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ADHD, DEVELOPMENTAL TRAUMA & THERAPEUTIC  
COMMUNITY DISCOURSES

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### **Acknowledgements**

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I do not have the words to express my gratitude to my family, friends, Ruth, Trish, Anne and Carol, for their support during this period of work. Sometimes my words fail me. I have found a poem which I hope will not.

And then the day came,  
when the risk  
to remain tight  
in a bud  
was more painful  
than the risk  
it took  
to blossom.

Risk. Anais Nin.

### **MRP Summary**

**Section A** reviewed available research that considered how ADHD and Developmental Trauma may be related. Findings suggest children who have experienced Developmental Trauma are more likely than those in the general population to meet diagnostic criteria for an ADHD diagnosis. The limits of medical and diagnostic language are considered and qualitative research in settings not organised around diagnosis is recommended.

**Section B** utilised discourse analysis to examine ADHD discourses, of Therapeutic Community staff, about ADHD and its related behaviour among looked after children who have had experiences of Developmental Trauma. Non-medical and environmental discourses were dominant in this setting. A Biopsychosocial discourse legitimised multi-disciplinary collaboration between Therapeutic Community and mainstream practice for complex difficulties among this population of children. Children's understanding of ADHD and stimulant medication prescribed for this diagnosis were considered.

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ADHD, DEVELOPMENTAL TRAUMA & THERAPEUTIC  
COMMUNITY DISCOURSES

Section A: Literature Review Paper

ADHD and Developmental Trauma

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**Abstract**

Children who have experienced Developmental Trauma, including neglect and abuse, may receive diagnosis and intervention for ADHD which could be inadequate or harmful. This article used a systematised review to critically analyse the available research and literature, that considered how ADHD and Developmental Trauma may be related. Eight individual studies and four reviews were identified. Findings suggest children who have experienced Developmental Trauma are more likely than those in the general population to meet diagnostic criteria for an ADHD diagnosis. Possible causal relationships hypothesised by the authors of the reviewed literature are considered. Clinical and research implications are considered, including assessing trauma in ADHD assessment. The limits of medical and diagnostic language are considered and qualitative research in settings not organised around diagnosis is recommended.

Keywords: ADHD; Developmental Trauma; Diagnosis; Neglect; Abuse.

This literature review aims to examine the relationship between ADHD and Developmental Trauma (DT) among children. A secondary aim is to review some of the language and discourses available in the research literature as a further window into understanding current beliefs and practices about this clinical group.

The following introduction outlines the rationale for this review by considering the following:

1. Definitions of ADHD and Developmental Trauma (DT).
2. Controversy surrounding the conceptualisation of ADHD.
3. Potential risks of biomedical discourse for children who have a diagnosis of ADHD and experiences of DT.
4. ADHD in the context of NHS mental health service provision for children.
5. A brief consideration of discourse analysis in thinking about language in relation to these risks.

The research questions will then be stated before moving on to the methodology.

## **ADHD**

Attention Deficit Hyperactivity Disorder (ADHD) is a diagnosis in the Diagnostic and Statistics Manual (DSM-V; American Psychiatric Association; APA, 2013) characterised by hyperactivity, impulsivity and inattention. The ICD 10 (World Health Organisation; WHO, 1992) equivalent classification is Hyperkinetic Disorder, which accounts for the same cluster of symptoms with narrower inclusion criteria (NICE, 2008). The term ADHD is most commonly used in practice, including in NICE guidance (2008).

Prevalence rates of ADHD vary greatly across studies depending on which diagnostic criteria are used, data collection methodology and population characteristics (Carr, 2006). Estimates from studies across the world vary from 1.5% to 25%, with a pooled rate of 5.3%

(Polanczyk & Rohde, 2007). Within the UK, estimates vary between 1.1% and 1.5% using ICD-10 (WHO, 1992) criteria (Ford, Vostanis, Meltzer & Goodman, 2007; Green, McGinnity, Meltzer, Ford & Goodman, 2005) representing one of the most common diagnosable problems among children and young people in Britain.

### **Developmental Trauma**

Developmental Trauma (DT; van der Kolk et al., 2009) refers to complex trauma due to exposure to repeated and severe episodes of interpersonal violence and disruptions in protective caregiving, beginning in childhood or early adolescence. The concept was developed to recognise the pervasive impact of complex trauma on childhood development not recognised by diagnostic classifications within the DSM, including Post Traumatic Stress Disorder (PTSD) (van der Kolk, 2005).

Prolonged traumatic exposure in childhood can contribute to complex difficulties and a variety of different, fluctuating presentations. Therefore, children with such histories may not always meet criteria for PTSD (van der Kolk et al., 2009). Rather, they tend to receive a range of diagnoses such as anxiety disorders, behavioural disorders and ADHD, sometimes in addition to PTSD (van der Kolk et al., 2009). However, some children with histories of prolonged maltreatment may not meet diagnostic criteria for any diagnosis (van der Kolk et al., 2009). This situation risks the underlying trauma aetiology of children's difficulties going unrecognised or inadequately recognised, resulting in clinicians either not providing interventions or providing those that may not be helpful (van der Kolk et al., 2009).

To address these potential gaps in clinical practice Developmental Trauma Disorder (DTD) was proposed (van der Kolk et al., 2009). The proposed diagnostic criteria (appendix A) accounted for behaviours that may be considered oppositional, while also accounting for the potential effects of trauma on attachment styles, coping strategies, thinking and self-

attribution (Rahim, 2014). However, DTD was not accepted as a diagnostic category in the DSM-V (Rahim, 2014) therefore concerns remain about mental health provision for children with experiences of DT (Bremness & Polzin, 2014; Rahim, 2014).

### **Controversy surrounding the conceptualisation of ADHD**

**Polarised discourse.** ADHD is described by some as a biologically based neuropsychiatric condition (Myttas, 2001), for which stimulant medication is the first line treatment for severe ADHD (Taylor, 2008) and behavioural-based individual and family support for less severe problems (NICE, 2008). However, the exact aetiology of ADHD is unknown and there is ongoing debate about its validity within the broader ‘medical model’ of behavioural difficulties (Tait, 2005; Timimi & Leo, 2009; Traxson, 2013). Debate about the validity of ADHD is characterised by polarised discourse between competing explanations of dominant biological versus minority environmental understandings of the difficulties associated with it (Colley, 2010; Horton-Salway, 2011; Lewis-Morton, Dallos, McClelland, & Clempson, 2014; Visser & Jehan, 2009). This polarised discourse may be problematic for clinicians as it directs them to justifying positions rather than advancing support for children (Colley, 2010).

**Biomedical versus environmental discourse.** An example of polarised professional discourse is the ‘International consensus statement on ADHD’ (Barkley et al, 2002) and the ‘Critique of the international consensus statement on ADHD’ (Timimi et al, 2004). Timimi, a psychiatrist, and 33 others challenged the views of Barkley, a professor of psychiatry and neurology, and 74 psychiatrists and psychologists, who sought to confirm the status of the scientific findings concerning the validity of ADHD as a biomedical disorder.

Discourse critical of the biomedical model draws attention to environmental contributory factors, including attachment problems (Erdman, 1998; Wheeler, 2010). Critics

highlight the problems the biomedical model may cause. At an individual psychological level, biomedical discourse risks iatrogenic difficulties contributing to “narratives that the child is either ‘ill’ or ‘bad’” (Dallos & Vetere, 2009, p. 77). As a result, “many children with a diagnosis of ADHD have developed an extremely low self-esteem” (Dallos & Vetere, 2009, p.79). When a child’s behaviour is understood as an indication of an illness, families may “move away from any consideration of how the family environment, their relationships and other factors may play a part” (Dallos & Vetere, 2009, p.78). Concerns have been raised that medication for ADHD is therefore used as a form of social control (Timimi & Leo, 2009).

Several advantages of biomedical discourse are also acknowledged. For example, a medical narrative may facilitate an explanation of a child’s behaviour so that they are not seen as ‘naughty’; it may allow access to drug treatment that reduces problematic behaviour; reduce blame towards parents and give access to resources (Jackson Brown, 2005), including educational resources (Department for Education, 2016). Dallos and Vetere (2009) suggest working alongside the labelling process, helping families to develop less problem saturated narratives, while maintaining the safety they may attach to a diagnosis of ADHD due to the benefits it provides.

**Biopsychosocial discourse.** Within the spectrum of ADHD discourse, a middle ground appears to be held by biopsychosocial discourse (Richards, 2013). This discourse attempts to combine biomedical and sociological discourse and constructs ADHD as an interaction of biological and psychosocial environmental factors (Wheeler, 2010). Within this discourse, impulsivity, hyperactivity and inattention can be constructed as individual psychological traits (Thapar, Cooper, Eyre & Langley, 2013) with multiple contributory factors, both biological and environmental. This discourse appears to fit with multi-disciplinary work where medical interventions are considered alongside psychosocial interventions (Dallos & Vetere, 2009).

Such an approach can facilitate, for example, shifting the focus of the problem from within the child to one regarding parent-child attachment patterns (Dallos & Vetere, 2009; Erdman, 1998).

### **Concerns about Medical Language for Children who have Experiences of DT**

Despite the potential benefits of biopsychosocial discourse, caution is urged that trauma is not overlooked as a better understanding for the difficulties associated with ADHD (Timimi & Radcliffe, 2005). Children exposed to DT, many of whom may become looked after, may not have the family structures to nurture less problem saturated narratives. The diagnosis may be welcomed by professionals responsible for their care as it may fit an agenda of categorising their difficulties (Rostill & Myatt, 2005) and provide access to mental health support in the context of limited access to CAMHS. However, it may not encourage conversations that give meaning to children's emotional experiences (Dallos & Vetere, 2009; Rostill & Myatt, 2005).

These authors argue that there can be a tendency in clinical practice to privilege biomedical discourse for children that meet criteria for an ADHD diagnosis, even when trauma is acknowledged. This practice may be especially problematic for children in the care system who may have a negative self-image from prolonged abuse and/or neglect. An ADHD diagnosis, which labels them as neurodevelopmentally disordered, may add to negative beliefs about themselves, and negatively impact their self-esteem more so than other children (Rostill & Myatt, 2005).

This language may also overlook and contribute to attachment difficulties. Recent research examining parental discourse about ADHD suggests that biological 'illness' discourse may contribute to uncertainty for parents about how to balance discipline and affection, in response to their children's behaviour, when it is constructed as a symptom of an illness (Gray Brunton, McVittie, Ellison, & Willock, 2014; Lewis-Morton et al., 2014). Children with a diagnosis of ADHD or ADHD-like symptoms have been reported more likely than controls to

be rated as insecurely attached, with evidence of anxious-ambivalent and disorganised attachment styles (Clarke, Ungerer, Chahoud, Johnson & Steifel, 2002; Neiderhofer, 2009). A meta-analysis found that maltreated infants were more likely than matched controls to be rated as insecure and/or disorganised, with disorganised attachment reported to be as high as 80% among maltreated children (Baer & Martinez, 2006).

Therefore, attachment difficulties among children with a diagnosis of ADHD and experiences of DT appear common. However, there is concern that intervention tends to be guided towards treating behavioural symptoms rather than attending to underlying distress related to trauma and attachment difficulties (Neiderhofer, 2009; Rahim, 2014; van der Kolk et al., 2009).

### **ADHD, DT and crisis in mental health provision to children**

In the context of increases in referrals and waiting times for Child and Adolescent Mental Health Services (CAMHS), the Children's Commissioner for England (2016) reported that, on average, 28% of children referred to CAMHS were not allocated a service and waiting times in some areas were up to 200 days. To manage demand, many CAMHS develop acceptance criteria not only based on severity and risk, but also based on a problem having a recognisable diagnosis (Children's Commissioner, 2016). ADHD is one such diagnosis, which appears to receive particular attention from CAMHS. It is a common reason for referral and a diagnosis for which specialist service pathways have been developed (Children's Commissioner, 2016).

While children may gain access to mental health provision because of an ADHD diagnosis, for those whose symptoms may have a basis in experiences of DT, the support they receive may not attend to underlying trauma, as ADHD is commonly thought of as having a



primarily biological basis (Barkley et al, 2002). This potential mismatch has contributed to controversy surrounding the conceptualisation of ADHD.

### **Discourse Analysis**

Discourse analysis provides a framework to think about how language is used and the meanings that may be constructed through it. Foucauldian Discourse Analysis ([FDA] Willig, 2013) assumes that discourse plays a fundamental role in the construction of meaning, and that human subjectivity is largely constructed through language with the discursive resources available to people (Willig, 2013). Discursive psychology (Willig, 2013) is focused with how language is used as action to achieve interpersonal objectives. Language as action assumes an effect on the hearer (Wood & Kroger, 2000).

If ADHD is constructed to mean that a child has a neurodevelopmental disorder it may help to achieve access to CAHMS. However, for looked after children (LAC) whose experiences of DT may contribute to their receipt of this diagnosis, the interventions it provides access to may be inadequate. Furthermore, its biomedical construction may have the effect of them feeling misunderstood, reinforcing a negative self-image, and leaving parents or carers uncertain about how to respond to their attachment needs.

### **Research Questions**

**ADHD and DT.** The above rationale has highlighted that experiences of DT may contribute to the difficulties associated with ADHD. There are concerns that children's underlying emotional needs, due to these experiences, may be overlooked because of a diagnosis of ADHD. This situation may be especially problematic for LAC. Therefore, the present review aims to ask the following:

- 1. What does relevant research propose about a relationship between ADHD and experiences of DT?**

**Previous reviews.** Four previous reviews have considered some research relevant to ADHD and DT, however none have been as targeted as the present review, regarding experiences of DT. (Klein, Damiani-Taraba, Kosta, Campbell & Scholz, 2015; Szymanski, Sapanski & Conway, 2011; Webb, 2013; Weinstein, Staffelbach & Biaggio, 2000). Webb (2013) considered potential environmental contributory factors to ADHD such as poverty, which includes DT exposure but also other factors such as low birth weight. Szymanski et al. (2011) and Weinstein et al. (2000) included some literature in relation to children who have experienced trauma but it is not evident if this occurred in the context of disruptions in caregiving. Klein et al. (2015) included some research on prevalence rates of diagnoses, including ADHD, among children in Canadian Child Protection Services who have experienced maltreatment. The authors of this prevalence research do not consider how ADHD and maltreatment may be related, while Klein et al. (2015) do.

Therefore, to include these authors' findings and discussion in the present review, sections of these previous four reviews, that consider how ADHD and experiences of DT may be related, will be examined as part of the review that follows. In addition, any individual papers considered in these previous reviews, which meet the inclusion criteria for the present review, will be examined separately, to explore the research in more detail and with a more critical stance.

**The language available from research.** In clinical practice, clinical psychologists have power to confer meaning about ADHD (Levine, 1999; Mather, 2012). The type of language used may be influenced by that available to them from research. Therefore, a secondary aim of the present literature review is to ask the following question:

- 2. What language is available to clinicians, from the reviewed research, about children with a diagnosis of ADHD and experiences of DT?**

## Methodology

### Type of Literature Review

It was not within the scope of this review to complete an exhaustively comprehensive systematic review. A systematic approach was applied in line with a systematised review (Grant & Booth, 2009). A systematised review aims to incorporate one or more elements of a systematic review but cannot claim that the output is a systematic review (Grant & Booth, 2009). In addition to a systematic search of several databases, this review includes a quality appraisal and narrative synthesis.

### Search Terms

**Developmental trauma.** The conceptualisation of DT is relatively recent and one that continues to be researched (Stolbach et al., 2013). It is argued that this concept relates to a range of adverse experiences. Two of the most frequently identified experiences are neglect and abuse (physical, sexual and emotional) (van der Kolk et al., 2009). These experiences are also consistently the most frequent grounds for removal of a child from their primary caregiver, with 60% of children becoming looked after for these reasons in the year to March 2016, in England (Department for Education, 2016). It was not within the scope of the present review to apply every potential experience of DT as a search term. Therefore, the terms ‘trauma’, ‘neglect’ and ‘abuse’ were used. As some children who have experienced DT may receive a diagnosis of PTSD (van der Kolk et al., 2009), the term ‘PTSD’ was also used. These terms were used in the literature search as follows:

Trauma\*, PTSD, abus\*, and neglect\*

**ADHD.** ADHD and Hyperkinetic Disorder (HD) are terms used to describe the same set of behaviours. Although ADHD is the most routinely used term the author aimed to account for HD in the search process. Therefore, the following search terms were used for ADHD:

ADHD, “attention deficit” and hyper\*

### **Search Process**

**Application of search terms.** Three electronic databases (Medline, Web of Science, PsycINFO) were searched applying the above search terms, with Boolean operations as follows:

(Trauma\* or PTSD or abus\* or neglect\*) and (ADHD or “attention deficit” or hyper\*) not ("brain injury" or injur\* or "head trauma" or "dental trauma" or "substance abuse" or "substance misuse" or "drug abuse" or "drug misuse")

The searches were limited to articles written in English and published in peer-reviewed journals. This search produced a total of 396 articles. Titles and abstracts, and full text papers when required were screened to apply the following criteria.

#### **Inclusion criteria.**

- Research that provides an understanding or consideration about how ADHD and DT may be related.
- Individual empirical research and review articles.
- Related to children (0 to 18 years of age).
- Related to children who met criteria for a diagnosis of ADHD.

#### **Exclusion criteria.**

- Research related to trauma in the context of physical injury such as head trauma, or accidental physical injury.
- To focus the review on interpersonal abuse (i.e. physical, emotional or sexual abuse) research related to substance abuse was excluded.

- Studies that did not examine traumatic events in the context of disruptions in protective caregiving (or where this was unclear) were excluded.

Reference lists of relevant papers and review articles were checked to ensure all relevant articles were located. Full search details can be found in figure 1, below.

### **Literature Search Outcome**

In total, twelve articles were identified, of which eight were individual studies (Briscoe-Smith & Hinshaw, 2006; Conway, Oster & Szymanski, 2011; Cuffe, McCullough & Pumariega, 1994; Evinçet al., 2014; Famularo, Kinscherff & Fenton, 1992; Heffron, Martin, Welsh & Perry, 1987; Lehmann, Havik, Havik, Heiervang, 2013; Merry & Andrews, 1994), and four were literature reviews (Klein et al., 2015; Szymanski et al., 2011; Webb, 2013; Weinstein et al., 2000).

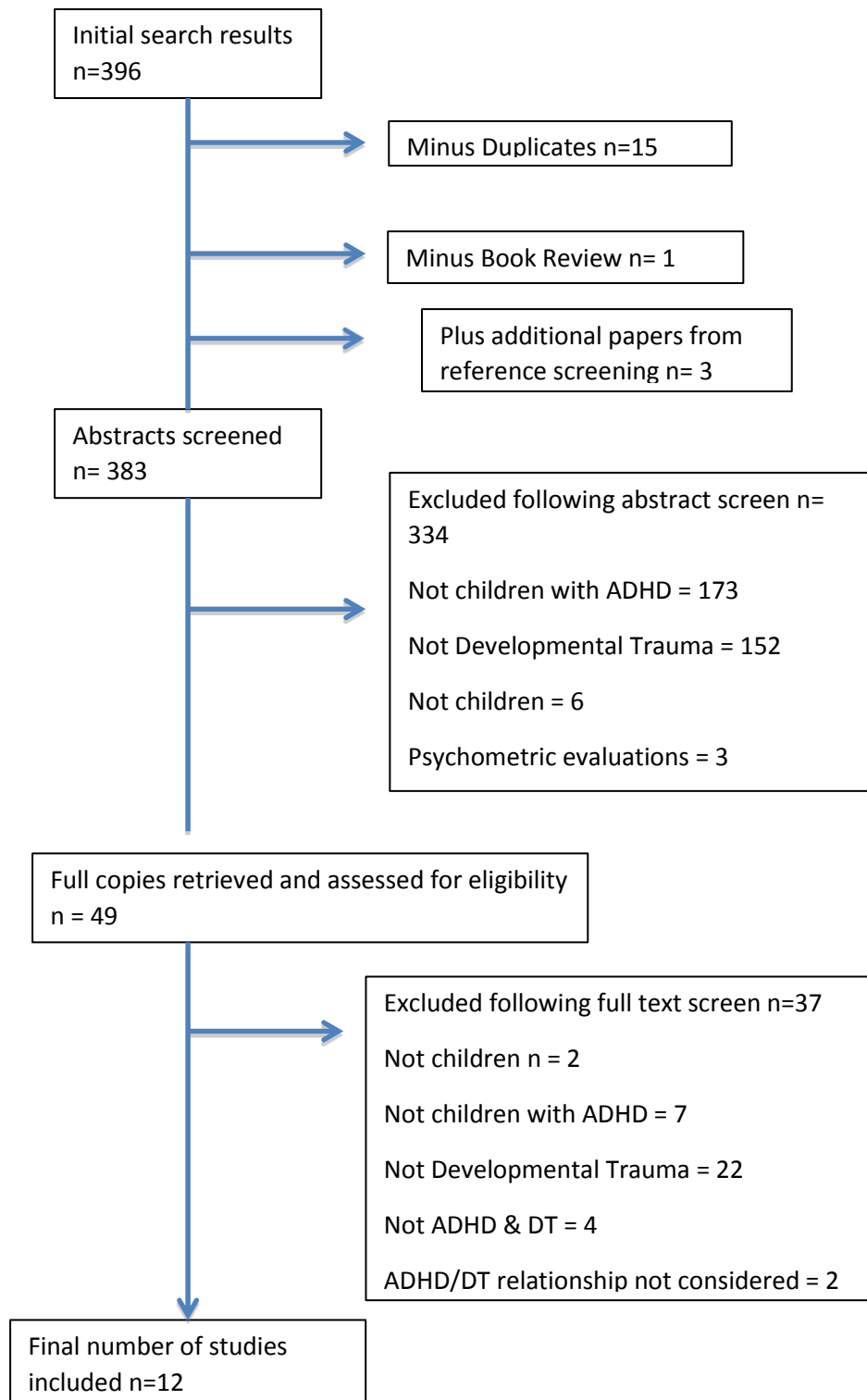
### **Quality Appraisal Tools**

**Individual studies.** The Mixed Method Appraisal Tool ([MMAT], Pluye et al., 2011) is designed for literature reviews that include studies with different types of research design. The MMAT provides sections for appraising the most common types of study methodology (Pluye et al., 2011). Each individual study identified was appraised per the relevant criteria from the MMAT (Pluye et al., 2011).

**Literature reviews.** The Critical Appraisal Skills Programme (CASP) provide a checklist for appraising systematic reviews (CASP, 2013). However, none of the reviews examined were systematic. Hutchison (1993) has highlighted the need to apply quality appraisal criteria to reviews that cannot be considered systematic, when reading reviews in routine clinical practice. The criteria applied to the articles considered in the present review were therefore adapted from the CASP (2013) criteria and guidelines for reading literature

reviews, presented by Oxman and Guyatt (1988) and recommended by Hutchison (1993) were used.

Figure 1: Literature search flow chart



### **Structure of the Review**

The identified articles are reviewed as follows:

1. The review articles are first collectively described and critically evaluated, followed by the individual research articles.
2. Language to describe ADHD across all identified articles is outlined.
3. A discussion of the findings, bearing in mind the critical evaluation and the two research questions, are outlined.
4. Implications for research and practice are considered, followed by a conclusion.

Tables 1 to 3 provide summary details of the papers covered by the review. Further details of the reviews, their quality appraisal and conclusions are provided in Appendixes C to E. Further details of the individual studies, their quality appraisal and findings are provided in Appendixes F to H.

## Results

### Literature reviews

**Aims.** Three of the reviews identified considered the possible misdiagnosis of ADHD among children that have had experiences of DT including sexual abuse, physical abuse and being placed within the care system because of maltreatment, neglect or abuse (Klein et al., 2015; Szymanski et al., 2011; Weinstein et al., 2000). The fourth literature review considered evidence for different forms of ADHD due to biological factors, environmental factors or both (Webb, 2013).

### Quality Appraisal

**Strengths.** All four reviews presented hypotheses about a relationship between ADHD and experiences of DT and considered clinical and research implications. One article (Klein et al., 2015) detailed inclusion and exclusion criteria and a methodology for its literature search. Three reviews addressed clearly focused questions (Klein et al., 2015; Szymanski et al., 2011; Webb, 2013). One review was completed in the UK (Webb, 2013) with implications for clinical practice relevant to the UK context. Consideration is given to the possible emotional impact on children that may result from clinical uncertainty or inaccuracy in diagnosing ADHD, in the context of experiences of DT (Klein et al., 2015; Weinstein et al., 2000).

**Limitations.** A limitation of all four articles was a lack of quality assessment, or examination of the precision of findings of the papers reviewed. A literature search methodology was not detailed for three reviews (Szymanski et al., 2011; Webb, 2013; Weinstein et al., 2000). One review was generic in its aim (Weinstein et al., 2000). Two of the reviews were completed in the USA (Szymanski



Table 1:

Summary of Literature Reviews

<b>Author(s)</b>	<b>Weinstein et al. (2000)</b>	<b>Szymanski et al. (2011)</b>	<b>Webb (2013)</b>	<b>Klein et al. (2015)</b>
Design	Literature Review	Literature Review	Literature Review	Literature Review
Location	USA	USA	United Kingdom	Canada
Aim	To describe the psychological impact of child sexual abuse and possible consequences for misdiagnosing ADHD among sexually abused children	Two Research Questions: Is exposure to trauma a risk factor for the development of ADHD?  Is the diagnosis of ADHD a misrepresentation of symptoms related to traumatic exposure?	To examine the hypothesis that children who receive a diagnosis of ADHD represent a heterogeneous group: for some children ADHD is largely genetic; some children have an ADHD ‘phenocopy’ because of adverse early childhood experiences, particularly those exposed to violence and poverty; for some children ADHD is a result of both biological and environmental factors	Research Questions: are current diagnostic guidelines for ADHD acceptable for vulnerable children involved with Child Protection Services (CPS)

et al., 2011; Weinstein et al., 2000) and one in Canada (Klein et al., 2015) which may reduce the relevance of implications to clinical practice in the UK. Two reviews did not consider all important outcomes, such as the emotional difficulties of children if experiences of DT are overlooked (Szymanski et al., 2011; Webb, 2013).

### **Review Findings**

**Prevalence.** All four reviews presented evidence of a higher prevalence of ADHD in certain populations of children vulnerable to DT, compared to the general population: those that have been sexually abused (Weinstein et al., 2000), child mental health populations (Szymanski et al., 2011), those from lower socioeconomic backgrounds in the UK (Webb, 2013) and children involved with Child Protection Services (CPS) in Canada (Klein et al., 2015).

Webb (2013) highlighted some characteristics of ADHD prevalence in the UK noting that the prevalence of ADHD varies on a gradient across social class in the UK. The author noted that there would be a 54% decrease in ADHD prevalence overall, if the UK had the same prevalence of ADHD, across all social classes, as seen in the wealthiest 20%.

**Diagnostic uncertainty.** Three of the reviews (Klein et al., 2015; Szymanski et al., 2011; Weinstein et al., 2000) highlighted overlaps in the criteria for diagnosing ADHD and other childhood diagnoses for behavioural and emotional difficulties. Two studies (Szymanski et al., 2011; Weinstein et al., 2000) focused on the overlap between diagnostic criteria for ADHD and PTSD. These authors argue that confusion between these diagnostic categories may result in children receiving ADHD diagnoses when their difficulties are as a result of trauma.

**Trauma.** Szymanski et al. (2011) considered the co-occurrence of ADHD and trauma. These authors reported research indicating children with a diagnosis of ADHD are at higher risk for past trauma exposure and research that indicates no such risk. Two reviews focused on

adverse environmental conditions for children that may contribute to the diagnosis of ADHD (Klein et al., 2015; Webb, 2013).

Three reviews (Klein et al., 2015; Szymanski et al., 2011; Weinstein et al., 2000) argued that evidence of trauma was not adequately considered when assessing for ADHD. All four reviews (Klein et al., 2015; Szymanski et al., 2011; Webb, 2013; Weinstein et al., 2000) highlighted the limitations of evidence based interventions for ADHD among children who have had experiences of DT.

### **Individual Articles**

**Aims.** All eight studies (Briscoe-Smith & Hinshaw, 2006; Conway et al., 2011; Cuffe et al., 1994; Evinç et al., 2014; Famularo et al., 1992; Heffron et al., 1987; Lehmann et al., 2013; Merry & Andrews, 1994) aimed to examine samples of children exposed to DT. Five studies (Briscoe-Smith & Hinshaw, 2006; Conway et al., 2011; Cuffe et al., 1994; Evinç et al., 2014; Heffron et al., 1987) examined associations between these experiences and diagnoses of ADHD. Three studies (Famularo et al., 1992; Lehmann et al., 2013; Merry & Andrews, 1994) looked at the prevalence of mental health diagnoses among their samples.

Table 2:

## Summary of Individual Studies (Authors B-E)

Author(s)	Briscoe-Smith & Hinshaw (2006)	Conway et al. (2011)	Cuffe et al. (1994)	Evinç et al. (2014)
Design	Case Control	Case control	Case Series	Case control
Location	USA	USA	USA	Turkey
Aim	To examine if a sample of preadolescent girls diagnosed with ADHD had higher rates of documented abuse than a matched non-ADHD control sample. To examine if those with an ADHD diagnosis and documented abuse were more impaired in several psychological domains, compared to those with a diagnosis of ADHD and no documented abuse.	To examine the prevalence of complex trauma, in a child mental health inpatient population, among children diagnosed with ADHD compared to those without an ADHD diagnosis	To examine the relationship between ADHD and PTSD among traumatised children	Aimed to compare mothers of children diagnosed with ADHD with mothers of children with no mental health diagnosis, in relation to abusive discipline.
Sample	ADHD (n=140) Control (n=88)	Not clear due to errors in reporting	4 cases of children that met criteria for both ADHD & PTSD are presented	ADHD group: 100 children & their mothers No diagnosis: 25 children and their mothers
Age	ADHD group: Mean (SD): 9.6 years (1.68)  Control group: Mean (SD): 9.4 years (1.65)	ADHD group: Mean (SD): 13.93 years (2.51)  No ADHD group: Mean (SD): 11.05 years (2.47)	12 years (n=1) 5 years (n=2) 8 years (n=1)	ADHD group Mean (SD): 9.1 years (1.92)  Control group Mean (SD): 8.26 years (1.43)
Gender	All Female	ADHD group: 75% male No ADHD group: 58.2% male	Male: Female = 2:2	Total Sample Male: Female = 88: 37

Table 3

Summary of Individual Studies (Authors F-M)

<b>Author(s)</b>	<b>Famularo et al. (1992)</b>	<b>Heffron et al. (1987)</b>	<b>Lehmann et al. (2013)</b>	<b>Merry &amp; Andrews (1994)</b>
Design	Case control	Case Control	Prevalence	Prevalence
Location	USA	USA	Norway	New Zealand
Aim	To examine the frequency of mental health diagnoses among maltreated children compared to controls	To examine the association between ADD and abuse	To examine the prevalence of mental health diagnoses, and risk factors for diagnoses, among foster children	To examine the prevalence of mental health diagnoses among children 12 months after disclosure of sexual abuse
Sample Size	61 maltreated children compared to 31 controls who had no history of abuse	115 records of children referred for overactivity, comparing physical abuse among those who met criteria for ADD with hyperactivity (n=75) and those who did not (n=40)	n=279	n = 66
Age	Maltreated group: Range: 5 to 10 years Mean: 93.2 months (7.7years)  Control Group: Range: 5 to 10 years Mean: 93.8 months (7.8 years)	ADD group:	Range: 6 to 12 years Mean (SD): 8.97 years (2.04)	Mean Age (SD) = 8 years (3.63)
Gender	Male: Female Maltreated group: 27: 34 Control group: 15: 20	Range: 3 to 16 years	Male: Female: 148:131 (47% female)	Male: Female = 11:55

## **Samples**

**Diagnosis of ADHD.** A variety of methods were used to identify if participants met DSM diagnostic criteria for a diagnosis of ADHD, current at the time of the study. Four studies reported children were diagnosed prior to the study (Conway et al., 2011; Cuffe et al., 1994; Evinç et al., 2014; Heffron et al., 1987). Four studies reported the use of standardised instruments to inform diagnosis (Briscoe-Smith & Hinshaw, 2006; Famularo et al., 1992; Lehmann et al., 2013; Merry & Andrews, 1994).

**Adverse experiences consistent with developmental trauma.** Seven studies identified a number of adverse life experiences consistent with DT as follows: removal from parents due to physical abuse (Heffron et al., 1987); child maltreatment, warranting removal from parents (Famularo et al., 1992); prolonged physical and or sexual abuse and removal from parents (Cuffe et al., 1994); disclosure of sexual abuse by parents/carers or others within the child's caregiving environment (Merry & Andrews, 1994); physical abuse, sexual abuse, neglect, witnessing domestic violence or a combination of these experiences (Briscoe-Smith & Hinshaw, 2006); physical or sexual abuse, neglect or maltreatment, abandonment by a parent or caretaker, and/or exposure to domestic or community violence (Conway et al., 2011); serious neglect and exposure to violence within the family of origin leading to foster care (Lehmann et al., 2013). One study reported on measures of physically and verbally abusive parental discipline and completed parent and child interviews (Evinç et al., 2014).

## **Quality Appraisal**

### **Strengths.**

**Sampling.** Seven of the eight studies (Briscoe-Smith & Hinshaw, 2006; Conway et al., 2011; Evinç et al., 2014; Famularo et al., 1992; Heffron et al., 1987; Lehmann et al., 2013; Merry & Andrews, 1994) minimised bias in their recruitment strategies or described sampling

strategies relevant to answering the research question posed. In the five controlled studies (Briscoe-Smith & Hinshaw, 2006; Conway et al., 2011; Evinç et al., 2014; Famularo et al., 1992; Heffron et al., 1987) inclusion and exclusion criteria were applied equally to cases and controls and recruitment was done independently of exposure status. For example, abuse status was unknown when recruiting girls with and without ADHD by Briscoe-Smith and Hinshaw (2006). In this study, a population of girls was purposefully sampled because of the underrepresentation of females in research about ADHD (Briscoe-Smith & Hinshaw, 2006).

In both prevalence studies (Lehmann et al., 2013; Merry & Andrews, 1994) the source of the samples was relevant to the populations under study and clear sampling procedures were outlined. A strength of Lehmann et al.'s (2013) study was that diagnostic information for 70.5% of all eligible foster children in a region of Norway was obtained.

**Measures.** Validated measures for ADHD, PTSD and/or other mental health diagnoses per DSM criteria were used in six studies (Briscoe-Smith & Hinshaw, 2006; Cuffe et al., 1994; Evinç et al., 2014; Famularo et al., 1992; Heffron et al., 1987; Lehmann et al., 2013; Merry & Andrews, 1994). Standardised measures were used to examine additional child psychological and parenting variables in two studies (Briscoe-Smith & Hinshaw, 2006; Evinç et al., 2014).

**Comparability of groups.** Three of the five controlled studies evidenced the comparability of the groups under study through presentation of demographic information, statistical analysis of potential differences and control of identified differences in analysis of dependent variables (Briscoe-Smith & Hinshaw, 2006; Evinç et al., 2014; Famularo et al., 1992).

**Response Rates.** There was either a complete set of outcome data (Briscoe-Smith & Hinshaw, 2006; Evinç et al., 2014; Famularo et al., 1992; Heffron et al., 1987) or a rate of above 60% (Merry & Andrews, 1994; Lehmann et al., 2013) reported in six of the seven studies

where this was relevant. Merry & Andrews (1994) acknowledged the screening out of information about severe cases by some data sources and non-response by others opposed to the research (about sexually abused children), resulting in a bias towards less severe cases.

**Limitations.**

**Sampling.** One study did not outline its sampling strategy or detail the clinical context, or source from which the presented cases were drawn (Cuffe et al., 1994). These omissions prevent consideration of the cases in the context of potential bias in the selection process and whether the cases presented were illustrative of the population.

**Measures.** One study reported the use of the Hospitalised Child and Adolescent Trauma and Psychopathology Questionnaire (HCATP; Conway et al., 2011). This measure was reported to relate to complex trauma based on the definition of DT outlined by van der Kolk (2005). Validity and reliability were not reported or referenced. The outcome data reported from this measure did not appear to fit the definition of complex trauma outlined. It was not clear that events recorded as traumatic met the criteria for multiple, chronic and prolonged exposure. Some children, considered to have experienced complex trauma, were reported to have been exposed to single adverse experiences. These discrepancies were not explained, limiting the conclusions drawn about differences in the level of trauma experienced by participants.

The use of standardised measures to assess if children met criteria for a mental health diagnoses, for research purposes, is not reflective of recommended UK clinical practice (NICE, 2008). Only one study reported a process (Heffron et al., 1994) consistent with UK practice for assessment and diagnosis of ADHD. Therefore, the generalisability of findings of the individual studies reviewed, to a UK context, is limited.



**Comparability of groups.** In two controlled studies, it was not clear whether groups were appropriately comparable (Conway et al., 2011; Heffron et al., 1987). Differences in mental health diagnoses between groups were noted but no direct comparison was provided and control of these differences in analysis was not reported. Therefore, it is not possible to be confident in the results reported about differences (Conway et al., 2011) or lack of differences (Heffron et al., 1987) between groups or to what extent additional mental health diagnoses may have been confounding variables.

**Response rate.** Conway et al. (2011) reported two different figures for its sample size and as all results were reported proportionally, it is not possible to clarify this error, undermining confidence about the results reported.

Complete sets of data were reported by two studies in the context of provision of a service. Therefore, there may have been bias from parents or carers towards identifying problems associated with ADHD that facilitated access to service provision (Briscoe-Smith & Hinshaw, 2006; Evinç et al., 2014).

### **Individual Study Findings**

Higher rates of ADHD among samples of children with experiences of DT, compared to controls, community samples and national prevalence rates, were reported in three studies (Famularo et al., 1992; Lehmann et al., 2013; Merry & Andrews, 1994). A significant difference nearly nine times higher than controls was reported by one study (Famularo et al., 1992); the rate of ADHD was more than double that of a community sample in another (Merry & Andrews, 1994) and this rate was nearly ten times that of local national prevalence rates in the third study (Lehmann et al., 2013).

Of those with an ADHD diagnosis in one study, over half met criteria for additional diagnoses of PTSD or other behavioural or emotional disorders (Lehmann et al., 2013). One

study reported higher rates of PTSD and Oppositional Defiant Disorder (ODD) diagnoses among children exposed to DT compared to controls, none of whom met criteria for these disorders (Famularo et al., 1992). In one study (Merry & Andrews, 1994) where 36.4% of participants met criteria for two or more diagnoses, 18.2% met criteria for PTSD and 13.6% met criteria for ADHD. Three of four cases, with ADHD and PTSD diagnoses, presented by Cuffe et al (1994), were exposed to prolonged sexual abuse within their caregiving environment.

In three studies, significantly higher rates of DT exposure among children with a diagnosis of ADHD (Briscoe-Smith & Hinshaw, 2006; Conway et al., 2011; Evinç et al., 2014) compared to those with no such diagnosis were reported. One study reported no difference in rates of abuse between children with and without a diagnosis of ADHD (Heffron et al., 1987).

Three studies examined additional variables related to ADHD and DT (Briscoe-Smith & Hinshaw, 2006; Evinç et al., 2014; Lehmann et al., 2013). Briscoe-Smith & Hinshaw (2006) reported that girls with a diagnosis of ADHD and a history of abuse had significantly more diagnoses of ODD, higher peer ratings of aggression, higher staff ratings of aggressive and non-compliant behaviour, and experienced more peer rejection, compared to girls with a diagnosis of ADHD and no histories of abuse. Lehmann et al. (2013) reported that foster children with an ADHD diagnosis were younger when first placed in care and had a lower number of placements.

Evinç et al. (2014) interviewed children and mothers about abusive discipline practices in their families. Verbally abusive discipline included threatening and cursing, leaving a child feeling refused. Physically abusive discipline included behaviours that were harmful to children including hitting with household items and kicking. Compared to mothers of children with no ADHD diagnosis, mothers of children with a diagnosis of ADHD reported significantly

higher approval of verbally abusive discipline. Significantly higher approval of physically abusive discipline was associated with mothers of children with an ADHD-hyperactive type diagnosis. Approval of both forms of discipline was significantly associated with child hyperactivity and maternal ADHD-related problems. Approval of verbally abuse discipline was predictive of child hyperactivity, aggression and associated with mothers' perception of being sexually abused.

### **Language Used to Describe ADHD**

ADHD was described in three ways: five articles used biomedical language (Briscoe-Smith & Hinshaw, 2006; Cuffe et al., 1994; Evinç et al., 2014; Famularo et al., 1992; Merry & Andrews, 1994 ) indicating a biological aetiology; four articles used diagnostic language, describing ADHD as a diagnostic classification, not indicative of aetiology (Heffron et al., 1987; Klein et al., 2015; Lehmann et al., 2013; Weinstein et al., 2000); three articles used biopsychosocial language, acknowledging experiences of DT as a potential aetiological factor (Conway et al., 2011; Szymanski et al., 2011; Webb, 2013).

## Discussion

### **What Does Relevant Research Propose about a Relationship Between ADHD and DT?**

A consistent association between a diagnosis of ADHD and experiences of DT, or those at risk of such experiences, was reported in all four reviews and all but one of the individual studies. While the reviews were limited in their quality, five of the individual studies (Briscoe-Smith & Hinshaw, 2006; Evinç et al., 2014; Famularo et al., 1992; Lehmann et al., 2013; Merry & Andrews, 1994) had several strengths, providing reasonable confidence in the validity of the findings reported. Significantly higher rates of ADHD among children with experiences of DT, compared to non-DT exposed controls, community samples and national prevalence rates were reported by three of these individual studies (Famularo et al., 1992; Lehmann et al., 2013; Merry & Andrews, 1994). Two further studies reported significantly higher rates of DT exposure among those with a diagnosis of ADHD compared to non-ADHD controls (Briscoe-Smith & Hinshaw, 2006; Evinç et al., 2014). The generalisability of these findings to a UK context is limited. In the review published by Webb (2013), UK based data consistent with increased prevalence of ADHD diagnoses among children at risk of DT is presented. However, this review did not assess the quality of studies on which this data was based.

Cuffe et al. (1994) reported that traumatised children frequently attract diagnoses of ADHD and PTSD. The generalisability of the cases presented by these authors, of such children, is limited. However, three further studies (Famularo et al., 1992; Lehmann et al., 2013, Merry & Andrews, 1994) reported more reliable evidence of a high frequency of both PTSD and ADHD diagnoses among children exposed to DT.. However, the extent to which the diagnosis of PTSD was more or less common among children with an ADHD diagnosis, compared to those without an ADHD diagnosis, was not clear.

Therefore, there is a limited amount of reasonable quality evidence, restricted in its generalisability to the UK, that suggests:

- a) Children with experiences of DT are more likely to have a diagnosis of ADHD compared to those without such experiences
- b) Children with a diagnosis of ADHD are more likely to have had experiences of DT compared to those without this diagnosis.
- c) Children with a history of DT who attract a diagnosis of ADHD, may also meet criteria for PTSD.

### **Understanding the Relationship between ADHD and DT**

There is a lack of evidence of a causal relationship, or the direction of such a relationship, between ADHD and DT, recognised or not through a PTSD diagnosis. In the absence of such evidence the authors of the reviewed articles offer several hypotheses:

**ADHD may be a misrepresentation of trauma.** Several authors suggest that an ADHD diagnosis may be a misrepresentation of trauma among children exposed to DT (Klein et al., 2015; Szymanski et al., 2011; Weinstein et al., 2000) because clinicians may not adequately consider trauma in ADHD assessment, or trauma histories may not be reported. In the absence of information of a trauma history, some authors suggest children may receive a diagnosis of ADHD because their difficulties look like ADHD (Cuffe et al., 1994; Klein et al., 2015). One author argues that the potentially traumatizing caregiving environments may contribute to “environmental ADHD” (Webb, 2013, p. 398).

**Onset of ADHD-behaviour may indicate if it is a contributory factor to, or a consequence of, trauma.** Several authors argue that the nature of a relationship between ADHD and DT depends on whether it can be identified if ADHD-behaviour was evident before or after DT. If ADHD-behaviour is evident prior to DT, this behaviour may contribute to, and

increase the risk of, exposure to DT (Cuffe et al., 1994; Famularo et al., 1992; Heffron et al., 1987; Lehmann et al., 2013; Merry & Andrews, 1994). If ADHD-behaviour occurred after DT, it may be a trauma reaction and the ADHD diagnosis may be inaccurate (Famularo et al., 1992; Szymanski, 2011; Weinstein et al., 2000;).

**Separate co-occurring difficulties.** Some authors (Merry & Andrews, 1994) argue that ADHD and trauma, identified through a PTSD diagnosis, are separate but possibly co-occurring sets of difficulties, with ADHD a contributory factor to DT and PTSD a consequence of DT.

**A complex relationship.** Conway et al. (2011) argued that the difficulties related to ADHD and DT cannot be separated and suggested a complex relationship. For example, Briscoe-Smith and Hinshaw (2006) and Evinç et al. (2014) highlighted complex interactions between girls and their peers (Briscoe-Smith & Hinshaw, 2006) and children and their mothers (Evinç et al., 2014). Both studies indicated that a diagnosis of ADHD combined with experiences of DT has an additive effect. This additive effect may result in increased levels of expressed aggression and peer rejection among girls (Briscoe-Smith & Hinshaw, 2006). Equally, Evinç et al. (2014) suggest that ADHD behaviours increase the risk that conflictual interactions between mothers and children will escalate into abuse (Evinç et al., 2014). Additional risk factors, such as a history of sexual abuse among mothers, may also contribute to these types of parent-child interactions. Mothers who reported a perception of being sexually abused in childhood were more likely to approve of verbally abusive discipline (Evinç et al., 2014).

These hypotheses, while useful in attempting to understand the relationship between ADHD and DT, are limited. The research, in its current state, does not offer further evidence to either support or reject these hypotheses, particularly due to the lack of longitudinal studies.

**What language is Available to Clinicians, from the Reviewed Research, about Children with a Diagnosis of ADHD and Experiences of DT?**

Biomedical and diagnostic language dominated the literature among nine of the twelve articles. However, it was not necessarily preventative to considering difficulties within children's caregiving environments or trauma. For example, Briscoe-Smith and Hinshaw (2006), who used biomedical language, stated:

given the genetic underpinnings of many cases of ADHD, biological parents of children with ADHD are likely to show impulse control and attentional problems themselves ... possibly increasing the likelihood of abusive behaviour (Briscoe-Smith & Hinshaw, 2006, p. 1241).

Lehmann et al. (2013) used diagnostic language and stated "the temperamental and behavioural problems related to ADHD might increase the probability of parenting problems" (Lehmann et al., 2013, p.11).

Authors, who used biopsychosocial language, were more direct about the need to attend to the emotional experience of children with a diagnosis of ADHD, for example:

it can be argued that the assumption that ADHD in children is a largely neurocognitive disorder has often neglected the underlying emotional, personality, and interpersonal issues from which many ADHD afflicted children suffer. (Conway et al., 2011, p. 63).

Several authors, who use biomedical or diagnostic language, suggested children with experiences of DT, and an ADHD diagnosis, should receive an additional or alternative diagnosis of PTSD (Briscoe-Smith & Hinshaw, 2006; Weinstein et al., 2000). However, this diagnosis may be pathologising of children's responses to DT, labelling them disordered.

It is perhaps to be expected that biomedical and diagnostic language dominated the research, given that it was all quantitative, based on identifying difficulties within a diagnostic framework. Alternative language, which might be more useful for clinicians in attending to this population's emotional experiences, was limited.

No qualitative research, which may not be limited by a diagnostic framework, was identified by the present review.



## **Implications**

### **Practice Implications**

**Assessing for trauma.** The need to assess for trauma in ADHD assessment among children vulnerable to DT was indicated from the present review. In the UK, such consideration may be encompassed in recommendations by NICE (2008) to gather a full developmental history and psychosocial assessment. However, specifically assessing for symptoms of trauma is not stated. The potential overlap between ADHD and PTSD diagnostic criteria is also not highlighted by NICE (2008). Specifically assessing for trauma appears important as Children and parents may not report trauma histories. Famularo et al. (1992) reported that parents can be poor reporters of trauma, compared to behavioural difficulties, consistent with the view of Rowe (2005) that adults may often be unaware of when a child is frightened. Therefore, it appears important to include children in assessment to consider trauma related difficulties, such as post traumatic flashbacks or disassociation (Famularo et al., 1992), which may not be identified by parents.

Two areas that may be helpful in identifying trauma which may not usually form a part of ADHD assessment are assessment of attachment and liaison with social services. Assessment of attachment may be helpful, as disorganised attachment is associated with DT (Baer & Martinez, 2006). Social services may hold relevant information that may not be reported by parents or children.

**Interventions.** Consistent with van der Kolk et al. (2009) the present review suggests that intervention for at least some children may be guided by an ADHD diagnosis, without consideration of trauma. Some authors raise concerns about potential harmful effects of such interventions for these children. Webb (2013) noted anecdotal evidence, from clinical practice, that such children may be prescribed increasing doses of stimulants to control their behaviour.

If these children are exposed to DT in their caregiving environment, such prescription raises ethical issues as to whether children are being maintained in unsafe environments. Weinstein et al. (2000) argued that behaviour management interventions do not attend to children's emotional experience and may therefore be harmful for children who have been sexually abused.

The reviewed articles suggest several factors to consider when designing interventions for this group of children. Briscoe-Smith & Hinshaw (2006) suggested girls with a diagnosis of ADHD and experiences of abuse, need support in developing and maintaining peer relationships. Conway et al. (2011) argued that children who have experienced trauma and/or have a diagnosis of ADHD present emotional regulation difficulties and therefore psychodynamic and mentalisation based interventions should be considered. Lehmann et al. (2013) recommended parenting interventions focused on both behaviour management and the development of empathy in parents towards their children. Such parenting interventions are further indicated from the results reported by Evinç et al. (2014) in relation to abusive parental discipline, consistent with the views of Rostill and Myatt (2005) and Dallos and Vetere (2009) about attending to the emotional experiences of children beyond labels.

Although attention was brought to the need for trauma, individual and parenting intervention, these would need to be considered with caution depending on the safety of a child's caregiving environment. As noted above, insecure disorganised patterns of attachment may be common among children with a diagnosis of ADHD and experiences of DT (Baer & Martinez, 2006; Clarke et al., 2002;). Attachment informed interventions for children who have been removed from their parents' care, were not considered in the reviewed articles. Such intervention may need to be prioritised to support these children to develop relationships with professional carers, in which they feel safe, before, or as a part of, trauma focused interventions.

## **Research Implications**

The present review did not aim to identify research on the effectiveness of interventions for children with a diagnosis of ADHD and experiences of DT. However, it seems reasonable that at least some of such research, if available, would have been identified with the search terms used. A further literature review may therefore be useful to clarify the extent of evidence for the effectiveness of interventions for this population.

Given that behaviour management and stimulant medication are recommended for children with a diagnosis of ADHD, whereas attachment and trauma focused interventions are recommended for children with a history of early trauma (Rahim, 2014; van der Kolk et al., 2009) it may be valuable to compare the effectiveness of these two types of intervention. However, due to the vulnerability of these young people, experimental designs may not be appropriate. An alternative may be to gather information from multiple case studies with similar pre and post measures.

Non-experimental longitudinal designs that aim to gather information over time, may be valuable in identifying possible causal links between ADHD and DT, and assessing intervention effectiveness.

A wider issue, however, is that it is difficult to conduct research on DT as it has not been recognised as a diagnostic classification. This situation may contribute to a vicious cycle for research and practice. On the one hand, available diagnoses, in this case ADHD, may not sufficiently guide intervention towards attending the experiences of some children. On the other hand, the lack of a diagnosis such as DTD restricts research that may help better guide intervention (Rahim, 2014). It was possible to identify research relevant to experiences of DT in the present review, where, for example, physical and sexual abuse had been reported. Even if biomedical and diagnostic language dominates CAMHS, as it does in the reviewed research,

attention can be given to these experiences, when identified. However, the extent to which this attention translates into non pathologising language and trauma or attachment based formulation and intervention in clinical practice is not clear.

Some children's difficulties may be related to consistent but low level emotional abuse that is not disclosed or does not result in meeting criteria for a diagnosis of ADHD or otherwise, preventing access to CAMHS or consideration in research. For those that meet criteria for ADHD, CAMHS may be biased towards interventions seen as an efficient use of clinicians' time, in the context of limited service capacity and pressure to meet demand. Providing stimulant medication or short term behavioural interventions, in the case of ADHD, may fit such bias and limit the possibility of identifying children's experiences of DT for consideration in intervention and research.

Working within a diagnostic framework appears restrictive to both research and clinical practice in this area. It may be necessary that future research employs methodologies and settings, outside of CAMHS, that are less restricted by this framework. Qualitative research designs that consider non-diagnostic language about the experience of children with a diagnosis of ADHD and DT may be useful. It may be valuable to examine what meaning emerges from the language of parents, carers and children. Discourse analysis, may be useful in examining such language.

### **Limitations**

The present review was limited to considering neglect and abuse as indicators of DT. While a broader range of experiences, such as exposure to domestic violence, were reported among some participants of the reviewed studies, there may be children with experience of DT that this review has not considered. For example, children exposed to significant community violence, war, and separation from their caregivers through seeking asylum. Therefore, although the experiences of children in the reviewed research are consistent with those associated with DT, the conclusions drawn from this review need to be considered cautiously.

Nearly all the research reviewed occurred outside of the UK and lacked generalisability to UK clinical practice. Although this does not mean the findings and conclusions of the reviewed research are not relevant to the UK, research within a UK context would be valuable.

The present review did not have the scope or resources to be exhaustively comprehensive therefore there may be some relevant research that has not been included. The review focused on ADHD but children who have experienced DT can receive multiple additional or alternative diagnoses about which there may be different implications for how children are understood and supported.

### **Conclusion**

This review has highlighted that there is some evidence that children who have experienced DT are more likely than children in the general population to meet criteria for an ADHD diagnosis. There is a lack of evidence of causal links between early trauma and abuse and a later diagnosis of ADHD, but there is concern among researchers that this diagnosis may be inaccurate and/or lead to potentially harmful interventions. Further research examining the effectiveness of interventions for children who have an ADHD diagnosis and experiences of DT, appears warranted. Diagnostic and biomedical language dominates the literature in relation to ADHD among this population of children, who may be at higher risk of its iatrogenic effects. Looked after children may be more vulnerable to these effects. However, the extent to which such language is used in practice is not clear. Further research, such as discourse analysis in settings that are not organised around diagnosis may be useful in illuminating this research gap.

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**ADHD, DEVELOPMENTAL TRAUMA AND THERAPEUTIC  
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**Abstract**

Quantitative research based on diagnostic classification has been limited in developing an understanding of ADHD and its related behaviour among children who have experienced Developmental Trauma, including neglect and abuse. Clinical practice may not attend sufficiently to the emotional experiences of these children with a diagnosis of ADHD, due to the dominance of biomedical discourse. This study utilised discourse analysis to examine discourses of Therapeutic Community staff about ADHD and its related behaviour among looked after children who have had experiences of Developmental Trauma. Non-medical and environmental discourses were dominant in this setting. A Biopsychosocial discourse legitimised multi-disciplinary collaboration between Therapeutic Community and mainstream practice for complex difficulties among this population of children. Children's understanding of ADHD and stimulant medication prescribed for this diagnosis, along with clinical and research implications, were considered.

Keywords: Discourse Analysis; ADHD; Developmental Trauma; Therapeutic Community; Looked After Children.

On average, 28% of children referred to CAMHS were not allocated a service or faced waiting times of up to 200 days, in 2015 (Children's Commissioner, 2016). To manage demand, many CAMHS have developed acceptance criteria based on severity, risk, and on a problem having a recognisable diagnosis (Children's Commissioner, 2016). Attention Deficit Hyperactivity Disorder ([ADHD], American Psychiatric Association [APA], 2013) was one such diagnosis.

The biomedical model of ADHD has been criticised for overlooking the contribution of Developmental Trauma (DT; van der Kolk et al., 2009) to the behaviour associated with this diagnosis, resulting in inadequate mental health service provision for some children (van der Kolk et al., 2009). The present study aims to examine discourses among staff in Therapeutic Communities (TCs), a service setting not organised around diagnosis. This study hopes to shed light on understanding and practice about children with a diagnosis of ADHD and experiences of DT, which may be useful for mainstream practice to consider.

### **ADHD**

ADHD is a diagnosis in the Diagnostic and Statistics Manual ([DSM-V], APA, 2013) characterised by hyperactivity, impulsivity and inattention. The ICD 10 (World Health Organisation[WHO], 1992) equivalent classification is Hyperkinetic Disorder, which accounts for the same cluster of symptoms with narrower inclusion criteria (NICE, 2008). However, the term ADHD is most commonly used in practice (NICE, 2008).

Prevalence rates of ADHD vary greatly across studies depending on which diagnostic criteria are used, data collection methodology and population characteristics (Carr, 2006). International estimates vary from 1.5% to 25%, with a pooled rate of 5.3% (Polanczyk & Rohde, 2007). Within the UK, estimates vary between 1.1% and 1.5% using ICD-10 (WHO, 1992) criteria (Ford, Vostanis, Meltzer & Goodman, 2007; Green, McGinnity, Meltzer, Ford

& Goodman, 2005), representing one of the most common diagnosable problems among children and young people in Britain.

### **Competing Discourses about ADHD**

Different ways of understanding the behaviour associated with ADHD are often opposed in polemic debate between biomedical and sociological discourse (Visser & Jehan, 2009). Within this debate a biological understanding of the difficulties associated with ADHD, seen as dominant, are commonly thought of as competing with minority social/environmental understandings (Colley, 2010; Lewis-Morton, Dallos, McClelland, & Clempson, 2014).

**Biomedical and psychosocial discourse.** An example of the dominant biomedical discourse is that outlined by Barkley et al. (2002) in an ‘international consensus statement’ with 74 other psychiatrists and psychologists asserting the evidence that the hyperactive, impulsive and inattentive behaviours that attract this diagnosis are caused by underlying neurological problems (Barkley et al., 2002). However, there is a lack of evidence that concretely proves this aetiology, leaving its classification, as a biomedical disorder, open to debate. Advantages of this discourse are recognised by its critics, such as providing an explanation of a child’s behaviour so that they are not seen as ‘naughty’; allowing access to drug treatment that reduces problematic behaviour; reducing blame towards parents and giving access to resources (Jackson Brown, 2005).

Critics of biomedical discourse highlight the risk of iatrogenic difficulties for children by being labelled as having a medical disorder. This construction locates problems within children and may negatively impact their self-esteem (Rostill & Myatt, 2005). Families may feel less capable of managing behaviour seen as a symptom of illness and seek medical intervention instead (Dallos & Vetere, 2009). A minority non-medical view highlights psychosocial environmental contributory factors. These factors include maltreatment,

attachment difficulties and educational practices that limit children's ability to move about in class and change activities (Erdman, 1998; Thapar, Cooper, Eyre & Langley, 2013; Timimi, 2009; Wheeler, 2010).

Tharpar et al. (2013) argued that these biomedical and psycho-social explanations should be considered complementary and not competing, to avoid practitioners justifying their positions rather than advancing thinking and practice (Colley, 2010).

**Biopsychosocial discourse.** A middle ground between competing discourses appears to be held by biopsychosocial discourse (Richards, 2013) which constructs the difficulties associated with ADHD resulting from an interaction between biological and psychosocial factors (Wheeler, 2010). Impulsivity, hyperactivity and inattention can be constructed as individual psychological traits (Tharpar et al., 2013) which have advantages and disadvantages. This discourse appears to open practice to multi-disciplinary work where medical intervention is considered alongside psychosocial factors such as attachment (Dallos & Vetere, 2009; Erdman, 1998). A biopsychosocial understanding presents opportunity to develop a positive narrative about a child with their family and attend to attachment difficulties, reducing the risk of iatrogenic difficulties while retaining the safety that may be held in a medical diagnosis (Dallos & Vetere, 2009).

### **A Biopsychosocial, Developmental Trauma, Pathway to ADHD Diagnosis**

DT (van der Kolk et al., 2009) refers to complex trauma due to exposure to repeated and severe episodes of interpersonal violence and disruptions in protective caregiving, beginning in childhood or early adolescence. van der Kolk et al. (2009) argued that many children with these experiences, such as neglect and abuse, may not receive a diagnosis of PTSD because the diagnostic criteria are not sensitive to the pervasive impact of DT. One of the variety of ways children may express difficulties due to DT is through behaviour consistent

with the diagnostic criteria for ADHD. Therefore, some children with these experiences may receive an ADHD diagnosis rather than a trauma based one. A biopsychosocial approach provides a conceptual framework which can include consideration of DT to the diagnosis of ADHD.

From a biological perspective, children who have experienced neglect and disruptions in caregiving are reported to have a similar neurological profile to children diagnosed with ADHD, with more severe abnormalities in the structure of the limbic system (Dahmen, Putz, Herpertz-Dahlmann & Konrad, 2012). These authors argued that this neurological profile is expressed in “ADHD-like” behaviour (Dahmen et al., 2012, p. 1028). Webb (2013) argued that adverse caregiving environments, particularly exposure to violence, can have a neurological impact associated with symptoms of ADHD.

From a psychosocial perspective, children with experiences of DT may express behaviours that “mimic” ADHD (Klein, Damiani-Taraba, Kosta, Campbell & Scholz, 2015, p. 181) due to deficits in their capacity to mentalise (Conway, Oster & Szymanski, 2011). The capacity to interpret the behaviour of oneself and others in terms of possible mental states, conceptualised as mentalisation, is central to both attachment and psychoanalytic theory (Fonagy, 2001). It is argued that the manner and extent to which this capacity develops depends on successful containment (Bion, 1962) enabling secure attachment (Fonagy, 2001). Difficulties in mentalisation are associated with disorganized attachment, reflective of childhood maltreatment (Fonagy, 2001; Baer & Martinez, 2006). Disorganized attachment is associated with ADHD and ADHD-like symptoms (Clarke, Ungerer, Chahoud, Johnson & Steifel, 2002; Neiderhofer, 2009).

The mentalisation ability of these children may be based on an internal working model (Bowlby, 1988) of carers, characterised by a lack of physical and emotional safety. These

children may be hypersensitive to mental states of others in which they have an expectation of further abuse (Fonagy & Target, 2000) which may be expressed through hyperactivity. These difficulties may limit their opportunities to learn how to regulate their emotions, control impulses and self-monitor feelings and thoughts (Fonagy & Target, 1997) which may be expressed through inattention and impulsivity, and thus present as ADHD-like symptoms.

### **Concerns for Children who have Experiences of Developmental Trauma**

Children with, or vulnerable to experiences of DT, are consistently reported to meet diagnostic criteria for ADHD at significantly higher rates than the general population. For example, in Finland, foster children exposed to severe neglect and violence in their family of origin have been estimated to meet DSM criteria nearly ten times more than general population estimates (Lehmann, Havik, Havik & Heiervang, 2013). In the UK, 8.4% of Looked After Children (LAC) have been estimated to meet ICD-10 criteria, compared to 1.1% of private household children (Ford et al., 2007). A biopsychosocial conceptualization may account for experiences of DT but there are three reasons for concern about ADHD assessment and diagnosis with this population:

- a) Trauma exposure may not be reported by parents or children (Conway et al., 2011; Famularo, Kinscherff & Fenton, 1992); clinicians may not be required to consider trauma in ADHD assessment and therefore may not ask about it (Klein et al., 2015; Weinstein, Staffelbach & Biaggio, 2000). An accurate developmental history, including reporting of trauma exposure, may not always be available (Cuffe, McCullough & Pumariega, 1994). This is particularly true for LAC who often come to services with incomplete early developmental histories. Therefore, children may receive an ADHD diagnosis that does not consider DT.

- b) Many children that have experiences of DT are LAC, or those at risk of being taken into care, due to neglect and abuse. These children may be more vulnerable than others to the iatrogenic difficulties of an ADHD diagnosis understood through biomedical discourse (Rostill & Myatt, 2005). This understanding may risk invalidating their experience resulting in them feeling misunderstood and/or confirming negative beliefs about themselves, developed because of abuse or neglect (Rostill & Myatt, 2005). Narrative and attachment based interventions, which may mitigate iatrogenic difficulties, may not be appropriate if these children are not safe within their family.
- c) Providing ADHD interventions to children that have experiences of DT may be inadequate or harmful. Conway et al. (2011) noted that evidence based pharmacological and psychological interventions, recommended for children with an ADHD diagnosis, focus on reducing behavioural symptoms, rather than attending to underlying distress related to their experiences. These interventions help parents, and often teachers, to manage a child's behaviour through stimulant medication and behaviour training. For children who have experienced trauma, these interventions do not attend to the need to alleviate distress, or the need to support them to feel safe within their caregiving relationships (Conway et al., 2011; Thomas, 1995; Weinstein et al. 2000). Webb (2013) noted that prescribing stimulants to manage children's behaviour may maintain them in an unsafe home environment. There is, however, a lack of evidence of effectiveness, or otherwise, of these interventions with this population (Webb, 2013).

### **Previous Research about ADHD and DT**

In the limited amount of research related to children who meet criteria for ADHD and have had experiences of DT, biomedical and diagnostic language dominates (e.g. Evinç et al., 2014). However, attention is brought to trauma and attachment difficulties, when experiences



of DT have been identified. Some argued that these children should receive alternative or additional diagnoses of PTSD (Briscoe-Smith & Hinshaw, 2006; Weinstein et al., 2000). Others argued that environmental contributory factors should be given more weight in the diagnosis of ADHD, for which alternative, attachment, mentalisation or psychodynamic based interventions, should be considered, possibly in addition to stimulant medication (Conway et al., 2011; Webb, 2013).

These alternatives remain tied to diagnosis, based on research and clinical practice that is organised around diagnostic classification. This organisation may direct interventions to prioritising the reduction of behavioural symptoms, as noted above. DT was proposed as a diagnostic category (Developmental Trauma Disorder [DTD], van der Kolk et al., 2009) with the aim of prioritising children's experiences but was not accepted into the DSM-V (Rahim, 2014). Furthermore, CAMHS may be biased towards providing interventions seen as an efficient use of clinical time, given the difficulties in capacity they face. Therefore, stimulant medication and short term psychological intervention focused on behavioural approaches may be prioritised over potentially longer term attachment, mentalisation or psychodynamic work.

Research and clinical practice about this population appears limited when it is organised around diagnosis. It is notable that there is no qualitative research about children with a diagnosis of ADHD and experiences of DT. A potentially wider view may come from discourses within services that are organised around young people's experiences and early environments.

### **Therapeutic Communities (TCs)**

Discourses of those working in TCs for LAC may be helpful in developing a wider view of children with ADHD diagnoses and experiences of DT for two reasons. Firstly, the children in their care are likely to have experienced disrupted early years and may therefore

provide a client group for whom an understanding of the relationship between experiences of DT and ADHD is necessary. Secondly, TC settings present a model of group care that is not organised around diagnosis. Rather, it is organised around young people's experiences of their early environments, informed by psychoanalytic, attachment and trauma perspectives (Diamond, 2013).

### **Discourse Analysis (DA)**

Psychologists became interested in DA from the 1970s onwards, as a critique of the idea that cognition is central to shaping perception and action (Potter & Wetherell, 1987). This critique challenged the assumption that an objective perception of reality is theoretically possible and that cognitions are simplified mental representations of reality, expressed through language (Edwards & Potter, 1992). Discourse analysts argued that the world can be seen in an unlimited number of ways and that reality is constructed through language because it is through language that meaning is created and negotiated (Potter & Wetherell, 1995).

There are two major versions of Discourse Analysis: Discursive Psychology and Foucauldian Discourse Analysis ([FDA], Willig, 2013). FDA assumes that discourse plays a fundamental role in the construction of meaning (Willig, 2013). Language is assumed to have variability, in that it constructs different versions of the world and different meanings of phenomena (Wood & Kroger, 2000). FDA is concerned with the discursive resources available to people to construct meaning (Willig, 2013).

Discursive psychology is focused on the action orientation of language in how people may use discursive resources to achieve interpersonal objectives (Willig, 2013). Language is assumed to have an effect, for example, telling a child they are "naughty" may have the effect of them feeling upset. Language is assumed to have a function, it can be used in various ways,

for example, to communicate meaning, persuade or evaluate (Wood & Kroger, 2000).

Wetherell (1998) advocated for a combined focus on discursive practices and resources.

### **Research Questions**

The current study asked two research questions, the first was Foucauldian in nature with the aim of examining construction of meaning:

1. What meanings are constructed in the discourses of TC staff about ADHD and the behaviour associated with it, among children with experiences of DT?

The second question was discursive in nature with the aim of examining how language is used in relation to practice:

2. How are the discursive constructions of TC staff used in relation to TC practice with these children?

## Method

### Study Design and Epistemology

The study used a DA design with a critical realist orientation. DA is social constructionist in nature (Willig, 2013). Willig (1999) argued for a non-relativist form of social constructionism with a critical realist orientation. Within this perspective social constructions represent variable ways of making different kinds of sense of phenomena, generated by underlying, relatively enduring structures. Social constructions cannot be independent from material structures, such as biochemical, economic or social structures. The aim of critical realist science is not to predict outcomes but to explain events as the realisation of structural possibilities (Willig, 1999).

Therefore, in relation to understanding ADHD among children with this diagnosis or the behaviour associated with it, and experiences of DT, a critical realist position acknowledges that behaviour can be generated from biological and psychosocial environmental factors. This position does not aim to examine the validity of the relationship between these factors in their contribution to behaviour. This position aims to examine how these, and any other factors spoken about, are understood to contribute to these children's behaviour.

### Study Setting

**Service provision.** Two non-mainstream specialist TC services took part in the current study. Both services provide residential care and education to children who have complex needs in the context of abusive, neglectful and/or traumatic childhood experiences.

In Service 1, children, aged 5 to 13 years, live and attend school within one setting, during the school year. Service 2 provides residential care and education through residential units and a school in separate locations in the local community. The school provides education to children living in residential care, provided by the service, and was open to children living

in foster care or with their family. Service 2 provided residential care to children aged 6 to 18 and education to children aged 6 to 16.

**Therapeutic community approach (TCA).** Both services employ the TCA (Diamond, 2013). The model has three features: group care as the mode of practice; psychodynamic thinking as an underpinning theory with the holding environment (Winnicott, 1986) as a model of practice; systems thinking to focus on holding together the different people around a child (Ward, 2003). In addition to the group and educational components of service provision, children receive individual therapy.

## **Procedure**

**Materials.** A flexible interview schedule was designed in consultation with supervisors (see appendix I). Questions were aimed at eliciting discourse in three categories: understanding of ADHD in the TC context; biological considerations (working with a medical model); and responding to and caring for children. An information sheet (appendix J), consent form (appendix K) and demographic questionnaire (appendix L) were used.

**Ethics.** Ethical approval was gained from the Canterbury Christ Church University Research Ethics Committee (appendix M). The possibility that focus group participants may experience distress in discussing clinical material about vulnerable children was considered with participants and services. Focus groups took place within the services and content was limited to that normally discussed and supported within the services.

**Focus groups and participant selection.** Data was gathered through focus group interviews as this method was considered suited to capturing discourse between staff.

Information sheets were disseminated by service management. Individuals available to participate volunteered for dates and times convenient to each service. To reduce impact on

daily practice and allow convenience for participants, the focus groups were completed at the services at locations and times when children were not present.

**Participants.** Participants included residential and educational staff. In consultation with both services, a sample of professionals involved in guiding practice were asked to participate. In service 1 this group was represented by managers of residential units. In service 2 therapeutic and educational consultants participated.

The demographic profile of participants, per service and focus group, are outlined in (appendix N). There were 29 participants across six focus groups, three in each service. Two focus groups in Service 1 were made up primarily of residential care staff. However, there was a member of teaching staff in each group. The third focus group in service 1 was made up of residential managers. The three focus groups in Service 2 were comprised of teaching staff; external educational and therapeutic consultants and residential care staff, including managers. The average age of participants was 42.07 years, (range: 26 to 66 years). 17 were female and 12 were male.

Participants were provided with copies of the information sheet, consent forms and the demographic questionnaire to complete. Focus groups lasted between 50 and 80 minutes.

**Management of the interview process.** The author used both open and closed questions, as outlined in the interview schedule (Appendix I) to facilitate both naturally emerging and specific content. The author was direct at times in clarifying whether issues discussed related to ADHD, as there was a tendency to discuss issues related to other diagnoses such as ASD. The author asked additional questions, to those in the interview schedule, in response to content presented by participants to develop a fuller range of discourses. For example, participants readily discussed reducing or stopping the use of stimulant medication with children, after they had come into the TCs. The interviewer therefore specifically asked

about occasions when children may have commenced medication after coming into the care of the TCs.

**Recording, Transcription and Analysis.** Focus group interviews were recorded on a digital voice recorder and kept on an encrypted memory stick. Interviews were transcribed verbatim by the author and transcripts were stored on the memory stick which was kept in a locked file.

Transcripts were analysed using the six-step DA process outlined by Willig (2013) which involves identifying: discursive constructs; discourses; action orientation; positioning; practice and subjectivity (see appendix O).

This process involved developing a list of discourses (see Appendix Q) and coding them per Willig's (2013) six steps (see appendices R and S) on the first reading of transcripts. These discourses were then refined into four broad discourses (see Appendix Q) through an iterative process of re-reading of transcripts and discussion with fellow researchers and supervisors, as noted below, in order to establish coherence.

### **Rigour and Quality**

Four methods for establishing rigour and quality in DA and qualitative research, drawn from Wetherell, Taylor and Yates (2001) and Mays and Pope (2000), employed by the author were:

1. Showing participants' orientation and that of the researcher.
2. Considering deviant cases or attention to inconsistency.
3. Locating the research within previous research and/or establishing coherence.
4. Presenting material to allow readers to make their own judgement.

**Orientation of participants and that of the researcher.** The TC approach is outlined above. The analysis of discourses within this context is the subjective interpretation of the

researcher influenced by prior experience of the topic. A reflexive approach was employed in considering this interpretation which consisted of: a bracketing interview with a fellow researcher, prior to commencing the research and keeping a reflexive diary during the research process (appendix P).

**Consideration of deviant cases.** The study had a variety of participants with different levels of experience, working in different settings within the services. This variety potentially allowed for a variety of discourses and the expression of minority discourses that contrasted dominant discourses. Therefore, attention has been paid to dominant and minority discourses in the transcripts.

**Establishing coherence.** TC discourses were considered in relation to the above outlined discourses about ADHD. Coherence was also attended to within transcript analysis through sharing transcripts with fellow researchers (in a study group), collaboratively discussing emergent discourses with supervisors and consultation with an academic supervisor experienced in DA.

**Presenting material for readers to make their own judgement.** Sections of transcript are presented below alongside the identification and interpretation of discourses. An audit trail is provided through an outline of discourse analysis progression (appendix Q), coding (appendix R), and an annotated transcript (appendix S).



### **Results<sup>1</sup>:**

Four discourses were identified.

1. Non-medical Discourse: ADHD is an irrelevant and inaccurate label.
2. Environmental Discourse: The role of the environment on these children's behaviour.
3. Biopsychosocial Discourse: The possibility of ADHD and cautious use of medication.
4. Discourse about children's understanding of their diagnosis and medication

Each discourse is outlined with respect to both research questions i.e. meanings constructed (question 1) and the use of discursive constructions in relation to TC practice (question 2).

#### **Non-Medical Discourse: ADHD, an Irrelevant and Inaccurate Label**

This was a dominant discourse across both services. Behaviour related to ADHD was constructed as non-verbal communication which indicated trauma and attachment difficulties. The diagnosis was constructed as resulting from the influence of parents, informed by medical discourse and their social context. These constructions were used to legitimise TC practice and explain why children may receive this label and why it is often inaccurate and irrelevant to TC practice.

**Behaviour as communication.** Constructing behaviour as communication was used to emphasise the irrelevance of the ADHD label in a TC environment and legitimise TC practice, informed by the TC approach, rather than being medically informed or requiring medical intervention.

We don't seem to focus on the labels (I: yeah) [Sam: absolutely] we focus on the behaviours and what they are communicating to us (**Barbara, Service 1**).

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<sup>1</sup> All names are pseudonyms

we have to try to understand (I: right) what they're trying to tell us through their behaviour (I: yeah, yeah, yeah) whether ADHD is in line with that [pause] that's not our main focus (**Annie, Service 1**).

whatever they are manifesting, you might know in your head, you might keep repeating the mantra that behaviour is communication (**Charlotte, Service 2**).

Several staff members discussed training in the TCA, which informed their practice and understanding of these children.

it's a programme for all of staff, so for people who are new into the childcare side it covers this attachment and it covers emmm trauma and it covers the psychodynamic principles. (**Brigit, Service 2**).

Charlie, noted how this perspective differs from a medical model:

instead of this quite fixed labels that are, tend to be seen as cured by drugs (**Charlie, Service 1**).

**Trauma and attachment.** The TC Approach appeared to inform how TC staff constructed ADHD behaviour to be a result of, and/or an expression of, trauma and attachment difficulties. This construction appeared to have several uses:

**To challenge ADHD diagnoses.** Staff offered examples where children's medication was reduced or stopped, and ADHD-related behaviour improved following support that attended to behaviour from a trauma and attachment perspective.

it's Not ADHD (I:yeah) that...it's the Trauma (I:ok) it's the Trauma ...emm... and off the top of my head, three children who definitely came here on the medication, either didn't have it or we had them re assessed and went to the doctors and (I:yeah) CAMHS

and we removed the medication, we started to work with the behaviours they presented (I:yeah), and there's no signs of ADHD (I:right ok). (**Andrea, Service 2**).

obviously those behaviours are linked (I: yeah) to their early attachment. (**Mandy, Service 1**).

**To justify not using medication.** The staff could justify starting intervention with a non-medical approach as advantageous because a diagnosis may be difficult to reverse. This approach avoids the problem of providing medication for a diagnosis that may later prove to be inaccurate.

I think we have about fifty things we could try first, and we are going to do those first [pause] because once a child is on medication, once the child is diagnosed the difficulty in trying to change that is [pause] HUGE (I: yeah) yeah trying to get a child Undiagnosed [pause] because that's what they are showing, but they're not [pause] we find [pause] we find that is what is on the documentation but it's not easy to change that [pause] we will still try the 50 route first. (**Brian, Service 1**).

**To legitimise talking about emotions.** By constructing previous trauma as relating to emotional difficulties that distinguish it from ADHD, staff could encourage practices that attended to emotional processes among both children and themselves.

we talk about it being (unclear) ADHD for example and the difference between that and something which is more trauma based, is em, with trauma you get an element of guilt and shame which they carry (I: hmm) which you don't get with ADHD purely. (**Shane, Service 2**).

if I'm asking them to talk about how they feel (I: yeah) [pause] there's an expectation on myself that I need to be able to do that. (**Damien, Service 2**).

**To justify a team approach to help children feel safe.** Another aspect of TC practice, which an ADHD diagnosis may not facilitate, is helping children to feel safe by them knowing that the staff team are holding them in mind.

the children know that they are going to be talked about and I think, they would be very unsafe [Cathy: yeah] if they weren't talked about... they need the whole team of adults to be thinking about them. (David, Service 2).

**To justify slow and gradual progress.** Citing known abuse added weight to the trauma and attachment construction and potentially served to convince those funding children's care that speedy outcomes were unrealistic.

local authorities want outcomes (I: hmm) [pause] for these children very quick (I: right) [pause] so that if a child has been abused for seven years (I: yeah) [pause] you know [pause] you're going to take at least another seven years to stop wobbling. (Andrea, Service 2).

**The role of parents in seeking a diagnosis of ADHD.** Parents were constructed as seeking an ADHD diagnosis because it can give them an explanation of their child's difficulties, provide access to resources and may relieve them of guilt or blame for their child's behaviour. This construction was used to both challenge the accuracy of the diagnosis and legitimise working sensitively with parents and the home environment.

There were differences between Service 1 and Service 2 in their descriptions of engaging parents or carers. This difference may reflect the differences in service structures. Service 1 may have more contact with parents and carers, as children go home during school holidays. Service 2 may have less contact with parents and carers of children living in the service full time, due to less transition between the two environments. Therefore, there may be less opportunity to engage with some parents or carers.

so they need to push for some things so that they can get something out... some understanding. (Sam, Service 1).

A diagnosis for some parents can mean that it's not their fault (I: ok). (Annie, Service 1).

C: what's the driving force about diagnoses of ADHD? (I: ok) it's and that could be very much parentally (I: yeah) driven (I: yeah) when times are bad but

B: maybe it's a guilt problem (I: hmmm)

C: Absolutely, absolutely and there's a reason to kind of pursue it

(Cathy & Bernie, Service 2)

it's incredibly hard for them to have their children here, (I: right) em, and I have every sympathy for them (I: yeah) so, I wouldn't like to be in their position (I: hmm) em [pause] but by and large most of them try and work with us (I: yeah) and we [pause] more and more as the years go by, more and more we try to work with the parents and not just with the child. (Trevor, Service 1).

how difficult it is in a way to integrate the parents into this process (I: hmmm) and you know you tentatively get them there but you didn't kind of get an openness. (Angela, Service 2).

### **Environmental Discourse: How the Environment Affects these Children's Behaviour**

This was a dominant discourse across both services and involved two discursive constructions in relation to the home environment (outside of the TC) and the school environment. The former was more evident in service 1, again perhaps reflecting differences in service structure, as noted above.

**The home environment outside of the TC.** Children's home environments were constructed as under resourced and not containing of trauma and attachment based behaviour associated with ADHD, in comparison to the TC environment. This construction was used to rationalise the use of medication at home.

I guess it is quite easy for us not to speak to diagnosis because (I: yeah) we have all the support we need here really (I: yeah ok) it's very different for parents (**Sam, Service 1**).

whereas if you've got Mr and Mrs Smith you know, at home, (I: yeah) and little Johnny is leaping around all day and doesn't go to sleep until 3 am and wakes up at 4 pm [pause] you know 4am, (I: yeah) then they're gone. (**Amy, Service 1**).

when you drop the medication are the parents still going to be able to manage the behaviour at home when they're not here? (I: ok) (unclear) so that does also come into it, we can't just take'em all off of it, we can cope with them but they do have to go home as well. (**Charlie, Service 1**).

**The school environment.** The school environment was constructed as contributing to behaviour associated with ADHD. This construction was used to legitimise adapting practice to children's behaviour to support their learning.

sometimes they can behave very differently here [pause] (I: yeah) to what they do at home emm so for example we had a child that showed us all of their difficulties (I: yeah) here but at home in their family they didn't show any difficulties (I: yeah) it was when they were in school settings that they were showing their difficulties. (**Gloria, Service 1**).

whether they actually have a diagnosis of ADHD or not doesn't make a difference to me, (I: yeah) it's whether their behaviours [pause] work well in a learning environment or don't work well. (**Bernie, Service 2**).

### **The Possibility of ADHD and Cautious use of Medication**

**Openness to medication as a help.** This was a minority discourse across both services in which there was more openness to the usefulness of medication, for a minority of children. Children for whom stimulant medication reduced behaviour associated with ADHD were constructed as possibly having ADHD, resulting from interaction between biology and environment.

This difficult behaviour was constructed as extreme, beyond the resources of the TC environment to contain and/or preventative to engagement in therapeutic work or education. These constructions legitimised the use of medication.

P: the drug therapy with what may well be ADHD ehh was calming, emm (I: hmmm)  
emm [pause] not a cure (I: yeah) it's a help (I: yeah) ...

A: you would say Extreme though

P: Oh yeah absolutely

#### **(Paul & Annie, Service 1)**

We got to the same place where I guess any number of parents or carers get to with individual children. **(Mark, Service 1).**

I certainly know that even in adult therapy communities that there is a role for medication for people who become so overwhelmed. **(Brigit, Service 2).**

**Difference between managers/consultants and other TC staff.** Discourse that legitimised openness to medication, and acknowledged biological contributory factors, was more evident among managers and consultants. This difference may reflect these participants' level of responsibility, or experience, about managing medication and liaising with external networks, including psychiatry, parents and carers.

I'm in favour of using Ritalin in certain situations... (I: yeah) and I've learned that a lot of therapeutic community workers would be horrified to hear that. **(David, Service 2)**.

well I'm much less hard lined now (I: ok) I mean... because I think there's a interplay going on between something ...that is organic and the environment (I: yeah, ok). **(David, Service 2)**.

when I sit in the team I feel a much more negative view (I:hmm) of medication from them (I: hmm) than I would say we express in here. **(Brian, Service 1)**.

Some staff members discussed keeping a critical perspective on TC practice, in the context of maintaining an openness to medication and the possibility that ADHD behaviour was not all indicative of trauma:

I tend to agree the vast majority of the time you work with the trauma and that's fine, (I:yeah) I am open to believing that we can be blinded by our own (I: yeah) belief. **(Mark, Service 1)**

### **Relationship with CAMHS**

This openness was balanced by caution about medication, constructed as having the potential to result in extreme change in personality and behaviour which could be upsetting to witness.

yeah [pause] that causes a lot of concern that people's full medication can do that to a child, as in "Should medication be allowed to do that to a child?". **(Brian, Service 1)**.

she has been on the medication for a year now and even last week or the end of term people were still saying "Is She Ok?". **Amy (Service 1)**.

Very very extreme (pause) change (pause) isn't it (pause) I can't bear to look at her, (I: really) I still find it really distressing ... she doesn't feel like the same child. **(Mary Service 1)**.



Medication was also constructed as having a negative effect on children's ability to learn when mismanaged by parents.

they are all taking the wrong dosage, you have got one on the roof ... (unclear)... and another one completely zonked. **(Charlotte, Service 2).**

These discursive constructions appeared to have the effect of legitimising the maintenance of a critical perspective on the effects of medication and the extent to which it is helping or not. This discourse also appeared to legitimise collaborative working with CAMHS.

when you build a relationship with CAMHS (I: yeah) then they, you know they understand what you do (I: yeah) you get a greater understanding of what they do until there follows trust there. **(Brian, Service 1).**

However, building such a relationship may be difficult, and some staff appeared both frustrated and resigned to this difficulty

C: We never get to see the CAMHS professionals (I: you don't?) they never attend at those meetings, no (I: right, right) no, they are too busy (I: Right) not available, understandable

F: That's right (group laughing) due to cuts in service

**(Charlotte & Frank, Service 2).**

### **Children's Understanding of their Diagnosis and Medication**

This discourse was more evident among managers, and consultants, possibly because of their roles, or experience, as outlined above. There were differences in how children were positioned in relation to parents and TC staff across the two services, based on age.

**Younger children.** In Service 1, the dominant discourse was about young children having a variety of understandings and positioned them as reliant on parents, carers and TC staff for their understanding.

In relation to a child for whom the medication did not affect his behaviour but gave him sensations in his body, that he did not like, and whom a psychiatrist had advised was receiving a subclinical dose, the following was reported about discussing coming off his medication:

He went quickly to “I need that tablet in the morning, that helps to control me (pause) my mother said I got ADHD, the tablet helps me with my concentration and to not be so restless”. **(Mark, Service 1).**

Some children were positioned as receiving unhelpful explanations from parents, that may have reinforced a negative sense of self-worth.

we were just chatting and he said “I’ve got ADHD and I’ve got Aspergers” [pause] and I said “do you understand what these mean?” (I: yeah) “well because I’m so naughty I can’t do these things” ... it’s just what his mum had told him [pause] (I: yeah) [pause] he’d been told in one way [pause] but [pause] not in a way that he could really, truly understand what it meant for him. **(Gloria, Service 1).**

Some children were positioned as using their diagnosis and medication to avoid responsibility.

I think there are other children, who it helps them abdicate any responsibility for their behaviour because they, you know, ‘I need my tablets because of X, Y and Z, and don’t expect me to manage myself, or take any responsibility for (I: ok) for what I’m doing’. **(Ellen, Service 1).**

In relation to explaining what their medication was for, some staff advocated for an honest explanation and one appropriate to their level of emotional and/or cognitive development.

But they're primary aged children and they often, their emotional age is often quite a few years younger than that too ... you might just say it's to help you feel a bit steadier or better. (Mary, Service 1).

I tend to believe that honesty is the best policy. (Brian, Service 1).

While these constructions legitimised providing children with reassurance about their medication as well as monitoring the impact of medication, they also appeared to position parents as having more influence in how children understood the diagnosis. Positioning parents in this way appeared to legitimise some uncertainty for TC staff about explaining the diagnosis.

does it come down to the parents to tell their child that they have a diagnosis whether its ADHD or not [pause] (I: yeah) [pause] emmm. Whose responsibility is it? (Gloria, Service 1).

There was a minority discourse in which some younger children were constructed as having the ability to understand their diagnosis and medication, informed by their parents in a way that can be helpful.

Bills' standard line, he understands, quite a rote now, is emm, "I've got ADHD, that means it's hard for me to concentrate and sit still (I: yeah) and my tablet can help with that"" (Amy, Service 1).

**Older Children.** In Service 2, older children were constructed as having the ability to develop their own understanding of the diagnosis and medication. This construction was used to position staff as supporting children to make decisions for themselves.

another boy who had that diagnosis who now is older says “Well I surely want to be reassessed” (I: yeah) “because I don’t think I’m the same boy I was when I was seven and I still have that label stuck onto me”. **(Cathy, Service 2)**.

if a young person refuses their medication then we will stick with that... if a young person who is of an age to make that decision, is making that decision, we would obviously provide as much support (unclear) we would work with professionals, therapists, with CAMHS (I: yeah) we’d be giving young people the supports to make the healthiest choice for them. **(Bright, Service 2)**.

## **Discussion**

Non-medical and environmental discourses were dominant among TC staff, in contrast with research and clinical practice organised around diagnosis.

### **Non-Medical Discourse**

Constructing the behaviour of children with a diagnosis of ADHD as being a result of trauma and attachment difficulties, and not an indication of a medical problem, is consistent with critics of biomedical discourse about ADHD (Timimi & Leo, 2009; Wheeler, 2010; Jackson Brown, 2005). Constructing ADHD as a potential mislabelling of trauma was consistent with concerns raised by previous authors that ADHD may be misdiagnosed among children that have experiences of developmental trauma (e.g. Klein et al., 2015). The possibility that parents may seek a diagnosis of ADHD because it may reduce feelings of guilt and blame is consistent with the views of Jackson Brown (2005) on the benefits, for parents, of a medical narrative about ADHD.

This language appeared to legitimize TC practice in which behaviour is considered a form of communication, medication is preferably not used, there is a focus on talking about emotions, a team of adults is needed to support children and progress is likely to be slow. The dominance of non-medical language in these TC environments appears to be counter to the tendency for the dominance of medical language in mainstream clinical practice, noted by Rostill and Myatt (2005).

### **Environmental Discourse**

The construction of children's home and school environmental context as contributory factors to difficult behaviour further undermined ADHD as indicative of a medical problem. There were parallels with the justification of medication in a TC environment and the home environment. The home environment was constructed as not containing of these children's

difficulties. Parents and carers were positioned as needing to use medication in a less resourced environment than the TC environment. Medication was justified in the TC environment when the limits of its resources had been reached and children could not be contained.

The use of medication was therefore constructed as contingent on the level of resources available in a child's environment and how difficult their behaviour was to contain. Arguably a change of environmental context is the primary intervention provided to children by placing them in a TC. The TC environment was constructed as better resourced to meet the containment needs of these children, not met in their primary caregiving environment. This construction is consistent with psychosocial discourse about ADHD, which emphasizes environmental context, and parent-child interactions as the primary contributory factors to ADHD behaviour (Erdman, 1998; Conway et al., 2011; Webb, 2013).

### **Biopsychosocial Discourse & Medication**

Biopsychosocial discourse was in the minority but had implications for supporting children who appeared to have the most complex difficulties. Medication was justified to help contain children so they could engage with therapeutic work and education. This discourse appeared to reflect a non-polarized position in which both biological and environmental contributory factors were acknowledged, consistent with Tharpar et al. (2013).

Medication was also constructed as causing personality and behavioural change which could be upsetting to witness. There may be uncertainty for some TC staff about whether medication is harmful, or if it helps to alleviate distress, rather than just reducing behavioural difficulties. This concern is consistent with those raised by previous authors that ADHD interventions may not be appropriate for children with experiences of DT because they are designed to manage behaviour, not to alleviate trauma related distress. (Weinstein et al. 2000; Thomas, 1995; Conway et al., 2011)

While the diagnosis of ADHD may reduce feelings of guilt and blame among parents It is possible that some TC staff may feel guilty about accepting the use of medication. Constructing medication as having negative, upsetting consequences legitimised maintaining a critical view as to whether its use is helpful. This practice included working collaboratively with CAMHS, consistent with Colley (2010).

### **Children's Understanding**

Some younger children were constructed as having a limited understanding of their diagnosis of ADHD, perceiving it as an indication that they are naughty. This construction is consistent with concerns about the iatrogenic effects of an ADHD diagnosis among children with experiences of DT (Rostill & Myatt, 2005).

Positioning parents as having more influence on younger children's understanding of the diagnosis appeared to legitimize uncertainty, among some TC staff, about explaining it themselves. If TC staff believed the diagnosis is inaccurate and children's ADHD-behaviour was due to parental abuse and neglect, this construction may have functioned to avoid parent blaming. This avoidance may fit with an aim of working sensitively with parents. Furthermore, parent blaming may be upsetting and difficult to hear for children who wish to maintain a positive view of their parents.

Older children, were constructed as having the ability to understand their diagnosis and medication in a way that was meaningful. This construction appeared hopeful that children, who may be more vulnerable to those in the general population to the iatrogenic effects of ADHD diagnosis, can develop a positive narrative about their diagnosis and medication, with support, consistent with Dallos & Vetere (2009).

## **Implications**

### **Clinical**

It appears that ADHD may not be spoken about with some children in TCs. Not speaking about it may be problematic if the child is spoken to about it with biomedical language, and/or in a way that is at odds with what these children may understand about themselves from TC staff. Some children may be left feeling confused, in transitions between home and TC environments. It therefore appears important to support children to develop their own understanding of their diagnosis that is useful for them.

Supporting the development of such an understanding may be easier with older children. However, considering how to do this with younger children may be useful. A collaborative approach may be needed between TCs, CAMHS, parents and the system involved in the care of these children. This kind of collaborative working appears to be the case, in relation to medication, for some children who present with more complex difficulties.

A concern raised in previous research about medication for children with a diagnosis of ADHD, vulnerable to DT, is that it may maintain children in unsafe caregiving environments (Webb, 2013). It appears, however, for some children in TCs, medication as part of multi-modal intervention aimed at attending to their attachment and trauma related emotional needs, may help maintain them in this safe caregiving environment.

To help maintain children in safe caregiving environments, and prevent placement breakdown, it may be valuable for CAMHS, and other non-TC settings, to consider the TC elements of multi-modal interventions provided through collaboration between TCs and CAMHS. These children may benefit from longer term interventions based on attachment and psychodynamic thinking, such as mentalisation based interventions, consistent with Conway et al. (2011). There are financial and resource implications for mainstream services, as noted



by some TC staff. A TC environment facilitates more direct and intense working than may be possible in CAMHS. However, there may be a role for clinical psychologists, and other CAMHS clinicians, in providing indirect interventions to parents, carers or mainstream residential care and educational settings.

### **Research**

Future research should consider examining the discourses of children, with experiences of DT, about their diagnosis of ADHD. It may be difficult to conduct such research with LAC due to their vulnerability. However, older children, or adult care leavers, may be interested in talking about their experiences.

It may be useful to examine discourses evident in other settings. For example, examining how practitioners, including clinical psychologists, involved in ADHD assessment and diagnosis with this population, talk to younger children about ADHD. Such research may provide insight into how practitioners talk with this population, and those responsible for their care, in a way that is sensitive to: their age; developmental stage, self esteem, and parent blaming. Examining interventions that develop from multidisciplinary collaboration for this population may also be valuable.

### **Limitations**

The results of the study lack generalisability outside of the two services who participated and it was limited by the lack of direct reporting from children. As noted above, the description of discourses presented is a construction subject to the author's bias'. The discourses were also influenced by the research process. Willig (2013) notes that making links between discursive constructions and their implications for subjective experience is the most speculative element of DA. It is possible that, because of the author's positioning as a trainee clinical psychologist (Appendix L), the author may have represented mainstream clinical practice that TCs liaise with. Participants may have presented discourse to the author that was biased on this basis. For example, participants who discussed openness to medication and working collaboratively with CAMHS, may have done so to a greater degree than they would normally within their TC setting. It is possible that this discourse is more thinly articulated in routine practice than reflected by the present study.

The use of focus groups, themselves, may have also biased the discourses presented by participants. The participants presented discourses within these groups in the context of participating in research and, in doing so, were removed from their everyday practice. Therefore, the content may have differed to what might have been gathered through naturally occurring conversation.

### **Conclusion**

The present study has outlined a rationale for an examination of TC staff discourse about children with a diagnosis of ADHD and experiences of DT. Concerns have been raised about the dominant biomedical model of understanding this diagnosis in this population. Despite the limitations of the study, the present research has revealed that the dominant discourses in two TC services is non-medical and environmental in nature, legitimising practice that attends to children's experiences of trauma and attachment difficulties.

This research has also revealed minority discourse indicating openness to medication and multi-modal intervention in collaboration with CAMHS, to support children to engage with therapeutic support and education within a TC. Future research should consider gathering the perspective of children, examining the language used by practitioners to talk to primary school aged children about ADHD and consider the form and effectiveness of interventions for this population, who both TCs and CAMHS may struggle to respond to, that develop from collaborative multidisciplinary work.

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**ADHD, DEVELOPMENTAL TRAUMA AND THERPAUTIC  
COMMUNITY DISCOURSES**

**Section C: Appendices of Supporting Material**

A thesis submitted in partial fulfilment of the requirements of  
Canterbury Christ Church University for the degree of  
Doctor of Clinical Psychology

APRIL 2017

SALOMONS

CANTERBURY CHRIST CHURCH UNIVERSITY

## Appendix A: Proposed Diagnostic Criteria for Developmental Trauma Disorder

### CONSENSUS PROPOSED CRITERIA FOR DEVELOPMENTAL TRAUMA DISORDER

van der Kolk et al., 2009

**A. Exposure.** The child or adolescent has experienced or witnessed multiple or prolonged adverse events over a period of at least one year beginning in childhood or early adolescence, including:

- A.1. Direct experience or witnessing of repeated and severe episodes of interpersonal violence; and
- A.2. Significant disruptions of protective caregiving as the result of repeated changes in primary caregiver; repeated separation from the primary caregiver; or exposure to severe and persistent emotional abuse

**B. Affective and Physiological Dysregulation.** The child exhibits impaired normative developmental competencies related to arousal regulation, including at least two of the following:

- B.1. Inability to modulate, tolerate, or recover from extreme affect states (e.g., fear, anger, shame), including prolonged and extreme tantrums, or immobilization
- B.2. Disturbances in regulation in bodily functions (e.g. persistent disturbances in sleeping, eating, and elimination; over-reactivity or under-reactivity to touch and sounds; disorganization during routine transitions)
- B.3. Diminished awareness/dissociation of sensations, emotions and bodily states
- B. 4. Impaired capacity to describe emotions or bodily states

**C. Attentional and Behavioral Dysregulation:** The child exhibits impaired normative developmental competencies related to sustained attention, learning, or coping with stress, including at least three of the following:

- C.1. Preoccupation with threat, or impaired capacity to perceive threat, including misreading of safety and danger cues
- C.2. Impaired capacity for self-protection, including extreme risk-taking or thrill-seeking
- C.3. Maladaptive attempts at self-soothing (e.g., rocking and other rhythmical movements, compulsive masturbation)
- C.4. Habitual (intentional or automatic) or reactive self-harm
- C.5. Inability to initiate or sustain goal-directed behavior

**D. Self and Relational Dysregulation.** The child exhibits impaired normative developmental competencies in their sense of personal identity and involvement in relationships, including at least three of the following:

- D.1. Intense preoccupation with safety of the caregiver or other loved ones (including precocious caregiving) or difficulty tolerating reunion with them after separation
- D.2. Persistent negative sense of self, including self-loathing, helplessness, worthlessness, ineffectiveness, or defectiveness
- D.3. Extreme and persistent distrust, defiance or lack of reciprocal behavior in close relationships with adults or peers
- D.4. Reactive physical or verbal aggression toward peers, caregivers, or other adults
- D.5. Inappropriate (excessive or promiscuous) attempts to get intimate contact (including but not limited to sexual or physical intimacy) or excessive reliance on peers or adults for safety and reassurance

D.6. Impaired capacity to regulate empathic arousal as evidenced by lack of empathy for, or intolerance of, expressions of distress of others, or excessive responsiveness to the distress of others

**Posttraumatic Spectrum Symptoms.** The child exhibits at least one symptom in at least two of the three PTSD symptom clusters B, C, & D.

**Duration of disturbance** (symptoms in DTD Criteria B, C, D, and E) at least 6 months.

**Functional Impairment.** The disturbance causes clinically significant distress or impairment in at two of the following areas of functioning:

- Scholastic: under-performance, non-attendance, disciplinary problems, drop-out, failure to complete degree/credential(s), conflict with school personnel, learning disabilities or intellectual impairment that cannot be accounted for by neurological or other factors.
- Familial: conflict, avoidance/passivity, running away, detachment and surrogate replacements, attempts to physically or emotionally hurt family members, non-fulfillment of responsibilities within the family.
- Peer Group: isolation, deviant affiliations, persistent physical or emotional conflict, avoidance/passivity, involvement in violence or unsafe acts, age inappropriate affiliations or style of interaction.
- Legal: arrests/recidivism, detention, convictions, incarceration, violation of probation or other court orders, increasingly severe offenses, crimes against other persons, disregard or contempt for the law or for conventional moral standards.
- Health: physical illness or problems that cannot be fully accounted for physical injury or degeneration, involving the digestive, neurological (including conversion symptoms and analgesia), sexual, immune, cardiopulmonary, proprioceptive, or sensory systems, or severe headaches (including migraine) or chronic pain or fatigue.
- Vocational (*for youth involved in, seeking or referred for employment, volunteer work or job training*): disinterest in work/vocation, inability to get or keep jobs, persistent conflict with co-workers or supervisors, under-employment in relation to abilities, failure to achieve expectable advancements.

**Appendix B: Summary of Literature Reviews**

Table 1

*Summary of Literature Reviews*

<b>Author(s)</b>	<b>Weinstein et al. (2000)</b>	<b>Szymanski et al. (2011)</b>	<b>Webb (2013)</b>	<b>Klein et al. (2015)</b>
<i>Design</i>	Literature Review	Literature Review	Literature Review	Literature Review
<i>Location</i>	USA	USA	United Kingdom	Canada
<i>Aim</i>	To describe the psychological impact of child sexual abuse and possible consequences for misdiagnosing ADHD among sexually abused children	Two Research Questions: Is exposure to trauma a risk factor for the development of ADHD?  Is the diagnosis of ADHD a misrepresentation of symptoms related to traumatic exposure?	To examine the hypothesis that children who receive a diagnosis of ADHD represent a heterogeneous group: for some children ADHD is largely genetic; some children have and ADHD ‘phenocopy’ because of adverse early childhood experiences, particularly those exposed to violence and poverty; for some children ADHD is a result of both biological and environmental factors	Research Questions: are current diagnostic guidelines for ADHD acceptable for vulnerable children involved with Child Protection Services (CPS)

## Appendix C: Literature Reviews Quality Appraisal\*

Table 1

*Literature Reviews Quality Appraisal*

<b>Author(s)</b>	<b>Klein et al. (2015)</b>	<b>Szymanski et al. (2011)</b>	<b>Webb (2013)</b>	<b>Weinstein et al. (2000)</b>
<i>Did the review address a clearly focused question?</i>	Yes	Yes	Yes	No
<i>Were explicit methods used to determine which articles to include in the review?</i>	Yes	Not reported	Not reported	Not reported
<i>Were comprehensive search methods used to locate relevant studies?</i>	Yes	Not reported	Not reported	Not Reported
<i>Did the review's authors do enough to assess the quality of the included studies?</i>	No	No	No	No
<i>How precise are the results?</i>	Not assessed	Not assessed	Not assessed	Not assessed
<i>Can the results be applied to the local population?</i>	No	No	No	No
<i>Were all important outcomes considered?</i>	Yes	No	No	Yes

\*Adapted from CASP (2013) and Oxman and Guyatt (1988)

## Appendix D: Literature Review Conclusions

Table 1

*Literature Review Conclusions*

Author(s)	Klein et al. (2015)	Szymanski et al. (2011)	Webb (2013)	Weinstein et al. (2000)
<i>Conclusions</i>	<p>Children involved with CPS are diagnosed with ADHD at higher rates than the general population. Children placed in group care settings receive diagnoses of ADHD more frequently than those in family based foster care or kinship care. Children in care are prescribed stimulants at higher rates than the general population. Children with maltreatment histories are more likely to have factors, including PTSD, contributing to difficulties that may overlap or mimic ADHD symptoms. These factors are not considered within diagnostic guidance for ADHD in Canada. Diagnosis of ADHD should be conducted in an MDT</p>	<p>There is mixed evidence for a relationship between trauma and ADHD, possibly due to limited conceptualisation of trauma, within the construct of PTSD.</p> <p>There is a high prevalence of ADHD in child mental health populations &amp; there are overlaps in the diagnostic criteria for ADHD &amp; PTSD. It is possible that clinicians' may mistake children's difficulties, as an indicator of ADHD, when at least some of these children may have experienced trauma.</p>	<p>Evidence that ADHD is primarily genetic in nature is well established. However, the research on which this is based is highly under-representative of maltreated children. Children exposed to violence display behaviour that can easily attract a diagnosis of ADHD when this behaviour is related to fear &amp; a lack of safety in their caregiving environment. Children from lower socioeconomic backgrounds with a diagnosis of ADHD are more likely to represent those with an ADHD 'phenocopy', to which their environment is a more significant contributory factor than their biology.</p>	<p>Both PTSD and ADHD are frequent diagnoses among children who have been sexually abused. There should be an emphasis on differential diagnosis of PTSD in ADHD assessment because of similarity in their diagnostic criteria. If ADHD is misdiagnosed when PTSD would be more appropriate children may receive inappropriate and/or unhelpful interventions. This could result in miscalculation, untreated trauma and a negative impact on the self-esteem of the child</p>



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	team setting which considers potential maltreatment			
<i>Proposed ADHD / DT relationship</i>	Children that have had experiences of developmental trauma may present with difficulties that look like ADHD	Trauma may be a contributory factor to ADHD symptoms or due to similarity in diagnostic criteria for both, ADHD may be misdiagnosed when a trauma diagnosis would be more appropriate	Experiences of developmental trauma may lead to an 'environmental' version of ADHD	ADHD may be misdiagnosed when children have experienced trauma as a result of sexual abuse
<i>Language re: ADHD</i>	Diagnostic	Biopsychosocial	Biopsychosocial	Diagnostic

## Appendix E: Summary of Individual Studies

Table 1:

*Individual Studies (Authors B – E)*

Author(s)	Briscoe-Smith & Hinshaw (2006)	Conway et al. (2011)	Cuffe et al. (1994)	Evinç et al. (2014)
<i>Design</i>	Case Control	Case control	Case Series	Case control
<i>Location</i>	USA	USA	USA	Turkey
<i>Aim</i>	To examine if a sample of preadolescent girls diagnosed with ADHD had higher rates of documented abuse than a matched non-ADHD control sample. To examine if those with an ADHD diagnosis and documented abuse were more impaired in several psychological domains, compared to those with a diagnosis of ADHD and no documented abuse.	To examine the prevalence of complex trauma, in a child mental health inpatient population, among children diagnosed with ADHD compared to those without an ADHD diagnosis	To examine the relationship between ADHD and PTSD among traumatised children	Aimed to compare mothers of children diagnosed with ADHD with mothers of children with no mental health diagnosis, in relation to abusive discipline.
<i>Sample</i>	ADHD (n=140) Control (n=88)	Not clear due to errors in reporting	4 cases of children that met criteria for both ADHD & PTSD are presented	ADHD group: 100 children & their mothers No diagnosis: 25 children and their mothers
<i>Age</i>	ADHD group: Mean (SD): 9.6 years (1.68)  Control group: Mean (SD): 9.4 years (1.65)	ADHD group: Mean (SD): 13.93 years (2.51)  No ADHD group: Mean (SD): 11.05 years (2.47)	12 years (n=1) 5 years (n=2) 8 years (n=1)	ADHD group Mean (SD): 9.1 years (1.92)  Control group Mean (SD): 8.26 years (1.43)
<i>Gender</i>	All Female	ADHD group: 75% male No ADHD group: 58.2% male	Male: Female = 2:2	Total Sample Male: Female = 88: 37

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<i>Ethnicity</i>	Total Sample: 53% white; 27% black; 11% Latina; 9% Asian American/Pacific Islander	<p>ADHD Group:                      African American: 71.9%                      Hispanic: 12.5%                      Caucasian: 6.3%                      Other: 9.4%</p> <p>No ADHD Group:                      African American: 56.4%                      Hispanic: 29.1%                      Caucasian: 9.1%                      Other: 5.4%</p>	NR for all	NR
<i>Identification of ADHD</i>	For ADHD diagnosis: CBCL & SNAP as screening measures; Parent administered DISC-IV	Data on ADHD & Trauma history drawn from hospital charts	NR	<p>How ADHD diagnoses were identified among participants NR</p> <p>ADHD-behaviour among participants measured with:</p> <p>Conners Parent rating scale (CPRS; Conners, 1997)</p> <p>Adult ADD/ADHD DSM-IV rating scale (Turgay, 1995)</p>
<i>Identification of DT</i>	Abuse identified through multiple sources incl. medical records, parent interview; child protection service reports	<p>Trauma history drawn from hospital charts</p> <p>Hospitalized Child and Adolescent Trauma and Psychopathology (HCATP; unpublished) Questionnaire used to measure complex trauma</p>	NR	<p>Frequency of verbally and physically abusive parenting practices gathered through child and mother interview.</p> <p>Childhood Trauma Questionnaire (CTQ; Aslan &amp; Alparslan, 1999)</p> <p>Survey of Standards for Discipline (Simsek Orhon, Ulukol, Bingoler &amp; Gulnar, 2006)</p>

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				Young Parenting Inventory (YPI, Young, 1994)
<i>Other outcome measures</i>	CBCL (Achenbach, 1991) parent and teacher; children's depression inventory (CDI; Kovacs, 1992); observations of externalising behaviours; peer ratings of behaviour	NA	NA	Rosenberg Self Esteem Scale (Rosenberg, 1965) Child Depression Inventory (CDI; Kovacs, 1985) Social Support Appraisals Scale for Children (APP; Gokler, 2007) Beck Depression Inventory (BDI; Beck et al., 1961) The Turkish Ways of Coping Inventory (TWCI; Gencoz, Gencoz & Bozo, 2006) Young Parenting Inventory (YPI, Young, 1994) Basic Personality Traits Inventory (BPTI; Gencoz & Oncul, 2012)

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Table 2

*Individual Studies (Authors F – M)*

<b>Author(s)</b>	<b>Famularo et al. (1992)</b>	<b>Heffron et al. (1987)</b>	<b>Lehmann et al. (2013)</b>	<b>Merry &amp; Andrews (1994)</b>
<i>Design</i>	Case control	Case Control	Prevalence	Prevalence
<i>Location</i>	USA	USA	Norway	New Zealand
<i>Aim</i>	To examine the frequency of mental health diagnoses among maltreated children compared to controls	To examine the association between ADD and abuse	To examine the prevalence of mental health diagnoses, and risk factors for diagnoses, among foster children	To examine the prevalence of mental health diagnoses among children 12 months after disclosure of sexual abuse
<i>Sample Size</i>	61 maltreated children compared to 31 controls who had no history of abuse	115 records of children referred for overactivity, comparing physical abuse among those who met criteria for ADD with hyperactivity (n=75) and those who did not (n=40)	n=279	n = 66
<i>Age</i>	Maltreated group: Range: 5 to 10 years Mean: 93.2 months (7.7years)  Control Group: Range: 5 to 10 years Mean: 93.8 months (7.8 years)	ADD group:	Range: 6 to 12 years Mean (SD): 8.97 years (2.04)	Mean Age (SD) = 8 years (3.63)
<i>Gender</i>	Male: Female Maltreated group: 27: 34 Control group: 15: 20	Range: 3 to 16 years	Male: Female: 148:131 (47% female)	Male: Female = 11:55
<i>Ethnicity</i>	Maltreatment White: 48 Black: 35 Hispanic: 8 Other: 8	Mean: 7.6 years	NR	European: 54 Maori: 9 Other: 3

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	Control White: 40 Black: 43 Hispanic: 11 Other: 6			
<i>Identification of ADHD</i>	DSM-III-R criteria with DICA structured interview with parents and child		Development and Well-Being Assessment (DAWBA; Goodman, Ford, Richards, Gatward & Meltzer, 2000) to assess DSM-IV mental health diagnoses or, previous diagnosis of ADHD by a specialist.	Child psychiatric interview using DSM-III-R criteria for diagnosis. Parents interview using the DISC-2 (Shaffer et al., 1989), completed the General Health Questionnaire (Goldberg, 1981) and the Life Events Inventory (Coddington, 1972)
<i>Identification of DT</i>	Maltreatment resulting in children's removal from parents identified through court records	No-ADD group:	Child welfare history provided via questionnaire to participant's child welfare case worker.	Sexual abuse data collected from primary caseworker at time of disclosure
<i>Other outcome measures</i>	NA	Range: 2 to 17 years	NA	NA

## Appendix F: MMAT Quality Appraisal of Individual Studies

Table 1

*Case Control Studies*

<b>Author(s)</b>	<b>Briscoe-Smith &amp; Hinshaw (2006)</b>	<b>Conway et al. (2011)</b>	<b>Evinç et al. (2014)</b>	<b>Famularo et al. (1992)</b>	<b>Heffron et al. (1987)</b>
<b>Study type</b>	<b>Case Control</b>	<b>Case Control</b>	<b>Case Control</b>	<b>Case Control</b>	<b>Case Control</b>
Are participants recruited in a way that minimizes selection bias?	Yes	Yes	Yes	Yes	Yes
Are measurements appropriate regarding the exposure/intervention and outcomes?	Yes	No	Yes	Yes	Yes
In the groups being compared, are the participants comparable, or do researchers take into account (control for) the difference between these groups?	Yes	No	Yes	Yes	No
Are there complete outcome data (80% or above), and, when applicable, an acceptable response rate (60% or above)?	Yes	No	Yes	Yes	Yes

*Note:* A scoring metric ranging from \*(25%) to \*\*\*\*(100%) is provided for the MMAT however, it is noted that an overall quality score may not be informative, and the criteria can be used to provide a descriptive summary of methodological quality.

Table 2

*Prevalence Studies and Case Series*

<b>Author(s)</b>	<b>Cuffe et al. (1994)</b>	<b>Lehmann et al. (2013)</b>	<b>Merry &amp; Andrews (1994)</b>
<b>Study Type</b>	<b>Case Series</b>	<b>Prevalence</b>	<b>Prevalence</b>
Is the sampling strategy relevant to address the quantitative research question?	Yes	Yes	Yes
Is the sample representative of the population understudy?	Yes	Yes	Yes
Are measurements appropriate (clear origin, or validity known, or standard instrument)?	Yes	Yes	Yes
Is there an acceptable response rate (60% or above)?	n/a	Yes	Yes



## Appendix G: Summary of Individual Study Findings

Table 1

*Individual Studies (Authors B – E)*

Author(s)	Briscoe-Smith & Hinshaw (2006)	Conway et al. (2011)	Cuffe et al. (1994)	Evinç et al. (2014)
<i>Findings</i>	<p>20 girls with a diagnosis of ADHD (14.4% of the ADHD sample) had documented histories of abuse (10 sexual abuse; 4 neglect; 3 physical abuse; 2 more than one type of abuse; 1 witnessed domestic violence), compared to 4 girls in the control group (4.5% of controls). This difference was statistically significant (<math>p &lt; 0.05</math>)</p> <p>Girls in the 'ADHD &amp; abuse' subgroup (<math>n=20</math>) had additional diagnoses of ODD compared to about half of the 'ADHD &amp; no abuse' (<math>n=120</math>) subgroup. This difference was statistically significant (<math>p &lt; 0.001</math>)</p> <p>The ADHD &amp; abuse subgroup had significantly more externalising problems, peer ratings of aggression and staff observations of aggressive and non-compliant behaviour compared to those with ADHD &amp; no abuse (<math>p &lt; 0.05</math>)</p>	<p>Children diagnosed with ADHD among a child mental health inpatient population, appear to experience a greater number of disruptive events in their attachment relationships, than children without an ADHD diagnosis</p> <p>Significantly higher scores for attachment complex trauma on the HCAPT for the ADHD group compared to the non-ADHD group (<math>p &lt; 0.01</math>).</p> <p>Attachment complex trauma related to several sources of trauma: being placed in a foster care placement; physical abuse; sexual abuse; maltreatment; parent or carer's death. Maltreatment (62.5% to 36.4%) and foster care placement (59.4% to 41.8%) showed the highest proportional differences between the groups.</p>	<p>3 of 4 cases had histories of prolonged sexual abuse, (in addition to physical abuse in one case) within their caregiving environments between the ages of 9 months &amp; 11 years. One of these three children had ADHD &amp; LD diagnosed prior to abuse. The fourth child experienced a non-maltreatment traumatic event.</p>	<p>Significantly higher scores for approval of verbally abusive discipline among parents of children with ADHD compared to parents of children without ADHD (<math>p &lt; 0.05</math>)</p> <p>Significantly higher scores for approval of physically abusive discipline among parents of children with ADHD-hyperactive type compared to parents of other children (<math>p &lt; 0.05</math>)</p> <p>Significant associations between child hyperactivity scores, maternal ADHD related problems and approval of verbal and physical discipline. (<math>p &lt; 0.01</math>)</p> <p>Maternal approval of verbally abusive discipline was a predictor of children's hyperactivity (<math>p &lt; 0.05</math>) and</p>

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	<p>The ADHD &amp; abuse group experienced significantly greater peer rejection compared to those with ADHD and no abuse (<math>p &lt; 0.005</math>).</p> <p>There were significant correlations between:          Abuse &amp; aggression (<math>r = 0.18</math>, <math>p &lt; 0.05</math>)          Abuse &amp; Rejection (<math>r = 0.28</math>, <math>p \leq 0.01</math>)          aggression and rejection (<math>r = 0.50</math>, <math>p &lt; 0.005</math>)</p> <p>Aggression partially mediated the relationship between abuse and rejection (<math>Z = 3.57</math>, <math>p &lt; 0.01</math>)</p>	<p>No statistically significant difference between the groups re: physical &amp; sexual abuse (<math>p &gt; 0.05</math>)</p>		<p>aggressive behaviour. (<math>p &lt; 0.001</math>)</p> <p>Mothers who reported a perception of being sexually abused in their childhood were more likely to approve of verbally abusive discipline. (<math>p &lt; 0.05</math>)</p>
<p><i>Proposed ADHD/DT relationship</i></p>	<p>A complex relationship proposed between ADHD, abuse &amp; trauma</p> <p>ADHD and abuse as separate additive factors contributing to childhood psychological difficulties.</p>	<p>Complex relationship between trauma and ADHD is proposed. Authors argue it is not possible to completely separate the difficulties related to ADHD &amp; trauma. Parallels between the difficulties presented and experienced by children with a diagnosis of ADHD, and those who have experiences of DT re: their attachment relationships. Author's propose deficits in mentalisation are a common</p>	<p>Two hypotheses put forward: ADHD increases risk of trauma; ADHD-like syndrome as a result of trauma</p>	<p>Complex relationship between ADHD and abuse within parent child interactions; potential cycle of abuse outlined in the context of parental ADHD behaviour, considered heritable, and possible intergenerational abuse</p>

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		factor and therefore this should be a focus of intervention for children with a diagnosis of ADHD		
<i>Language re: ADHD</i>	Medical	Biopsychosocial	Medical	Medical

Table 2

*Individual Studies (Authors F-M)*

Author(s)	Famularo et al. (1992)	Heffron et al. (1987)	Lehmann et al. (2013)	Merry & Andrews (1994)
<i>Findings</i>	<p>24.59% met criteria for ADHD compared to 2.86% of control children.</p> <p>39.34% met criteria for PTSD and 22.95% met criteria for ODD with none of the control group meeting criteria for either of these diagnoses</p> <p>There was a discrepancy between child and parent report of PTSD. On the basis of parent reports 21% of children met diagnostic criteria for PTSD. Parents reported more difficulties related to conduct and mood than children.</p>	<p>No significant difference (<math>p &gt; 0.30</math>) in prevalence of physical abuse between ADD and no ADD children. Prevalence of physical abuse was 14.6% among ADD children and 12.5% among non-ADD children, both higher than prevalence of abuse in the general population, reported as 2.2%</p>	<p>90% of the sample experienced serious neglect</p> <p>19% of the sample had a diagnosis of ADHD (<math>n=53</math>)</p> <p>36 of 53 (67.9%) children with an ADHD diagnosis had an additional diagnosis of an emotional disorder (such as separation anxiety) or behavioural disorder (such as oppositional defiant disorder)</p> <p>Children who had been exposed to violence (including threatening or abusive interactions from primary caregiver to child) were more likely to receive a diagnosis of ADHD. (<math>p &lt; 0.05</math>)</p> <p>Younger age at first placement increased the likelihood of receiving an ADHD diagnosis. (<math>p &lt; 0.001</math>) Children with an ADHD diagnosis also had a lower number of placements. (<math>p &lt; 0.001</math>)</p>	<p>41 (63.5%) met criteria for a diagnosis; 36.4% met criteria for 2 or more diagnoses. 18.2% met criteria for PTSD; 13.6% met criteria for ADHD (twice that of ADHD diagnoses among a non-abused community sample, details of which are not reported)</p>

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<p><i>Proposed ADHD/DT relationship</i></p>	<p>ADHD a contributory factor to maltreatment; ADHD behaviour following abuse proposed as post traumatic reaction. Distinguishing between these possibilities is difficult, when, for example, it is not possible to confirm if abuse occurred before or after onset of ADHD-behaviour. Parents also noted as unreliable reporters of children's trauma re: post traumatic flashbacks</p>	<p>ADD a contributory factor to abuse; no ADD children responding to abuse through overactivity.</p>	<p>ADHD as a contributory factor to parental distress leading to earlier foster care placement for children</p>	<p>ADHD a predisposing factor to sexual abuse; PTSD a consequence of abuse</p>
<p><i>Language re: ADHD</i></p>	<p>Medical</p>	<p>Diagnostic</p>	<p>Diagnostic</p>	<p>Medical</p>

**Appendix H: Focus Group Interview Questions**

Closed	Open
<b><i>Understanding ADHD</i></b>	
<p>What proportion of children in your care have a diagnosis of ADHD?</p> <p>Is ADHD common among children in your care?</p> <p>(How common is it for a children in your care to have a diagnosis of ADHD?)</p> <p>Is this common?</p> <p>Has this changed over time?</p> <p>How has this changed over time?</p>	<p>Can you tell me about this?</p>
	<p>What kinds of behaviours do you particularly think about in relation to children with ADHD?</p>
	<p>What do you make of these types of behaviours?</p>
<p>In what ways does a diagnosis influence how you understand these behaviours?</p>	<p>In what ways is a diagnosis helpful or unhelpful in understanding these behaviours?</p>
<p>What other understandings do you know about that attempt to explain ADHD?</p>	
<p>How do these other explanations fit in with your thinking?</p>	

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	How else do you understand these behaviours?
Have you changed your views about ADHD since coming to work here?  In what way (if at all) does working here influence your views about ADHD?	
What kinds of things come up in community meetings about ADHD?	
Can you think of an example of when you might have talked to a colleague about ADHD?	What kinds of conversations do you have with each other about ADHD?
Are there any types of behaviour that tend to be talked about in the community more than others?	Can you tell me about these
<b><i>Biological Considerations</i></b>	
Do you work with CAMHS? / Do CAMHS tend to be involved with these children?	How do you find working with CAMHS (and/or other diagnosing agencies)?  What is it like working with CAMHS?
Would there be a treatment or care plan from CAMHS if they are involved?	
What kind of involvement might a CAMHS psychiatrist have?	
What kind of involvement might a CAHMS psychologist have?	

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<p>How does this fit with how you work?</p>	<p>What is helpful or unhelpful about working with CAMHS?</p> <p>In what ways does this fit (or not) into how you work with children here?</p>
<p>Do these children tend to be prescribed medication?</p>	
<p>If / when children are prescribed medication how is this incorporated into their care here?</p>	<p>What do you do (or not do) to incorporate this into their care?</p>
<p><b><i>Responding to and caring for children</i></b></p>	
	<p>In what ways does what you think about ADHD affect your care for these children? (How else does what you think about ADHD affect your care for these children?)</p>
	<p>What if anything do you differently for or with children with a diagnosis of ADHD than for those without a diagnosis?</p>
<p>Can you describe an example from a recent interaction with a young person which would illustrate your way of working with children with ADHD?</p>	
	<p>What sense do you think young people make of their diagnosis?</p>
<p>Can you give an illustration of a conversation that you have had with a young person about ADHD?</p>	



## **Appendix I: Information Sheet**

### **Making Sense of ADHD in Therapeutic Communities**

#### **Information Sheet**

**26.11.2014**

You have been invited to take part in a research study which is part of a Clinical Psychology Doctorate training programme in the Department of Applied Psychology at Canterbury Christ Church University. This sheet will provide you with information about why this research is taking place and what will be involved. This is important in helping you decide if you would like to participate. If you would like to learn more, if something is not clear or if you would like to ask me anything at any stage please feel free to ask. You can contact me on [c.murphy640@canterbury.ac.uk](mailto:c.murphy640@canterbury.ac.uk)

#### **What is the purpose of this research project?**

The aim of the study is to explore how therapeutic community practitioners understand the behaviour of children diagnosed with ADHD. There is currently limited research on how professional carers working with children who have experienced early trauma and have a diagnosis of ADHD make sense of their behaviour. I believe that gathering such information can help develop a better understanding of how to support these children.

#### **Who is carrying out this project?**

This project is being carried out by Colin Murphy, Trainee Clinical Psychologist, under the supervision of Dr Patricia Joscelyne at the Salomons Centre for Applied Psychology, Canterbury Christ Church University and Dr. Louise Richards, Watford Child and Family Clinic.

#### **Why have I been approached to take part in this research?**

It would be useful to gain insight into your understanding as you work very closely with children diagnosed with ADHD and have very valuable experience to draw on.

#### **Do I have to take part?**

Taking part is undertaken on a voluntary basis. Your involvement is completely separate from your role at work. Whether you take part or not will have no bearing on your work. It is completely up to you whether to take part or not. If you decide to take part you will be asked to sign a consent form where you will indicate that you have read this information leaflet, that you agree to take part, that you are aware of your right to withdraw at any time and that you are aware of the procedure should you wish to make a complaint about any aspect of the research or the research process.

#### **What is involved?**

The research will involve undertaking a focus group with me at your place of work. This will last for approximately 90 minutes to two hours. The interview will be recorded on a dictaphone, which I will listen to and transcribe. All identifying information will be anonymised. This information will be kept on an encrypted memory stick and any printed information will be kept at Salomons campus of Canterbury Christ Church University in a locked filing cabinet. All the information and material will be destroyed in 10 years.

#### **Will the information I share be kept confidential?**

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All the information collected during this research project is kept strictly confidential at all times. The information you provide will remain confidential and only be used for the purposes of this research.

The focus group will be recorded using a dictaphone which will be transcribed and some quotes of your comments may be included in the final report. What you say, which could include direct quotes, is likely to be included in the study, however, no identifying information will be included.

### **How will this information be managed and stored?**

Data will be made anonymous, encrypted and stored on a password protected computer during the course of the project. After completion of the project data will be stored on a password protected CD in the Salomons centre's office in a locked cabinet and in my possession for 10 years after the study is completed, after which time it will be destroyed.

### **What will happen to the information that I share during the focus group?**

I will present back to you and the service my results and ask for any feedback which I will include in the final report. A written summary will be available to you once completed. I plan to publish the findings in a research journal for which all information will remain anonymous.

### **Does this research have ethical approval?**

Yes, this project has full ethical approval from Canterbury Christ Church University

### **What should I do if I want to take part?**

Please pass your name to [name removed for submission], Head of Training, and I will be in touch shortly.

### **What should I do if I want to make a complaint?**

If you would like to make a complaint you can contact the Professor Paul Camic, Research Director, Salomons Centre for Applied Psychology at [paul.camic@canterbury.ac.uk](mailto:paul.camic@canterbury.ac.uk)

**If you have any questions or should you wish to withdraw you can contact me at [c.murphy640@canterbury.ac.uk](mailto:c.murphy640@canterbury.ac.uk)**

## Appendix J: Consent Form

### Consent Form

You have been asked to participate in a focus group as part of a research project into how Therapeutic Communities make sense of the behaviour of children diagnosed with ADHD

I confirm that I have read and understand the information sheet dated 26.11.2014 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation is not connected to my role within (enter service name) and is not expected as part of my job.

I understand that If I decide to withdraw or not take part my position in (enter service name) will not be effected in any way.

I understand that my participation is voluntary and I may withdraw at any stage, without giving a reason.

I agree that anonymous quotes from my interview may be used in published reports of the study findings

I agree to take part in the above study.

Name of Participant \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Name of Person taking consent \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

**Appendix K: Demographic Questionnaire.**

**Making Sense of ADHD in Therapeutic Communities**

**Demographic Information Sheet**

1. Gender: \_\_\_\_\_
2. Age: \_\_\_\_\_
3. Ethnic Background:  
\_\_\_\_\_
4. Job Title:  
\_\_\_\_\_
5. How long have you been working as a therapeutic care worker?  
\_\_\_\_\_
6. Have you undertaken any training in therapeutic childcare? Yes/No
7. Have you undertaken any other training you feel is relevant to your role? Yes/No
  - a. If yes, please give details:  
\_\_\_\_\_
8. What age group of children do you work with?  
\_\_\_\_\_

**Appendix L: Ethics Approval**

This has been removed from the electronic copy.

**Appendix M: Participant Demographics**

Service & Focus Group (FG)	Age	Gender	Ethnicity	Job	Length of service	Training in Therapeutic Care	Age group working with
Service 1, FG 1	54	F	White British	Therapeutic Care worker	7.5 years	Y	5 – 13 years
Service 1, FG 1	26	F	White British	Therapeutic Care worker	5 months	Y	5 – 11 years
Service 1, FG 1	56	M	English	Senior Teaching Assistant	NR	Y	11 – 12 years
Service 1, FG 1	27	M	White British	Therapeutic Care Worker	5 years	Y	5 – 13 years
Service 1, FG 1	22	M	White British	Therapeutic Care Worker	1 year	Y	8 – 12 years
Service 1, FG 2	34	F	British	Senior Therapeutic Care Worker	11 years	Y	6 – 12 years
Service 1, FG 2	32	F	White British	Therapeutic Care Worker	8 years	Y	5 – 13 years
Service 1, FG 2	53	M	White British	Therapeutic Care Worker	11 years	Y	7 – 12 years
Service 1, FG 2	26	F	White British	Teaching Assistant	5 months	N	5 – 13 years
Service 1, FG 2	35	M	White	Deputy Team Leader	11 years	Y	6 – 12 years
Service 1, FG 3	43	F	British	House manager	21 years	Y	5 – 13 years
Service 1, FG 3	43	F	English	House manager	16 years	Y	5 – 13 years
Service 1, FG 3	36	F	White British	House manager	10 years	Y	6 – 13 years
Service 1, FG 3	39	M	White British	House manager	13 years	Y	5 – 13 years
Service 1, FG 3	39	M	White British	House manager	17 years	Y	5 – 13 years

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Service 2, FG 1	46	F	White British	School manager	4 years	Y	6 – 16 years
Service 2, FG 1	47	M	White British	Teacher	5 years	Y	7 – 16 years
Service 2, FG 1	47	F	White British	Special Education Needs (SEN) teacher	3 years	Y	6 – 16 years
Service 2, FG 1	46	F	White British	SEN teacher	3 years	Y	7 – 16 years
Service 2, FG 1	52	F	White British	Head of teaching	8 years	Y	6 – 16 years
Service 2, FG 1	40	M	White British	Head of learning support	8 years	Y	6 – 16 years
Service 2, FG 2	49	F	White British	Educational Practitioner/Lecturer	18 years	N; Education training	12 years upwards
Service 2, FG 2	63	F	White British	Play Therapist	17 years	N; Play therapy training	9 years upwards
Service 2, FG 2	66	M	White British	Organisational Consultant	N/A	N; Psychodynamic training	N/A
Service 2, FG 2	65	F	White Scottish	Child adolescent & Family Therapist	14 years	N; Child, adolescent & family therapy training	6 – 18 years
Service 2, FG 2	44	F	White British	Psychotherapist	2 years	N; Attachment & trauma psychotherapy training	6 – 18 years
Service 2, FG 3	29	M	White British	Deputy Manager (residential care)	4.5 years	Y	12 – 18 years
Service 2, FG 3	23	M	White British	Therapeutic carer	7 months	Y	7 – 12 years
Service 2, FG 3	39	F	White British	Service Manager (residential care)	6 years	Y	6 – 18 years

## **Appendix N: Six-step Discourse Analytic Process**

### **Discourse Analytic Process Guidance (Willig, 2013)**

#### **1. Discursive Constructs**

Identify the different ways discursive objects (DO; concepts which the study aims to explore) are constructed in the text, through explicit and implicit reference. Five DOs were identified as relevant:

“ADHD” “the environment” “medication” “trauma” “parents” “children’s understanding”

#### **2. Discourse**

What are the different ways the DOs are constructed and what wider discourse(s) are they located within?

#### **3. Action Orientation**

What is the language doing? What is gained from constructing the DOs in different ways, how does one construction relate to other constructions in the text?

#### **4. Positioning**

What subject positions do the discursive constructions offer? What positions are offered for people to take up, in relation to rights and duties, within meanings constructed?

#### **5. Practice**

What opportunities are opened up or closed down by the discourses? How does this impact clinical practice? (What practice(s) is seen as legitimate?)

#### **6. Subjectivity**

What can be felt, thought and experienced from within subject positions? (and what wider perspectives are legitimised?)



**Appendix O: Abridged Research Diary**

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## Appendix P: Discourse analysis progression

### A. The following discourses were noted during the transcription process from the first read

ADHD as a medical label irrelevant to guiding practice in a Therapeutic Community  
Behaviour as communication  
Behaviour as more or less adaptable to a child's environment, especially school  
ADHD behaviour as something that can be fun  
ADHD as something that exists in mainstream school – needed to access special educational support in mainstream schools  
ADHD as a tool for selling the services of special education schools  
Medication as a barrier to working therapeutically with children  
Medication as suppressing behaviour that children need to express  
Medication as removing positive aspects of a child's personality  
Medication as helping children access therapeutic intervention  
Medication as helping children to access education and to learn  
TC staff have a responsibility to provide reassurance about medication  
Diagnosis and medication as potentially time limited  
Trauma as a more accurate way of understanding the behaviour of children with a diagnosis of ADHD – ADHD as inaccurate/invalid  
Behaviour associated with ADHD a result of an uncontained home environment  
Parents may seek diagnosis of ADHD because it gives access to resources for their child and removes responsibility from parents for their child's behaviour  
Parents may be relieved of guilt for their child's behaviour through an ADHD diagnosis  
Parents influence by other parents whose children may have an ADHD diagnosis  
Parents influenced by medical discourse to provide an explanation  
ADHD and medication as accurate and helpful in extreme cases when children cannot be contained in a TC  
CAMHS as disappointing  
CAMHS as helpful in validating TC practice  
CAMHS and psychiatric provision as limited and under resourced  
CAMHS deferring to TCs as they would have nowhere for children to go  
External environment as short term focused – ADHD an outcome in itself providing access to resources, benefits to parents and children  
External environment as pro medical and medication  
External environment as less educated/less access to non-medical discourse  
External environment as allies / working alongside TCs  
Short term financially driven external professionals as unhelpful  
Progress as slow and gradual  
TCs as experts in working with traumatised children  
Internal/external – internal TC environment as having a better understanding of children and more resourced than parents and professionals in the external environment  
ADHD believed to be rife in the external environment and associated with naughtiness – influenced by the media  
TCs as non-expert in medication  
Working alongside psychiatrists and psychiatric nurses to inform use of medication  
Maintaining a critical perspective to the use of medication – is it doing anything? is it helping?  
ADHD as historically valid and medication helpful so a child will sit still and a relationship can be established  
Children have a limited or no understanding of their diagnosis or medication because they may be too young, distressed or may not want to know

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Children as having limited involvement in their care (children don't have diagnoses explained and are put on medication)

Children's parents don't help them understand their diagnosis or medication in a way that makes sense for them

Children can internalise a diagnosis as something negative about themselves, such as being naughty

Older children and those that are more advanced in their development can understand their diagnosis and medication

Maintaining a critical perspective on medication and supporting children to make decisions for themselves using or not using medication, challenging or accepting diagnoses

Children as having more agency? (we take children off medication and they can learn and apply learning from therapeutic support)

### **B. Categorisation of discourses with re-reading of transcripts**

1. Discourse about the relevance of ADHD in a Therapeutic Community
2. Discourses about Medication
3. Discourse about alternative ways of understanding ADHD behaviour – Trauma & Attachment
4. Discourses about how behaviour associated with ADHD may be influenced by environmental context
5. Discourse about working with CAMHS and the external environment
6. Discourse about why parents may seek diagnosis of ADHD / social context
7. Discourse about Children's Perspectives on their diagnosis of ADHD and medication

### **C. Refining of discourses with discussion with supervisors, fellow researchers and further reading**

1. Non-medical Discourse: ADHD is an irrelevant and inaccurate label.
  - a. Behaviour as communication
  - b. Attachment and trauma
  - c. The role of parents
2. Environmental Discourse: How the environment effects these children's behaviour.
  - a. The home environment outside of the TC
  - b. The school environment
3. Biopsychosocial Discourse: The possibility of ADHD and cautious use of medication.
  - a. Openness to medication as a help
  - b. Difference between managers/consultants and other TC staff
  - c. Relationship with CAMHS
4. Discourse about children's understanding of their diagnosis and medication.
  - a. Younger children
  - b. Older children

**Appendix Q: Coding Book Sample**

Discursive Constructs	Discourse	Action Orientation	Positioning	Practice	Subjectivity	Example Quotes
<p>What is the discursive object &amp; how is it constructed</p>	<p>What wider discourse(s) are discursive constructions located within</p>	<p>What is the language doing?</p>	<p>How does this position staff, children, external and me?</p>	<p>How does this impact clinical practice? (What practice(s) is seen as legitimate?)</p>	<p>What can be felt, thought and experienced from within subject positions? (and what wider perspectives are legitimised?)</p>	
<p>ADHD as a set of behaviours incl. lack of attention, hyperactivity, inability to sit still</p>	<p>Located in anti-medical discourse - Behaviour as communication rather than an indication of a disorder</p>	<p>Gives limited value to the term ADHD in the TC environment</p>	<p>Places staff within non-medical discourse, children in TC environment positioned as commonly having this behaviour, external mainstream school environment positioned within medical discourse</p>	<p>Practice is adaptable and inclusive of children in response to their behaviour. A diagnosis of ADHD is not required to guide practice</p>	<p>It is unusual and unhelpful for TC staff to think about children &amp; their behaviour in terms of ADHD as it overlooks what a child may be communicating through their behaviour</p>	<p>“I find this very interesting ‘cause actually when you’re in a mainstream setting (I: yeah) you do hear it a lot more [P: yeah, absolutely] whereas in this kind of environment you don’t (I: yeah) and I was really, like absolutely flabbergasted the day when I [pause] when, I am not entirely sure if it’s true but, somebody mentioned that Will might have ADHD ? and I, I mean apparently in his write up or something [pause] and I was really surprised to learn that because I think (I: right) I think Will does have some traits of ADHD [pause] He can’t manage to calm himself down but I think it’s a phrase that we don’t, we don’t u, don’t hear or use quite often (I: yeah) I think behaviour for us is</p>

ADHD, Developmental Trauma & Therapeutic Community Discourse

						communication and we have to try to understand (I: right) what they're trying to tell us through their behaviour (I: yeah, yeah, yeah) whether ADHD is in line with that [pause] that's not our main focus (I: yeah) it's really [pause] in a mainstream school it would be" (Annie, Service 1)
TC environment as internal, including classroom and house environments. family home environments, previous or future schools are external	Environmental Discourse - Children's behaviour varies depending on the environment	ADHD behaviour more noticeable in structured activity and in the external environment due to a lack of containment compared to the TC environment	Positions TC staff as more able to contain behaviour than parents & carers in the external environment; children as responsive to behaviour modelled by carers in either environment and boundaries put in place;	Differences in behaviour per environment requires attention as an intervention with children and in working with parents/carers, the latter of which requires caution to avoid conflict	Children's behaviour that might attract a diagnosis of ADHD may be normal within their external environment; difference in behaviour in a different environment, attributes behaviour to context & not diagnosis	"you have individual children, behaviours, respond to environments [S: hmm] because for me that would be an indicator of [pause] the primary route, some of those behaviours are going to happen, have multiple [pause] you know, things feeding into them [I: hmm] but I suppose my feeling is that if a behaviour is particularly responsive to environment change, relationship change, it's probably got more of an environment and relationship origin [I: hmm] where as if it's a behaviour that manifests organically and less responsively then it's probably got a more organic route" (Brigit, Service 2)
Trauma as a cause of ADHD behaviour	Attachment and Psychodynamic discourse	Diagnosis of ADHD is frequently invalid	TC staff as informed by attachment and psychodynamic thinking &	Legitimises relationship based therapeutic practice within TCs	TC staff may think that attachment and psychodynamic informed thinking	"when children come into therapeutic community (I: yeah) It takes, I reckon about a year to get some accurate diagnosis (I: yeah) on our own (I: yeah) because they

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			experienced in working with traumatised children; parents/carers and doctors external to the TC informed by medical discourse; TC staff as more accurate; children as subject to the experience and understanding of carers in their environment; children as able to learn and apply learning from therapeutic support		provide better ways of understanding behaviour associated with ADHD than through an ADHD diagnosis and medically informed thinking.	come in with previous diagnosis (I: yeah) which may or may not be accurate (I: yeah) which may be in the worse case scenario, the worse cases a mistaking, a mislabelling (I: yeah) autism or ADHD for what's actually trauma" (David, Service 2)
ADHD as a medical label  ADHD as medicated	ADHD located within medical discourse	Medical discourse as external to the TC that has to be recognised when a child is prescribed medication even though it may be a barrier to working with	Positions staff as non-expert and having less power than those that diagnose and prescribe medication; positions children as subject to the decisions of those with power	Legitimises provision of medication to children while working with doctors to reduce medication	TC staff may feel they have to accept an ADHD diagnosis and prescription of medication despite feeling that it is unhelpful	"if there's a prescription for methylphenidate, then of course that prescription will be legally recognised (I: yeah) and you know, it would be given, and I'm sure it's given along with the correct guidelines [A: yeah] (I: yeah) for medications, however, there would be some gentle pressure and communication to see if we could actually emm enable us to

ADHD, Developmental Trauma & Therapeutic Community Discourse

		children's trauma				deal with the child without [pause] (I: yeah) emm clouding of the issue" (Paul, Service 1)  "we put across its very hard to work with children if they are medicated" (Patricia, Service 2)
Parents incl. foster, adoptive, birth & those providing temporary care	ADHD located within discourse of social influence	ADHD diagnosis is subject to social pressure from parents to access resources, provides an explanation for their child's behaviour & removes responsibility for their child's behaviour	Positions parents as having power to influence diagnosis; parents as more burdened/less resourced than TCs; medical discourse as dominant in external environment; children as subject to the influence of parents in the external environment	Legitimises Parents seeking a diagnosis of ADHD	TC staff they may be sceptical of the validity of an ADHD diagnosis, while understanding the circumstances it may result from. It may be frustrating for TC staff when they see children with a diagnosis of ADHD which may inaccurately locate some difficulties, that are due to their home environmental context, within the child.	"they have often got a diagnosis so that they can get some extra help, 'cause once you are on the register you can get some extra help" (Brian, Service 1)  "Amy: And also a diagnosis for some parents can mean that it's not their fault.(I: ok)  Mary: and the child might be circling around in the supermarket...you can.... there are people looking at you.... and instead of saying sorry he is being naughty, you can say "(whisper) "Sorry but he's got ADHD you know and he's over ...bright lights... or, you know "... so they've got a reason for ... It's not them who can't make their child walk along with the trolley [I:yeah] or even ... it can provide some

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						<p>Mark: A Lack of Judgement ... don't feel judged all the time, You don't feel like you are walking around and people are looking at you and thinking you are a crap parent, whatever the reality behind that is"</p> <p>(Amy, Mary &amp; Mark, Service 2)</p>
ADHD as legitimate	ADHD located within medical discourse	For some children ADHD may explain difficulties not accounted for by trauma and when children can't be contained in the TC environment – medical discourse is acceptable for some children.	Positions TC staff and service provision as having limits; positions children as benefiting from medication; positions external professionals (CAMHS) as allies; positions senior TC staff as having a critical view on own practice	Legitimises use of medication for children who may not be responsive to TC approach	Medical discourse and ADHD is legitimate in extreme cases; for senior staff there is some acceptance that the 'traumalens' of the TC approach may not always be accurate or comprehensive	<p>"P: the drug therapy with what may well be ADHD ehh was calming, emm (I: hmmm) emm [pause] not a cure (I: yeah) it's a help (I: yeah) but it was [unclear] official (I: right ok)</p> <p>A: you would say extreme though</p> <p>P: Oh yeah absolutely (I: yeah) emm [pause] yeah because I think that she, emm, I would certainly say that she has a complex of potential [pause] labels"</p> <p>(Paul &amp; Annie, Service 1)</p> <p>"some do require it so that we can actually start doing some therapeutic work with them, otherwise it's just a case of containing them which we're not making any progress with, then, that's where the medication can actually help."</p>



ADHD, Developmental Trauma & Therapeutic Community Discourse

						<p>(Charlie, Service 1)</p> <p>“I tend to agree the vast majority of the time you work with the trauma and that’s fine (I:yeah) I am open to believing that we can be blinded by our own (I:yeah) belief”</p> <p>(Mark, Service 1)</p>
<p>ADHD as unexplained</p> <p>ADHD as naughtiness (&amp; interpreted as negative aspect of self)</p>	<p>Discourse about children’s understanding of ADHD and medication</p> <p>Located within psychological discourse of developmental level and cognitive ability</p>	<p>Parents of children in a TC may explain ADHD and medication in a developmentally appropriate way, some children are too young to understand</p>	<p>Parents positioned as irresponsible in their duty to explain the diagnosis; TC staff positioned as responsible in providing reassurance to children but conflicted in doing so due to lack of parental authority and uncertainty about medication side effects; children positioned as vulnerable to understanding their diagnosis as</p>	<p>TC staff aim to provide reassurance to children and monitor potential negative effects of medication; lack of parental authority may legitimise avoidance of approving of diagnosis and medication by TC staff</p>	<p>TC staff may be conflicted about how to protect children from internalising a diagnosis of ADHD due to uncertainty about whether they have permission to explain the diagnosis when lacking parental authority or whether a child is too young to understand. Staff may also disapprove of providing medication to children when they</p>	<p>“he had ADHD and Aspergers on his diagnosis and we were just chatting and he said ‘I’ve got ADHD and I’ve got Aspergers’... and I said do you understand what these mean (I: yeah) ‘well because I’m so naughty I can’t do these things and work while I’m here’ and he didn’t really understand,, and unfortunately he was due to move on (I: hmmmnn) from here...emm but it ... he didn’t really have that much of an understanding about his diagnosis ...it’s just what his mum had told him ...(I: yeah) he’d been told in one way.. but... not in a way that he could really truly understand what it meant for him”</p> <p>(Gloria, Service 1)</p>

			a negative aspect of themselves		may be upset by their perception of a negative impact of medication	<p>“does it come down to the parents to tell their child that they have a diagnosis whether its ADHD or not ...(!: yeah)...emmm. Whose responsibility is it?”</p> <p>(Gloria, Service 1)</p> <p>“I have to take this because I’m naughty, I can’t do this and I can’t care (!: right) I think its what about ....what the parents or the people around them, when they,..... how they see it and how they approach”</p> <p>(Mark Service 1)</p> <p>“But the primary aged children and they often, their emotional age is often quite a few years younger than that too so you might have a 7-year-old who might be still almost like a 3-year-old (!: hmmm) and you wouldn’t necessarily (coughing) explain why you going to a 3-year-old ‘calm down’ or you know you might just say it’s to help you feel a bit steadier or better”</p> <p>(Mary, Service 1)</p>
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ADHD, Developmental Trauma & Therapeutic Community Discourse

<p>ADHD as meaningful to older children</p>	<p>Discourse about children’s understanding of ADHD and medication</p> <p>Located within psychological discourse of developmental level and cognitive ability</p>	<p>Older children are better able to develop their own understanding of their diagnosis and medication</p>	<p>Positions staff as having the ability to support children making informed choices about medication and diagnosis; positions older children as having power/agency about their diagnosis and medication</p>	<p>Legitimises TC staff supporting children to express their own agency/make decisions for themselves</p>	<p>As older children are better able to understand their diagnosis and medication it is easier for TC to support them in relation to decisions related to diagnosis and medication</p>	<p>“if a young person refuses their medication then we will stick with that... if a young person who is of an age to make that decision, is making that decision, we would obviously provide as much support (unclear) we would work with professionals, therapists, with CAMHS (I: yeah) we’d be giving young people the supports to make the healthiest choice for them”</p> <p>(Brigit, Service 2)</p> <p>“another boy who had that diagnosis who now is older says “Well I surely want to be reassessed” (I: yeah) because I don’t think I’m the same boy I was when I was seven and I still have that label stuck onto me”</p> <p>(Cathy, Service 2)</p>
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**Appendix R: Annotated Transcript**

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**Appendix S: R&D Approval**

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## **Appendix T: Letter to the Ethics Committee**

### **Re: ADHD, Developmental Trauma and Therapeutic Community Discourse (Formerly titled: Making sense of ADHD in Therapeutic Communities)**

Dear Sir/Madam,

I am writing to notify you that this research is now complete. Below, I have summarised the background, aims, method, findings and conclusions of the study.

#### **Background**

There is a limited amount of research about children who have had experiences of Developmental Trauma, such as neglect and abuse, and meet ADHD diagnostic criteria. Available evidence suggests children who have had such experiences consistently meet the diagnostic criteria for ADHD to a greater degree than children in the general population. A biomedical model of understanding ADHD, among children with experiences of Developmental Trauma, may result in the provision of inadequate interventions. Such interventions may prioritise reducing behavioural symptoms rather than attending to trauma related emotional experiences. Research and clinical practice organised around diagnostic classification and biomedical discourse appears to be limited in developing an understanding of, and providing intervention for, this population.

#### **Aims**

The research aimed to explore understanding and practice, related to ADHD and its associated behaviour in the discourse of Therapeutic Communities (TC) staff caring for looked after children, for two reasons. Firstly, intervention in this setting is not organised around diagnostic classification. Secondly, looked after children have often had experiences of Developmental Trauma, and more frequently meet diagnostic criteria for ADHD than the general population.

#### **Method**

Discourse Analysis was chosen as the methodology as it is focused on the meanings constructed about phenomena through language, and how constructions may be used in relation to practice. As TCs are informed by trauma, attachment, psychodynamic perspectives, different language and meanings to that of biomedical discourse may be evident, and indicate different forms of practice.

#### **Research Questions**

1. What meanings are constructed in the discourses of TC staff about ADHD and the behaviour associated with it, among children with experiences of DT?
2. How are the discursive constructions of TC staff used in relation to TC practice with these children?

#### **Findings**

From six focus groups in two Therapeutic Community (TC) services, involving 29 participants, four discourses were identified.

1. Non-medical Discourse: ADHD is an irrelevant and inaccurate label.
2. Environmental Discourse: The role of the environment on these children's behaviour.
3. Biopsychosocial Discourse: The possibility of ADHD and cautious use of medication.
4. Discourse about children's understanding of their diagnosis and medication.

### **Conclusions**

The research revealed that the dominant discourses about ADHD, and its associated behaviours, in two TC services was non-medical and environmental in nature, legitimising practice that attends to children's experiences of trauma and attachment difficulties. This research also revealed minority discourse indicating openness to stimulant medication and multi-modal intervention in collaboration with CAMHS, to support children to engage with therapeutic support and education within a TC.

To help maintain children in safe caregiving environments, it may be valuable for CAMHS, and other non-TC settings, to consider the TC elements of multi-modal interventions provided through collaboration. This population of children may benefit from longer term interventions based on attachment and psychodynamic thinking, such as mentalisation based interventions.

There are financial and resource implications for mainstream services, noted by some TC staff. A TC environment facilitates more direct and intense working than may be possible in CAMHS. However, there may be a role for clinical psychologists, and other CAMHS clinicians, in providing indirect interventions to parents, carers or mainstream residential care and educational settings.

Future research should consider gathering the perspective of children, examining the language used by practitioners to talk to primary school aged children about ADHD and consider the form and effectiveness of interventions for this population, who both TCs and CAMHS may struggle to respond to, that develop from collaborative multidisciplinary work.

Thank you for your time and attention.

**Colin Murphy**

**Trainee Clinical Psychologist**

## **Appendix U: Letter to Participants**

Dear Participant

I am writing to summarise the findings from research you kindly participated in. Below, I have summarised the background, aims, method, findings and conclusions of the study.

### **Background**

There is a limited amount of research about children who have had experiences of Developmental Trauma, such as neglect and abuse, and meet ADHD diagnostic criteria. Available evidence suggests children who have had such experiences consistently meet the diagnostic criteria for ADHD to a greater degree than children in the general population. A biomedical model of understanding ADHD, among children with experiences of Developmental Trauma, may result in the provision of inadequate interventions. Such interventions may prioritise reducing behavioural symptoms rather than attending to trauma related emotional experiences. Research and clinical practice organised around diagnostic classification and biomedical discourse appears to be limited in developing an understanding of, and providing intervention for, this population.

### **Aims**

The research aimed to explore understanding and practice, related to ADHD and its associated behaviour in the discourse of Therapeutic Communities (TC) staff caring for looked after children, for two reasons. Firstly, intervention in this setting is not organised around diagnostic classification. Secondly, looked after children have often had experiences of Developmental Trauma, and more frequently meet diagnostic criteria for ADHD than the general population.

### **Method**

Discourse Analysis was chosen as the methodology as it is focused on the meanings constructed about phenomena through language, and how constructions may be used in relation to practice. As TCs are informed by trauma, attachment, psychodynamic perspectives, different language and meanings to that of biomedical discourse may be evident, and indicate different forms of practice.

### **Research Questions**

1. What meanings are constructed in the discourses of TC staff about ADHD and the behaviour associated with it, among children with experiences of DT?
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### **Findings**

From six focus groups in two Therapeutic Community (TC) services, involving 29 participants, four discourses were identified.

1. Non-medical Discourse: ADHD is an irrelevant and inaccurate label.
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### Conclusions

The research revealed that the dominant discourses about ADHD, and its associated behaviours, in two TC services was non-medical and environmental in nature, legitimising practice that attends to children's experiences of trauma and attachment difficulties. This research also revealed minority discourse indicating openness to stimulant medication and multi-modal intervention in collaboration with CAMHS, to support children to engage with therapeutic support and education within a TC.

To help maintain children in safe caregiving environments, it may be valuable for CAMHS, and other non-TC settings, to consider the TC elements of multi-modal interventions provided through collaboration. This population of children may benefit from longer term interventions based on attachment and psychodynamic thinking, such as mentalisation based interventions.

There are financial and resource implications for mainstream services, noted by some TC staff. A TC environment facilitates more direct and intense working than may be possible in CAMHS. However, there may be a role for clinical psychologists, and other CAMHS clinicians, in providing indirect interventions to parents, carers or mainstream residential care and educational settings.

Future research should consider gathering the perspective of children, examining the language used by practitioners to talk to primary school aged children about ADHD and consider the form and effectiveness of interventions for this population, who both TCs and CAMHS may struggle to respond to, that develop from collaborative multidisciplinary work.

Thank you for your participation. I am grateful to have been let in to your service and for your thoughtfulness on the topic. I have learnt a great deal through our conversation and I hope this research contributes to future useful conversation.

#### Further Information:

If you have any questions you can contact me with the details below.

Colin Murphy

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## Appendix V: Journal Submission Guidance

### Journal of Child and Adolescent Trauma Instructions for authors

Thank you for choosing to submit your paper to us. These instructions will ensure we have everything required so your paper can move through peer review, production and publication smoothly. Please take the time to read and follow them as closely as possible, as doing so will ensure your paper matches the journal's requirements. For general guidance on the publication process at Taylor & Francis please visit our [Author Services website](#).



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**References.** References, citations, and general style of manuscripts should be prepared in accordance with the most recent APA Publication Manual. Cite in the text by author and date (Smith, 1983) and include an alphabetical list at the end of the article.

*Examples:*

Journal: Anderson, A.K. (2005). Affective influences on the attentional dynamics supporting awareness. *Journal of Experimental Psychology General*, 154, 258-281. doi: 10.1037/0096-3445.134.2.258

Book: Weschsler, D. (1997). *Technical manual for the Wechsler Adult Intelligence and Memory Scale - III*. New York, NY: Psychological Corporation.

Chapter in a Book: Chow, T.W., & Cummings, J.L. (2000). The amygdale and Alzheimer's disease. In J.P. Aggleton (Ed.), *The amygdale: A functional analysis* (pp. 656-680). Oxford, England: Oxford University Press.

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- EPS, TIFF, or PSD format only
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**Tables and Figures.** Tables and figures (illustrations) should not be embedded in the text, but should be included as separate sheets or files. A short descriptive title should appear above each table with a clear legend and any footnotes suitably identified below. All units must be included. Figures should be completely labeled, taking into account necessary size reduction. Captions should be typed, double-spaced, on a separate sheet.

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