would considerably benefit healthcare professionals, in terms of supporting individuals in crisis, and action planning for risk management. As the processes associated with DSH are multifaceted, further insight surrounding potential predictor factors can aid staff in identifying at-risk populations earlier.

From a practitioner's perspective, the study findings also support those of Teicher and Khan (2019), that indicate that attention should be paid to identifying experiences of CEA at earlier stages of development. This might help to change the course of the deleterious trajectory that child maltreatment has in terms of neurodevelopment and maladaptive emotional coping; specifically low DT. Interventions such as additional training for schools and child-care professions that identify earlier behavioural signs that a child is experiencing covert forms of abuse, are straightforward to implement, for example. The study also provides support for intervention from safeguarding teams, and policy development regarding abusive encounters and child protection; whereby both CEA and CEN are underrepresented (Office

for National Statistics, 2020). Those in the Counselling Psychology profession could provide support and training to these teams following on from this research.

As DT was identified as a significant mediator in the relationship between CEA and SBs, interventions targeting DT may be especially beneficial in reducing engagement in these behaviours. This is particularly the case for risk management in adult mental health services, as this will enable practitioners to easily recognise individuals who may be at a higher risk of SBs, whilst also highlighting an area on which to focus specific interventions to reduce symptoms. This will enable clinicians to make use of evidence-based practice that specifically helps to predict, prevent, and reduce SBs. As DT was identified as a mediator for SBs, there is also clinical justification for emotional regulation based, preventative, interventions for young children who have experienced, or are currently experiencing, CEA.

The identified importance of increasing DT skills within this study aligns well with therapeutic intervention modalities such as Dialectical Behaviour Therapy (Linehan 1993; 2018), and attachment focussed therapy (Britto et al., 2017), that focus on developing self-regulation skills. The study also provides new insights into DT as an important aspect of adaptive emotional regulation. In the long term, successful modulation of emotions has been viewed as a fundamental set of skills that increase the likelihood of developing successful relationships, regardless of an individual's history (Linehan, 2018). Thus, the findings of this study also offer a hopeful trajectory for improved quality of life, reduction of maladaptive symptoms, and promotion of better psychological outcomes for survivors of abuse. The recommendation for future work is an increase in more intensive, narrow-focussed interventions which target DT specifically, as this will then increase a person's capacity for

coping, provide initial emotional relief, and enable further trauma-focussed work to commence if necessary.

Despite a lack of statistical significance in the mediation pathway from CEA to DSH, the finding suggests that CEA may contribute to DSH through different processes. For instance, a dual process that potentially interacts with DT, such as dissociation (Briere & Eadie, 2016), or co-occurring experiences of CEA and CEN. This also suggests that the approach towards DSH in a clinical setting may need consideration, particularly in the conceptualisation and formulation of appropriate treatment plans. This includes further consideration of behavioural presentations after experiencing CEN, and at screening and assessment catering questions to these experiences.

#### **4.7 Conclusions**

This research study was the first to explore the potential of distress tolerance (DT) as a mediating variable between childhood emotional abuse (CEA) and deliberate self-harm (DSH), and CEA and suicidal behaviours (SBs), respectively, and has provided a conceptual theory regarding maladaptive adult outcomes. The findings indicated that the pathway between CEA and SBs is significantly mediated by the individual's ability to tolerate distress, an important finding for childhood maltreatment research. This indicates that the development of SBs could potentially be prevented with adequate skills intervention in DT. This may also increase the likelihood of long-term positive outcomes and recovery from abusive experiences. For the individual this means that, although high levels of CEA are more likely to indicate a greater propensity for engagement in SBs in adulthood, if DT skills are learned, this behaviour could be reduced.

The findings also indicated that, although there was a correlation between DT and DSH, other processes may influence the pathway from CEA to DSH. A contradictory finding to previous research, this highlights the need for further exploration of alternate pathways that may link CEA to DSH, and additional consideration about how to achieve the best outcomes for patients. Overall, this research supports the need for further systematic investigations into the mediating and moderating factors that influence the aetiology of DSH such as comorbid CEA and CEN, and early interventions to aid the development of DT skills as children age to prevent later SBs.

## Chapter 5: Critical appraisal

This chapter includes the researcher's epistemological underpinning, followed by personal reflections on the experience of the research-practitioner using Gibbs' six stage reflective cycle (1988). This model was chosen due to its well-structured framework (Description, Feelings, Evaluation, Analysis, Conclusion, Action Plan; Gibbs, 1988), and clear processes to aid and enhance reflective learning. The process of idea development, seeking ethical approval and recruitment, and project write up will be discussed. Disruption caused by the global pandemic COVID-19 will also be addressed. These factors have been chosen as key areas influencing the decision-making process throughout the project. Each of these issues will now be considered in turn.

### 5.1 Epistemological reflexivity

Counselling psychology as a subject is well known for its combined exploration of scientist-practitioner based research, as well as its philosophical discourse surrounding the process of therapy. Particular attention is given to the 'in-person' context, meaning making and the narratives encompassed when working with people (Gelso et al., 2014). My personal stance as a researcher and counselling psychologist is that of critical realism, a positioning that aligns well with the current study.

Critical realism was first developed by Bhaskar (1975; 2013) and takes the positioning that ontology (existence) and epistemology (knowledge) must be separately distinguished to understand how unobservable structures (such as consciousness) can cause observable events or outcomes. Critical realism aims to balance being and knowledge, rather than explicitly focusing on knowledge, as is the case within positivism (Pilgrim, 2014). Indeed, this



positioning aims to acknowledge the depth of reality that is currently unobservable, whilst also considering the context and values based in scientific enquiry (Pilgrim, 2014).

This is particularly relevant for social sciences research, where a person's neuroplasticity, individual differences, and social factors such as agency, can result in complex interchangeable results. Humans are also capable of self-reflection and the subsequent altering of their behaviour, which requires more adaptive methods of scientific study than the measurement of a physical phenomenon such as weather patterns or food growth (Archer et al., 2013). Within critical realism, human research can be understood as an ongoing process in which we can understand causal mechanisms (Archer et al., 2013); where understanding is derived from knowledge of the structures that generate said outcomes.

In contrast to positivism or social constructivism, critical realism has been argued to have valuable implications within the mental health research field (Pilgrim, 2014), particularly in the focus on historical structures that are embedded within society. Indeed, within healthcare research, critical realism is particularly useful in understanding complex outcomes, optimising interventions, and researching biopsychosocial pathways to best benefit the health of the population (Clark et al., 2008).

In line with this position, when beginning my exploration of literature, I felt that it was important to explore the psychological impact of childhood emotional abuse from a holistic, developmental perspective; to understand attachment theory and the effects of a disrupted developmental pathway on a child's neurobiological growth. I also aimed to explore common coping mechanisms, perceived relational difficulties, stress hormones and physiological health difficulties to understand the narrative of this experience. This included factors which contribute to, and potentially influence, the wide variety of outcomes following CEA. In my

clinical practice as a counselling psychologist in training, critical realism felt like an accurate fit; particularly when applying intervention styles and formulating differing patterns of difficulties presented within the therapy room. Viewing mental health difficulties from a critical realism lens was also particularly useful when developing a theoretical understanding of individuals experiencing difficulties with emotional regulation; exploring mechanisms that are complex and multifaceted.

## **5.2 Idea development**

### ***5.2.1 Description***

As researcher we also need to be aware of any narrative we bring to a research topic, either via our professional role or personal history, and how this can influence the phraseology of the research question and the methodology we use to address it. I chose to focus on childhood emotional abuse, and then later found specific interest in distress tolerance, self-harm, and suicidal behaviour. This interest was initially inspired by work in my professional role: I have worked with multiple clients who have experiences of childhood trauma in some form and have observed their difficulties with maladaptive coping styles. I had also grown up with a friend who had experienced emotional abuse, and worked with multiple children whose homelife mirrored these experiences. There had also been occasions where I had been exposed to emotional abuse myself. Thus, it was important before starting research into this area to reflect on what my experiences brought to the topic and any biases that might influence this research.

### **5.2.2 Feelings**

Whilst in the stage of idea development, and beginning to explore specific topics, I felt a mix of emotions. I was saddened to find such large gaps in this research area, and such limited societal recognition, especially as this had been a feature of my own personal narrative. Through my professional work, I felt frustrated as it seemed such a prevalent clinical issue to have seemingly so little theoretical understanding. I was particularly surprised to find little research involving all the research variables I had chosen to look at (particularly CEA), as I felt the relationships between each made sense based on the commonality of these experiences within my practical work, and my understanding of current psychological theories. As a research practitioner, I felt a sense of personal responsibility to build a picture of these experiences.

### **5.2.3 Evaluation**

I discovered during my research that many books and research left out psychological abuse in any format (such as emotional abuse and emotional neglect) altogether. One book, for example, highlighting emotional abuse consisted of one paragraph of information. Though this could be seen as a negative, and initially felt disheartening to find so little in more historical texts, this ended on a positive note. I felt that my research idea could perhaps strengthen current findings (such as Etain et al., 2010 and Christ et al., 2019) and add to an area where there was a visible gap.

It seemed intuitive that should a relationship be found between distress tolerance, CEA, self-harm and suicidality then there was the potential for creating an intervention that could directly benefit my clinical work. This directly led to my research questions. Since I had access

opportunity to a relevant clinical population, I considered appropriate methodological approaches that could leverage this. It was necessary to frame my research in such a way that the clients would understand the importance of this work and engage with the research. This influenced the research design.

#### ***5.2.4 Analysis***

Taking a pragmatic approach to idea formation, as suggested by Schwebel and Morrongiello (2016), meant that I was able to efficiently gain an understanding of the topic areas whilst also ensuring that I was remaining practical and applying readings to the formation of ideas. Taking guidance from other researchers also aided this process, and ensured that ideas were developed within the confines of the time and capacity of the study. I also learned of my weaknesses in this area, including my interest in the subject sometimes leading me off track. Whilst the research question was inevitably influenced by personal and professional history, the evidence is that it remained a topic of relevant academic interest.

#### ***5.2.5 Conclusion***

I effectively developed a research idea that would be suitable for testing, whilst also acknowledging my own biases that may have influenced the research process.

#### ***5.2.6 Action Plan***

To continue to monitor any personal biases involved in this research project, and to continue to confirm through literature reviews the clinical relevance of the work.

### **5.3 Planning, Professional Development, and Ethics**

#### **5.3.1 Description**

As part of the components for the counselling psychology doctorate, I was working as a trainee within an NHS enhanced primary care psychology service offering one-to-one interventions to individuals experiencing moderate mental health difficulties. After liaising with my clinical supervisor and the service lead regarding my research proposal, I was given authorisation to meet with the trust's research team to discuss a time effective proposal that I could then submit to the integrated research application system (IRAS) ethical board. This included planning to ensure the project recruitment could be achieved within the time frame of the course, and accounting for added processing time that would be required for completing documentation for the IRAS board and for attending the Research Ethics Committee (REC) meetings.

Following submission of my IRAS application, I completed an NHS half day of E-learning for researchers to ensure I understood the policies and regulations of conducting ethical research within a clinical setting. For academic development I attended relevant doctoral workshops to support the research process, and continued to work within other elements of the counselling psychology course.

#### **5.3.2 Feelings**

Throughout my doctoral training, I felt I had had a solid grounding in the ethical and professional work related to counselling psychology. However, I felt the NHS ethical and professional approach to be considerably more rigorous than my experiences to date, which made me question my ability to complete this work in an appropriate and ethical way.

### **5.3.3 Evaluation**

Completing the application for NHS ethical approval was both time consuming and a valuable learning experience. Completing this application forced me to carefully consider all aspects of the recruitment, data storing, and procedures outlined for my later reference, as well as the technical aspects of the research project. I found workshops around statistical analysis particularly beneficial to my learning experience, as this was one of my weaker academic areas, and this helped develop my confidence in this area.

### **5.3.4 Analysis**

One of the key reasons that this process felt successful was related to clear communication between all professionals involved. As stated by Burnard (1997) and later Ward et al. (2018) effective communication skills across professional teams not only encourages intrapersonal skills sharing and collaboration, but also improves effectiveness in healthcare delivery. This, alongside focused and relevant training, helped me to develop skills in how to plan effective research within an NHS clinical setting, and ensure relevant policies and procedures were followed. As a trainee, following the British Psychological Society (BPS, 2018) and Health and Care Professions Council (HCPC, 2016) codes of ethics and conduct was also an essential component to my progression; ensuring I was achieving ethical practice and completing relevant competencies for my level of training. Developing confidence and competence in more practical, organisational areas also aided this process, as I began to develop my own agency as a researcher alongside skills as a practitioner (Sweat et al., 2021).

### **5.3.5 Conclusion**

I understand that I feel anxiety when approaching new ethical and professional frameworks. For me the value of training cannot be overstated. I have found that I work most effectively within a framework that allows for the ability to question and discuss with experienced practitioners.

### **5.3.6 Action Plan**

To ensure that I develop and maintain appropriate mentor relationships to support the ongoing work on this project. To identify further training opportunities provided by the NHS and professional bodies as appropriate to research.

## **5.4 Recruitment and COVID-19**

### **5.4.1 Description**

At the beginning of recruitment, I devised a plan for how I would optimise my time and engagement around other commitments. I planned to go to different locations within the trust on alternating weeks, as patients within the service would often attend their appointments on the same date and time. This ensured that I was exposed to a variety of individuals and prevented mishaps with recruiting such as asking someone who had already previously completed the forms. At the mid-point of my recruitment the government announced a national lockdown due to the global COVID-19 pandemic which caused a disruption to this recruitment strategy.

As recruitment for this research was achieved through face-to-face interactions, and due to the uncertain nature of the situation, I felt I had no choice but to pause data collection,

subject to review based on how long the country remained in lockdown. I also considered alternate routes of recruitment that could be possible for an online approach – though this could require potentially abandoning or skewing the data that I had already gathered.

#### **5.4.2 Feelings**

Uncertainty was a key factor throughout the whole of the lock-down period. This certainly affected my ability to make reasoned decisions on how to continue to recruit. I felt the time pressure to obtain a reliable sample group, but had no way of knowing how long it would take for me to return to collecting face-to-face samples. I was hesitant about moving to online sampling as this was a period where the whole service was having to adjust to new protocols and ways of working and, at that time, I did not have a good understanding of how effective (or not) the technology would be at allowing this kind of data collection. I felt very much in limbo feeling the uncertainty made it hard to make a definitive decision one way or the other. The alternative strategy was to simply to stop recruiting and use only the data I had already collected (which is what eventually happened) but I felt that this would somehow lessen my ability to gain reliable data and would result in a poorer quality study.

#### **5.4.3 Evaluation**

COVID-19 negatively impacted many projects that were in progress. Risk analysis clearly could not have easily foreseen this situation, so it was not surprising that I had no alternative plan in place. My feelings about the importance of a clinically relevant sample caused me much stress when my extant strategy had to change. Like many, I delayed making a decision until the situation became clearer and I was fortunate that this turned out to be a



sensible decision. It allowed me to better evaluate the potential options with their associated risks. In the end the decision reached by myself and my supervisory team was the most logical, if unsatisfying, strategy; either delaying until face-to-face options was again an option, or waiting until the services had optimised the online delivery of sessions, would have caused an unacceptably long delay to my research. Due to the timelines involved it was best to work with the data I had but to acknowledge the shortcomings of this within the final thesis.

#### **5.4.4 Analysis**

Though COVID-19 disrupted the research process, Dunne et al. (2005) suggests that new researchers should not be attached to the idea of their research process, as this might change. I believe I found initial aspects of this disruption difficult because of my rigidity surrounding 'the plan' that I had developed, and managing my own disappointment and discomfort around deviating from this path. Asikainen et al. (2018) found that academic flexibility can encourage self-regulation and academic achievement, as well as increasing emotional coping for the student, thus this might explain why I initially found this aspect of the process so difficult to adjust to. Considering the global nature of the disruption, however, I also feel that self-compassion is important, as COVID-19 initially felt like a life-threatening experience. To allow me to continue working towards my research with clarity and motivation, an adaptive mindset and approach has been required. If there is enough leeway within the research timeline, often the best decision is simply to 'watchfully wait' until enough information is available to make a more informed cost-benefit analysis.

#### **5.4.5 Conclusion**

Though I am aware that this situation is unique, I feel I can apply skills learnt here to future situations. This incident has highlighted the importance of building in extra time to all projects to allow for high-impact low-probability events. It has also led me to hold to the idea that the plan itself is less important than the planning process, and to work to address my emotional response to change.

#### **5.4.6 Action Plan**

For future research I will consider the benefits of adapting to academic challenges, and aim to lose some of my assumptions surrounding the 'proper order' of the research process. I will also aim to increase my own internal flexibility, in order to effectively adapt to challenges.

### **5.5 Applications as a research-practitioner**

#### **5.5.1 Description**

I have gained a more comprehensive understanding of childhood abuse due to this research, and the differing psychopathologies that can manifest as a result. Exploring distress tolerance in depth has allowed me to apply key theories when working with individuals in a professional capacity. This has aided my ability to formulate complex relational experiences. Utilising critical realism has enabled me to apply alternate theoretical underpinnings, such as the interpersonal neurobiology framework (Siegel, 1999), which encompasses attachment and emotional regulation theories, in my practice as opposed to a more medicalised, positivist

approach to psychotherapy. This has resulted in my way of working expanding to become more holistic and integrated.

This research has also been useful for formulating relational difficulties within the wider system. The research highlights the importance of positive connection and attachment in an adult's ability to regulate themselves. For children, the importance of opening a dialogue about emotional abuse in a catered and understandable format, and the possibility of teaching emotional regulation skills from as early as primary school to enable children to develop their own internal dialogue and connection with their emotions. Understanding the connections with emotional abuse and emotional regulation allowed me to highlight and recognise emerging patterns in an individual's behaviour, and apply this to psychological intervention. This research has enabled me to develop more of a trauma-informed approach to my work.

### ***5.5.2 Feelings***

I feel enriched by this experience, and though considerably stressful in periods, ultimately I have benefitted in my learning. At the beginning of the process, I felt unsure of myself and how I would find working in such a different way to what I was used to. The uncertainty and unfamiliarity felt daunting, but I also embraced the challenge. I have found a comfortable balance in managing clinical work with research, and am interested in applying this new knowledge to my views of mental health.

### **5.5.3 Evaluation**

Completing a piece of research exploring the impacts of emotional abuse has been useful for my practice. This research has also led to the development of my views and understandings of other mental health difficulties; particularly personality disorders which often have a high association with childhood emotional abuse. These disorders are often characterised by emotional regulation difficulties, self-harming behaviours, and interpersonal disruption. Researching this topic whilst compiling evidence for my literature review has allowed my perception of these experiences to develop and grow to contribute to my current theoretical positioning.

### **5.5.4 Analysis**

My research experience was very mixed. I learnt things that I did not expect during the process, particularly managing under pressure, adapting to challenges, and remaining calm when stressed in order to effectively achieve my goals. These were not outcomes that I had expected from this experience, however, are invaluable for my work as a practitioner. Experiential learning has been found to have a multitude of benefits (Gibbs, 1988) particularly in the art of 'doing'. The hands-on approach to research has been the most enjoyable aspect of the learning, and I feel that this aligns well with my style of learning.

### **5.5.5 Conclusion**

Developing research skills in a more pragmatic methodical manner has allowed me to develop as a research-practitioner. I now have a more sophisticated view of research within practice and how I can apply it to my professional role. This has been invaluable to my current

position in the NHS, and has enabled me to contribute to the development of new emotional regulation groups within the service.

#### ***5.5.6 Action Plan***

I have found researching this particular topic incredibly enriching and aim to continue exploring this area moving forward, applying knowledge to clinical work as well as considering further research in these areas. I consider it important that I continue to reflect on my professional role on a regular basis in order to ensure I continue to develop and apply skills within this area.

## References

- Abu-Bader, S., & Jones, T. V. (2021). Statistical mediation analysis using the Sobel test and Hayes SPSS process macro. *International Journal of Quantitative and Qualitative Research Methods*, 9(1), 42-61.
- Addis, M. & Linehan, M. M. (1989). Predicting suicidal behavior: Psychometric properties of the Suicidal Behaviors Questionnaire. Poster presented at the *Annual Meeting of the Association for the Advancement Behavior Therapy*, Washington, D.C.
- Aguinis, H., Edwards, J. R., & Bradley, K. J. (2017). Improving our understanding of moderation and mediation in strategic management research. *Organizational Research Methods*, 20(4), 665-685. <https://doi.org/10.1177/1094428115627498>
- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical psychology review*, 30(2), 217-237. <https://doi.org/10.1016/j.cpr.2009.11.004>
- Alexander, S., Pillay, R., & Smith, B. (2018). A systematic review of the experiences of vulnerable people participating in research on sensitive topics. *International journal of nursing studies*, 88, 85-96. <https://doi.org/10.1016/j.ijnurstu.2018.08.013>
- Alink, L. R., Cicchetti, D., Kim, J., & Rogosch, F. A. (2009). Mediating and moderating processes in the relation between maltreatment and psychopathology: Mother-child relationship quality and emotion regulation. *Journal of abnormal child psychology*, 37(6), 831-843.
- Allan, N. P., Macatee, R. J., Norr, A. M., & Schmidt, N. B. (2014). Direct and interactive effects of distress tolerance and anxiety sensitivity on generalized anxiety and depression. *Cognitive Therapy and Research*, 38(5), 530-540.

Allbaugh, L. J., Mack, S. A., Culmone, H. D., Hosey, A. M., Dunn, S. E., & Kaslow, N. J. (2018).

Relational factors critical in the link between childhood emotional abuse and suicidal ideation. *Psychological Services, 15*(3), 298–304.

<https://doi.org/10.1037/ser0000214>

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub.

Anestis, M. D., & Joiner, T. E. (2012). Behaviorally-indexed distress tolerance and suicidality. *Journal of Psychiatric Research, 46*(6), 703-707.

<https://doi.org/10.1016/j.jpsychires.2012.02.015>

Anestis, M. D., Bagge, C. L., Tull, M. T., & Joiner, T. E. (2011). Clarifying the role of emotion dysregulation in the interpersonal-psychological theory of suicidal behavior in an undergraduate sample. *Journal of psychiatric research, 45*(5), 603-611.

<https://doi.org/10.1016/j.jpsychires.2010.10.013>

Anestis, M. D., Pennings, S. M., Lavender, J. M., Tull, M. T., & Gratz, K. L. (2013). Low distress tolerance as an indirect risk factor for suicidal behavior: Considering the explanatory role of non-suicidal self-injury. *Comprehensive psychiatry, 54*(7), 996-1002.

<https://doi.org/10.1016/j.comppsy.2013.04.005>

Anestis, M. D., Tull, M. T., Bagge, C. L., & Gratz, K. L. (2012). The moderating role of distress tolerance in the relationship between posttraumatic stress disorder symptom clusters and suicidal behavior among trauma exposed substance users in residential treatment. *Archives of Suicide Research, 16*(3), 198-211.

<https://doi.org/10.1080/13811118.2012.695269>

- Archer, M., Bhaskar, R., Collier, A., Lawson, T., & Norrie, A. (Eds.). (2013). *Critical realism: Essential readings*. Routledge.
- Ashfield, E., Chan, C., & Lee, D. (2021). Building 'a compassionate armour': The journey to develop strength and self-compassion in a group treatment for complex post-traumatic stress disorder. *Psychology and Psychotherapy: Theory, Research and Practice, 94*, 286-303.
- Asikainen, H., Hailikari, T., & Mattsson, M. (2018). The interplay between academic emotions, psychological flexibility and self-regulation as predictors of academic achievement. *Journal of further and Higher Education, 42*(4), 439-453.
- Bacon, T., Doughty, C., Summers, A., Wiffen, B., Stanley, Z., & McAlpine, S. (2018). The Emotional Resources Group: Provisional outcome data for a pilot six-session emotion regulation programme for secondary care. *British Journal of Clinical Psychology, 57*(2), 223-239.
- Baker, C. (2020). *Mental health statistics for England: prevalence, services and funding* (6988). House of Commons Library. <https://dera.ioe.ac.uk/34934/1/SN06988%20%28redacted%29.pdf>
- Ball, J. S., & Links, P. S. (2009). Borderline personality disorder and childhood trauma: Evidence for a causal relationship. *Current psychiatry reports, 11*(1), 63-68.
- Baltes, P. B., & Smith, J. (2004). Lifespan psychology: From developmental contextualism to developmental biocultural co-constructivism. *Research in human development, 1*(3), 123-144. [https://doi.org/10.1207/s15427617rhd0103\\_1](https://doi.org/10.1207/s15427617rhd0103_1)
- Banducci, A. N., Connolly, K. M., Vujanovic, A. A., Alvarez, J., & Bonn-Miller, M. O. (2017a). The impact of changes in distress tolerance on PTSD symptom severity post-



- treatment among veterans in residential trauma treatment. *Journal of anxiety disorders*, 47, 99-105. <https://doi.org/10.1016/j.janxdis.2017.01.004>
- Banducci, A. N., Lejuez, C. W., Dougherty, L. R., & MacPherson, L. (2017b). A prospective examination of the relations between emotional abuse and anxiety: Moderation by distress tolerance. *Prevention science*, 18(1), 20-30.
- Barbu, Z. (2019). *Problems of historical psychology*. Routledge.
- Barlow, J., & McMillan, A. S. (2010). *Safeguarding children from emotional maltreatment: What works*. Jessica Kingsley Publishers.
- Barnett, O., Miller-Perrin, C. L., & Perrin, R. D. (2005). *Family violence across the lifespan: An introduction*. Sage Publications, Inc.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173-1182.
- Barrett, R. (2010). *Experiential avoidance: Associations with childhood trauma, internalised shame, psychopathology and maladaptive behaviours* [Doctoral dissertation, University of Southampton].
- Bartlett, B. A., Lebeaut, A., Zegel, M., Johnson, A., & Vujanovic, A. A. (2021). Childhood maltreatment severity and suicidal ideation among adults receiving acute-care psychiatric inpatient services: The role of distress tolerance. *Psychological trauma: theory, research, practice, and policy*, 13(3), 333-337.  
<https://doi.org/10.1037/tra0000663>
- Bateman, A. W., & Fonagy, P. (Eds.). (2012). *Handbook of mentalizing in mental health practice*. American Psychiatric Pub.

- Batterham, P. J., Ftanou, M., Pirkis, J., Brewer, J. L., Mackinnon, A. J., Beautrais, A., Fairweather-Schmidt, A. K., & Christensen, H. (2015). A systematic review and evaluation of measures for suicidal ideation and behaviors in population-based research. *Psychological Assessment, 27*(2), 501-512. <https://doi.org/10.1037/pas0000053>
- Bear, M., Connors, B., & Paradiso, M. A. (2020). *Neuroscience: Exploring the Brain, Enhanced Edition: Exploring the Brain*. Jones & Bartlett Learning.
- Behl, L. E., Conyngham, H. A., & May, P. F. (2003). Trends in child maltreatment literature. *Child Abuse & Neglect, 27*(2), 215-229. [https://doi.org/10.1016/S0145-2134\(02\)00535-5](https://doi.org/10.1016/S0145-2134(02)00535-5)
- Bernstein, D. P., & Fink, L. (1998). *Childhood trauma questionnaire: A retrospective self-report: Manual*. Orlando: Psychological Corporation.
- Bernstein, D. P., Fink, L., Handelsman, L., & Foote, J. (1998). Childhood trauma questionnaire (CTQ). In *Assessment of family violence: A handbook for researchers and practitioners*. APA PsycTests. <https://doi.org/10.1037/t02080-000>
- Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., Sapareto, E. & Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American journal of psychiatry, 151*(8), 1132–1136. <https://doi.org/10.1176/ajp.151.8.1132>
- Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Stokes, J., Handelsman, L., Medrano, M., Desmond, D., & Zule, W. (2003). Development and validation of a brief screening version of the childhood trauma questionnaire. *Child Abuse & Neglect, 27*(2), 169-190. [https://doi.org/10.1016/s0145-2134\(02\)00541-0](https://doi.org/10.1016/s0145-2134(02)00541-0)

- Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive childhood experiences and adult mental and relational health in a statewide sample. *JAMA Pediatrics*, *173*(11), Article e193007. <https://doi.org/10.1001/jamapediatrics.2019.3007>
- Bhaskar, R. (1975). *A realist theory of science*. York: Books.
- Bhaskar, R. (2013). *A realist theory of science* (2<sup>nd</sup> Ed.). Routledge.
- Binggeli, N. J., Hart, S. N., & Brassard, M. R. (2001). *Psychological maltreatment of children*. Sage.
- Black, K. A., & Schutte, E. D. (2006). Recollections of being loved: Implications of childhood experiences with parents for young adults' romantic relationships. *Journal of Family Issues*, *27*(10), 1459-1480. <https://doi.org/10.1177/0192513X06289647>
- Bogin, B. (1990). The evolution of human childhood. *Bioscience*, *40*(1), 16-25.
- Bosmans, G. (2016). Cognitive behaviour therapy for children and adolescents: Can attachment theory contribute to its efficacy?. *Clinical Child and Family Psychology Review*, *19*(4), 310-328.
- Bowlby, J. (1958). The nature of the child's tie to his mother. *International journal of psycho-analysis*, *39*, 350-373.
- Bowlby, J. (1969). *Attachment. Attachment and Loss (vol. 1)*, New York: Basic Books.
- Bowlby, J. (1973). Attachment. In *Attachment and loss: Volume II: Separation, anxiety and anger*, 95, 1-429. London: The Hogarth press and the institute of psycho-analysis.
- Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent psychiatry*. *6*, 5-33.

- Bowlby, J., & Ainsworth, M. (2013). The origins of attachment theory. *Attachment theory: Social, developmental, and clinical perspectives*, 45, 759-775.
- Boyda, D., Mc Feeters, D., Dhingra, K., Galbraith, N., & Hinton, D. (2018). Parental psychopathology, adult attachment and risk of 12-month suicidal behaviours. *Psychiatry research*, 260, 272-278.  
<https://doi.org/10.1016/j.psychres.2017.11.084>
- Brady, L. L., Credé, M., Sotola, L., & Tynan, M. (2019). A meta-analysis on positive psychology correlates of sales performance. In *Examining the Role of Well-being in the Marketing Discipline (Research in Occupational Stress and Well Being, Vol. 17)*, Emerald Publishing Limited, 91-115. <https://doi.org/10.1108/S1479-355520190000017005>
- Brereton, A., & McGlinchey, E. (2019). Self-harm, emotion regulation, and experiential avoidance: A systematic review. *Archives of suicide research*, 24(sup1), 1-24.  
<https://doi.org/10.1080/13811118.2018.1563575>
- Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications*, 102–127. The Guilford Press.
- Bretherton, I., Ridgeway, D., & Cassidy, J. (1993). Assessing internal working models of the attachment relationship. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 273-308). University of Chicago Press.

Briere, J., & Eadie, E. M. (2016). Compensatory self-injury: Posttraumatic stress, depression, and the role of dissociation. *Psychological trauma: theory, research, practice, and policy*, 8(5), 618-625. <https://doi.org/10.1037/tra0000139>

Briere, J., & Runtz, M. (1990). Differential adult symptomatology associated with three types of child abuse histories. *Child abuse & neglect*, 14(3), 357-364.

[https://doi.org/10.1016/0145-2134\(90\)90007-G](https://doi.org/10.1016/0145-2134(90)90007-G)

Briggs, F., & Hawkins, R. (2020). *Child protection: A guide for teachers and child care professionals*. Routledge.

British Psychological Society. (2018). *Code of Ethics and Conduct*. Leicester: British Psychological Society

British Psychological Society. (2020). *Guidance for BPS accredited psychology professional doctorate programmes in relation to the Covid-19 outbreak*.

BPS. <https://www.bps.org.uk/sites/www.bps.org.uk/files/Accreditation/Guidance%20for%20accredited%20psychology%20professional%20doctorate%20progra>

Britto, P. R., & Pérez-Escamilla, R. (2013). No second chances? Early critical periods in human development [Editorial]. *Social Science & Medicine*, 97, 238–240. <https://doi.org/10.1016/j.socscimed.2013.09.001>

Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., Perez-Escamilla, R., Rao, N., Ip, P., Fernald, L. C. H., MacMillan, H., Hanson, M., Wachs, T. D., Yao, H., Yoshikawa, H., Cerezo, A., Leckman, J. F., Bhutta, Z. A. & Lancet Early Childhood Development Series Steering Committee (2017). Nurturing care: Promoting early childhood development. *The Lancet*, 389(10064), 91–102.

[https://doi.org/10.1016/s0140-6736\(16\)31390-3](https://doi.org/10.1016/s0140-6736(16)31390-3)

- Britto, P. R., Singh, M., Dua, T., Kaur, R., & Yousafzai, A. K. (2018). What implementation evidence matters: Scaling-up nurturing interventions that promote early childhood development. *Annals of the New York Academy of Sciences*, 1419(1), 5-16.  
<https://doi.org/10.1111/nyas.13720>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American psychologist*, 32(7), 513-531 <https://doi.org/10.1037/0003-066X.32.7.513>
- Brown, J. S., Sagar-Ouriaghli, I., & Sullivan, L. (2019). Help-seeking among men for mental health problems. In *The Palgrave handbook of male psychology and mental health* (pp. 397-415). Palgrave Macmillan, Cham.
- Brown, S., Iqbal, Z., Burbidge, F., Sajjad, A., Reeve, M., Ayres, V., Melling, R., & Jobes, D. (2020). Embedding an evidence-based model for suicide prevention in the National Health Service: A service improvement initiative. *International Journal of Environmental Research and Public Health*, 17(14), 4920. <https://doi.org/10.3390/ijerph17144920>
- Brown, S. M., Rienks, S., McCrae, J. S., & Watamura, S. E. (2019). The co-occurrence of adverse childhood experiences among children investigated for child maltreatment: A latent class analysis. *Child abuse & neglect*, 87, 18-27.
- Bruner, C. (2017). ACE, place, race, and poverty: Building hope for children. *Academic pediatrics*, 17(7), 123-129.
- Buckmaster, R., McNulty, M., & Guerin, S. (2019). Family factors associated with self-harm in adults: a systematic review. *Journal of family therapy*, 41(4), 537-558.
- Burnard, P. (1997). *Effective communication skills for health professionals*. Nelson Thornes.

- Burns, E. E., Jackson, J. L., & Harding, H. G. (2010). Child maltreatment, emotion regulation, and posttraumatic stress: The impact of emotional abuse. *Journal of Aggression, Maltreatment & Trauma, 19*(8), 801-819.  
<https://doi.org/10.1080/10926771.2010.522947>
- Buser, T., & Hackney, H. (2012). Explanatory style as a mediator between childhood emotional abuse and nonsuicidal self-injury. *Journal of Mental Health Counseling, 34*(2), 154-169. <https://doi.org/10.17744/mehc.34.2.j714850564663545>
- Capron, D. W., Norr, A. M., Macatee, R. J., & Schmidt, N. B. (2013). Distress tolerance and anxiety sensitivity cognitive concerns: Testing the incremental contributions of affect dysregulation constructs on suicidal ideation and suicide attempt. *Behavior Therapy, 44*(3), 349-358. <https://doi.org/10.1016/j.beth.2012.12.002>
- Carr, M. J., Ashcroft, D. M., Kontopantelis, E., While, D., Awenat, Y., Cooper, J., Chew-Graham, C., Kapur, N., & Webb, R. T. (2016). Clinical management following self-harm in a UK-wide primary care cohort. *Journal of Affective Disorders, 197*, 182-188. <https://doi.org/10.1016/j.jad.2016.03.013>
- Cassidy, S. A., Bradley, L., Bowen, E., Wigham, S., & Rodgers, J. (2018). Measurement properties of tools used to assess suicidality in autistic and general population adults: A systematic review. *Clinical Psychology Review, 62*, 56-70.  
<https://doi.org/10.1016/j.cpr.2018.05.002>
- Catanzaro, S. J., & Mearns, J. (1990). Measuring generalized expectancies for negative mood regulation: Initial scale development and implications. *Journal of personality assessment, 54*(3-4), 546-563. <https://doi.org/10.1080/00223891.1990.9674019>

- Cawson, P., Wattam, C., Brooker, S., & Kelly, G. (2000). Child maltreatment in the United Kingdom: A study of the prevalence of abuse and neglect. *London: NSPCC*. 1-20.
- Cecil, C. A., Viding, E., Fearon, P., Glaser, D., & McCrory, E. J. (2017). Disentangling the mental health impact of childhood abuse and neglect. *Child abuse & neglect, 63*, 106-119. <https://doi.org/10.1016/j.chiabu.2016.11.024>
- Cha, C. B., Wilson, K. M., Tezanos, K. M., DiVasto, K. A., & Tolchin, G. K. (2019). Cognition and self-injurious thoughts and behaviors: A systematic review of longitudinal studies. *Clinical Psychology Review, 69*, 97-111.
- Chapman, A. L., Gratz, K. L., & Brown, M. Z. (2006). Solving the puzzle of deliberate self-harm: The experiential avoidance model. *Behaviour research and therapy, 44*(3), 371-394. <https://doi.org/10.1016/j.brat.2005.03.005>
- Christ, C., De Waal, M. M., Dekker, J. J., Van Kuijk, I., Van Schaik, D. J., Kikkert, M. J., Goudriaan, A. E., Beekman, A. T., & Messman-Moore, T. L. (2019). Linking childhood emotional abuse and depressive symptoms: The role of emotion dysregulation and interpersonal problems. *PLOS ONE, 14*(2), Article e0211882. <https://doi.org/10.1371/journal.pone.0211882>
- Cicchetti, D. (1989). How research on child maltreatment has informed the study of child development: Perspectives from developmental psychopathology. In Cicchetti, D., Carlson, V., & Dante, C. (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect*, 377-431. Cambridge University Press.



- Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and Psychopathology*, 8(4), 597–600. <https://doi.org/10.1017/S0954579400007318>
- Cicchetti, D., Carlson, V., & Dante, C. (Eds.). (1989). *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect*. Cambridge University Press.
- Clark, A. M., Lissel, S. L., & Davis, C. (2008). Complex critical realism: Tenets and application in nursing research. *Advances in Nursing Science*, 31(4), 67-79. doi: 10.1097/01.ANS.0000341421.34457.2a
- Clark-Carter, D. (2018). *Quantitative psychological research: The complete student's companion*. Routledge.
- Claussen, A. H., & Crittenden, P. M. (1991). Physical and psychological maltreatment: Relations among types of maltreatment. *Child abuse & neglect*, 15(1-2), 5-18. [https://doi.org/10.1016/0145-2134\(91\)90085-R](https://doi.org/10.1016/0145-2134(91)90085-R)
- Cole, P. M., & Deater-Deckard, K. (2009). Emotion regulation, risk, and psychopathology. *Journal of Child Psychology and Psychiatry*, 50(11), 1327-1330. doi: 10.1111/j.1469-7610.2009.02180.x
- Cole, P. M., & Hall, S. E. (2008). Emotion dysregulation as a risk factor for psychopathology. In Beauchaine, T. P., & Hinshaw, S. P. (Eds.), *Child and adolescent psychopathology*, 265–298. John Wiley & Sons Inc.
- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child development*, 75(2), 317-333. <https://doi.org/10.1111/j.1467-8624.2004.00673.x>

- Colonnesi, C., Draijer, E. M., Jan JM Stams, G., Van der Bruggen, C. O., Bögels, S. M., & Noom, M. J. (2011). The relation between insecure attachment and child anxiety: A meta-analytic review. *Journal of Clinical Child & Adolescent Psychology, 40*(4), 630-645.
- Connolly, J. (2006). *The book of lost things: A novel*. Simon & Schuster.
- Corral Gilsanz, S., Herrero Lázaro, M., Martín Bolaños, N., Gordejuela Enales, A., & Herrero Fernández, D. (2021). Psychological adjustment in adult adoptees: A meta-analysis. *Psicothema, 33*(4), 527-535.
- Cotton, C. R., Peters, D. K., & Range, L. M. (1995). Psychometric properties of the suicidal behaviors questionnaire. *Death Studies, 19*(4), 391-397.  
<https://doi.org/10.1080/07481189508252740>
- Cogle, J. R., Timpano, K. R., Fitch, K. E., & Hawkins, K. A. (2011). Distress tolerance and obsessions: An integrative analysis. *Depression and anxiety, 28*(10), 906-914.  
<https://doi.org/10.1002/da.20846>
- Cramer, P. (2000). Defense mechanisms in psychology today: Further processes for adaptation. *American Psychologist, 55*(6), 637 - 646. <https://doi.org/10.1037/0003-066X.55.6.637>
- Cross, T. P., & Hershkowitz, I. (2017). Psychology and child protection: Promoting widespread improvement in practice. *Psychology, Public Policy, and Law, 23*(4), 503-518.
- Crow, T., Cross, D., Powers, A., & Bradley, B. (2014). Emotion dysregulation as a mediator between childhood emotional abuse and current depression in a low-income

African-American sample. *Child Abuse & Neglect*, 38(10), 1590-1598.

<https://doi.org/10.1016/j.chiabu.2014.05.015>

Cummings, J. R., Bornovalova, M. A., Ojanen, T., Hunt, E., MacPherson, L., & Lejuez, C.

(2013). Time doesn't change everything: The longitudinal course of distress tolerance and its relationship with externalizing and internalizing symptoms during early adolescence. *Journal of abnormal child psychology*, 41(5), 735-748.

D'Andrea, W., Ford, J., Stolbach, B., Spinazzola, J., & van der Kolk, B. A. (2012).

Understanding interpersonal trauma in children: Why we need a developmentally appropriate trauma diagnosis. *American Journal of Orthopsychiatry*, 82(2), 187-200.

<https://doi.org/10.1111/j.1939-0025.2012.01154.x>

Daoud, J. I. (2017). Multicollinearity and regression analysis. *Journal of Physics: Conference*

*Series*, 94(1), 1-6. <https://doi.org/10.1088/1742-6596/949/1/012009>

Dallos, R., & Vetere, A. (2021). *Systemic therapy and attachment narratives: Applications in a range of clinical settings*. Routledge.

Dazzi, T., Gribble, R., Wessely, S., & Fear, N. T. (2014). Does asking about suicide and related behaviours induce suicidal ideation? What is the evidence?, *Psychological Medicine*, 44(16), 3361–3363. <https://doi.org/10.1017/S0033291714001299>

de Araújo, R. M. F., & Lara, D. R. (2016). More than words: The association of childhood emotional abuse and suicidal behavior. *European psychiatry*, 37, 14-21.

<https://doi.org/10.1016/j.eurpsy.2016.04.002>

De la Cruz-Cano, E. (2017). Association between FKBP5 and CRHR1 genes with suicidal behavior: A systematic review. *Behavioural brain research*, 317, 46-61.

<https://doi.org/10.1016/j.bbr.2016.09.032>

- Degli Esposti, M., Humphreys, D. K., Jenkins, B. M., Gasparri, A., Pooley, S., Eisner, M., & Bowes, L. (2019). Long-term trends in child maltreatment in England and Wales, 1858–2016: An observational, time-series analysis. *The Lancet Public Health*, 4(3), e148-e158.
- Dewe, H., Watson, D. G., Kessler, K., & Braithwaite, J. J. (2018). The depersonalized brain: New evidence supporting a distinction between depersonalization and derealization from discrete patterns of autonomic suppression observed in a non-clinical sample. *Consciousness and cognition*, 63, 29-46.
- Doyle, C. (1997). Emotional abuse of children: Issues for intervention. *Child Abuse Review: Journal of the British Association for the Study and Prevention of Child Abuse and Neglect*, 6(5), 330-342. [https://doi.org/10.1002/\(SICI\)1099-0852\(199712\)6:5<330::AID-CAR355>3.0.CO;2-C](https://doi.org/10.1002/(SICI)1099-0852(199712)6:5<330::AID-CAR355>3.0.CO;2-C)
- Dueweke, A. R., & Bridges, A. J. (2018). Suicide interventions in primary care: A selective review of the evidence. *Families, Systems, & Health*, 36(3), 289-302. <https://doi.org/10.1037/fsh0000349>
- Duggan, C., Milton, J., Egan, V., McCarthy, L., Palmer, B., & Lee, A. (2003). Theories of general personality and mental disorder. *The British Journal of Psychiatry*, 182(44), 19-23.
- Duncan, R. D. (1999). Maltreatment by parents and peers: The relationship between child abuse, bully victimization, and psychological distress. *Child maltreatment*, 4(1), 45-55. <https://doi.org/10.1177/1077559599004001005>

- Dunne, M., Pryor, J., & Yates, P. (2005). *Becoming a researcher: A research companion for the social sciences: A companion to the research process*. McGraw-Hill Education (UK).
- Dye, H. L. (2019). Is Emotional Abuse As Harmful as Physical and/or Sexual Abuse?. *Journal of Child & Adolescent Trauma*, 13(4), 399-407.
- Egeland, B. (2009). Taking stock: Childhood emotional maltreatment and developmental psychopathology. *Child Abuse & Neglect*, 33(1), 22–26.  
<https://doi.org/10.1016/j.chiabu.2008.12.004>
- Elkin, M. (2020, January 14). *Child emotional abuse in England and Wales*. Office for National Statistics. Retrieved May 1, 2020, from <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/childemotionalabuseinenglandandwales/yearendingmarch2019>
- Erikson, E. H. (1950). *Childhood and society* (2<sup>nd</sup> Ed). *Vintage*, 53-54.
- Ermisch, J., Jantti, M., & Smeeding, T. M. (Eds.). (2012). *From parents to children: The intergenerational transmission of advantage*. Russell Sage Foundation.
- Etain, B., Mathieu, F., Henry, C., Raust, A., Roy, I., Germain, A., Leboyer, M., & Bellivier, F. (2010). Preferential association between childhood emotional abuse and bipolar disorder. *Journal of Traumatic Stress*, 23(3), 376-383. <https://doi.org/10.1002/jts.20532>
- Everall, R. D., Bostik, K. E., & Paulson, B. L. (2005). I'm sick of being me: Developmental themes in a suicidal adolescent. *Adolescence*, 40(160), 693-708.
- Everett, B., & Gallop, R. (2000). *The link between childhood trauma and mental illness: Effective interventions for mental health professionals*. Sage Publications.

Felitti, V. J. (2019). Origins of the ACE Study. *American journal of preventive medicine*, 56(6), 787-789. <https://doi.org/10.1016/j.amepre.2019.02.011>

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4), 245-258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (2019). Reprint OF: Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 56(6), 774-786. <https://doi.org/10.1016/j.amepre.2019.04.001>

Felton, J. W., Collado, A., Havewala, M., Shadur, J. M., MacPherson, L., & Lejuez, C. W. (2018). Distress tolerance interacts with negative life events to predict depressive symptoms across adolescence. *Journal of Clinical Child & Adolescent Psychology*, 48(4), 633-642. <https://doi.org/10.1080/15374416.2017.1405354>

Finkelhor, D., Gelles, R. J., Hotaling, G. T., & Strauss, M. A. (Eds.). (1983). *The dark side of families: Current family violence research*. Sage.

Fliege, H., Kocalevent, R. D., Walter, O. B., Beck, S., Gratz, K. L., Gutierrez, P. M., & Klapp, B. F. (2006). Three assessment tools for deliberate self-harm and suicide behavior: Evaluation and psychopathological correlates. *Journal of psychosomatic research*, 61(1), 113-121. <https://doi.org/10.1016/j.jpsychores.2005.10.006>

- Fliege, H., Lee, J. R., Grimm, A., & Klapp, B. F. (2009). Risk factors and correlates of deliberate self-harm behavior: A systematic review. *Journal of psychosomatic research, 66*(6), 477-493. <https://doi.org/10.1016/j.jpsychores.2008.10.013>
- Foege, W. H. (1998). Adverse childhood experiences. *A public health perspective. Am J Prev Med, 14*(4), 354-355.
- Foster, J. D., Kernis, M. H., & Goldman, B. M. (2007). Linking adult attachment to self-esteem stability. *Self and Identity, 6*(1), 64-73.
- Fraley, R. C., & Roisman, G. I. (2019). The development of adult attachment styles: Four lessons. *Current opinion in psychology, 25*, 26-30.  
<https://doi.org/10.1016/j.copsyc.2018.02.008>
- Franklin, J. C., Ribeiro, J. D., Fox, K. R., Bentley, K. H., Kleiman, E. M., Huang, X., Musacchio, K. M., Jaroszewski, A. C., Chang, B. P., & Nock, M. K. (2017). Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research. *Psychological Bulletin, 143*(2), 187-232. <https://doi.org/10.1037/bul0000084>
- Fraser, B. G. (1974). A pragmatic alternative to current legislative approaches to child abuse. *American Criminal Law Review., 12*, 103-110.
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science, 18*(3), 233-239. <https://doi.org/10.1111/j.1467-9280.2007.01882.x>
- Fusar-Poli, P. (2019). Integrated mental health services for the developmental period (0 to 25 years): a critical review of the evidence. *Frontiers in Psychiatry, 10*(355). 1-17.  
<https://doi.org/10.3389/fpsy.2019.00355>

- Gaher, R. M., Hofman, N. L., Simons, J. S., & Hunsaker, R. (2013). Emotion regulation deficits as mediators between trauma exposure and borderline symptoms. *Cognitive therapy and research*, 37(3), 466-475.
- Garbarino, J. (1978). The elusive "crime" of emotional abuse. *Child Abuse & Neglect*, 2(2), 89-99. [https://doi.org/10.1016/0145-2134\(78\)90011-X](https://doi.org/10.1016/0145-2134(78)90011-X)
- Gavin, H. (2011). Sticks and stones may break my bones: The effects of emotional abuse. *Journal of Aggression, Maltreatment & Trauma*, 20(5), 503-529. <https://doi.org/10.1080/10926771.2011.592179>
- Gay, L. E., Harding, H. G., Jackson, J. L., Burns, E. E., & Baker, B. D. (2013). Attachment style and early maladaptive schemas as mediators of the relationship between childhood emotional abuse and intimate partner violence. *Journal of Aggression, Maltreatment & Trauma*, 22(4), 408-424. <https://doi.org/10.1080/10926771.2013.775982>
- Gelso, C. J., Williams, E. N., & Fretz, B. R. (2014). *Counseling psychology* (3rd ed.). Washington, D.C: American Psychological Association.
- Gerhardt, S. (2006). Why love matters: How affection shapes a baby's brain. *Infant Observation*, 9(3), 305-309.
- Gibb, B. E., Benas, J. S., Crossett, S. E., & Uhrlass, D. J. (2007). Emotional maltreatment and verbal victimization in childhood: Relation to adults' depressive cognitions and symptoms. *Journal of Emotional Abuse*, 7(2), 59-73. [https://doi.org/10.1300/J135v07n02\\_04](https://doi.org/10.1300/J135v07n02_04)
- Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Geography Discipline Network.



- Gilbert, P., McEwan, K., Mitra, R., Franks, L., Richter, A., & Rockliff, H. (2008). Feeling safe and content: A specific affect regulation system? Relationship to depression, anxiety, stress, and self-criticism. *The Journal of Positive Psychology, 3*(3), 182-191.  
<https://doi.org/10.1080/17439760801999461>
- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *The Lancet, 373*(9657), 68-81. [https://doi.org/10.1016/S0140-6736\(08\)61706-7](https://doi.org/10.1016/S0140-6736(08)61706-7)
- Giletta, M., Hastings, P. D., Rudolph, K. D., Bauer, D. J., Nock, M. K., & Prinstein, M. J. (2017). Suicide ideation among high-risk adolescent females: Examining the interplay between parasympathetic regulation and friendship support. *Development and psychopathology, 29*(4), 1161-1175. <https://doi.org/10.1017/S0954579416001218>
- Glaser, D. (2002). Emotional abuse and neglect (psychological maltreatment): A conceptual framework. *Child abuse & neglect, 26*(6-7), 697-714. [https://doi.org/10.1016/S0145-2134\(02\)00342-3](https://doi.org/10.1016/S0145-2134(02)00342-3)
- Glassman, L. H., Weierich, M. R., Hooley, J. M., Deliberto, T. L., & Nock, M. K. (2007). Child maltreatment, non-suicidal self-injury, and the mediating role of self-criticism. *Behaviour research and therapy, 45*(10), 2483-2490.  
<https://doi.org/10.1016/j.brat.2007.04.002>
- Goldsmith, R. E., & Freyd, J. J. (2005). Awareness for emotional abuse. *Journal of Emotional Abuse, 5*(1), 95-123. [https://doi.org/10.1300/J135v05n01\\_04](https://doi.org/10.1300/J135v05n01_04)
- Gordon, K. H., Simonich, H., Wonderlich, S. A., Dhankikar, S., Crosby, R. D., Cao, L., Kwan, M. Y., Mitchell, J. E., & Engel, S. G. (2016). Emotion dysregulation and affective intensity mediate the relationship between childhood abuse and suicide-related

behaviors among women with bulimia nervosa. *Suicide and Life-Threatening Behavior*, 46(1), 79-87. <https://doi.org/10.1111/sltb.12172>

Grace, J. (2015). Clare's Law, or the national Domestic Violence Disclosure Scheme: the contested legalities of criminality information sharing. *The Journal of Criminal Law*, 79(1), 36-45. <https://doi.org/10.1177/0022018314564732>

Gratz, K. L. (2001). Measurement of deliberate self-harm: Preliminary data on the Deliberate Self-Harm Inventory. *Journal of psychopathology and behavioral assessment*, 23(4), 253-263.

Gratz, K. L. (2003). Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clinical Psychology: Science and Practice*, 10(2), 192-205.  
<https://doi.org/10.1093/clipsy.bpg022>

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of psychopathology and behavioral assessment*, 26(1), 41-54.

Gratz, K. L., & Roemer, L. (2008). The relationship between emotion dysregulation and deliberate self-harm among female undergraduate students at an urban commuter university. *Cognitive behaviour therapy*, 37(1), 14-25.  
<https://doi.org/10.1080/16506070701819524>

Gratz, K. L., Bornovalova, M. A., Delany-Brumsey, A., Nick, B., & Lejuez, C. W. (2007). A laboratory-based study of the relationship between childhood abuse and experiential avoidance among inner-city substance users: The role of emotional

nonacceptance. *Behavior therapy*, 38(3), 256-268.

<https://doi.org/10.1016/j.beth.2006.08.006>

Gratz, K. L., Dixon-Gordon, K. L., & Tull, M. T. (2014). Predictors of treatment response to an adjunctive emotion regulation group therapy for deliberate self-harm among women with borderline personality disorder. *Personality Disorders: Theory, Research, and Treatment*, 5(1), 97-107. <https://doi.org/10.1037/per0000062>

Gratz, K. L., Rosenthal, M. Z., Tull, M. T., Lejuez, C. W., & Gunderson, J. G. (2006). An experimental investigation of emotion dysregulation in borderline personality disorder. *Journal of abnormal psychology*, 115(4), 850-855.

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of general psychology*, 2(3), 271-299.

Gross, J. J. (2014). Emotion regulation: Conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation*, 3–20. The Guilford Press.

Gross, J. J., & Thompson, R. A. (2006). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.) *Handbook of emotion regulation*. The Guilford Press.

Grossman, F. K., Spinazzola, J., Zucker, M., & Hopper, E. (2017). Treating adult survivors of childhood emotional abuse and neglect: A new framework. *American Journal of Orthopsychiatry*, 87(1), 86-93. <https://doi.org/10.1037/ort0000225>

Gu, H., Ma, P., & Xia, T. (2020). Childhood emotional abuse and adolescent nonsuicidal self-injury: the mediating role of identity confusion and moderating role of rumination. *Child Abuse & Neglect*, 106, Article 104474.

<https://doi.org/10.1016/j.chiabu.2020.104474>

Hamarman, S., & Bernet, W. (2000). Evaluating and reporting emotional abuse in children:

Parent-based, action-based focus aids in clinical decision-making. *Journal of the American Academy of Child & Adolescent Psychiatry, 39*(7), 928-930. <https://doi.org/10.1097/00004583-200007000-00023>

Hamza, C. A., Stewart, S. L., & Willoughby, T. (2012). Examining the link between nonsuicidal

self-injury and suicidal behavior: A review of the literature and an integrated model. *Clinical psychology review, 32*(6), 482-495.

<https://doi.org/10.1016/j.cpr.2012.05.003>

Hankin, B. L. (2005). Childhood maltreatment and psychopathology: Prospective tests of

attachment, cognitive vulnerability, and stress as mediating processes. *Cognitive Therapy and Research, 29*(6), 645-671.

Hardt, J., & Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood

experiences: review of the evidence. *Journal of child psychology and psychiatry, 45*(2), 260-273. <https://doi.org/10.1111/j.1469-7610.2004.00218.x>

Hardt, J., Vellaisamy, P., & Schoon, I. (2010). Sequelae of prospective versus retrospective

reports of adverse childhood experiences. *Psychological reports, 107*(2), 425-440.

<https://doi.org/10.2466/02.04.09.10.16.21.PR0.107.5.425-440>

Hart, S. N., & Brassard, M. R. (1987). A major threat to children's mental health:

Psychological maltreatment. *American Psychologist, 42*(2), 160-165. <https://doi.org/10.1037/0003-066X.42.2.160>

Hart, S. N., Brassard, M. R., Binggeli, N. J., & Davidson, H. A. (2002). Psychological

maltreatment. In J. E. B. Myers, L. Berliner, J. Briere, C. T. Hendrix, C. Jenny, & T. A.

- Reid (Eds.), *The APSAC handbook on child maltreatment*, 79–103. Sage Publications, Inc.
- Hayes, A. F. (Ed.). (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (1st ed.). New York: The Guilford Press.
- Hayes, A. F., & Little, T. D. (2018). More than one mediator. In A. F. Hayes (Ed.). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (2<sup>nd</sup> ed.) (pp. 147-187). Guilford publications.
- Health and Care Professions Council. (2016). *Standards of conduct, performance and ethics*. London: Health and Care Professions Council
- Herman, J. (1992). *Trauma and recovery*. NY: Basic books.
- Herpertz, S. C., Schwenger, U. B., Kunert, H. J., Lukas, G., Gretzer, U., Nutzman, J., Schuerkens, A., & Sass, H. (2000). Emotional responses in patients with borderline as compared with avoidant personality disorder. *Journal of Personality Disorders*, 14(4), 339-351. <https://doi.org/10.1521/pedi.2000.14.4.339>
- Hershler, A. (2021). Window of Tolerance. In A. Hershler, L. Hughes, P. Nguyen, & S. Wall (Eds.), *Looking at trauma: A tool kit for clinicians*. Penn State Press.
- Hoebner, C., De Roos, C., van Son, G. E., Spinhoven, P., & Elzinga, B. (2021). The effect of parental emotional abuse on the severity and treatment of PTSD symptoms in children and adolescents. *Child abuse & neglect*, 111, 104775. <https://doi.org/10.1016/j.chiabu.2020.104775>
- Hoghugh, M. S., & Long, N. (Eds.). (2004). *Handbook of parenting: theory and research for practice*. Sage.
- Holmes, J., & Slade, A. (2017). *Attachment in therapeutic practice*. Sage.

Howe, D. (2005). *Child abuse and neglect: Attachment, development and intervention*.

Macmillan International Higher Education.

Iverson, K. M., King, M. W., Cunningham, K. C., & Resick, P. A. (2015). Rape survivors' trauma-related beliefs before and after cognitive processing therapy: Associations with PTSD and depression symptoms. *Behaviour Research and Therapy*, *66*, 49-55.

<https://doi.org/10.1016/j.brat.2015.01.002>

Iwaniec, D. (2006). *The emotionally abused and neglected child: Identification, assessment and intervention: A practice handbook*. John Wiley & Sons.

Iyengar, U., Snowden, N., Asarnow, J. R., Moran, P., Tranah, T., & Ougrin, D. (2018). A further look at therapeutic interventions for suicide attempts and self-harm in adolescents: an updated systematic review of randomized controlled trials. *Frontiers in psychiatry*, *9*, 583. <https://doi.org/10.3389/fpsy.2018.00583>

Janiri, D., De Rossi, P., Kotzalidis, G. D., Girardi, P., Koukopoulos, A. E., Reginaldi, D., Dotto, F., Manfredi, G., Jollant, F., Gorwood, P., Pompili, M., & Sani, G. (2018). Psychopathological characteristics and adverse childhood events are differentially associated with suicidal ideation and suicidal acts in mood disorders. *European Psychiatry*, *53*, 31-36. <https://doi.org/10.1016/j.eurpsy.2018.05.009>

Janiri, D., Sani, G., Rossi, P. D., Piras, F., Iorio, M., Banaj, N., Giuseppin, G., Spinazzola, E., Maggiora, M., Ambrosi, E., Simonetti, A., & Spalletta, G. (2017). Amygdala and hippocampus volumes are differently affected by childhood trauma in patients with bipolar disorders and healthy controls. *Bipolar Disorders*, *19*(5), 353-362. <https://doi.org/10.1111/bdi.12516>

- Kaleycheva, N., Cullen, A. E., Evans, R., Harris, T., Nicholson, T., & Chalder, T. (2021). The role of lifetime stressors in adult fibromyalgia: systematic review and meta-analysis of case-control studies. *Psychological medicine, 51*(2), 177-193.  
<https://doi.org/10.1017/S0033291720004547>
- Merrick, J., Greydanus, D. E., & Palusci, V. J. (2017). Child abuse and neglect in a historic perspective. *International Journal of Child and Adolescent Health, 10*(3), 275-284.
- Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect, 69*, 10-19. <https://doi.org/10.1016/j.chiabu.2017.03.016>
- Johnstone, J. M., Carter, J. D., Luty, S. E., Mulder, R. T., Frampton, C. M., & Joyce, P. R. (2016). Childhood predictors of lifetime suicide attempts and non-suicidal self-injury in depressed adults. *Australian & New Zealand Journal of Psychiatry, 50*(2), 135-144.  
<https://doi.org/10.1177/0004867415585581>
- Johnstone, L., Boyle, M., Cromby, J., Dillon, J., Harper, D., Kinderman, P., & Read, J. (2018). The power threat meaning framework. In *British Psychological Society*. Leicester.
- Kaplan, S. J., Pelcovitz, D., & Labruna, V. (1999). Child and adolescent abuse and neglect research: A review of the past 10 years. Part I: Physical and emotional abuse and neglect. *Journal-American Academy Of Child And Adolescent Psychiatry, 38*, 1214-1222. <https://doi.org/10.1097/00004583-199910000-00009>
- Karatzias, T., Shevlin, M., Ford, J. D., Fyvie, C., Grandison, G., Hyland, P., & Cloitre, M. (2021). Childhood trauma, attachment orientation, and complex PTSD (CPTSD) symptoms in

- a clinical sample: Implications for treatment. *Development and Psychopathology*, 1-6. <https://doi.org/10.1017/S0954579420001509>
- Kempe, C. H., Silverman, F. N., Steele, B. F., Droegemueller, W., & Silver, H. K. (1962). The battered-child syndrome. *Jama*, 181(1), 17-24.
- Kim, D., Bae, H., Han, C., Oh, H. Y., & MacDonald, K. (2013). Psychometric properties of the Childhood Trauma Questionnaire-Short Form (CTQ-SF) in Korean patients with schizophrenia. *Schizophrenia research*, 144(1-3), 93-98.  
<https://doi.org/10.1016/j.schres.2012.12.020>
- Kim, J. H. (2019). Multicollinearity and misleading statistical results. *Korean journal of anesthesiology*, 72(6), 558 - 569. <https://doi.org/10.4097/kja.19087>
- Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, 82, 26-33.
- Kinderman, P. (2015). Imagine there's no diagnosis, it's easy if you try. *Psychopathology Review*, 2(1), 154-161. <https://doi.org/10.5127/pr.036714>
- Klonsky, E. D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical psychology review*, 27(2), 226-239.  
<https://doi.org/10.1016/j.cpr.2006.08.002>
- Klonsky, E. D., May, A. M., & Glenn, C. R. (2013). The relationship between nonsuicidal self-injury and attempted suicide: converging evidence from four samples. *Journal of abnormal psychology*, 122(1), 231-237.
- Kolb, B., & Whishaw, I. (Eds.). (2016). *Brain and behaviour: Revisiting the classic studies*. Sage.



- Kratovic, L., Smith, L. J., & Vujanovic, A. A. (2021). PTSD symptoms, suicidal ideation, and suicide risk in university students: The role of distress tolerance. *Journal of Aggression, Maltreatment & Trauma, 30*(1), 82-100.  
<https://doi.org/10.1080/10926771.2019.1709594>
- Krause-Utz, A., Frost, R., Winter, D., & Elzinga, B. M. (2017). Dissociation and alterations in brain function and structure: Implications for borderline personality disorder. *Current psychiatry reports, 19*(1), 1-22. <https://doi.org/10.1007/s11920-017-0757-y>
- Kuo, J. R., Khoury, J. E., Metcalfe, R., Fitzpatrick, S., & Goodwill, A. (2015). An examination of the relationship between childhood emotional abuse and borderline personality disorder features: The role of difficulties with emotion regulation. *Child abuse & neglect, 39*, 147-155. <https://doi.org/10.1016/j.chiabu.2014.08.008>
- Lass, A. N., & Winer, E. S. (2020). Distress tolerance and symptoms of depression: A review and integration of literatures. *Clinical Psychology: Science and Practice, 27*(3), 1-14.  
<https://doi.org/10.1111/cpsp.12336>
- Lee, M. A. (2015). Emotional abuse in childhood and suicidality: The mediating roles of re-victimization and depressive symptoms in adulthood. *Child Abuse & Neglect, 44*, 130-139. <https://doi.org/10.1016/j.chiabu.2015.03.016>
- Levine, P. A., & Kline, M. (2014). *Trauma-proofing your kids: A parents' guide for instilling confidence, joy and resilience*. North Atlantic books.
- Levy, K. N., & Johnson, B. N. (2019). Attachment and psychotherapy: Implications from empirical research. *Canadian Psychology/Psychologie Canadienne, 60*(3), 178-193.  
<https://doi.org/10.1037/cap0000162>

- Leyro, T. M., Zvolensky, M. J., & Bernstein, A. (2010). Distress tolerance and psychopathological symptoms and disorders: a review of the empirical literature among adults. *Psychological bulletin*, 136(4), 576-600.  
<https://doi.org/10.1037/a0019712>
- Linehan, M. M. (1993). *Skills training manual for treating borderline personality disorder*. Guilford press.
- Linehan, M. M. (2018). *Cognitive-behavioral treatment of borderline personality disorder*. Guilford Publications.
- Linehan, M. M., & Nielsen, S. L. (1981). Suicidal behaviors questionnaire (SBQ) [Database record]. *PsycTESTS Dataset*. <https://doi.org/10.1037/t24083-000>
- Lisak, D. (1995). Integrating a critique of gender in the treatment of male survivors of childhood abuse. *Psychotherapy: Theory, Research, Practice, Training*, 32(2), 258-269. <https://doi.org/10.1037/0033-3204.32.2.258>
- Liu, J., Fang, Y., Gong, J., Cui, X., Meng, T., Xiao, B., He, Y., Shen, Y., & Luo, X. (2017). Associations between suicidal behavior and childhood abuse and neglect: A meta-analysis. *Journal of Affective Disorders*, 220, 147-155.  
<https://doi.org/10.1016/j.jad.2017.03.060>
- Loeys, T., Moerkerke, B., & Vansteelandt, S. (2015). A cautionary note on the power of the test for the indirect effect in mediation analysis. *Frontiers in Psychology*, 5(1549). 1-8. <https://doi.org/10.3389/fpsyg.2014.01549>
- Lohner, J., & Konrad, N. (2007). Risk factors for self-injurious behaviour in custody: problems of definition and prediction. *International Journal of Prisoner Health*, 3(2), 135-161.  
<https://doi.org/10.1080/17449200701321654>

- Lohrasbe, R. S., & Ogden, P. (2017). Somatic resources: Sensorimotor psychotherapy approach to stabilising arousal in child and family treatment. *Australian and New Zealand Journal of Family Therapy, 38*(4), 573-581.
- Lotan, G., Tanay, G., & Bernstein, A. (2013). Mindfulness and distress tolerance: relations in a mindfulness preventive intervention. *International Journal of Cognitive Therapy, 6*(4), 371-385. <https://doi.org/10.1521/ijct.2013.6.4.371>
- Ludy-Dobson, C. R., & Perry, B. D. (2010). The role of healthy relational interactions in buffering the impact of childhood trauma. In E. Gil (Ed.), *Working with Children to Heal Interpersonal Trauma: The Power of Play* (pp. 26-43). The Guilford Press.
- Lyons-Ruth, K. (2003). The two-person construction of defenses: Disorganized attachment strategies, unintegrated mental states, and hostile/helpless relational processes. *Journal of infant, child, and adolescent psychotherapy: JICAP, 2*, 105-114.
- Lyons-Ruth, K., & Spielman, E. (2004). Disorganized infant attachment strategies and helpless-fearful profiles of parenting: Integrating attachment research with clinical intervention. *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health, 25*(4), 318-335. <https://doi.org/10.1002/imhj.20008>
- Lyons-Ruth, K., Bureau, J. F., Holmes, B., Easterbrooks, A., & Brooks, N. H. (2013). Borderline symptoms and suicidality/self-injury in late adolescence: Prospectively observed relationship correlates in infancy and childhood. *Psychiatry research, 206*(2-3), 273-281. <https://doi.org/10.1016/j.psychres.2012.09.030>
- Macatee, R. J., Capron, D. W., Schmidt, N. B., & Cogle, J. R. (2013). An examination of low distress tolerance and life stressors as factors underlying obsessions. *Journal of*

*psychiatric research*, 47(10), 1462-1468.

<https://doi.org/10.1016/j.jpsychires.2013.06.019>

MacDonald, K., Thomas, M. L., Sciolla, A. F., Schneider, B., Pappas, K., Bleijenberg, G., Bohus, M., Bekh, B., Carpenter, L., Carr, A., Dannlowski, U., Dorahy, M., Fahlke, C., Finzi-Dottan, R., Karu, T., Gerdner, A., Glaesmer, H., Grabe, H. J., Heins, M., ... Wingenfeld, K. (2016). Minimization of childhood maltreatment is common and consequential: Results from a large, multinational sample using the childhood trauma questionnaire. *PLOS ONE*, 11(1), Article e0146058. <https://doi.org/10.1371/journal.pone.0146058>

Mann, J. J. (2003). Neurobiology of suicidal behaviour. *Nature Reviews Neuroscience*, 4(10), 819-828. <https://doi.org/10.1038/nrn1220>

Mars, B., Heron, J., Klonsky, E. D., Moran, P., O'Connor, R. C., Tilling, K., Wilkinson, P., & Gunnell, D. (2019). Predictors of future suicide attempt among adolescents with suicidal thoughts or non-suicidal self-harm: A population-based birth cohort study. *The Lancet Psychiatry*, 6(4), 327-337. [https://doi.org/10.1016/s2215-0366\(19\)30030-6](https://doi.org/10.1016/s2215-0366(19)30030-6)

Martin, C., Iqbal, Z., Airey, N. D., & Marks, L. (2021). Improving Access to Psychological Therapies (IAPT) has potential but is not sufficient: How can it better meet the range of primary care mental health needs?. *British Journal of Clinical Psychology*.

Masana, L. P., Reyes, M. E. S., & Delariarte, C. F. (2020). Unraveling non-suicidal self-injury: Understanding the behavioral dynamics of Filipino adolescents at risk of deliberate self-harm. *North American Journal of Psychology*, 22(2), 331-354.

- Mathews, B., Pacella, R., Dunne, M. P., Simunovic, M., & Marston, C. (2020). Improving measurement of child abuse and neglect: A systematic review and analysis of national prevalence studies. *PLoS one*, *15*(1), e0227884.
- Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research*, *46*(5), 816-841.  
<https://doi.org/10.1080/00273171.2011.606716>
- May-Chahal, C., & Cawson, P. (2005). Measuring child maltreatment in the United Kingdom: A study of the prevalence of child abuse and neglect. *Child abuse & neglect*, *29*(9), 969-984. <https://doi.org/10.1016/j.chiabu.2004.05.009>
- Mayor, S. (2019). Major rise in non-suicidal self harm in England, study shows. *BMJ (Clinical Research ed.)*, *365*, Article l4058. <https://doi.org/10.1136/bmj.l4058>
- McCabe, R., Garside, R., Backhouse, A., & Xanthopoulou, P. (2018). Effectiveness of brief psychological interventions for suicidal presentations: A systematic review. *BMC psychiatry*, *18*(1), 1-13.
- McCrory, E. J., De Brito, S. A., Kelly, P. A., Bird, G., Sebastian, C. L., Mechelli, A., Samuel, S., & Viding, E. (2013). Amygdala activation in maltreated children during pre-attentive emotional processing. *British Journal of Psychiatry*, *202*(4), 269-276. <https://doi.org/10.1192/bjp.bp.112.116624>
- McManus, S., Gunnell, D., Cooper, C., Bebbington, P. E., Howard, L. M., Brugha, T., Jenkins, R., Hassiotis, A., Weich, S., & Appleby, L. (2019). Prevalence of non-suicidal self-harm and service contact in England, 2000–14: Repeated cross-sectional surveys

of the general population. *The Lancet Psychiatry*, 6(7), 573-

581. [https://doi.org/10.1016/s2215-0366\(19\)30188-9](https://doi.org/10.1016/s2215-0366(19)30188-9)

McPhillips, K. (2019). Silence, secrecy and power: Understanding the Royal Commission findings into the failure of religious organisations to protect children. *Journal for the Academic Study of Religion*, 31(3), 116-142. <https://doi.org/10.1558/jasr.37306>

Meszaros, G., Horvath, L. O., & Balazs, J. (2017). Self-injury and externalizing pathology: A systematic literature review. *BMC psychiatry*, 17(160), 1-21.

<https://doi.org/10.1186/s12888-017-1326-y>

Miller, A. B., Jenness, J. L., Oppenheimer, C. W., Gottleib, A. L. B., Young, J. F., & Hankin, B. L.

(2017). Childhood emotional maltreatment as a robust predictor of suicidal ideation:

A 3-year multi-wave, prospective investigation. *Journal of abnormal child*

*psychology*, 45(1), 105-116. <https://doi.org/10.1007/s10802-016-0150-z>

Millner, A. J., Lee, M. D., & Nock, M. K. (2017). Describing and measuring the pathway to

suicide attempts: A preliminary study. *Suicide and Life-Threatening Behavior*, 47(3),

353-369. <https://doi.org/10.1111/sltb.12284>

Misca, G., & Smith, J. (2014). Mothers, fathers, families and child development. In A. Abela

& J. Walker (Eds.), *Contemporary issues in family studies: Global perspectives on*

*partnerships, parenting and support in a changing world* (1st ed., pp. 151-165). John

Wiley & Sons.

Montgomery, E., Just-Østergaard, E., & Jervelund, S. S. (2019). Transmitting trauma: A

systematic review of the risk of child abuse perpetrated by parents exposed to

traumatic events. *International Journal of Public Health*, 64(2), 241-251.

- Mort, S. [@drsoph]. (2019, December 12). *The Instagram effect: Practitioner engagement* [Article]. Psychology in practice magazine. <https://psychology-in-practice-magazine.co.uk/the-instagram-effect-practitioner-engagement/>
- Muehlenkamp, J. J., Claes, L., Havertape, L., & Plener, P. L. (2012). International prevalence of adolescent non-suicidal self-injury and deliberate self-harm. *Child and adolescent psychiatry and mental health*, 6(10), 1-9. <https://doi.org/10.1186/1753-2000-6-10>
- Mulholland, P. C. (2010). *Childhood emotional maltreatment and its impact on emotion regulation* [Doctoral dissertation]. Edinburgh Research Archive.
- Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1996). The long-term impact of the physical, emotional, and sexual abuse of children: A community study. *Child abuse & neglect*, 20(1), 7-21. [https://doi.org/10.1016/0145-2134\(95\)00112-3](https://doi.org/10.1016/0145-2134(95)00112-3)
- Najmi, S., Wegner, D. M., & Nock, M. K. (2007). Thought suppression and self-injurious thoughts and behaviors. *Behaviour research and therapy*, 45(8), 1957-1965. <https://doi.org/10.1016/j.brat.2006.09.014>
- National Health Service. (2016). *Priorities for mental health: Economic report for the NHS England mental health Taskforce*. NHS England.
- National Institute for Health and Care Excellence. (2019). *Suicide Prevention*. NICE. <https://www.nice.org.uk/guidance/qs189/resources/suicide-prevention-pdf-75545729771461>
- National Institute for Health and Care Excellence. (2020). *Interventions for Self-Harm*. NICE. <https://pathways.nice.org.uk/pathways/self-harm#path=view%3A/pathways/self-harm/longer-term-management-of-self-harm->

[assessment-and-treatment.xml&content=view-quality-statement%3Aquality-statements-psychological-interventions](#)

- Naughton, A. M., Cowley, L. E., Tempest, V., Maguire, S. A., Mann, M. K., & Kemp, A. M. (2017). Ask Me! self-reported features of adolescents experiencing neglect or emotional maltreatment: A rapid systematic review. *Child: care, health and development, 43*(3), 348-360. <https://doi.org/10.1111/cch.12440>
- Neacsiu, A. D., Fang, C. M., Rodriguez, M., & Rosenthal, M. Z. (2018). Suicidal behavior and problems with emotion regulation. *Suicide and Life-Threatening Behavior, 48*(1), 52-74.
- Newton, C., & Gavin, H. (2020). "My reality is just different from yours, that doesn't mean I'm crazy." Exploring the Impact of Childhood Emotional Abuse on Adult Emotional Adjustment. *Journal of Aggression, Maltreatment & Trauma, 29*(1), 2-21.
- Nobakht, H. N., & Dale, K. Y. (2017). The prevalence of deliberate self-harm and its relationships to trauma and dissociation among Iranian young adults. *Journal of Trauma & Dissociation, 18*(4), 610–623.
- Nock, M. K. (2010). Self-injury. *Annual review of clinical psychology, 6*, 339-363.
- Nock, M. K., & Mendes, W. B. (2008). Physiological arousal, distress tolerance, and social problem-solving deficits among adolescent self-injurers. *Journal of consulting and clinical psychology, 76*(1), 28-38. <https://doi.org/10.1037/0022-006X.76.1.28>
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. *PLoS Med, 9*(11), 1-31. <https://doi.org/10.1371/journal.pmed.1001349>



- North, G. (2019). Assessing for bruises on the soul: Identifying and evidencing childhood emotional abuse. *Journal of Social Welfare and Family Law*, 41(3), 302-320.  
<https://doi.org/10.1080/09649069.2019.1627086>
- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & quantity*, 41(5), 673-690.
- O'Cleirigh, C., Ironson, G., & Smits, J. A. (2007). Does distress tolerance moderate the impact of major life events on psychosocial variables and behaviors important in the management of HIV?. *Behavior therapy*, 38(3), 314-323.  
<https://doi.org/10.1016/j.beth.2006.11.001>
- O'Connor, R. C. (2011). Towards an integrated motivational–volitional model of suicidal behaviour. In R. C. O'Connor, S. Platt, & J. Gordon (Eds.), *International handbook of suicide prevention: Research, policy and practice* (1st ed., pp. 181-198). John Wiley & Sons.
- O'Dougherty Wright, M. (2007). The long-term impact of emotional abuse in childhood: Identifying mediating and moderating processes. *Journal of Emotional Abuse*, 7(2), 1-8. [https://doi.org/10.1300/J135v07n02\\_01](https://doi.org/10.1300/J135v07n02_01)
- Office for National Statistics. (2019). Suicides in the UK. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2018registrations>
- Office for National Statistics. (2020, March 5). Child abuse in England and Wales. <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/childabuseinenglandandwales/march2020>

- Ogden, P., & Fisher, J. (2015). *Sensorimotor psychotherapy: Interventions for trauma and attachment (Norton series on interpersonal neurobiology)*. WW Norton & Company.
- Ogden, P., Minton, K., & Pain, C. (2006). Window of Tolerance: Capacity for Modulating Arousal. In *Trauma and the body: A sensorimotor approach to psychotherapy (Norton series on interpersonal neurobiology)* (pp. 26-40). W. W. Norton & Company.
- O'Hagan, K. (1993). *Emotional and psychological abuse of children*. (1st ed.). Open University Press.
- O'Hagan, K. P. (1995). Emotional and psychological abuse: Problems of definition. *Child abuse & neglect, 19*(4), 449-461.
- Oppenheim, A. N. (2000). *Questionnaire design, interviewing and attitude measurement*. Bloomsbury Publishing.
- Osman, A., Bagge, C. L., Gutierrez, P. M., Konick, L. C., Kopper, B. A., & Barrios, F. X. (2001). The Suicidal Behaviors Questionnaire-Revised (SBQ-R): Validation with clinical and nonclinical samples. *Assessment, 8*(4), 443-454.
- Paine, A. L., Fahey, K., Anthony, R. E., & Shelton, K. H. (2021). Early adversity predicts adoptees' enduring emotional and behavioral problems in childhood. *European child & adolescent psychiatry, 30*, 721-732.
- Panksepp, J. (1999). Emotions as viewed by psychoanalysis and neuroscience: An exercise in consilience. *Neuropsychoanalysis, 1*(1), 15-38.  
<https://doi.org/10.1080/15294145.1999.10773241>
- Pelton, L. H. (2015). The continuing role of material factors in child maltreatment and placement. *Child Abuse & Neglect, 41*, 30-39. <https://doi.org/10.1016/j.chiabu.2014.08.001>

- Perry, B. D. (2008). Child maltreatment: A neurodevelopmental perspective on the role of trauma and neglect in psychopathology. In T. P. Beauchaine & S. P. Hinshaw (Eds.), *Child and adolescent psychopathology* (pp. 93–128). John Wiley & Sons Inc.
- Perry, R. E., Blair, C., & Sullivan, R. M. (2017). Neurobiology of infant attachment: attachment despite adversity and parental programming of emotionality. *Current opinion in psychology, 17*, 1-6.
- Pessoa, L. (2019). Embracing integration and complexity: placing emotion within a science of brain and behaviour. *Cognition and Emotion, 33*(1), 55-60.  
<https://doi.org/10.1080/02699931.2018.1520079>
- Pilgrim, D. (2014). Some implications of critical realism for mental health research. *Social Theory & Health, 12*(1), 1-21.
- Pinto, R. J., & Maia, Â. C. (2013). A comparison study between official records and self-reports of childhood adversity. *Child Abuse Review, 22*(5), 354-366.  
<https://doi.org/10.1002/car.2232>
- Pirkola, S., Isometsä, E., Aro, H., Kestilä, L., Hämmäläinen, J., Veijola, J., Kiviruusu, O., & Lönnqvist, J. (2005). Childhood adversities as risk factors for adult mental disorders. *Social Psychiatry and Psychiatric Epidemiology, 40*(10), 769-777. <https://doi.org/10.1007/s00127-005-0950-x>
- Preston-Shoot, M. (2018). What is really wrong with serious case reviews?. *Child abuse review, 27*(1), 11-23. <https://doi.org/10.1002/car.2487>
- Proudlock, S., & Peris, J. (2020). Using EMDR therapy with patients in an acute mental health crisis. *BMC psychiatry, 20*(1), 1-9.

- Puig, J., Englund, M. M., Simpson, J. A., & Collins, W. A. (2013). Predicting adult physical illness from infant attachment: a prospective longitudinal study. *Health Psychology, 32*(4), 409-417. <https://doi.org/10.1037/a0028889>
- Purcell, C. (2020). *The politics of children's services reform: Re-examining two decades of policy change*. Policy Press.
- Rajappa, K., Gallagher, M., & Miranda, R. (2012). Emotion dysregulation and vulnerability to suicidal ideation and attempts. *Cognitive Therapy and Research, 36*(6), 833-839.
- Read, J., & Bentall, R. P. (2012). Negative childhood experiences and mental health: Theoretical, clinical and primary prevention implications. *The British Journal of Psychiatry, 200*(2), 89-91.
- Reilly, S., Planner, C., Hann, M., Reeves, D., Nazareth, I., & Lester, H. (2012). The role of primary care in service provision for people with severe mental illness in the United Kingdom. *PloS one, 7*(5), e36468.
- Riggs, S. A. (2010). Childhood emotional abuse and the attachment system across the life cycle: What theory and research tell us. *Journal of Aggression, Maltreatment & Trauma, 19*(1), 5-51. <https://doi.org/10.1080/10926770903475968>
- Robinson, M., Ross, J., Fletcher, S., Burns, C. R., Lagdon, S., & Armour, C. (2021). The mediating role of distress tolerance in the relationship between childhood maltreatment and mental health outcomes among university students. *Journal of interpersonal violence, 36*(15-16), 7249-7273.
- Röhricht, F., Waddon, G. K., Binfield, P., England, R., Fradgley, R., Hertel, L., James, P., Littlejohns, J., Maher, D., & Opong, M. (2017). Implementation of a novel primary care pathway for patients with severe and enduring mental illness. *BJPsych Bulletin, 41*(6), 314-319. <https://doi.org/10.1192/pb.bp.116.055830>

- Rosenberg, R. (2018). *The Human Magnet Syndrome: The Codependent Narcissist Trap*. Morgan James Publishing.
- Ross, N. D., Kaminski, P. L., & Herrington, R. (2019). From childhood emotional maltreatment to depressive symptoms in adulthood: The roles of self-compassion and shame. *Child abuse & neglect, 92*, 32-42.  
<https://doi.org/10.1016/j.chiabu.2019.03.016>
- Roth, A., & Fonagy, P. (2006). *What works for whom?: A critical review of psychotherapy research*. Guilford Press.
- Rueda-Jaimes, G. E., Castro-Rueda, V. A., Rangel-Martínez-Villalba, A. M., Corzo-Casasadiago, J. D., Moreno-Quijano, C., & Camacho, P. A. (2017). Validity of the Suicide Behaviors Questionnaire-Revised in patients with short-term suicide risk. *The European Journal of Psychiatry, 31*(4), 145-150.  
<https://doi.org/10.1016/j.ejpsy.2017.09.002>
- Sacks, E. (2017). Defining disrespect and abuse of newborns: A review of the evidence and an expanded typology of respectful maternity care. *Reproductive health, 14*(1), 1-8.
- Safelives. (2014). In plain sight: The evidence from children exposed to domestic abuse. CAADA. [https://safelives.org.uk/sites/default/files/resources/In\\_plain\\_sight\\_the\\_evidence\\_from\\_children\\_exposed\\_to\\_domestic\\_abuse.pdf](https://safelives.org.uk/sites/default/files/resources/In_plain_sight_the_evidence_from_children_exposed_to_domestic_abuse.pdf)
- Safren, S. A., Gershuny, B. S., Marzol, P., Otto, M. W., & Pollack, M. H. (2002). History of childhood abuse in panic disorder, social phobia, and generalized anxiety disorder. *The Journal of nervous and mental disease, 190*(7), 453-456.
- San Martín, C., Jacobs, B., & Vervliet, B. (2020). Further characterization of relief dynamics in the conditioning and generalization of avoidance: Effects of distress tolerance and

intolerance of uncertainty. *Behaviour research and therapy*, 124, Article 103526.

<https://doi.org/10.1016/j.brat.2019.103526>

Sarchiapone, M., Mandelli, L., Iosue, M., Andrisano, C., & Roy, A. (2011). Controlling access to suicide means. *International journal of environmental research and public health*, 8(12), 4550-4562.

Scharfe, E. (2007). Cause or consequence?: Exploring causal links between attachment and depression. *Journal of social and clinical psychology*, 26(9), 1048-1064.

Schore, A. N. (2013). Bowlby's "environment of evolutionary adaptedness": Recent studies on the interpersonal neurobiology of attachment and emotional development. In D. Narvaez, J. Panksepp, A. N. Schore, & T. R. Gleason (Eds.), *Evolution, early experience and human development: From research to practice and policy* (pp. 31–67). Oxford University Press.

Schuder, M. R., & Lyons-Ruth, K. (2004). "Hidden Trauma" in Infancy: Attachment, Fearful Arousal, and Early Dysfunction of the Stress Response System. In J. D. Osofsky (Ed.), *Young children and trauma: Intervention and treatment* (p. 69–104). Guilford Press.

Schwebel, D. C., & Morrongiello, B. A. (2016). Musings on developing research ideas. *The Behavior therapist*, 39(6), 211-212.

Sege, R. D., & Browne, C. H. (2017). Responding to ACEs with HOPE: Health outcomes from positive experiences. *Academic pediatrics*, 17(7), 79-85.

<https://doi.org/10.1016/j.acap.2017.03.007>

Shapiro, F. (2017). *Eye movement desensitization and reprocessing (EMDR) therapy: Basic principles, protocols, and procedures*. Guilford Publications.

- Siegel, D. J. (1999). *The developing mind: Toward a neurobiology of interpersonal experience*. Guilford Press.
- Siegel, D. J. (2001). Toward an interpersonal neurobiology of the developing mind: Attachment relationships, "mindsight," and neural integration. *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health*, 22(1-2), 67-94. [https://doi.org/10.1002/1097-0355\(200101/04\)22:1<67::AID-IMHJ3>3.0.CO;2-G](https://doi.org/10.1002/1097-0355(200101/04)22:1<67::AID-IMHJ3>3.0.CO;2-G)
- Siegel, D. J. (2015). Interpersonal neurobiology as a lens into the development of wellbeing and resilience. *Children Australia*, 40(2), 160-164. <https://doi.org/10.1017/cha.2015.7>
- Silverman, M. M. (2011). Challenges to classifying suicidal ideations, communications, and behaviours. In R. C. O'Connor, S. Platt, & J. Gordon (Eds.), *International handbook of suicide prevention: Research, policy and practice* (pp. 9-25). John Wiley & Sons.
- Sim, L., Adrian, M., Zeman, J., Cassano, M., & Friedrich, W. N. (2009). Adolescent deliberate self-harm: Linkages to emotion regulation and family emotional climate. *Journal of Research on Adolescence*, 19(1), 75-91. <https://doi.org/10.1111/j.1532-7795.2009.00582.x>
- Simons, J. S., & Gaher, R. M. (2005). The Distress Tolerance Scale: Development and validation of a self-report measure. *Motivation and Emotion*, 29(2), 83-102.
- Smith, N. B., Monteith, L. L., Rozek, D. C., & Meuret, A. E. (2018). Childhood abuse, the interpersonal–psychological theory of suicide, and the mediating role of depression. *Suicide and Life-Threatening Behavior*, 48(5), 559-569.

- Smith, W. B. (2011). *Youth leaving foster care: A developmental, relationship-based approach to practice*. Oxford University Press.
- Somma, A., Sharp, C., Borroni, S., & Fossati, A. (2017). Borderline personality disorder features, emotion dysregulation and non-suicidal self-injury: Preliminary findings in a sample of community-dwelling Italian adolescents. *Personality and Mental Health*, 11(1), 23–32. <https://doi.org/10.1002/pmh.1353>.
- Sonuga-Barke, E. J., Kennedy, M., Kumsta, R., Knights, N., Golm, D., Rutter, M., Maughan, B., Schlotz, W., & Kreppner, J. (2017). Child-to-adult neurodevelopmental and mental health trajectories after early life deprivation: The young adult follow-up of the longitudinal English and Romanian adoptees study. *The Lancet*, 389(10078), 1539–1548. [https://doi.org/10.1016/s0140-6736\(17\)30045-4](https://doi.org/10.1016/s0140-6736(17)30045-4)
- Spinazzola, J., Hodgdon, H., Liang, L., Ford, J. D., Layne, C. M., Pynoos, R., Briggs, E. C., Stolbach, B., & Kisiel, C. (2014). Unseen wounds: The contribution of psychological maltreatment to child and adolescent mental health and risk outcomes. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6(1), 18–28. <https://doi.org/10.1037/a0037766>
- Spinhoven, P., Penninx, B. W., Hickendorff, M., van Hemert, A. M., Bernstein, D. P., & Elzinga, B. M. (2014). Childhood Trauma Questionnaire: Factor structure, measurement invariance, and validity across emotional disorders. *Psychological assessment*, 26(3), 717–729. <https://doi.org/10.1037/pas0000002>
- Stanley, I. H., Boffa, J. W., Smith, L. J., Tran, J. K., Schmidt, N. B., Joiner, T. E., & Vujanovic, A. A. (2018). Occupational stress and suicidality among firefighters: Examining the



buffering role of distress tolerance. *Psychiatry research*, 266, 90-96.

<https://doi.org/10.1016/j.psychres.2018.05.058>

Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R., & Van Ijzendoorn, M. H. (2012).

The universality of childhood emotional abuse: A meta-analysis of worldwide prevalence. *Journal of Aggression, Maltreatment & Trauma*, 21(8), 870-890.

<https://doi.org/10.1080/10926771.2012.708014>

Stone, A. A., Bachrach, C. A., Jobe, J. B., Kurtzman, H. S., & Cain, V. S. (Eds.). (1999). *The*

*science of self-report: Implications for research and practice*. Psychology Press.

Sweat, K., Yedgarian, V. A., Rigler Jr, K. L., Maddox, S., & Throne, R. (2021). Doctoral

practitioner researcher agency and the practice-based research agenda. In *Practice-based and practice-led research for dissertation development* (pp. 188-206). IGI

Global.

Teicher, M. H. (2002). Scars that won't heal: The neurobiology of child abuse. *Scientific*

*American*, 286(3), 68-75.

Teicher, M. H., & Khan, A. (2019). Childhood maltreatment, cortical and amygdala

morphometry, functional connectivity, laterality, and psychopathology. *Child maltreatment*, 24(4), 458-465.

Teo, S. S. S., & Griffiths, G. (2020). Child protection in the time of COVID-19. *Journal of*

*paediatrics and child health*, 56(6), 838-840. <https://doi.org/10.1111/jpc.14916>

Thomas, R. M. (2000). *Comparing theories of child development*. Wadsworth/Thomson

Learning.

Thompson, A. E., & Kaplan, C. A. (1996). Childhood emotional abuse. *The British Journal of*

*Psychiatry*, 168(2), 143-148. <https://doi.org/10.1192/bjp.168.2.143>

- Thompson, R. A. (2011). Emotion and emotion regulation: Two sides of the developing coin. *Emotion Review*, 3(1), 53-61. <https://doi.org/10.1177/1754073910380969>
- Thompson, R. A., & Lagattuta, K. H. (2006). Feeling and Understanding: Early Emotional Development. In K. McCartney & D. Phillips (Eds.), *Blackwell handbook of early childhood development* (pp. 317–337). Blackwell Publishing. <https://doi.org/10.1002/9780470757703.ch16>
- Thompson, R. A., Lewis, M. D., & Calkins, S. D. (2008). Reassessing emotion regulation. *Child Development Perspectives*, 2(3), 124-131. <https://doi.org/10.1111/j.1750-8606.2008.00054.x>
- Tonmyr, L., Draca, J., Crain, J., & MacMillan, H. L. (2011). Measurement of emotional/psychological child maltreatment: A review. *Child Abuse & Neglect*, 35(10), 767-782. <https://doi.org/10.1016/j.chiabu.2011.04.011>
- Townsend, E. (2019). Time to take self-harm in young people seriously. *The Lancet Psychiatry*, 6(4), 279-280. [https://doi.org/10.1016/S2215-0366\(19\)30101-4](https://doi.org/10.1016/S2215-0366(19)30101-4)
- Troisi, A. (2020). Childhood trauma, attachment patterns, and psychopathology: An evolutionary analysis. In G. Spalletta, D. Janiri, F. Piras, & G. Sani (Eds.), *Childhood trauma in mental disorders: A comprehensive approach* (pp. 125-142). Springer Nature.
- Troya, M. I., Chew-Graham, C. A., Babatunde, O., Bartlam, B., Higginbottom, A., & Dikomitis, L. (2019). Patient and Public Involvement and Engagement in a doctoral research project exploring self-harm in older adults. *Health Expectations*, 22(4), 617-631. <https://doi.org/10.1111/hex.12917>

- Tunno, A. M., Inscoe, A. B., Goldston, D. B., & Asarnow, J. R. (2021). A trauma-informed approach to youth suicide prevention and intervention. *Evidence-Based Practice in Child and Adolescent Mental Health, 6*(3), 316-327.
- Turecki, G., & Brent, D. A. (2016). Suicide and suicidal behaviour. *The Lancet, 387*(10024), 1227-1239. [https://doi.org/10.1016/S0140-6736\(15\)00234-2](https://doi.org/10.1016/S0140-6736(15)00234-2)
- Uchida, Ryo. (2001). Child Abuse and Social Stigma. *The Journal of Educational Sociology, 68*, 187-206. <https://doi.org/10.11151/eds1951.68.187>.
- van der Kolk, B. A. (2005). Attachment, helplessness, and trauma: The body keeps the score. In *Harvard Medical School conference on Attachment and Related Disorders, Boston, MA*.
- van der Kolk, B. A., Perry, J. C., & Herman, J. L. (1991). Childhood origins of self-destructive behavior. *American journal of Psychiatry, 148*(12), 1665-1671.
- Vigfusdottir, J., Dale, K. Y., Gratz, K. L., Klonsky, E. D., Jonsbu, E., & Høidal, R. (2020). The psychometric properties and clinical utility of the Norwegian versions of the deliberate self-harm inventory and the inventory of statements about self-injury. *Current Psychology, 1-11*. <https://doi.org/10.1007/s12144-020-01189-y>
- Viola, T. W., Salum, G. A., Kluwe-Schiavon, B., Sanvicente-Vieira, B., Levandowski, M. L., & Grassi-Oliveira, R. (2016). The influence of geographical and economic factors in estimates of childhood abuse and neglect using the Childhood Trauma Questionnaire: A worldwide meta-regression analysis. *Child abuse & neglect, 51*, 1-11. <https://doi.org/10.1016/j.chiabu.2015.11.019>
- Vohs, K. D., & Baumeister, R. F. (Eds.). (2016). *Handbook of self-regulation: Research, theory, and applications*. Guilford Publications.

- Vonderlin, R., Kleindienst, N., Alpers, G. W., Bohus, M., Lyssenko, L., & Schmahl, C. (2018). Dissociation in victims of childhood abuse or neglect: A meta-analytic review. *Psychological Medicine, 48*(15), 2467-2476.
- Vondra, J. I., Shaw, D. S., Swearingen, L., Cohen, M., & Owens, E. B. (2001). Attachment stability and emotional and behavioral regulation from infancy to preschool age. *Development and Psychopathology, 13*(1), 13-33.  
<https://doi.org/10.1017/S095457940100102X>
- Wainberg, M. L., Scorza, P., Shultz, J. M., Helpman, L., Mootz, J. J., Johnson, K. A., Neria, Y., Bradford, J. E., Oquendo, M. A., & Arbuckle, M. R. (2017). Challenges and opportunities in global mental health: A research-to-Practice perspective. *Current Psychiatry Reports, 19*(5). <https://doi.org/10.1007/s11920-017-0780-z>
- Waller, G., Corstorphine, E., & Mountford, V. (2007). The role of emotional abuse in the eating disorders: Implications for treatment. *Eating Disorders, 15*(4), 317-331.  
<https://doi.org/10.1080/10640260701454337>
- Wang, Q. (2001). Culture effects on adults' earliest childhood recollection and self-description: Implications for the relation between memory and the self. *Journal of personality and social psychology, 81*(2), 220-233. <https://doi.org/10.1037/0022-3514.81.2.220>
- Ward, W., Zagoloff, A., Rieck, C., & Robiner, W. (2018). Interprofessional education: Opportunities and challenges for psychology. *Journal of Clinical Psychology in Medical Settings, 25*(3), 250-266.

Warner, S., & Spandler, H. (2012). New strategies for practice-based evidence: A focus on self-harm. *Qualitative Research in Psychology*, 9(1), 13-26.

<https://doi.org/10.1080/14780887.2012.630631>

Williamson, A. K., Riendeau, R. P., Stolzmann, K., Silverman, A. F., Kim, B., Miller, C. J., Connolly, S. L., Pitcock, J., & Bauer, M. S. (2019). An exploratory analysis of self-reported protective factors against self-harm in an enrolled veteran general mental health population. *Military Medicine*, 184(11), 738-

744. <https://doi.org/10.1093/milmed/usz111>

Winnicott, D. W. (1965). The maturational processes and the facilitating environment: Studies in the theory of emotional development. In *The Maturational Processes and the Facilitating Environment: Studies in the Theory of Emotional Development* (pp. 1-276). London: the Hogarth Press and the Institute of Psycho-analysis.

Witt, K. G., Hetrick, S. E., Rajaram, G., Hazell, P., Salisbury, T. L. T., Townsend, E., & Hawton, K. (2021). Pharmacological interventions for self-harm in adults. *Cochrane Database of Systematic Reviews*, 1(2), PMC7388774

<https://doi.org/10.1002/14651858.CD013669.pub2>

World Health Organisation. (2018). *Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential*. World Health

Organization. <https://apps.who.int/iris/handle/10665/272603>

Yardley, P., McCall, A., Savage, A., & Newton, R. (2019). Effectiveness of a brief intervention aimed at increasing distress tolerance for individuals in crisis or at risk of self-

harm. *Australasian psychiatry*, 27(6), 565-568.

<https://doi.org/10.1177/1039856219848835>

Yip, S. W., Lacadie, C. M., Sinha, R., Mayes, L. C., & Potenza, M. N. (2019). Childhood trauma moderates inhibitory control and anterior cingulate cortex activation during stress. *Neuroimage*, 185, 111-118.

Yiu, H. W., Rowe, S., & Wood, L. (2021). A systematic review and meta-analysis of psychosocial interventions aiming to reduce risks of suicide and self-harm in psychiatric inpatients. *Psychiatry research*, 305, 114175.

<https://doi.org/10.1016/j.psychres.2021.114175>

Zalewski, M., Lewis, J. K., & Martin, C. G. (2018). Identifying novel applications of dialectical behavior therapy: Considering emotion regulation and parenting. *Current opinion in psychology*, 21, 122-126.

Zilcha-Mano, S. (2019). Major developments in methods addressing for whom psychotherapy may work and why. *Psychotherapy Research*, 29(6), 693-708.

<https://doi.org/10.1080/10503307.2018.1429691>

Zvolensky, M. J., Bernstein, A., & Vujanovic, A. A. (Eds.). (2011). *Distress tolerance: Theory, research, and clinical applications*. Guilford Press.

Zvolensky, M. J., Vujanovic, A. A., Bernstein, A., & Leyro, T. (2010). Distress tolerance:

Theory, measurement, and relations to psychopathology. *Current Directions in*

*Psychological Science*, 19(6), 406-410. <https://doi.org/10.1177/0963721410388642>