Assessing the Mental Health Needs of Looked after Children: A Study Investigating the Utility of the Brief Assessment Checklist for Children

Catherine Frogley

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School of Psychology
Faculty of Health and Medical Sciences
University of Surrey
Guildford, Surrey
United Kingdom
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Abstract

Background: Looked after children (LAC) are a unique clinical group who, as a result of multiple trauma and disrupted attachment in early life, often present with complex mental health needs. In order to develop a meaningful formulation and provide suitable treatment for these children, the assessment of mental health difficulties in LAC is paramount. However, limited measures have been developed with LAC in mind and very few have been validated in this population. A recent literature review (Denton, Frogley, Jackson, John & Querstret, 2016) identified the Brief Assessment Checklist for Children (BAC-C; Tarren-Sweeney, 2007) as a potential screening tool for LAC aged 4-11 years. The aim of the current study was to explore the utility and psychometric properties of the BAC-C in a UK LAC population.

Design: The study used a mixed-method design. A total of 178 foster/kinship carers completed two questionnaires about a LAC aged 4-11 years: the BAC-C and Strengths and Difficulties Questionnaire (SDQ). Participants were also asked questions about the utility of both questionnaires. Secondly, telephone interviews with five foster carers and two focus groups with professionals working in Child and Adolescent Mental Health Services (CAMHS) were conducted to gather qualitative data about the utility of the BAC-C.

Results: The BAC-C total score was significantly correlated with exposure to sexual abuse, a previous referral to CAMHS, SDQ total and subscale scores. The SDQ total scale was the strongest predictor of the BAC-C score, followed by Emotional Problems, Conduct and the remaining SDQ subscales. The factor analysis could not determine a clinically meaningful factor structure. Finally, the thematic analysis revealed three overarching themes regarding the BAC-C: content, format and design and ways of using the information.
Conclusion: The BAC-C demonstrated many psychometric strengths in terms of reliability and validity. This was also supported by the qualitative data. However, several limitations of the measure were also revealed and were discussed in the context of mental health services for children.

**Keywords:** children, looked after children, developmental trauma, mental health, assessment
References


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# Table of Contents

Abstract .............................................................................................................. 2
Acknowledgements ............................................................................................ 5

**Chapter One: Major Research Project Empirical Paper .................. 8**
Introduction ........................................................................................................ 9
Research Hypotheses ......................................................................................... 20
Method .............................................................................................................. 21
Results .............................................................................................................. 30
Discussion ......................................................................................................... 52
References ....................................................................................................... 62
List of Appendices ........................................................................................... 67

**Chapter Two: Major Research Project Proposal ......................... 103**
Introduction .................................................................................................... 104
Method ............................................................................................................ 106
  Design .......................................................................................................... 106
  Procedure .................................................................................................. 107
Participants ...................................................................................................... 109
Measures .......................................................................................................... 110
R&D Considerations ......................................................................................... 113
Project Costing ................................................................................................. 113
Proposed Data Analysis ..................................................................................... 114
Involving/Consulting Interested Parties ............................................................. 114
Contingency Plan .............................................................................................. 115
Dissemination strategy ....................................................................................... 115
References ....................................................................................................... 116

**Chapter Three: Literature Review .................................................. 118**
Abstract .......................................................................................................... 119
Statement of Journal Choice ............................................................................. 120
Introduction ...................................................................................................... 121
Method ............................................................................................................ 126
Data Extraction ................................................................................................. 127
Results .......................................................................................................................... 128
   a) Instruments assessing PTSD .............................................................................. 129
   b) Instruments assessing trauma-related symptomology beyond PTSD .... 133
   c) Instruments assessing one symptom of trauma ............................................. 140
   d) Measures of mental health .............................................................................. 142
   e) Instruments Measuring General Functioning ............................................... 143
Discussion .................................................................................................................... 153
   Limitations ........................................................................................................... 154
   Future directions .................................................................................................. 157
   Conclusion ............................................................................................................ 158
References ............................................................................................................... 160

Clinical Experience .................................................................................................. 165
   Neuropsychological Assessment ........................................................................ 168
   Relevant training courses .................................................................................... 168

Table of Academic Assignments .............................................................................. 169
Chapter One: Major Research Project Empirical Paper

Assessing the Mental Health Needs of Looked after Children:
A Study Investigating the Utility of the Brief Assessment Checklist for Children

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Addendum

Please note that post-examination, a scoring error on the data for the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) was identified. Following correction of this, the SDQ results were amended for publication and are described below.

The new descriptive data for the SDQ is displayed in Table 1. Normality, linearity, skewness and kurtosis information remained within the recommended limits according to Field (2007). However, as reported in the original analysis, all but one score (SDQ Total) was significant according to the Kolmogorov-Smirnov statistic. Field (2007) suggests this has limited accuracy in large sample sizes and as such, Z scores were also calculated for the new data. The majority of the Z scores were less than 1.96 as defined by Field (2005). However, the Hyperactivity subscale had a skewness z-score with an absolute value higher than the score expected at p < .05 level (1.96; Field, 2009) and at the .01 level (2.58). Z scores for kurtosis were higher than 1.96 for SDQ Total and all subscales except the Hyperactivity subscale, but only above 2.58 for Emotional Problems and Conduct. Given the relatively large sample size, Field (2005) suggests looking at the shape of the distribution visually. Histograms were reviewed for all variables and confirmed normal distribution except for the Hyperactivity subscale which was skewed. Nonetheless, given the high proportion of LAC who are diagnosed with Attention Hyperactivity Deficit Disorder (ADHD; Ford et al, 2007) this finding is to be expected. Box-plots were also analysed for outliers.

The amended SDQ data identified 69% of LAC within the clinical range, not 65% as previously stated. The SDQ Conduct subscale had the highest percentage of children falling in the clinical range, followed by Hyperactivity, Peer Relationships, Emotional problems and Pro-social Behaviour.
The correlation analysis with the amended SDQ data produced similar results to the original data analysis. However, the SDQ did not correlate with a child’s exposure to sexual abuse (Table 3) as previously stated. The SDQ correlated highly with the BAC-C total score ($r=0.8$) along with all SDQ subscales ($r=0.3-0.6$). The amended SDQ data showed a good internal reliability of 0.87 (20 items, $n=184$). Contrary to the previous findings, this suggests the SDQ is stable in this population of LAC. The internal reliability for the SDQ subscales were as follows: Emotional Problems (0.77), Conduct (0.73), Hyperactivity (0.82), Peer Relationships (0.67) and Pro-social (0.76). Thus, with the exception of the Peer Relationships subscale, all SDQ subscales showed acceptable internal reliability in this sample.

The multiple regression was re-run with the amended SDQ data. Once again, the two control variables which significantly correlated with BAC-C total score (exposure to sexual abuse and previous referral to CAMHS) were entered into Step 1, and the predictor variable (SDQ total score) was entered into Step 2. Further predictor variables (SDQ subscales: Emotional Problems, Conduct, Hyperactivity, Peer Relationships and Prosocial behaviour) were then entered into Step 3. The results are displayed in Table 2. Similar to the previous findings, both control variables accounted for 12.1% of the variance in the BAC-C total scores though only a referral to CAMHS was a significant predictor. The explanatory power of the model increased to 55.5% of the variance when including the SDQ Total and both control variables were significant predictors. This increased further to 66.1% when including the SDQ subscales, though referral to CAMHS and the SDQ total became insignificant during the third step. All variables fell within acceptable levels in terms of VIF ($<10$) and tolerance ($<1$) (Field, 2005). Furthermore, Durbin-Watson statistic fell within limits described (approximately 2) by Field (2005). As a result, the need to repeat the regression separately with the SDQ total and subscale scores (as
conducted in the previous analysis) was therefore not necessary when the SDQ data was scored correctly.

**Clinical Implications**

The most significant correction following the new analysis was the internal reliability of the SDQ. I had previously stated that the SDQ may not be a stable measure of mental health problems for LAC. However, following the amendment to the scoring of the SDQ, it proved to be a reliable and stable measure. Therefore, the current study provides support to the SDQ as a reliable measure of mental health needs in LAC.

Secondly, the new results showed that the SDQ was not significantly related to exposure to sexual abuse as found in the original results. Nonetheless, the SDQ continued to show significant correlations to children who had a previous referral to CAMHS and to the BAC-C total score. Furthermore, the SDQ remained the strongest predictor of the BAC-C total score. This supports the original findings which conclude that the association between the BAC-C and SDQ support the BAC-C’s construct validity as a measure of mental health difficulties in LAC.

The amended SDQ data highlighted a larger proportion of children with mental health difficulties (69%) though the BAC-C continued to highlight a higher number (94%) of LAC in this study.
Tables

Table 1: Descriptive statistics for SDQ scores

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Clin Sig (%)</th>
<th>Skew</th>
<th>Kurt</th>
<th>Z scores Skew</th>
<th>Z scores Kurt</th>
<th>KS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDQ Total</td>
<td>21.20</td>
<td>.62</td>
<td>2-39</td>
<td>69.02%</td>
<td>-.070</td>
<td>-.722</td>
<td>-.03</td>
<td>-.202</td>
<td>0.08</td>
</tr>
<tr>
<td>SDQ EP</td>
<td>4.67</td>
<td>.22</td>
<td>0-10</td>
<td>51.63%</td>
<td>.115</td>
<td>-1.028</td>
<td>.64</td>
<td>-2.88</td>
<td>.00*</td>
</tr>
<tr>
<td>SDQ Con</td>
<td>5.04</td>
<td>.20</td>
<td>0-10</td>
<td>65.76%</td>
<td>.087</td>
<td>-1.04</td>
<td>.48</td>
<td>-2.92</td>
<td>.00*</td>
</tr>
<tr>
<td>SDQ PR</td>
<td>4.40</td>
<td>.19</td>
<td>0-10</td>
<td>59.78%</td>
<td>.143</td>
<td>-.728</td>
<td>.79</td>
<td>-2.04</td>
<td>.00*</td>
</tr>
<tr>
<td>SDQ H</td>
<td>7.09</td>
<td>.21</td>
<td>0-10</td>
<td>63.59%</td>
<td>-.760</td>
<td>-.728</td>
<td>4.24</td>
<td>-1.46</td>
<td>.00*</td>
</tr>
<tr>
<td>SDQ PS</td>
<td>5.28</td>
<td>.19</td>
<td>0-10</td>
<td>36.96%</td>
<td>-.090</td>
<td>-.763</td>
<td>-.79</td>
<td>-2.02</td>
<td>.00*</td>
</tr>
</tbody>
</table>

*Clinical significance for SDQ total is 17-40 and clinical significance for SDQ subscales is ER (5-10), Con (4-10), H (7-10), PR (4-10), PS (0-4).


Table 2: Multiple Regression with new SDQ data

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>β</td>
<td>T</td>
<td>p</td>
</tr>
<tr>
<td>Exposure to Sexual Abuse</td>
<td>.079</td>
<td>1.10</td>
</tr>
<tr>
<td>CAMHS referral</td>
<td>.341</td>
<td>4.72</td>
</tr>
<tr>
<td>SDQ Total</td>
<td>.69</td>
<td>12.79</td>
</tr>
<tr>
<td>SDQ EP</td>
<td>.17</td>
<td>2.03</td>
</tr>
<tr>
<td>SDQ Con</td>
<td>.20</td>
<td>2.73</td>
</tr>
<tr>
<td>SDQ PR</td>
<td>.19</td>
<td>3.25</td>
</tr>
<tr>
<td>SDQ PR</td>
<td>.20</td>
<td>3.30</td>
</tr>
<tr>
<td>SDQ PB</td>
<td>-.022</td>
<td>-.403</td>
</tr>
<tr>
<td>R² Adjusted</td>
<td>.12</td>
<td>.55</td>
</tr>
<tr>
<td>R²</td>
<td>.11</td>
<td>.54</td>
</tr>
<tr>
<td>F</td>
<td>11.94</td>
<td>69.81</td>
</tr>
<tr>
<td>Sig</td>
<td>.00**</td>
<td>.00**</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .001.

C: conduct; EP: emotional problems; H: hyperactivity; PB: prosocial behaviour; PR: peer relationships; SDQ: strengths and difficulties questionnaire; Sig: significance; Tol= tolerance; VIF: variance inflation factor.
Table 3: Correlation Matrix with new SDQ data

|                  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Child age     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2. Length of time as a carer | .129|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 3. Type of placement | .059| .015|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 4. Type of care   | -.201* | .007 | -.288** |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 5. Child gender   | -.036 | -.120 | -.074 | -.081|     |     |     |     |     |     |     |     |     |     |     |     |     |
| 6. Witnessing domestic violence | .061 | .011 | .074 | -.091 | .002 |     |     |     |     |     |     |     |     |     |     |     |     |
| 7. Exposure to physical abuse | .017 | -.031 | .081 | -.080 | .000 | .312** |     |     |     |     |     |     |     |     |     |     |     |
| 8. Exposure to sexual abuse | .014 | .047 | .106 | -.227** | -.153' | .162' | .383** |     |     |     |     |     |     |     |     |     |     |
| 9. Neglect       | .061 | .059 | .124 | -.047 | -.111 | .255** | .050 | .121 |     |     |     |     |     |     |     |     |     |
| 10. Bereavement  | -.036 | -.112 | -.088 | .085 | -.058 | -.122 | .059 | -.010 | -.175' |     |     |     |     |     |     |     |     |
| 11. Number of placements | .114 | -.097 | .231** | -.416** | -.043 | .009 | .031 | .001 | .040 | .037 |     |     |     |     |     |     |     |
| 12. SDQ Total    | -.082 | .138 | -.003 | .049 | .047 | -.062 | -.046 | .130 | .025 | -.006 | .057 | .890** |     |     |     |     |     |
| 13. SDQ Emotional Problem | -.032 | .085 | -.009 | .194* | -.048 | .063 | -.033 | .170' | .056 | .008 | -.106 | .606** | .747** |     |     |     |     |
| 14. SDQ Conduct  | -.070 | .132 | .045 | -.020 | -.020 | .075 | -.044 | .169' | .102 | .006 | .143 | .631** | .769** | .385** |     |     |     |
| 15. SDQ Hyperactivity | -.192' | .082 | -.097 | -.006 | .118 | -.034 | -.062 | .005 | -.051 | .028 | .085 | .604** | .794** | .456** | .495** |     |     |
| 16. SDQ Peer Problems | .009 | .127 | .061 | -.030 | .101 | .092 | .002 | .052 | -.033 | -.066 | .064 | .621** | .757** | .410** | .497** | .462** |     |
| 17. SDQ Prosocial | .112 | -.113 | .078 | .128 | -.283** | -.051 | -.023 | .046 | .124 | -.005 | -.151' | -.310** | -.342** | -.020 | -.387** | -.249** | -.423** |
| 18. Referral to CAMHS | .106 | .094 | .068 | .021 | .010 | .043 | -.015 | .083 | .068 | .035 | .136 | .333** | .356** | .261** | .322** | .238** | .281** | -.082 |

* $p < .05$. ** $p < .001$
Introduction

The term ‘looked after’ refers to children and young people who are placed under the care of local authority social services either voluntarily or forcibly. Looked after children (LAC) are a unique clinical group whose mental health needs are widely considered to be greater than those of the general population (Utting et al, 1997). The Office of National Statistics found 45% of LAC in the UK had at least one psychiatric diagnosis (Meltzer et al, 2003; Meltzer et al, 2004a; Meltzer et al, 2004b); roughly four times higher than the general child population (Green, McGinnity, Meltzer & Ford, 2005). A more recent study (Ford, Vostanis, Meltzer & Goodman, 2007) reported the prevalence of psychiatric disorder in LAC was between 45-49%. The evidence also suggests that children in care and care leavers are at greater risk of self-harm and both attempted and completed suicide than their peers (Hjern, Vinnerljung & Lindblad, 2004; Vinnerljung, Hjern & Lindblad, 2006).

The most common reason for being placed in the care of local authorities in England and Wales during 2013 was exposure to abuse and neglect in 62% of cases (Vickerstaff, 2014). The emotional, physical and psychological costs of trauma in childhood have been well documented within the literature with several areas of functioning affected including interpersonal relationships, cognition, attention and impulse control (for a review see D’Andrea, Ford, Stolbach, Spinazzola & van der Kolk, 2012). Consistently, research has shown a positive relationship between the number and types of trauma that a child is exposed to and the number and complexity of symptoms and mental health diagnoses suffered by children (D’Andrea et al, 2012). Moreover, the earlier the trauma occurs in life, the greater risk of structural changes to the brain and nervous system (Glaser, 2000; Beers & De Bellis, 2002; De Bellis & Kuchibhatla, 2006) and a greater prevalence of mental health difficulties (Tarren-Sweeney, 2008; Kisiel et al, 2014). These symptoms frequently endure into adulthood as roughly 50% of adults receiving
mental health care reported experience of abuse and neglect during their childhood (Read, 1998).

The conceptualisation of mental health needs in LAC

The traditional diagnostic label given to psychological distress following a traumatic incident is post-traumatic stress disorder (PTSD). However, this diagnostic category has been criticised in recent years for failing to adequately conceptualise the pervasive and complex range of difficulties displayed by children who face ongoing trauma during their early life (van der Kolk, 2005; Denton et al, 2016). Researchers and clinicians in the field have highlighted the importance of including an attachment framework for this group of children and to consider additional behaviours which are neglected by current DSM-V criteria (American Psychiatric Association, 2013), such as, dissociative responses to trauma and peer relationships (van der Kolk, 2005; D'Andrea et al, 2012; Tarren-Sweeney, 2008).

Attachment theory proposes that individuals are biologically predisposed to form relationships from which they can experience security and comfort and it is through these relationships that children develop an understanding of themselves and the world around them (Bowlby, 1998). Children who experience a secure attachment with their caregiver learn to understand, trust and communicate their emotions during times of distress, in order to have their needs met (Gerhardt, 2004). As such, if trauma occurs in the context of a secure attachment, caregivers are usually able to restore a sense of safety and control (van der Kolk, 2005). However, when trauma occurs in the context of an insecure attachment and/or the attachment figure is the source of trauma, the child is unable to regulate their emotional state (van der Kolk, 2005). Not only does this profoundly influence the structure of a child’s developing brain (Schore, 1994; Gerhardt, 2004), but it also disrupts the
child’s ability to process, organise and make sense of their experience (Hughes, 2004). Over time, this may lead to a variety of difficulties including oppositional behaviour, interpersonal problems, anxiety and depression (Lyons-Ruth & Jacobvitz, 1999). Given that LAC, by the very nature of being in care, are likely to experience separation, loss and trauma at the hands of their attachment figure, they frequently encounter compromised attachment relationships and thus present differently to securely attached children who experience trauma (D’Andrea et al, 2012). A new diagnosis, Developmental Trauma Disorder (DTD), was proposed by van der Kolk (2005) in an attempt to capture the range of symptoms displayed by children experiencing developmental trauma, including attachment difficulties. However, the diagnosis did not secure a place in the new DSM-5 as critics argued that symptoms of DTD couldn’t be differentiated from other existing diagnoses and it would therefore weaken the existing classification system (see Schmid, Petermann & Fegert, 2013, for a review). Researchers continue to explore the scientific validity and potential clinical utility of the DTD diagnosis (Ford et al, 2013).

**Assessing mental health needs in LAC**

The CAMHS Outcome Research Consortium (CORC), a body responsible for coordinating the assessment and measurement of outcomes across CAMHS, failed to make any specific recommendations for LAC, choosing to endorse the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) as a brief mental health screening tool across all CAMHS services in the UK (Law, 2012). The SDQ is also the measure of choice selected by the Department for Children, Schools and Families (2009) as a tool used by local authorities to identify emotional and behavioural difficulties in LAC aged 4-16 years old. The SDQ scores are reported annually to the Department for Education to gather information about the LAC population and are often used clinically to aid decision making about referral to
specialist CAMHS services. The SDQ assesses five domains covering emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and prosocial behaviour (Goodman, 1997). Thus, the mental health of LAC have been defined in terms of difficulties measured on this scale.

Several studies have investigated the utility of the SDQ in British (Goodman, Ford, Corbin & Meltzer, 2004; Goodman & Goodman, 2012), American (Jee et al, 2011) and Canadian (Marquis & Flynn, 2009) LAC populations. Goodman and colleagues (2004) compared SDQ scores against a detailed psychiatric interview based on DSM-IV diagnostic criteria (Development and Well-being Assessment; DAWBA) collected from 1028 LAC between 2001 and 2002. The authors showed that SDQ scores were able to identify individuals with a psychiatric diagnosis (specificity: 80%, sensitivity: 85%). Goodman and Goodman (2012) later reported on SDQ data collected between 2002 and 2003 in LAC. The authors showed that a one-point increase in SDQ score corresponded to an increased prevalence of clinical disorder. Jee and colleagues (2011) showed that the SDQ could screen for social-emotional difficulties in American LAC, whilst Marquis and Flynn (2009) found that it was able to discriminate between Canadian in-care and British normative samples. However, both latter studies were conducted in LAC over 11 years old. It has therefore been concluded that the SDQ is able to identify mental health needs in LAC.

However, the SDQ and other popular standardised measures used in CAMHS have come under scrutiny in recent years for not considering the complex range of difficulties experienced by LAC and children exposed to developmental trauma (Achenbach, Demenci & Rescorla, 2003; Tarren-Sweeney, 2007; Denton et al, 2016). Traditional mental health screening tools cover broad psychopathological perspectives and are based solely on DSM-IV criteria (Denton et al, 2016).
Symptoms which are specific to LAC, such as developmental trauma and attachment difficulties, are too often not considered on such measures (Tarren-Sweeney, 2008). Research shows that LAC frequently score just below the clinical threshold for a number of DSM-IV disorders (DeJong, 2010) and present with behaviours outside of the diagnostic classification criteria e.g. sexualised behaviour and food hoarding (Iwaniec, 2006). Some have argued that the challenge for LAC is that their expression of emotional difficulties may be located in interpersonal problems associated with attachment (Minnis & Del Priore, 2001), which may not be identified by traditional measures. As such, despite high levels of need, many LAC with difficulties go undetected, undiagnosed and therefore untreated (McCann et al, 1996; Minnis & Del Priore, 2001; DeJong, 2010).

The lack of appropriate and valid measures available to clinicians working with traumatised child populations was highlighted by a recent systematic literature review (Denton et al, 2016). The review criticised a number of studies for trying to conform to the DSM-IV PTSD criteria, validating measures across large age-ranges and failing to document and consider the significance of trauma frequency and type (Denton et al. 2016). The Assessment Checklist tools developed by Tarren-Sweeney (2007, 2013a, 2013b) were identified in the review as the only measures designed to capture attachment and trauma-related psychopathology found in developmental trauma. The checklists included child (4-11 years) and adolescent versions (12-17 years) in extended and brief versions. In particular, Tarren-Sweeney (2013b) proposed that the 20-item Brief Assessment Checklist for Children (BAC-C) and Adolescents (BAC-A) could be used as mental health screening tools for LAC as opposed to the SDQ. However, limited psychometric data is currently available for the Assessment Checklists. The BAC-C has only been validated in an Australian population and was not compared to the SDQ (Tarren-Sweeney, 2013a).
To conclude, as a result of disrupted attachment relationships and multiple traumas in early life, LAC are a unique and vulnerable group who frequently present with complex mental health needs. As such, the assessment of mental health in LAC needs to be valid and clinically meaningful. However, at present there are limited assessment tools which have been developed or validated within LAC populations. The preferred assessment tool (SDQ) may not be sensitive enough to identify LAC who have experienced developmental trauma and therefore, finding measurement tools with greater sensitivity for this may be beneficial. The BAC-C has potential as a measurement tool with utility in this area. The current study aimed to explore the following research question: what is the utility of the BAC-C for foster carers and CAMHS clinicians when screening for mental health difficulties in LAC aged 4-11 years. Given the lack of psychometric data available on the BAC-C, part of the current study aimed to examine the reliability and validity of the measure in the context of a UK population of LAC.
Research Hypotheses

Within the overall research question, the following research hypotheses were considered:

Hypothesis 1: LAC with a history of abuse and neglect will report higher scores on the BAC-C and SDQ

Hypothesis 2: LAC with a previous referral to CAMHS will report higher scores on the BAC-C and SDQ

Hypothesis 3: LAC with a greater number of placements will report higher scores on the BAC-C and SDQ

Hypothesis 4: Participants reporting higher scores on the BAC-C will also report higher scores on the SDQ total score and subscales

Hypothesis 5: The BAC-C and SDQ will have adequate internal reliability within the sample

Hypothesis 6: Scores on the SDQ will predict scores on the BAC-C

Hypothesis 7: The BAC-C will have a stable factor structure and will account for most of the variability in the construct.
Method

Joint project

A joint study was conducted with another trainee psychologist at the University of Surrey. The current study examined the utility of the BAC-C (Tarren-Sweeney, 2013b) in LAC aged 4-11 years. The other trainee evaluated the adolescent version of the Brief Assessment Checklist (BAC-A; Tarren-Sweeney, 2013b). The two branches of the study sought to assess the utility and psychometric properties of the two Brief Assessment Checklists in a UK sample of LAC. The studies were run in parallel with one another but with separate data collection.

Design

The study was a mixed-method design with qualitative and quantitative elements. The rationale for a mixed methods design was to enable the researcher to gather quantitative data across a large number of foster carers to investigate the psychometric properties of the measure whilst also gathering more in-depth qualitative data about the utility of the measure from the perspectives of foster carers and clinicians. A cross-sectional design was employed to gather quantitative data from foster/kinship carers completing two questionnaires (BAC-C and SDQ) and a utility questionnaire. Qualitative data was collected via telephone interviews with foster/kinship carers and focus groups with clinicians working in CAMHS.

Ethical Considerations

Ethical approval for this study was granted by University of Surrey Faculty of Arts and Human Sciences Ethics Committee (Appendix A). Furthermore, Research Governance approval to recruit National Health Service (NHS) staff was granted by an NHS Mental Health Trust in the South of England (Appendix B).
The research project followed the University of Surrey’s data protection and information security policies around research data storage. As such, data was stored securely at the University of Surrey or on an encrypted memory stick if it was an electronic file. Personal data was handled in accordance with the Data Protection Act 1998. The NHS Trust policy guidelines regarding research data were also followed for NHS staff data. No identifiable or personal information were included in the study write-up and participants were informed of the data storage and handling procedures prior to giving consent.

The project did not require the use of deception as participants were made aware of the research question without it affecting their ability to participate and make honest contributions. The project involved the discussion of potentially sensitive material such as the experiences of a child before coming in to care and challenging or distressing behaviours exhibited by the child in placement. This may have caused temporary distress, particularly for foster/kinship carers. In order to manage this, the researcher provided detailed information about the study and the questionnaires within the information sheet beforehand (Appendix C and D for Information Sheets). Participants were also provided with the contact information of the research team, the Faculty Ethics committee and were sign-posted to support services such as The Samaritans (see Appendix E for Debrief Information).

Foster carers were advised by the researcher to seek support from their allocated social worker if they raised concerns about their own welfare within the telephone interview. Participants were also advised that the researcher would not interpret scores from the questionnaires completed as part of the project on the information sheet. Any safeguarding concerns raised about professionals during the focus groups were reported via NHS safeguarding policy or the Local Authority safeguarding policy, depending on the professional involved.
The interviews and focus groups were recorded using audio recording devices. The audio file was then transcribed by the researcher and any identifying details within the transcript removed. Direct quotations from participants taking part in the study were anonymised. The internet host site where the online survey was based (Qualtrics Online Survey Software) was a secure data collection facility; protected by high firewall systems and encryption, and was recommended by the University of Surrey.

**Participants**

Participants were foster or kinship carers and clinicians working in CAMHS. The term ‘foster carer’ was defined as a caregiver (other than biological parents) who provide temporary care to a child. A ‘kinship carer’ was defined as a family member (other than biological parents) who care for the child temporarily. In both cases, the local authority had legal responsibility for the child.

**Inclusion criteria for foster/kinship carers:**

- Participants had to be a current foster or kinship carer.
- Participants had to be currently caring for a child aged 4-11 years old. This followed the criteria of the BAC-C (Tarren-Sweeney, 2013b) and SDQ (Goodman, 1997).
- Participants had to have a child in placement for at least four months. This followed the criteria of the BAC-C as behaviour is rated over the last 4-6 months (Tarren-Sweeney, 2013b).
**Inclusion criteria for clinicians:**

- Participants had to be qualified in their profession for at least one year in order that they had sufficient knowledge and experience to comment on the utility of the questionnaires for this population.

- Participants also had to have at least one years’ experience working within a CAMHS setting. This was to ensure that participants had appropriate knowledge and experience of the population and were able to comment on the utility of the questionnaires within CAMHS.

**Procedure and Recruitment**

There were three parts to the research project. Firstly, foster/kinship carers were invited to take part in an online survey (see Appendix F for website). Within the survey, participants were asked to provide demographic information about themselves and one LAC in their care and to complete two questionnaires; the BAC-C (Tarren-Sweeney, 2013b) and SDQ (Goodman, 1997). Participants were then asked to complete two utility questionnaires asking for their opinions about the BAC-C and SDQ (see Appendix G for utility questionnaire). Questionnaires were presented to participants in random order to prevent bias through order effects. The information sheet and consent form were displayed on the website prior to participants completing questionnaires. Participants gave informed consent to take part in the study.

Secondly, participants who completed the online survey were invited to take part in a telephone interview with the researcher. The aim of the telephone interview was to gather further qualitative information about the utility of the BAC-C from the perspective of foster/kinship carers. Those who wished to be contacted about the interview were asked to provide an email address at the end of the survey. The researcher then contacted the participant via email and arranged a telephone
interview at their convenience. Telephone interviews were audio-taped and transcribed verbatim by the researcher.

Foster and kinship carers were recruited nationwide through two main recruitment strategies. The project was advertised through social media websites e.g. Twitter and Facebook, via online forums dedicated to foster and kinship carer support (with permission of forum/group administrators) and through various charity organisations such as the British Association of Adoption and Fostering (BAAF) and Grandparents Plus. Secondly, local authority and independent fostering services were contacted and asked to advertise the study to potential participants via email, leaflet and/or on their website. A total of eleven out of thirty-nine local authorities and sixteen out of thirty-four independent fostering agencies agreed to advertise the project (see Appendix H for flyer).

In the final part of the study, clinicians working in specialist CAMHS were invited to take part in a focus group. The purpose of the two focus groups was to gather qualitative data on the utility and value of the BAC-C from the perspective of professionals within CAMHS. The focus groups took place at two CAMHS sites within an NHS Mental Health Trust in the South of England. An email was circulated to staff working in CAMHS with details of the study including an information sheet and consent form (Appendix D). Participants were invited to ‘opt in’ to the study by emailing back. As recommended by McLafferty (2004) a sample size of 4 to 8 participants per focus group was planned to enable sufficient richness of the data. A range of clinicians were invited to participate so that a multi-disciplinary perspective could be gained.

Measures

**Brief Assessment Checklist for Children (BAC-C).** The BAC-C (Tarren-Sweeney, 2013a) is a 20-item screening tool designed to measure clinically
meaningful mental health difficulties in LAC aged 4-11 years (Appendix I). It was based on the longer 120-item Assessment Checklist for Children (ACC) (Tarren-Sweeney, 2007). Each item refers to a behaviour, emotional state or manner of relating to others that is rated by a child’s carer e.g. “craves attention”, “hides feelings”. The BAC-C employs a three-point response scale (0= Not true, 1= Partly True or 2=Mostly true) and asks carers to consider behaviour over the last 4-6 months. Ratings on the measure are totalled to give an overall score with higher scores indicating higher levels of mental health difficulties. The authors recommend that scores exceeding the cut-off score of 5 indicate that ‘further clinical assessment is warranted’. In the initial validation study internal reliability was high (Cronbach’s α= 0.89).

**Strengths and Difficulties Questionnaire (SDQ).** The SDQ (Goodman, 1997) is a 25-item mental health screening tool for 4-17 year olds (Appendix J). It contains five subscales: emotional symptoms, conduct problems, hyperactivity/inattention, peer relational problems, and prosocial behaviour. Items include “Considerate of other people’s feelings” and “Many worries, often seems worried”. The questionnaire has good psychometric qualities (internal consistency (α = 0.73), cross-informant correlation (mean: 0.34), and retest stability (mean: 0.62)) (Goodman, 2001). A review of internal reliability estimates on the parent version for children aged 4-12 years were as follows for each subscale: emotional symptoms (.66), conduct problems (.58), hyperactivity/inattention (.76), peer problems (.53) and prosocial behaviour (.67) (Stone et al, 2010). The SDQ uses a scale of Not True, Somewhat True or Certainly True and scores are summed to give a total difficulties score (cut-off point: 14-16 = ‘borderline’ and 17-40 = ‘abnormal’). Cut-off scores are also defined for each of the five subscales.

**Utility Questionnaire.** A short questionnaire about the utility of the BAC-C and SDQ (Appendix G) was developed by the research team (which consisted of
two trainee clinical psychologists and two research supervisors). The questions aimed to focus on various aspects of the questionnaires’ overall utility including ease of completion, relevance of the items, usefulness and potential problems with the measure. Questions were developed and reviewed several times by the research team. Participants were required to rate their answer on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

**Demographic information.** Participants were asked to provide brief demographic information about themselves and the current child in their care (Appendix K).

**Interview Schedule.** Two semi-structured interview schedules were designed by the research team to investigate the utility of the BAC-C from the perspective of foster/kinship carers (Appendix L) and clinicians working in CAMHS (Appendix M). Literature regarding the development of interview schedules was also consulted (Cassel & Symon, 1994).

**Power analysis**

As there was no previous research examining the utility of the BAC-C in a UK population, it was not possible to calculate an a priori sample size. The current study aimed to conduct a regression and factor analysis on the data and therefore recommendations regarding sample size for these analyses were consulted. For regression analysis, Green (1991) suggested $N > 50 + 8m$ (where $m$ is the number of independent variable’s (IV’s)). Whilst Tabachnick and Fidell (2007) suggest $104 + k$ when testing individual predictors (where $k$ is the number of IVs). Both sample size recommendations were based on detecting a medium effect size with a power of 80%. The current study had five independent variables, therefore the recommended sample size was 90 according to Green (1991) or 109 according to
Tabachnick and Fidell (2007). The larger sample size was selected as it was considered realistic given the timescale of the project.

A number of recommendations have been made regarding sample size for factor analysis (Velicer & Fava, 1998). Gorsuch (1983) recommended at least 100 participants whilst Kline (1994) and Hatcher (1994) recommended a variable to subject ratio of at least 1:5. As the BAC-C has 20 variables, a sample size of at least 100 was suggested for the factor analysis.

Data analysis

Quantitative data. The IBM Statistical Package for Social Sciences (SPSS) version 20 (IBM, 2011) was used to analyse data. There were no missing data on the BAC-C or SDQ as data came from an online survey which forced participants to provide responses to all questions. Data was included in the analysis if at least one questionnaire (BAC-C or SDQ) was completed in full. Preparation of the data included removing missing datasets, recoding reverse-scored items and calculating total scores.

Qualitative data. The data was analysed using the thematic analysis approach described by Braun and Clarke (2006). This particular analytical strategy was selected for several reasons. Firstly, the intention of the researcher was to identify patterns describing the foster carers and CAMHS clinician’s perspectives of the BAC-C. Thematic analysis is one method of minimising data into patterns (or themes) to organise and describe the entire dataset (Braun & Clarke, 2006). Furthermore, unlike other forms of qualitative analysis, thematic analysis is independent of theory and therefore provides a flexible and useful research tool for analysing qualitative data in relation to a specific research question (Braun & Clarke, 2006).
The epistemological position taken by the researcher during the thematic analysis was consistent with critical realist approaches. This approach recognises that knowledge of the world is subjective and influenced by the beliefs and experiences of the individual (Maxwell, 2010). Therefore, given that the researcher was undergoing training in clinical psychology and working within CAMHS during the data analysis, it is likely that these experiences influenced the interpretation of the results to some extent. Nonetheless, the critical realist approach also aims to be grounded within the data obtained from the research process. In order to be aware of the potential influences and biases occurring during the thematic analysis process, the researcher maintained a reflexivity journal (see Appendix N).

Following the transcription of the data, the researcher familiarised themselves with the data set through reading and re-reading the transcripts. Subsequently, initial codes were generated from the data using an inductive approach where interesting information was identified and coded within the data. Data was then reviewed again deductively with the research question in mind in order to identify particular features of the dataset related to the question. From these codes, patterns across the dataset were identified to form a number of potential themes and related extracts of data were organised within these themes. The data was reviewed several times and the researcher used thematic maps to explore the relationship between potential themes and to review and refine overarching themes (Braun & Clarke, 2006). The entire dataset was re-read and considered alongside the overarching themes and sub-themes within the thematic map to check for credibility.
Results

Participants

A total of 278 foster and kinship carers took part in the first part of the study. Of these, 34 participants were excluded due to the following criteria: child age (n=13), length of time known to the child (n=17) and length of time as a foster carer (n=4). A further 53 participants dropped out of the study prior to completing at least one questionnaire. In total, 185 participants had full data for the BAC-C, 184 for the SDQ and 178 for both questionnaires.

The mean age of foster/kinship carers was 48.4 years, the majority were White British females and over 50% had been a foster carer for over five years (see Table 1). Further demographic information regarding foster/kinship carers can be found in Appendix O. The mean age of children was 7.6 years and just over half were male. The most common reason for being placed in care was neglect, followed by domestic abuse and just over 50% had been referred to CAMHS previously (see Table 2).

<table>
<thead>
<tr>
<th>Table 1: Foster Carer Demographic Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Gender</td>
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<tr>
<td>Female</td>
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<tr>
<td>Length as carer</td>
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<tr>
<td>&gt;1 year</td>
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<tr>
<td>1-2 years</td>
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<tr>
<td>3-5 years</td>
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<tr>
<td>Over five years</td>
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<tr>
<td>Type of care provided</td>
</tr>
<tr>
<td>Foster Care</td>
</tr>
<tr>
<td>Kinship Care</td>
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<tr>
<td>Type of placement</td>
</tr>
<tr>
<td>Short term and respite</td>
</tr>
<tr>
<td>Long term</td>
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<tr>
<td>Mixture</td>
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</tbody>
</table>
Table 2: Looked after Child Demographic Information

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child Age</strong></td>
<td>7.58 (2.26)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>N (%)</td>
</tr>
<tr>
<td>Female</td>
<td>81 (42.6%)</td>
</tr>
<tr>
<td>Male</td>
<td>109 (57.4%)</td>
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<tr>
<td><strong>Previous referral to CAMHS (Y)</strong></td>
<td>99 (52.1%)</td>
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<tr>
<td><strong>Pre-care experience:</strong></td>
<td></td>
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<tr>
<td>Domestic violence</td>
<td>94 (49.5%)</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>24 (12.6%)</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>61 (32.1%)</td>
</tr>
<tr>
<td>Neglect</td>
<td>160 (84.2%)</td>
</tr>
<tr>
<td>Bereavement</td>
<td>9 (4.7%)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>4 (2.1%)</td>
</tr>
<tr>
<td>Other</td>
<td>38 (20%)</td>
</tr>
<tr>
<td><strong>Number of placements:</strong></td>
<td></td>
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<tr>
<td>First placement</td>
<td>91 (47.9%)</td>
</tr>
<tr>
<td>1-2 placements</td>
<td>66 (34.7%)</td>
</tr>
<tr>
<td>3-4 placements</td>
<td>23 (12.1%)</td>
</tr>
<tr>
<td>5+ placements</td>
<td>10 (5.3%)</td>
</tr>
</tbody>
</table>

Control variables

The data for each of the variables was analysed for the presence of outliers, normality, and linearity (Field, 2005) (Table 3). Skewness scores were all under 1. However, all but one score (SDQ total) were significant according to Kolmogorov-Smirnov test, though this has limited accuracy with large sample sizes (Field, 2005). The majority of the Z scores were less than 1.96 as defined by Field (2005), however Z scores for the following subscales were above 1.96: Peer Relationships, Hyperactivity and Prosocial Behaviour. Given the relatively large sample size, Field (2005) suggests looking at the shape of the distribution visually. Histograms were reviewed for all variables and confirmed normal distribution (see Appendix P). Boxplots were also analysed for outliers.
As shown in Table 3, the mean BAC-C score was over 20 and identified 94.05% of children as falling within the clinical range compared to 67.02% of those identified by the SDQ. The SDQ Peer Relationships subscale had the highest percentage of children falling in the clinical range (80.43%), followed by Conduct problems and Emotional problems.

**Correlation Analysis**

In order to address Hypotheses 1, 2, 3 and 4, the data was analysed using Pearson’s product moment correlation coefficient and significance was evaluated against an alpha level of \( p < .05 \). The hypotheses stated that LAC with 1) a history of abuse and neglect, 2) a previous referral to CAMHS, 3) a greater number of placements and 4) higher scores on the SDQ total and subscale scores, will report higher scores on the BAC-C. Analysis of the correlation matrix revealed that relationships among BAC-C total score and previous exposure to sexual abuse, a previous referral to CAMHS, SDQ total score and the SDQ subscales score were significant and in the direction predicted (see Table 4). Similarly, significant
relationships were also indicated for SDQ total score, exposure to sexual abuse and a previous referral to CAMHS. As only exposure to sexual abuse and a referral to CAMHS were significantly correlated with the outcome variables, the remaining control variables were not included in further analyses. All analyses can be viewed in Table 4.

**Internal Reliability**

The fifth hypothesis predicted that the BAC-C and SDQ will have adequate internal reliability within the sample. In order to assess the internal reliability, Cronbach’s alpha analysis was performed. Cronbach’s alpha for the BAC-C (20 items, n=185) was .89 and therefore fell within a good range (0.8-0.9) according to Field (2009). The Cronbach's alpha for SDQ total score was 0.67 (25 items, n=184). This is indicative of a poor internal reliability and suggests the SDQ is unstable in this population of LAC. The internal reliability for the SDQ subscales were as follows: Emotional Problems (.77), Conduct (.46), Hyperactivity (.02), Peer Relationships (-.22) and Pro-social (.76). Thus, with the exception of the Emotional Problems and Prosocial subscales, the remaining SDQ subscales showed poor internal reliability in this sample.

**Multiple Regression**

To address Hypothesis 6, that scores on the SDQ will predict scores on the BAC-C, a multiple regression analysis was conducted. The two control variables which were significantly correlated with BAC-C total score (exposure to sexual abuse and previous referral to CAMHS) were entered into Step 1, and the predictor variable (SDQ total score) was entered into Step 2. Further predictor variables (SDQ subscales: Emotional Problems, Conduct, Hyperactivity, Peer Relationships and Prosocial behaviour) were then entered into Step 3. The results are displayed in Table 5.
Table 4: Correlation Matrix

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<th>15</th>
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<tbody>
<tr>
<td>1. Child age</td>
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<td>2. Length of time as a carer</td>
<td>.056</td>
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<td>3. Type of placement</td>
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<td>.015</td>
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<td>4. Type of care</td>
<td>-.176*</td>
<td>.007</td>
<td>-.288**</td>
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<td>5. Child gender</td>
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<td>-.074</td>
<td>-.081</td>
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<td>6. Witnessing domestic violence</td>
<td>-.047</td>
<td>.011</td>
<td>.074</td>
<td>-.091</td>
<td>.002</td>
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<tr>
<td>7. Exposure to physical abuse</td>
<td>-.028</td>
<td>-.031</td>
<td>.081</td>
<td>-.080</td>
<td>.000</td>
<td>.312**</td>
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<tr>
<td>8. Exposure to sexual abuse</td>
<td>.013</td>
<td>.047</td>
<td>.106</td>
<td>-.227**</td>
<td>-.153*</td>
<td>.162*</td>
<td>.383**</td>
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<tr>
<td>9. Neglect</td>
<td>.087</td>
<td>.059</td>
<td>.124</td>
<td>-.047</td>
<td>-.111</td>
<td>.255**</td>
<td>.050</td>
<td>.121</td>
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<tr>
<td>10. Bereavement</td>
<td>-.014</td>
<td>-.112</td>
<td>-.088</td>
<td>.085</td>
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<td>-.122</td>
<td>.059</td>
<td>-.010</td>
<td>-.175*</td>
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<tr>
<td>11. Number of placements</td>
<td>.092</td>
<td>-.097</td>
<td>.231**</td>
<td>-.416**</td>
<td>-.043</td>
<td>.009</td>
<td>.031</td>
<td>.001</td>
<td>.040</td>
<td>.037</td>
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<tr>
<td>12. BAC-C</td>
<td>-.071</td>
<td>.083</td>
<td>.057</td>
<td>-.041</td>
<td>.101</td>
<td>.081</td>
<td>.224**</td>
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<tr>
<td>13. SDQ Total</td>
<td>-.110</td>
<td>.048</td>
<td>-.045</td>
<td>.185**</td>
<td>-.055</td>
<td>.058</td>
<td>-.081</td>
<td>.154**</td>
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<td>.048</td>
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<tr>
<td>14. SDQ Emotional Problem</td>
<td>-.072</td>
<td>.085</td>
<td>-.009</td>
<td>.194*</td>
<td>-.048</td>
<td>.063</td>
<td>-.033</td>
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<td>.606**</td>
<td>.812**</td>
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<tr>
<td>15. SDQ Conduct</td>
<td>-.058</td>
<td>.051</td>
<td>.031</td>
<td>.052</td>
<td>-.060</td>
<td>.088</td>
<td>-.029</td>
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<td>-.006</td>
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<td>.588**</td>
<td>.723**</td>
<td>.401**</td>
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<td>16. SDQ Hyperactivity</td>
<td>-.144</td>
<td>.004</td>
<td>-.140</td>
<td>.011</td>
<td>.050</td>
<td>-.026</td>
<td>-.088</td>
<td>-.035</td>
<td>-.050</td>
<td>.067</td>
<td>.039</td>
<td>.421**</td>
<td>.667**</td>
<td>.370**</td>
<td>.349**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. SDQ Peer Problems</td>
<td>-.053</td>
<td>-.049</td>
<td>-.046</td>
<td>.263**</td>
<td>-.091</td>
<td>.010</td>
<td>-.110</td>
<td>.045</td>
<td>.015</td>
<td>.102</td>
<td>-.007</td>
<td>.279**</td>
<td>.576**</td>
<td>.280**</td>
<td>.249**</td>
<td>.297**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. SDQ Prosocial</td>
<td>-.041</td>
<td>-.113</td>
<td>.078</td>
<td>.128</td>
<td>-.283**</td>
<td>-.051</td>
<td>-.023</td>
<td>.046</td>
<td>.124</td>
<td>-.005</td>
<td>-.151*</td>
<td>-.310**</td>
<td>-.067</td>
<td>-.020</td>
<td>-.254**</td>
<td>-.083</td>
<td>.220**</td>
<td></td>
</tr>
<tr>
<td>19. Referral to CAMHS</td>
<td>.038</td>
<td>.094</td>
<td>.068</td>
<td>.021</td>
<td>.010</td>
<td>.043</td>
<td>-.015</td>
<td>.083</td>
<td>.068</td>
<td>.035</td>
<td>.136</td>
<td>.333**</td>
<td>.332**</td>
<td>.261**</td>
<td>.320**</td>
<td>.097</td>
<td>.235**</td>
<td>-.082</td>
</tr>
</tbody>
</table>

* * p < .05, ** * p < .001.
The control variables accounted for 15.2% of the variance in the BAC-C total scores and both were significant predictors. This explanatory power of the model increased to 55% of the variance when including the SDQ Total, and increased further to 59.5% when including the SDQ subscales. However, the regression analysis excluded the SDQ Emotional Problems subscale from the model and the Beta values for three of the subscales were in the opposite direction to the correlational analyses. This may have been a result of the multi-collinearity between the SDQ total score and SDQ subscales. To test for multicollinearity, variance inflation factor (VIF) and tolerance statistics were assessed. Tolerance below 0.2 and VIF above 10 indicate problems (Field, 2005). The VIF and tolerance statistics were within the acceptable range for Steps 1 and 2, but tolerance for SDQ total in Step 3 was below 0.2, and VIF was 5.209. Therefore, two further multiple regressions were conducted separately to investigate firstly, the predictive value of the SDQ total score and secondly, the predictive value of the SDQ subscales.

In the second multiple regression, control variables (sexual abuse exposure and previous referral to CAMHS) were entered into Step 1. The predictor variable, SDQ total
score, was then entered into Step 2, (see Table 6). Once again, control variables (sexual abuse exposure and previous referral to CAMHS) accounted for 15.2% of the variance in BAC-C total scores with both being significant predictors ($p < .001$). The predictor variable (SDQ total) contributed significantly to the prediction of BAC-C total score and in line with expectations, the model explained 55% of the variance. All variables fell within acceptable levels in terms of VIF (< 10) and tolerance (<1) (Field, 2005). Furthermore, Durbin-Watson statistic fell within limits described (approximately 2) by Field (2005) at 2.12. Within Step 2, the unique variance (part correlation) accounted for by the SDQ total score was 39.82% whilst a previous referral to CAMHS accounted for 1.32% and exposure to sexual abuse accounted for 1.23%.

Table 6: Second Multiple Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>T</td>
<td>P</td>
<td>PartC</td>
<td>Beta</td>
<td>T</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>.19</td>
<td>2.71</td>
<td>.00*</td>
<td>.19</td>
<td>2.13</td>
<td>.03*</td>
</tr>
<tr>
<td>CAMHS Referral</td>
<td>-.32</td>
<td>-4.45</td>
<td>.00**</td>
<td>-.33</td>
<td>-2.21</td>
<td>.02*</td>
</tr>
<tr>
<td>SDQ Total</td>
<td>.67</td>
<td>12.19</td>
<td>.00</td>
<td>.63</td>
<td>.88</td>
<td>.12</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.152</td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.142</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>15.111</td>
<td>68.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td>.00**</td>
<td>.00**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$. ** $p < .001$.

PartC: partial correlation; Sig: significance; Tol: tolerance; VIF: variance inflation factor.

In the third multiple regression, the control variables (exposure to sexual abuse and referral to CAMHS) were entered into Step 1 and the predictor variables (SDQ subscales: Emotional Problems, Conduct, Hyperactivity, Peer Relationships and Prosocial) were entered in to Step 2. Once again, VIF, tolerance and Durbin-Watson statistics fell within the limits described by Field (2005). In this model, the control variables accounted for 15.2% of the total variance in the BAC-C total score. All the predictor variables, with the exception of the SDQ Peer Relationships subscale, contributed significantly to the prediction of the BAC-C total score accounting for 59.5% of the total variance. The results are displayed in Table 7.
The unique variance of each predictor was SDQ Emotional Problems subscale was 9.36% of the total variance, 5.57% for Conduct, 2.19% for Hyperactivity, 0.5% Peer Relationships and -2.4% for the Pro-social subscale.

Table 7: Third Multiple Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>T</td>
<td>P</td>
<td>PartC</td>
<td>Beta</td>
<td>T</td>
<td>P</td>
<td>PartC</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>.19</td>
<td>2.71</td>
<td>.00*</td>
<td>.19</td>
<td>.10</td>
<td>2.04</td>
<td>.04*</td>
<td>.10</td>
</tr>
<tr>
<td>CAMHS referral</td>
<td>- .32</td>
<td>-4.55</td>
<td>.00**</td>
<td>- .33</td>
<td>- .11</td>
<td>-2.05</td>
<td>.04*</td>
<td>- .10</td>
</tr>
<tr>
<td>SDQ EP</td>
<td>.35</td>
<td>6.15</td>
<td>.00**</td>
<td>.30</td>
<td>.74</td>
<td>.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDQ C</td>
<td>.29</td>
<td>4.75</td>
<td>.00**</td>
<td>.23</td>
<td>.68</td>
<td>1.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDQ H</td>
<td>.16</td>
<td>2.98</td>
<td>.00*</td>
<td>.14</td>
<td>.79</td>
<td>1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDQ P</td>
<td>.08</td>
<td>1.54</td>
<td>.12</td>
<td>.07</td>
<td>.83</td>
<td>1.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDQ PS</td>
<td>-.16</td>
<td>-3.03</td>
<td>.00*</td>
<td>-.15</td>
<td>.83</td>
<td>1.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
<td>.59</td>
<td></td>
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<tr>
<td>Adjusted R²</td>
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<td></td>
<td>.57</td>
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<td></td>
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<tr>
<td>F</td>
<td>15.11</td>
<td></td>
<td></td>
<td></td>
<td>34.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td>.00**</td>
<td></td>
<td></td>
<td></td>
<td>.00**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05, ** p < .001.

C: conduct; EP: emotional problems; H: hyperactivity; Part C: part correlation; PB: prosocial behaviour; PR: peer relationships; SDQ: strengths and difficulties questionnaire; Sig: significance; Tol = tolerance; VIF: variance inflation factor.

Factor Analysis

In order to address Hypothesis 7; the BAC-C will have a stable factor structure and will account for most of the variability in the construct, an exploratory factor analysis was conducted. Principal components analysis was chosen as the method of factor extraction as it is typically used when there is no pre-existing knowledge about the factors underlying the items (Field, 2005).

Several well-recognised criteria for the factorability of a correlation were used. Firstly, the total number of participants used for this analysis was n=172, a ratio of 1:8.6 and thus, above 1:5 as suggested by Kline (1994) and Hatcher (1994). The correlation matrix between items was examined and all correlation coefficients were below 0.9 \( r = .047-.835 \) as recommended by Field (2005). The Kaiser-Meyer-Olkin (KMO) measure of sampling
adequacy was .85, above the recommended value of .6, and Bartlett’s test of sphericity was significant ($p < .005$). The communalities were all above .3, confirming that each item shared some common variance with other items. However, the determinant value was .000 and thus less than the necessary value of .00001 according to Field (2005); suggesting multicollinearity may be a problem in this sample. Further inspection of the correlation matrix indicated that two items (item 9: “Relates to strangers as if they were family” and item 14: “Too friendly with strangers”) correlated highly ($r=.835$). As suggested by Field (2005), one of highly correlated items were selected and removed from the analysis. Item 9 was selected on this occasion as it was a slightly more specific question than item 14.

Following this, factor analysis was conducted with 19 items. The determinant value, KMO and Bartlett’s test of sphericity all fell within acceptable limits (according to Field, 2005). The extraction identified five factors based on Kaiser’s criterion for eigenvalues equal to or greater than 1 (Field, 2005). The five factors accounted for 61.52% of the variance within the data. Oblique factor rotation with the Direct Oblimin method was conducted on the five factor solution given that correlations were expected between the factors. All but one of the 19 items loaded on to one of the five factors (above 0.4 level as suggested by Field, 2005), though one item loaded on to two factors (Table 8). Kaiser’s criterion is based on communalities after extraction exceeding 0.7 (Field, 2005). Given that the average communality within the dataset was 0.6 and the scree plot visual interpretation suggested two or three factors, the analysis was rerun specifying that two and three factors were extracted.
<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can't concentrate, short attention span</td>
<td>-.052</td>
<td>.263</td>
<td>.094</td>
<td>-.294</td>
<td>-.647</td>
</tr>
<tr>
<td>Craves affection</td>
<td>.824</td>
<td>.067</td>
<td>.072</td>
<td>.061</td>
<td>.002</td>
</tr>
<tr>
<td>Eats too much</td>
<td>.119</td>
<td>.125</td>
<td>.631</td>
<td>.074</td>
<td>-.121</td>
</tr>
<tr>
<td>Fears you will reject him/her</td>
<td>.506</td>
<td>-.246</td>
<td>-.027</td>
<td>.037</td>
<td>-.360</td>
</tr>
<tr>
<td>Hides feelings</td>
<td>-.084</td>
<td>-.689</td>
<td>.134</td>
<td>-.237</td>
<td>-.023</td>
</tr>
<tr>
<td>Is convinced friends will reject him/her</td>
<td>.121</td>
<td>-.677</td>
<td>-.033</td>
<td>-.023</td>
<td>-.303</td>
</tr>
<tr>
<td>Lacks guilt or empathy</td>
<td>.070</td>
<td>-.070</td>
<td>-.003</td>
<td>-.809</td>
<td>.074</td>
</tr>
<tr>
<td>Prefers to be adults, rather than children</td>
<td>.496</td>
<td>-.078</td>
<td>.217</td>
<td>-.371</td>
<td>.094</td>
</tr>
<tr>
<td>Seems insecure</td>
<td>.124</td>
<td>-.263</td>
<td>.016</td>
<td>-.018</td>
<td>-.669</td>
</tr>
<tr>
<td>Startles easily ('seems jumpy')</td>
<td>.019</td>
<td>-.066</td>
<td>-.013</td>
<td>-.028</td>
<td>-.794</td>
</tr>
<tr>
<td>Suspicious</td>
<td>.178</td>
<td>-.351</td>
<td>.130</td>
<td>-.016</td>
<td>-.487</td>
</tr>
<tr>
<td>Too dramatic (false emotions)</td>
<td>.540</td>
<td>-.123</td>
<td>.051</td>
<td>-.188</td>
<td>-.165</td>
</tr>
<tr>
<td>Too friendly with strangers</td>
<td>.204</td>
<td>.411</td>
<td>.486</td>
<td>-.234</td>
<td>-.143</td>
</tr>
<tr>
<td>Too jealous had to use you as though you were the child and she/he was the parent</td>
<td>.457</td>
<td>.062</td>
<td>-.052</td>
<td>-.311</td>
<td>-.328</td>
</tr>
<tr>
<td>Uncaring (shows little concern for others)</td>
<td>-.085</td>
<td>.004</td>
<td>-.002</td>
<td>-.869</td>
<td>-.107</td>
</tr>
<tr>
<td>Distressed or troubled by traumatic memories</td>
<td>.124</td>
<td>-.386</td>
<td>.253</td>
<td>.194</td>
<td>-.349</td>
</tr>
<tr>
<td>Does not show pain if physically hurt</td>
<td>-.387</td>
<td>-.139</td>
<td>.695</td>
<td>-.127</td>
<td>-.100</td>
</tr>
<tr>
<td>Sexual behaviour not appropriate for her/his age</td>
<td>.129</td>
<td>-.133</td>
<td>.691</td>
<td>.028</td>
<td>.172</td>
</tr>
</tbody>
</table>

Extraction method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalisation
Correlations in bold illustrate correlations (r) above .4

The forced entry two-factor model accounted for 43.41% of the total variance. Eight items loaded onto Factor 1 and eight items loaded onto Factor 2 (Table 9). However, three items did not load onto either factor at a level above 0.4 and the communality for five items was below 0.3 after extraction, suggesting low correlation between items. The forced entry three-factor model accounted for 50.09% of the total variance (Table 9). Seven items loaded onto the first factor, nine onto the second and three on to the third factor. One item did not load on to any factor whilst another loaded on to two factors. In the two, three and five factor models, the items loading onto each factor did not appear to be clinically or theoretically meaningful. Therefore, an interpretable factor structure was not found for the BAC-C questionnaire.
Table 9: Factor structure matrix for forced two-factor and three-factor models

<table>
<thead>
<tr>
<th>Item</th>
<th>Forced – 2 Factor Analysis</th>
<th>Forced – 3 Factor Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
<td>Can’t concentrate, short attention span</td>
<td>.122</td>
<td>.545</td>
</tr>
<tr>
<td>Craves affection</td>
<td>.377</td>
<td>.224</td>
</tr>
<tr>
<td>Eats too much</td>
<td>.049</td>
<td>.449</td>
</tr>
<tr>
<td>Fears you will reject him/her</td>
<td>.734</td>
<td>.036</td>
</tr>
<tr>
<td>Hides feelings</td>
<td>.589</td>
<td>-.012</td>
</tr>
<tr>
<td>Is convinced friends will reject him/her</td>
<td>.890</td>
<td>-.205</td>
</tr>
<tr>
<td>Lacks guilt or empathy</td>
<td>.059</td>
<td>.724</td>
</tr>
<tr>
<td>Prefers to be adults, rather than children</td>
<td>.233</td>
<td>.545</td>
</tr>
<tr>
<td>Seems insecure</td>
<td>.748</td>
<td>.068</td>
</tr>
<tr>
<td>Startles easily</td>
<td>.590</td>
<td>.141</td>
</tr>
<tr>
<td>(‘seems jumpy’)</td>
<td>.742</td>
<td>.083</td>
</tr>
<tr>
<td>Suspicious</td>
<td>.485</td>
<td>.313</td>
</tr>
<tr>
<td>Too dramatic (false emotions)</td>
<td>-.198</td>
<td>.779</td>
</tr>
<tr>
<td>Too friendly with strangers</td>
<td>.360</td>
<td>.445</td>
</tr>
<tr>
<td>Too jealous</td>
<td>.350</td>
<td>.254</td>
</tr>
<tr>
<td>Treats you as though you were the child and she/he was the parent</td>
<td>-.076</td>
<td>.778</td>
</tr>
<tr>
<td>Uncaring (shows little concern for others)</td>
<td>.683</td>
<td>-.079</td>
</tr>
<tr>
<td>Distressed or troubled by traumatic memories</td>
<td>.004</td>
<td>.429</td>
</tr>
<tr>
<td>Does not show pain if physically hurt</td>
<td>.098</td>
<td>.367</td>
</tr>
</tbody>
</table>

Extraction method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalisation
Correlations in bold illustrate correlations (r) above .4

Utility Questionnaire Data

Participant’s responses on the two online utility questionnaires related to the BAC-C and SDQ are displayed in Table 10. The participants had clear views of the relative merits of the BAC-C over the SDQ. Three particular characteristics were identified; the BAC-C had clear instructions, the measure was briefer and it was easier to complete without assistance. Participants also scored the BAC-C more positively when recognising problems at home. Conversely, participants valued the SDQ over the BAC-C for asking relevant questions about behaviours and topics at school, and when thinking about how useful the measure is
for people involved in the child’s care. Finally, participants scored the BAC-C more negatively for being too long and asking upsetting questions.

Table 10: Participant mean scores on the utility questionnaires for the BAC-C and SDQ
Qualitative Data

In order to explore whether the BAC-C offers useful information for the assessment of LAC according to foster/kinship carers and mental health clinicians, qualitative data was also gathered as part of the project. The qualitative data was comprised of five individual telephone interviews with foster carers and two focus groups with CAMHS clinicians (see Tables 11 and 12 for demographic information). Please note that pseudonyms have been used for the foster carers but not for the clinicians in order to preserve confidentiality.

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Type of Carer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karen</td>
<td>Female</td>
<td>Foster carer</td>
</tr>
<tr>
<td>Laura</td>
<td>Female</td>
<td>Foster carer</td>
</tr>
<tr>
<td>Elizabeth</td>
<td>Female</td>
<td>Foster carer</td>
</tr>
<tr>
<td>Lisa</td>
<td>Female</td>
<td>Foster carer</td>
</tr>
<tr>
<td>Barbara</td>
<td>Female</td>
<td>Foster carer</td>
</tr>
</tbody>
</table>

*Table 11: Foster/Kinship Carer Demographics*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Professional role</th>
<th>Years working in CAMHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>Psychiatrist</td>
<td>8 years</td>
</tr>
<tr>
<td>Participant 2</td>
<td>Psychotherapist</td>
<td>8 years</td>
</tr>
<tr>
<td>Participant 3</td>
<td>Art Psychotherapist</td>
<td>12 years</td>
</tr>
<tr>
<td>Participant 4</td>
<td>Clinical Nurse Specialist</td>
<td>5 years</td>
</tr>
<tr>
<td>Participant 5</td>
<td>Psychologist</td>
<td>2 years</td>
</tr>
<tr>
<td>Participant 6</td>
<td>Psychotherapist</td>
<td>15 years</td>
</tr>
<tr>
<td>Participant 7</td>
<td>Psychotherapist</td>
<td>Didn't state</td>
</tr>
<tr>
<td>Participant 8</td>
<td>Psychotherapist</td>
<td>Didn't state</td>
</tr>
</tbody>
</table>

*Table 12: CAMHS Clinicians Demographics*

The thematic analyses highlighted three overarching themes related to the BAC-C: ‘content’, ‘format and design’ and ‘ways of using the information’, to describe the experiences of foster/kinship carers and CAMHS clinicians using the BAC-C. Nine subthemes were also identified and will be discussed within the narrative with examples of quotes (see Appendix Q for further quotes supporting the themes). Whilst the two sets of participant data were
analysed separately, the three overarching themes corresponded to both datasets and therefore will be discussed together. The thematic map illustrates the relationship between the main themes and subthemes (see Figure 1).

**Content**

An overarching theme related to the BAC-C’s content was prominent across all foster carer interviews and within the clinician’s focus groups. Within this theme, two sub-themes were also present; ‘‘covers relevant topics for LAC’’ and ‘‘it is not comprehensive enough’’.

**Covers relevant topics for LAC** Foster carers gave frequent examples of the BAC-C covering behaviours and topics that they felt were relevant to the looked after children in their care. One participant reported that seeing behaviours that were reflective of her experience was ‘‘reassuring’’ and ‘‘comforting’’.

Laura: “…it is reassuring in a way, when you see those behaviours written down. And you know there are reasons for them”.

Foster carers frequently talked about the questionnaire as measuring something more ‘‘specific’’ than other questionnaires; with most suggesting it measured ‘‘emotional’’ difficulties, whilst others referring to ‘‘attachment disorder’’. Similarly, clinicians noted that the questionnaire tapped into a ‘‘specific’’ set of symptoms and most attributed these to attachment and trauma.

Karen: ‘‘…where this one is more specific to, as I said, an attachment, trauma type focus.’’
Figure 1: Thematic Map

Content
- Covers relevant topics for LAC
- Not comprehensive enough

Ways of using the information
- It can versus it can’t facilitate access to mental health services
- Provide feedback and monitor progress
- Prompt discussion with professionals

Format and Design
- It is easy to use versus it is too simplistic
- Interpretation of the questions may vary
Clinicians also largely agreed that the BAC-C covered issues pertinent to this clinical group and two professionals suggested that seeing behaviours on the BAC-C would not only be validating for foster carers, but could potentially foster greater empathy for the child.

Participant 3: “…this is a way of saying, this is what you’d expect from a traumatised child”.

Foster carers provided ample examples of behaviours included on the BAC-C that were neglected by other questionnaires. This was supported by the clinicians who frequently reported that information relating to ‘attachment’ was missing from typical questionnaires used in CAMHS.

*Not comprehensive enough.* However, foster carers also gave examples of difficulties commonly experienced in their LAC that were missing from the BAC-C. These included: controlling behaviour, rejecting affection, refusing to eat, toileting problems and hyperactivity. A number of foster carers felt that the SDQ also overlooked key behaviours they observed in their child; often referring to these as ‘subtle behaviours’. Two participants felt the SDQ was better equipped to identify behaviours related to ‘acting out’ or ‘physical behaviour’. They worried that the BAC-C would fail to detect these types of behaviours in their children and suggested that the two questionnaires fitted different types of children. However, participants felt that both sets of behaviour needed consideration.
Elizabeth: “The Brief Assessment would be easier to fill in for one of my girls, and the other one for one of the others.”

Likewise, clinicians expressed concerns that important information was missing from the BAC-Csomatisation, mood, concentration, imaginary friends and information about behaviours across settings. All clinicians agreed that there were limitations to using the BAC-C as a stand-alone tool and most argued that they would use it in conjunction with other routine measures, such as the SDQ, and alongside clinical judgement, developmental history and discussion. Some also felt that the BAC-C was not comparable to the SDQ given that it is a ‘trans-diagnostic’ measure and measuring something ‘more generic’ than the BAC-C.

Format and design

There were several sub-themes within the overarching theme related to the format of the questionnaire; layout and wording.

*It is easy to use versus it is too simplistic.* In terms of the layout, foster carers often made references to the questionnaire being ‘easy to look at’ or ‘easy to read’. Several foster carers felt that this was a result of less questions or less headings than other questionnaires. Several participants also talked about the ‘yes’ or ‘no’ style responses of the BAC-C as a factor that made it easy to complete.

Barbara: “Because it’s just like, ‘can they concentrate?’; ‘yes’ ‘no’. Whereas the SDQ is a bit more wordier.”
On the other hand, clinicians wondered whether the scale of ‘0, 1 and 2’ was too restrictive or ‘limited’. Several clinicians felt it may not ‘leave space for nuance’ and thus, may fail to ‘gage the seriousness of the difficulties’ or differentiate between children who are ‘fighting for resources’. One foster carer (Lisa) supported this query;

Lisa: ‘…there isn’t room to not be black and white’.

Clinicians also raised concerns about having a separate group of questions in their own section and worried that these may be missed by foster carers, leading to invalid responses. Nonetheless, clinicians repeatedly made comments about the questionnaire being ‘user friendly’, ‘well set out’ and many agreed they would be happy to send the questionnaire to foster carers.

**Interpretation of the questions may vary.** A sub-theme within this category, raised by both foster carers and clinicians, was the wording and interpretation of the questions. Foster carers generally felt that the questionnaire was understandable and ‘easy to read’. However, there were frequent examples of foster carers stating that the questions were likely to be interpreted differently according to different foster carers.

Laura: “Each of our tolerance levels are different… especially when you’re ticking boxes.”
This was also a sub-theme within the clinician’s discussions. Although clinicians typically felt the authors had done well to simplify behaviours of attachment disorder in the questionnaire, many also wondered whether foster carers would interpret the questions correctly. Clinicians questioned whether the items on the BAC-C were ‘too broad’, ‘subjective’, taken ‘literally’ and/or would require the foster carer to know a lot about the ‘internal world’ of the child. Questions such as ‘too jealous’ or ‘too friendly with strangers’ were picked out as subjective and misleading.

Ways of using the information

This subordinate theme is comprised of four sub-themes which were consistent with using the information collated by the BAC-C. The sub-themes were ‘highlight concerns’, ‘prompt discussion with professionals’, ‘provide feedback and monitor progress’ and ‘it can versus it can’t facilitate access to mental health services’.

**Highlight concerns.** Foster carers frequently talked about the BAC-C as a way of raising concerns about a child. Many talked about the BAC-C as a ‘starting point’ or ‘stepping stone’. A key advantage of using the BAC-C to document concerns was having problems ‘on the record’ or ‘in writing’. One foster carer (Karen) believed this would help her to ‘prepare to fight for my children’s corner’.

Clinicians also tended to talk about the BAC-C as a tool during the initial stages of gathering information to highlight key difficulties. Many felt the BAC-C could provide a ‘snapshot’ of information about a child at the referral stage which could help the professional to think ‘in a sharper, more focused way’ (Participant 5) when meeting the family for the first time.
**Prompt discussion with professionals.** Despite the relative merits of the BAC-C, foster carers repeatedly stated that they would prefer to discuss their concerns about the child with a professional. Many hoped that after filling out the BAC-C, they would have an opportunity to talk to a member of staff about the answers they had given and/or to hear the results of the questionnaire. Some talked about this in terms of gaining ‘feedback from your employer’ or being ‘consulted as a professional’, whilst others felt they needed to ‘talk between the lines’ to give a full picture of their child. When reflecting on their experience with using questionnaires, almost all foster carers said they hadn’t seen the results of questionnaires they have used in the past.

Similarly, clinicians gave many examples of using the BAC-C to talk to the foster carers about their answers on the questionnaire. Some talked about this in a positive light such as using the BAC-C as a ‘discussion tool’, a ‘prompt’ or a ‘semi-structured approach’ to gathering further information, whilst others criticised the BAC-C for being ‘not in depth enough’; preferring to gather information qualitatively and/or through observation. A handful of clinicians across the focus groups suggested that the BAC-C would be particularly useful for less-experienced clinicians who have less knowledge about complex trauma and attachment presentations.

Participant 3: “…as a member of staff who’s not terribly experienced in trauma work, actually that would make quite a good list of things that I want to be exploring”
**Provide feedback and monitor progress.** A sub-theme raised by both foster carers and clinicians was using the BAC-C to track and monitor behaviours within looked after children. Foster carers often talked about using the measure to gain objective ‘feedback’ on the child in their care and to see the progress they have made. Some suggested the BAC-C could be used routinely, for example, at the six-monthly LAC reviews.

*Laura:* “...would see what needs to be worked on or you’ve made progress… sometimes you can feel like you’re going nowhere.”

Clinicians also suggested that the BAC-C may be used as a measure of outcome. Similar to the foster carers, clinicians talked about the advantage of using the BAC-C was to demonstrate change in a ‘concrete’ way.

*Participant 1:* “… it could be used to assess whether attachment styles or patterns change or settle over time”.

**It can versus it can’t facilitate access to mental health services.** Several foster carers suggested that the BAC-C would enable their children to meet the criteria for mental health services. Three foster carers believed that many of the children they have cared for ‘don’t meet the stereotypes in the boxes’ and therefore don’t gain access to additional support. Frequently foster carers suggested children who act out were more likely to meet the criteria than children who showed their distress in other ways.
Lisa: “I’ve never been able to get my answers to quite fit with the types of things they ask (on the SDQ).”

Within the clinicians’ discussions, there was disagreement around whether the BAC-C would facilitate access to CAMHS. One clinician warned that as the BAC-C was measuring attachment disorder rather than a mental health disorder, the referral would likely be ‘knocked back’. It was also suggested that such a questionnaire would put more pressure on CAMHS to work with attachment disorder, which is not commissioned by the service presently.

Participant 5: ‘… they cannot access our service as looked after children for attachment disorder on its own’.


Discussion

Given the high proportion of LAC experiencing mental health difficulties and the poor outcomes for these children when left untreated, the accurate and meaningful assessment of LAC has been highlighted as a priority for both clinicians and policy-makers (Richardson & Lelliott, 2003; Bazalgette, Rahilly & Trevelyan, 2015). Existing mental health screening measures for children have been criticised for failing to reflect the pervasive and complex nature of difficulties displayed by LAC and children exposed to developmental trauma (Achenbach, Dumenci & Rescorla, 2003; Tarren-Sweeney, 2008; Denton et al, 2016). In an attempt to address some of these issues, the current study aimed to explore the utility and psychometric properties of a brief mental health screening tool developed specifically for LAC; the BAC-C (Tarren-Sweeney, 2013b) in a UK population. A mixed methods approach was employed for the investigation in order to gather rich and clinically meaningful information to inform the research question.

Psychometric properties of BAC-C

The construct validity of the questionnaire was supported by a significant correlation to the SDQ; a validated measure of emotional and behavioural difficulties in children. Given that the BAC-C measures similar theoretical constructs to the SDQ, the findings suggest that the BAC-C is a valid measure of mental health needs in LAC aged 4-11 years. The regression analysis revealed a strong predictive relationship between the SDQ Total and BAC-C Total. Subsequent analyses also found that the Emotional Problems and Conduct subscales were the only significant predictors accounting for 9% and 5% of the unique variance, respectively.

The relatively strong predictive power of the Emotional Problems subscale suggest that this is a significant construct in the context of LAC’s mental health and
that the BAC-C is able to capture this information. Foster carers frequently commented on ‘emotion’ and ‘emotional difficulties’ as significant difficulties experienced by LAC within the qualitative data. Furthermore, previous research investigating foster carers perceptions of LAC’s difficulties described problems as ‘emotional’ as opposed to ‘mental health issues’ (Sargent & O’Brien, 2004). Conduct problems have also been shown to be significant in LAC as two surveys conducted in Britain found that 38% of LAC present with symptoms of conduct disorder (Meltzer et al, 2003; Ford et al, 2007). Similarly, within the interviews, foster/kinship carers often talked about behavioural problems as challenging within their experience of LAC. This is particularly important given the strong link between conduct disorder and greater rates of placement breakdown (Munro & Hardy, 2008).

The study revealed that exposure to sexual abuse was the only trauma type significantly associated with greater mental health needs in this population. This was despite the fact that exposure to sexual abuse was also significantly associated with experience of domestic violence and physical abuse in this population. A recent study also found LAC exposed to sexual abuse reported significantly greater externalising and internalising problems on the Child Behaviour Checklist compared to LAC without a sexual abuse history (Lewis, McElroy, Harlaar & Runyan, 2016). The current study therefore supports existing research findings that sexual abuse in childhood is a significant risk factor for a range of mental health and behavioural problems (Putnam, 2003; Cutajar et al, 2010). A higher score on the BAC-C was also significantly associated with a previous referral to CAMHS, as predicted. This provides further evidence that the BAC-C is identifying children who present with greater mental health needs and who may require additional support from CAMHS.

No other significant relationships were established between the pre-care maltreatment variables and the BAC-C Total in the current study. For example, the
number of placement moves were not significantly associated with levels of mental distress in this sample despite evidence indicating greater attachment disruptions with multiple placement moves (Munro & Hardy, 2008). The reason for this finding may be a result of the young age of the sample, as older children are more likely to experience un-planned placement breakdowns compared to younger children (Selwyn & Quinton, 2004; Munro & Hardy, 2008). Furthermore, the greater proportion of childhood abuse in the sample may have diluted the impact of the maltreatment variables during the analysis.

The BAC-C possessed good internal reliability and thus evidenced the scale’s reliability within a UK LAC population. However, the inconclusive results of the principal components analysis indicated that the hypothesis predicting a stable internal structure for the BAC-C could not be supported. The original authors appeared to present the BAC-C as a uni-dimensional scale though items did not clearly map on to one factor in the current analyses. The low communality between scale and items could be the result of high variability in participant responses. This was an issue highlighted by foster carers and clinicians in the qualitative data who suggested that some of the items are likely to be interpreted differently or were too simplistic. As such, the structure of the BAC-C requires further examination.

Finally, the BAC-C identified 94% of the sample as above the clinical cut-off and experiencing clinically meaningful mental health difficulties. This was considerably higher than the SDQ which highlighted 67% of the sample as within ‘abnormal’ limits. Tarren-Sweeney (2013b) argued that the sensitivity of a brief screening measure is particularly pertinent to the LAC population given the serious consequences when mental health difficulties go undetected (Tarren-Sweeney, 2013b). As such, Tarren-Sweeney claimed that a brief mental health screening measure that fails to detect a significant number of clinical cases may be counter-
productive and perhaps even harmful for LAC (Tarren-Sweeney, 2013b). A recent enquiry into the mental health and well-being of LAC highlighted that local authorities and health services are failing to identify those in need of specialist mental health care (Department of Education, 2016). With this in mind, the BAC-C may be a more sensitive measure of mental health needs in LAC compared to the SDQ.

**Clinical implications**

The BAC-C possessed several psychometric strengths in terms of reliability and validity; suggesting it may be a useful tool for clinicians to use in LAC populations. It also highlighted a significantly higher proportion of LAC as in need of mental health services compared to the widely used SDQ. The qualitative data indicated that both the foster/kinship carers and clinicians agreed on what the BAC-C covered e.g. ‘attachment’, ‘emotional difficulties’ and ‘trauma’, and that these were relevant and meaningful topics in the context of LAC’s mental health. Many foster carers and clinicians alike also commented that these constructs were frequently missing from other measures. Clinicians in particular highlighted the lack of consideration for attachment difficulties in traditional assessment tools for children and young people. Furthermore, given that the BAC-C includes psychological and behavioural constructs beyond the DSM-IV PTSD criteria e.g. attachment, dissociation and sexual behaviour, the findings provide additional support in favour of a broader conceptualisation of children exposed to developmental trauma. The study also provides further information about the mental health needs of LAC; highlighting attachment issues, emotional difficulties and conduct behaviour as significant issues in this population.

Participants agreed that the BAC-C may benefit LAC in several ways. Both foster carers and clinicians suggested that the measure could be used to prompt
discussion between professionals and families around attachment and trauma psychopathology. Clinicians believed this would be particularly helpful for members of staff who are less experienced in the attachment and trauma field and/or may encourage clinicians to explore some of these issues as part of an initial assessment. This finding is particularly pertinent given that in the current economic climate, many CAMHS are facing significant funding and workforce reductions which often lead to experiencing members of staff leaving. Furthermore, many services are developing centralised assessment and triage services where less experienced clinicians are likely to be responsible for the assessment of children referred to services. Therefore, the need for clinically useful assessment tools for LAC is paramount and the BAC-C may provide a useful way of highlighting the importance of trauma and attachment during the assessment process.

Whether or not the BAC-C could facilitate access to CAMHS was a key theme within the qualitative data. Although foster carers hoped the measure would enable greater support from CAMHS, several clinicians stressed that access to CAMHS was dependent on meeting DSM-IV mental health diagnoses and as the BAC-C measured attachment, it would not enable access to CAMHS. However, research shows that children with histories of disrupted caregiving, abuse and neglect often present to services with a number of mental health symptoms (DeJong, 2010); thus suggesting attachment difficulties and mental health are not necessarily distinct entities. The strict referral criteria for CAMHS has been a long-standing barrier for LAC who regularly do not meet clearly defined diagnostic categories (Minnis & Del Priore, 2001; Vostanis et al, 2008). Clinicians in the field have warned against the over-reliance on diagnostic categories for this population (DeJong, 2010) yet evidence shows that LAC are frequently only able to access CAMHS with the presence of a comorbid hyperkinetic or emotional disorder regardless of serious behavioural difficulties (Vostanis et al, 2008). This is despite
the fact that evidence shows behavioural difficulties can be understood in the context of attachment difficulties (Minnis & Del Priore, 2001; Kenneth, Sheldon-Keller & West, 1996) and often mask emotional and developmental disorders (Vostanis et al, 2008). The lack of clarity about whether CAMHS accept referrals for LAC with attachment-related difficulties is an ongoing debate in spite of guidelines recommending clear LAC care pathways (NICE, 2010).

Although the proposal for the new DTD diagnosis (van der Kolk, 2005) attempted to address some of these issues, it was not accepted into the latest DSM-V due to the potential overlap it shared with other well-established diagnostic categories (see Schmid, Petermann & Fegert, 2013, for a review). Consequently, LAC are left without adequate mental health care provision and foster carers are expected to manage high levels of risk without appropriate training and support (Sturgess & Selwyn, 2007; Sargent & O’Brien, 2004).

Although the BAC-C may go some way to capture the mental health difficulties expressed in LAC, the current study also highlighted several weaknesses of the measure. Data from the utility questionnaire showed that participants rated the SDQ more favourably when thinking about relevant behaviours displayed at school and for being useful to clinicians working with their child. This is important given the evidence that attachment behaviours often change across different contexts e.g. school, social care, and with carers (Golding, 2006).

In the qualitative interviews, both foster carers and clinicians criticised the measure for failing to capture the full range of difficulties in these children and offered several examples of behaviours they felt were missing from the questionnaire such as toileting problems and somatising symptoms. There was disagreement amongst professionals as to whether attachment difficulties should be measured on a brief screening tool given the complexity of the construct. Many acknowledged it could be a useful ‘starting point’ at the initial information-gathering
or referral stage but felt that they could not rely solely on the measure. The costs of relying on narrow assessment measures in this population has also been emphasised in the literature (DeJong, 2010) and several researchers have stressed the importance of a comprehensive assessment when working with traumatized populations, including psychological formulation which encompasses developmental, systemic and attachment perspectives (Golding, 2010; Tarren-Sweeney, 2013b).

Given that an extended version of the BAC-C exists (ACC; Tarren-Sweeney, 2007), it may be fruitful to investigate this as a possible alternative to the BAC-C. Additionally, several clinicians remarked that items across both the child and adolescent versions of the BAC were applicable in the context of LAC in spite of previous research emphasising the importance of age-appropriate measures (Denton et al, 2016). This supports previous research findings that LAC can ‘get stuck’ at critical developmental levels (Bazalgette, Rahilly & Trevelyan, 2015) and that those supporting LAC are advised to respond to children at their developmental level, rather than chronological age (Farmer, Lipscombe & Moyers, 2005).

Finally, the poor internal reliability of the SDQ raises concerns regarding its use in LAC populations. This was the first study to report reliability within a LAC population despite considerable evidence supporting its psychometric properties in other child groups (Goodman, 1997; Goodman & Goodman, 2009; Goodman & Goodman, 2011). A previous literature review has highlighted poor reliability in several SDQ subscales in young children aged 4-12 years old (Stone, 2010) which may go some way to explain this result. Nonetheless, given the widespread use of the SDQ for conceptualising LAC’s mental health needs, further research with a larger LAC population is warranted in this area.
Methodological Limitations

Given that participants were aware of the study aims, it is likely that this led to a biased sample of LAC with greater mental health needs than the general LAC population. This certainly seems to be the case when looking at the number of children reaching clinical significance on the SDQ and BAC-C. The proportion of children identified with clinically significant scores was considerably higher than the initial validation of the BAC-C which identified 67% of children (Tarren-Sweeney, 2013b). Furthermore, those identified by the SDQ as ‘abnormal’ was almost double the 36% of general LAC population who scored in the ‘abnormal’ range within a recent national survey (Brown, 2014). Furthermore, over 50% of the sample had been referred to CAMHS. The population used to develop the measure by Tarren-Sweeney (2013b) reported an average of 3.5 confirmed maltreatment events and 4.3 years in care. The mean number of placements was 3.1, in contrast to the current sample whereby almost 50% were in their first placement. However, the mean scores on the BAC-C was 10 in the original population compared to 20 in the current sample. Therefore, the results of this study may not be representative of the general UK LAC population and it would be beneficial to replicate the study in a typical LAC population.

The self-report nature of the study may also have inflated the relationship between different variables via common method bias. Furthermore, the author failed to collect detailed information about the clinical caseness of the sample, for example, whether children had a current mental health diagnosis, an active referral to CAMHS and/or had received treatment for mental health difficulties. This information and the addition of a control group would have allowed further investigation into the discriminant validity of the BAC-C. It may also be beneficial to investigate the reliability and validity of the BAC-C in children who had been
exposed to developmental trauma, but were not looked after children to examine the BAC-C’s utility within this population.

Despite following guidelines regarding sample size, the advice was mixed and some authors recommended a significantly larger sample size of 250 (Cattell, 1978) or 500 for factor analysis (Comrey & Lee, 1992). Field (2005) recommended a minimum sample size of 200 participants for multiple regression and factor analysis. Therefore, the findings of the current study may have been influenced by the relatively modest sample size. This may have also impacted on the stability of the SDQ measure, particularly given the poor internal reliability estimates displayed by some of the SDQ subscales.

**Conclusion**

LAC are frequently exposed to a broad range of adversities during their early years and as such are a complex clinical group (Tarren-Sweeney, 2007). Each child’s response to adversity is unique, incorporating many interrelating biological, psychological and social factors (Bazalgette, Rahilly & Trevelyan, 2015). A clear understanding and formulation of the child can facilitate recovery and therefore, the need for an adequate and comprehensive assessment is crucial. However, traditional diagnostic categories and corresponding mental health screening processes often fail to capture the mental distress observed in these children. The BAC-C goes some way to highlight and track clinically meaningful mental health symptoms which are specific to LAC. In particular, the BAC-C raises the profile of attachment and trauma-related difficulties in the conceptualization of LAC’s mental health; issues which have been neglected by other measures. However, the measure is restricted by its’ brevity and potentially unstable structure; calling for further investigation within a larger sample. To conclude, the BAC-C may provide a
valuable overview of LAC’s mental health needs. However, it should be used in conjunction with other methods of assessment in order to gain a comprehensive understanding of the child and to move away from narrow, diagnosis-led assessment of these children.
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List of Appendices

Appendix A: University of Surrey Ethical Approval
Appendix B: NHS Research Governance Ethical Approval
Appendix C: Information Sheet and Consent Form (Foster/Kinship carers version)
Appendix D: Information Sheet and Consent Form (Clinicians version)
Appendix E: Debrief information sheet
Appendix F: Website landing page
Appendix G: Utility Questionnaire
Appendix H: Flyer to advertise the study
Appendix I: Demographic Information Questions
Appendix J: Interview Schedule (Foster Carers)
Appendix K: Interview Schedule (Clinicians)
Appendix L: Summary of reflexive journal
Appendix M: Further demographic results
Appendix N: Histograms of distribution for BAC-C total score and SDQ total score
Appendix O: Example quotes for each theme
Appendix P: Example of a coded transcript (foster carer)
Appendix Q: Example of a coded transcript (clinician focus group)
Appendix A: Ethical approval from Faculty of Arts & Human Sciences

Faculty of Arts and Human Sciences
Ethics Committee

Chair's Action

Proposal Ref: [Redacted]

Name of Student/Trainees: [Redacted]

Title of Project: Improving Access to Mental Health Services for Looked After children: An Evaluation of the Brief Assessment Checklist for Children/Adolescents

Supervisor: Mary John

Date of submission: 19th January 2015

Date of confirmation email: 19th March 2015

The above Research Project has been submitted to the FAHS Ethics Committee and has received a favourable ethical opinion from the Faculty of Arts and Human Sciences Ethics Committee with minor conditions. Confirmation has been received that the conditions stipulated after ethical review have now been addressed and compliance with these conditions has been documented.

The final list of documents reviewed by the Committee is as follows:

- Protocol Cover sheet
- Summary of the project
- Detailed protocol for the project
- Participant Information sheet
- Consent Form

This documentation should be retained by the student/trainee in case this project is audited by the Faculty Ethics Committee.

Signed and Dated: [Redacted]

Professor Bertram Opitz
Chair

Please note: If there are any significant changes to your proposal which require further scrutiny, please contact the Faculty Ethics Committee before proceeding with your Project.
Appendix B: Ethical approval from Research Governance NHS Trust in South of England

10th July 2015

University of Surrey
Guildford
Surrey
GU2 7HE

Research and Development

Thank you for your application to [Redacted] for research governance approval of the above named study.

I am pleased to inform you that you have all the necessary internal and external regulatory approvals to proceed. Details of your research project and any associated supporting documentation will be stored on an electronic database administered by the R&D Department.

This approval is valid in the following sites:

The documents reviewed for this approval were:

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Conditions of approval

- Upon completion of the research the study team will be required to complete a research proforma to enable the dissemination of results through the Trust.
The approval covers the period stated in the Research Ethics Committee (REC) application and will be extended in line with any amendments agreed by the REC. Research must commence within 12 months of the issue date of this letter. Any delay beyond this may require a new review of the project resources.

Please alert the Research and Development Office if significant developments occur as the study progresses, whether in relation to the safety of individuals or to scientific direction.

Please ensure that you comply fully with the Department of Health Research Governance Framework, in particular that you are aware of and fully discharge your responsibilities in respect to Data Protection, Health and Safety, financial probity, ethics and scientific quality. You should refer in particular to Sections 3.5 and 3.6 of the Research Governance Framework.

Please ensure that all information regarding patients or staff remains secure and strictly confidential at all times. Ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice, Data Protection Act and Human Rights Act. Unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

Amendments

Project amendment details dated after the issue of this approval letter should be emailed to the Research and Development Office for formal approval.

ICH-GCP Monitoring

The Trust has a duty to ensure that all research is conducted in accordance with the Research Governance Framework and to ICH-GCP standards. In order to ensure compliance the Trust undertakes random audits. If your project is selected you will be given 4 weeks notice to prepare all documentation for inspection. The trust undertakes annual monitoring of all research studies, please respond to any requests for information. Failure to do this will result in the suspension of research governance approval.

I wish you luck with your project and would be grateful if you could inform me when the project is complete or due to be closed on this site.

Yours sincerely,
Appendix C: Information sheet for foster/kinship carers

University of Surrey
Department of Psychology

Improving Access to Mental Health Services for Looked After Children: An Evaluation of the Brief Assessment Checklist for Children/Adolescents

Who are we?

The researchers; Ruth Denton and Catherine Frogley, are Trainee Clinical Psychologists Surrey's Doctorate of Clinical Psychology Programme. As part of their qualification they are required to undertake a piece of research in a clinical area.

What is the project about?

Many Looked After Children (LAC) are referred to mental health services (CAMHS) with a range of emotional and behavioural difficulties. Sometimes CAMHS staff use questionnaires to inform the referral process and gather a good range of information about the child. Frequently foster carers may be asked to complete these questionnaires as they are likely to be the most informed about the child's strengths and difficulties and their behaviour in the home.

We are interested in evaluating two mental health screening tools; the Brief Assessment Checklist for Children (BAC-C) and the Brief Assessment Checklist for Adolescents (BAC-A) against the Strengths and Difficulties Questionnaire (SDQ) to determine which one best captures the difficulties Looked After Children face.

What does the study involve?

Part 1

The first part of the study involves answering some questions about the child in your care, completing the SDQ and either the BAC-C or BAC-A (depending on the age of your child) in relation to the child who is currently placed with you. We will then ask you to complete two evaluation surveys in which you can rate your opinion of both assessment questionnaires.

Part 2

The second part of the study involves a small group discussion about the online questionnaires with up to 6 other foster carers. This session will be recorded so that each individual's opinions are accurately documented. The recording will not be used to identify individual foster carers and will be totally anonymous.

The session will take up to 60 minutes. Please let the researchers know if you would like to be involved in Part 2 of the study by giving your email address at the end of the online survey in part 1.

71
Parking costs will be reimbursed if required.

**What happens afterwards?**

After the questionnaires are completed the results will be used to determine which assessment questionnaire is most useful and informative according to the foster carers we have asked. The questionnaires will also be taken to a discussion group of Child and Adolescent Mental Health workers for them to discuss.

This study forms a significant part of the academic requirement for the Doctorate of Clinical Psychology programme. As such the results will be written up and the final report submitted for examination and for publication in a peer-review journal. All written reports will not contain any personally identifiable data.

The final report can be made available to foster carers who wish to know the outcome of the study. Please tick the box when prompted online if you wish to have access to an electronic copy of the summary report.

**What if I wish to withdraw?**

You may withdraw your consent at any time. This will not affect the way in which you are treated by the project team. The team may ask you why you have chosen to withdraw from the study although you are not obliged to answer this.

**How will my information be stored?**

Research data will be stored securely at the University of Surrey for at least 10 years, in line with University policy. Any information provided by you for the study will be stored securely in the University Of Surrey Department of Psychology or on encrypted memory stick if it is an electronic file. There will be no identifiable or personal information included in the study write-up regarding individual foster carers or children. Any personal data will be handled in accordance with the Data Protection Act 1998.

**Are there any risks?**

If you choose to participate in this study there is the potential that the material in the assessment instruments or discussed by other participants is of an upsetting nature. The assessment instruments are designed for foster carers to complete and therefore this risk is very low. However the questionnaires ask questions about behaviour in Looked After Children that could be upsetting to discuss or think about e.g. ripping of clothing.

If you feel affected by what is being discussed during the study please speak to one of the researchers who will encourage you to liaise with your placement social worker.

Please note that the researchers are not trained to interpret your scores on the questionnaires and therefore will not be able to provide any clinical advice or information about your child or young person. If you do have any concerns about your child, we advise you to discuss this with your placement social worker.
What if I have questions about the survey?
If you have any questions or concerns about the study once it has been completed please feel free to speak with.

Dates of the Study: The project will run from January 2015 to March 2016

Contact Details:
Research Team:

Project Supervisors:

If you have any further questions or are unhappy with any part of the study procedure please contact the University of Surrey Ethics Committee on the following details:

Research Integrity and Governance Office – 01483 689103 / 682051
General Inquiries – ethics@surrey.ac.uk
Study Name:
Participant Identification Number:
Researcher:

Please initial box

1. I confirm that I have read and understand the information sheet dated 18/01/2015 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my social care or legal rights being affected.

3. I agree to being recorded for the purposes of the research study and understand that my responses will remain anonymous.

4. I agree to take part in the above study.

Name of Participant Date Signature

Name of Researcher Date Signature
Appendix D: Information Sheet and Consent Form for CAMHS Clinicians

Participant Information Sheet

Who are we?

The researchers, are Trainee Clinical Psychologists at the University of Surrey's Doctorate of Clinical Psychology Programme. As part of their qualification they are required to undertake a piece of research in a clinical area.

What is the project about?

Many Looked After Children (LAC) are referred to mental health services (CAMHS) with a range of emotional and behavioural difficulties. Sometimes CAMHS staff use questionnaires to inform the referral process and gather a good range of information about the child. Frequently, foster carers may be asked to complete these questionnaires as they are likely to be the most informed about the child's strengths and difficulties and their behaviour in the home.

We are interested in evaluating two mental health screening tools; the Brief Assessment Checklist for Children (BAC-C) and the Brief Assessment Checklist for Adolescents (BAC-A) against the Strengths and Difficulties Questionnaire (SDQ) to determine which one best captures the difficulties Looked After Children face.

What does the study involve?

We would like to invite clinicians from CAMHS to a small group discussion of up to 6 people with the aim of discussing the mental health screening tools. We will ask each individual to look over an example questionnaire with anonymised data prior to discussion. This session will be recorded so that each individual's opinions are accurately documented. The recording will not be used to identify any individual. The session will last up to 120 minutes.

Parking costs will be reimbursed if required.

What happens afterwards?

After the discussion, the recordings will be transcribed verbatim and discussion themes will be generated by qualitative analysis.

This study forms a significant part of the academic requirement for the Doctorate of Clinical Psychology programme. As such the results will be written up and the final report submitted for examination and for publication in a peer-review journal. No personally identifiable data will be contained within any of the written reports.
What if I wish to withdraw?

You may withdraw your consent at any time. This will not affect the way in which you are treated by the project team. The team may ask you why you have chosen to withdraw from the study although you are not obliged to answer this. Any future employment at the University would not be affected by your decision to withdraw.

How will my information be stored?

The consent form will be stored securely within the Department of Psychology at the University of Surrey and will only be accessed by the research team. The data collected within the focus group will be stored on an encrypted memory stick and identifiable information will be removed from the transcript following transcription. Research data will be stored securely at the University of Surrey for at least 10 years, in line with University policy. Any personal data will be handled in accordance with the Data Protection Act 1998.

Are there any risks?

If you choose to participate in this study, it is possible that the information within the assessment tools and discussion amongst participants may be of a sensitive nature and may be upsetting for some. For example, the questionnaires ask about behaviour in Looked After Children that could be upsetting to discuss or think about e.g. ripping of clothing. However, the assessment instruments are designed for foster carers to complete and therefore this risk is low. If you do become upset

If you feel affected by what is being discussed during the study please speak to one of the researchers who will encourage you to liaise with your CAMHS line manager.

What if I have questions?

If you have any questions or concerns about the study once it has been completed please feel free to speak with the research team or project supervisors.

Contact Details:

Research Team:

Project Supervisors:

Dates of the Study: The project will run from May 2015 to March 2016.

If you have any further questions or are unhappy with any part of the study procedure please contact xxx Partnership Research & Development Team

Research Office –

General Inquiries –

This study has been reviewed and received a favourable ethical opinion from the University of Surrey Faculty of Arts and Human Sciences Ethics Committee.
Consent Form

Study Name:

Participant Identification Number:

Researcher:

Please initial box

1. I confirm that I have read and understand the information sheet dated 14/05/2015 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my social care or legal rights being affected.

3. I agree to respect the privacy of other participants and not to discuss other participants or their opinions outside the focus group without their permission.

4. I agree to being recorded for the purposes of the research study and understand that my responses will remain anonymous.

5. I agree to take part in the above study.

Name of Participant Date Signature

Name of Researcher Date Signature

77
Debrief Information Sheet

Improving Access to Mental Health Services for Looked After Children: An Evaluation of the Brief Assessment Checklist for Children/Adolescents

The study was an investigation into two assessment measures which may be helpful for assessing mental health difficulties in looked after children between 4 and 17 years.

The study aimed to promote better access to mental health services for Looked After Children and Adolescents and in doing so reduce the impact of earlier traumatic experiences.

As you might already be aware, children and young people coming into the local authority care system will often have experienced difficult life events such as abuse, neglect, bereavement, disability or serious illness in one or both parents. As a result they may be more vulnerable to developing mental health difficulties.

It is important that services provide early mental health assessment and intervention for looked after children and young people in order to manage difficult behaviours and emotions, and reduce the risk of placement breakdown. During the referral process, Child and Adolescent Mental Health Services (CAMHS) will often ask foster carers to complete questionnaires about the child/young person, as they are usually the most informed about the child’s strengths and difficulties.

The current study sought to evaluate two new screening tools: the BAC-C/BAC-A (Brief Assessment Checklist for Children/Adolescents), in comparison to the widely used SDQ (Strengths and Difficulties Questionnaire).

Foster carers were asked to give information about a child in their care, complete the SDQ, a quality of life scale and the BAC-C/A and to answer questions about each measure on a utility questionnaire. They were then given the opportunity to discuss their experience of the screening tools in more detail with a member of the research team. Finally, clinicians working in CAMHS were invited to take part in a small focus group to discuss the utility of the instruments within the referral and assessment of looked after children and young people.

Thank you for taking the time to be involved in this research project. Your help is greatly appreciated and will help inform the assessment and treatment of looked after children in the future.

If you were affected by anything within this research project please talk to your allocated Social Worker. Alternatively, you may find the following contacts useful:

The Fostering Network
Tel: 0207 401 9582 (10am-3pm, Monday to Friday)
Email: info@fosteringnetwork.net
Website: www.fostering.net/all-about-fostering
British Association of Adoption and Fostering (BAAF)
Tel: 020 3597 6116 - Advice given Mon-Fri, 9am - 1pm.
Email: adviceengland@baaf.org.uk
Website: www.baaf.org.uk

What if I want to know more?
If you would like to receive a report of this research when it is completed (or a summary of the findings), please contact the researchers

What if I have a concern?
Any concerns or complaints about any aspect of the way you have been dealt with during the course of the study will be addressed. Please contact the project supervisors:

If you have any further questions please contact the University of Surrey Ethics Committee on the following details:

Research Integrity and Governance Office –
General Inquiries – ethics@surrey.ac.uk

Thank you again for your participation
Appendix F: Online survey landing page for foster/kinship carers

Improving Access to Mental Health Services for Looked After Children and Young People

Why do you need my help?
Child and Adolescent Mental Health Services (CAMHS) will often ask foster carers and kinship carers to complete questionnaires about the child/young person, as they are usually the person who knows the child best.
We want to know your opinion on two core questionnaires for assessing Looked After children and young people’s strengths and difficulties.
This project hopes to inform better mental health assessment of Looked After children and young people. In the long term this research hopes to contribute to improved access to professional help for Looked After children and young people with emotional and behavioural difficulties.

What will you ask me to do?

We would like you to complete some short questionnaires about ONE child or young person currently in your care. You can complete the survey more than once if you care for children of varying ages.

Please click on this link if you currently care for a child between the ages of 4 and 11 years

Please click on this link if you currently care for a young person between the ages of 12 and 17 years

This study has received favourable approval from the Faculty of Arts and Human Sciences Ethics Department at the University of Surrey.
If you have any questions, please contact the research team.
Appendix G: Utility Questionnaire

These questions ask about the questionnaire you've just completed. Please tick the box that closest matches your opinion about the following statements:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructions were clear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I thought the survey was too long</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to complete the survey without assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The questionnaire asked about...

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>...behaviours I have observed in my child at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...subjects that my child has become upset about at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...behaviours that my child has displayed at school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...subjects that my child has become upset about at school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please tick the box that closest matches your opinion about the following statements:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are difficult behaviours that I have observed in my child that were not mentioned in the questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are subjects that my child gets upset about that were not mentioned in the questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The questionnaire would be useful for people involved in my child's care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would be happy to complete the questionnaire again</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The questions were upsetting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have not been asked these questions about my child before</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H: Flyer advertising the study to foster/kinship carers

Are you a foster or kinship carer currently caring for a child or young person aged 4 - 17 years?

We’re gathering foster and kinship carers’ views of a new mental health screening tool for LAC. It’s completely anonymous and takes just 15 minutes.

For more information please go to:

http://surveys.fahs.surrey.ac.uk/LACHealthstudy/

Or contact the research team:

[Redacted] (Trainee Psychologist) at [redacted] if you have a child aged 4-11 years old or [redacted] (Trainee Psychologist) at [redacted] if you have a child aged 12-17 years old

UNIVERSITY OF SURREY
Appendix I: Demographic information questions collected in the online survey

What is your gender?
What is your age?
What is your highest level of education?
What ethnicity do you consider yourself to be?
Where do you currently live?
What type of care do you provide?
What type of placement(s) do you typically provide?
How long have you been a foster/kinship carer?
  Less than 1 year
  1 to 2 years
  3 to 5 years
  More than 5 years

How old is this child?
How long have you cared for this child?
What gender is this child?
Under what circumstances was this child brought into care?
  Witnessing domestic violence
  Exposure to physical abuse
  Exposure to sexual abuse
  Neglect
  Bereavement
  I don’t know
  Other

How many placements has this child had?
  First placement
  2-3 placements
  3-4 placements
  More than 5 placements

Has this child ever been referred to Child and Adolescent Mental Health Services (CAMHS)?
Appendix J: Semi-structured interview schedule for foster carers

Topic Guide for Foster Carers

Thank you for getting involved in our study, we really appreciate your help. As you know, we are interested in gathering more information from you about the Brief Assessment Checklist which you filled out online.

Have you got any questions about the project after reading the information sheet?

We will be recording this phone call on a Dictaphone and it will be stored securely on an encrypted memory stick. If at any point you would like to stop the interview that is fine. Are you happy to begin?

1. In anticipation of this phone call, I wondered if there was anything in particular you wanted to tell me about your experience of being involved in the study or wanted me to know in relation to our study?
   a. How do you think questionnaires can be useful?

2. We asked you in the online survey about your experience of filling out the Brief Assessment Checklist. Did you have anything you wanted to add about what it was like to fill out?
   a. The way the questions/statements are worded?
   b. Length of time it takes to complete
   c. Did you feel confident completing the BAC yourself (i.e., without the support of a professional)?

3. Have you been sent a questionnaire like the BAC/SDQ in the past?
   a. If you have completed them in the past, how do you think the information is used?
   b. Do you think it could help your young person access services?
   c. What would prompt you to complete it?

4. I wondered what you made of the BAC as compared to the SDQ which you will be very familiar with
   a. How do you think the BAC compares to the SDQ?

5. In what way does the BAC capture important information about your young person?
   a. Is there anything it doesn’t ask that you think it should?

6. What role do you think it could have in services for looked after children?
7. Self-report?
CAMHS Focus Group Questions

Thank you for getting involved in our study, we really appreciate your help. As you are aware, we are interested in gathering information from you about a new questionnaire designed to assess looked after children; the Brief Assessment Checklist.

First of all, do you have any questions about the project after reading the information sheet?

First of all, we will give you approximately 20 minutes to have a look through the Brief Assessment Checklists and the SDQ to gather your thoughts on these questionnaires. Please feel free to make notes.

"pause to look at questionnaires"

We will be recording this focus group on a Dictaphone. As detailed in the information sheet, it will be stored securely on an encrypted memory stick. One of us will transcribe the focus group and will remove any personal information from the transcript so that you will not be identified. If at any point you would like to stop the recording that is fine, please let us know.

Are you happy to begin?

- After having had a chance to look over the Brief Assessment Checklists, what are your initial impressions of the questionnaires?
  - Length
  - Wording
  - Question content

- What is your opinion of using brief questionnaires in the assessment of children and young people who have suffered trauma?

- Which children in this service would you consider using this questionnaire for?

- How could you see /envisage the Brief Assessment Checklists questionnaires being used within this service?

- How does the questionnaire compare to questionnaires already used in this service?
  - How do the Brief Questionnaires compare to the SDQ?

- What are your thoughts about the child and adolescent versions of the questionnaire?

- The Brief Questionnaires come in carer-only format, unlike the SDQ which has a youth-report version, what are your thoughts on this?
Appendix L: Summary of reflexivity journal written during thematic analysis process

Whilst conducting the telephone interviews with foster carers, I found the stories of the foster carers incredibly moving and inspiring. As a result of this, I noticed my propensity to fall into my ‘clinical mode’, rather than remaining within the researcher role during the telephone interviews. I felt an urge to praise the women for the fantastic job they were doing with the children in their care and at times, to offer support or guidance.

I wondered whether this was also in part due to my awareness that the foster carers’ knew I was a clinical psychologist (as well as a researcher) and therefore, I felt obliged to provide some support. The foster carers all spoke of difficult and often distressing experiences of being a foster carer and the lack of support they receive from both Social Services and CAMHS. Once again, this fuelled my urge to support these women in some way. I felt that I had to apologise for being part of a system which they felt wasn’t supporting them.

The ability to stay neutral and to remain within my researcher role seemed to develop with each interview. I was able to empathise with the foster carers’ experience but to ask them to elaborate on certain points or focus on particular questions. I sought advice from my research supervisor, who also listened to my recordings to help guide me during the next interviews.

I noticed that I found it easier to be neutral and to stay within my researcher role during the focus groups with clinicians. This was probably as a result of the context, as I assumed professionals would not require any support from me, and also as a result of it being conducted within a group of people.

Through conducting the interviews and focus groups, I noticed that I already had some ideas about possible themes in my mind. Subsequently, my ideas for themes grew during the transcription of the data. On reflection, some of these initial themes were related to wider, systemic issues surrounding LAC and mental health provision. These are issues I find interesting and feel passionate about and therefore, were likely to be influenced by some of my beliefs. Therefore, I had to revisit the data and initial themes with the specific research question in mind. This enabled me to focus on the data related to the BAC-C.

My knowledge of LAC and CAMHS were influenced by the reading and knowledge I gained during the doctoral training course in Clinical Psychology and through preparation of the research project. Furthermore, I was on my CAMHS placement during the analysis of my data and this may have influenced my interpretation of the themes to some degree. During this period of time, I worked clinically with LAC and had discussions with professionals about mental health screening measures used in the service. Many clinicians had a negative opinion of the SDQ which may have influenced by own beliefs about the measure and its utility for this group of children.

I noticed that my first ideas surrounding the themes were quite positive about the BAC-C. As the research process continued and I refined my themes, these slowly developed into more objective and critical views about the BAC-C, which I now feel is more realistic.
**Table 13: Further demographic information related to the foster/kinship carers**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White British</td>
<td>167</td>
<td>87.9%</td>
</tr>
<tr>
<td>White Irish</td>
<td>3</td>
<td>1.6%</td>
</tr>
<tr>
<td>White Other</td>
<td>14</td>
<td>7.4%</td>
</tr>
<tr>
<td>Black or Black Caribbean</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>White and Black Caribbean</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>White and Asian</td>
<td>2</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest level of education</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal qualifications</td>
<td>21</td>
<td>11.1%</td>
</tr>
<tr>
<td>GCSE’s or equivalent</td>
<td>70</td>
<td>36.8%</td>
</tr>
<tr>
<td>A-Levels or equivalent</td>
<td>48</td>
<td>25.3%</td>
</tr>
<tr>
<td>Undergraduate degree</td>
<td>31</td>
<td>16.3%</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>19</td>
<td>10%</td>
</tr>
</tbody>
</table>
Appendix N: Histograms for BAC-C and SDQ total score data

**BACC_Total**

![Histogram for BACC_Total](image)

**SDQ_TOTAL**

![Histogram for SDQ_TOTAL](image)
Appendix O: A selection of quotes supporting each theme

**Theme 1: Content**

Covers relevant topics for LAC

<table>
<thead>
<tr>
<th>Participant</th>
<th>Example Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 2</td>
<td>“For me, it seems to cover all of (client name) behaviours…”  &lt;br&gt;“Oh there’s one on the BAC about too jealous. That’s a big behaviour that he did exhibit quite a lot of”.  &lt;br&gt;“So that’s quite interesting because that’s not on the SDQ and that would have been relevant for <em>child’s name</em>.”  &lt;br&gt;“When you’re looking at some of these behaviours, you think ‘oh well, it looks like my child isn’t the only child in the world that’s done that’”  &lt;br&gt;“It’s quite reassuring in a way when you can see these behaviours written down.”</td>
</tr>
<tr>
<td>Participant 3:</td>
<td>“The Brief assessment would be easier to fill in for one of my girls and the other one for one of the others. It’s kind of like, their, sort of, issues fitted slightly differently”.  &lt;br&gt;“I think the BAC one seems to be very, more, I guess more around emotion. Whereas the other one, there’s a lot more physical- if that makes sense.”  &lt;br&gt;“I don’t know if they’re indicative of trauma and attachment disorder.”</td>
</tr>
<tr>
<td>Participant 4:</td>
<td>“Like the question ‘are they suspicious?’ That wouldn’t come up on the other one I don’t think”  &lt;br&gt;“Do you know it was more about the emotions? Whereas the other one is more about concrete evidence. Not concrete evidence but…they’re asking they are absolutely everywhere.”</td>
</tr>
<tr>
<td>Clinicians</td>
<td>“Seems to have a, a greater kind of relational element.”  &lt;br&gt;“Attachment based questions and some trauma-based questions…”  &lt;br&gt;“I like that it is attachment based and trauma based. I think a lot of the other measures don’t consider those enough.  &lt;br&gt;“Focus too much on erm things that could be attributed to other diagnosable things rather than actually the attachment that goes through everything that we do really.”  &lt;br&gt;“SDQ … wider breadth of sort of psychopathology that it’s sort of looking for, not psychopathology but difficulties or child difficulties. Where this one is more specific to, as I said, the attachment, trauma type focus.”</td>
</tr>
<tr>
<td>Clinicians in Focus Group 2</td>
<td>“It’s being a bit more precise I think, because it is, it’s asking about attachment styles…”  &lt;br&gt;“questions are all very relevant to looked after children aren’t they?”  &lt;br&gt;“in terms of informing our trauma pa-pathway at least it’s got something that’s specific and relevant to a traumatised child and a child with attachment difficulties”  &lt;br&gt;“some of the dissociative kind of symptomology, which I don’t think anything else that we’re using is capturing unless you use a very specific, disorder specific questionnaire”</td>
</tr>
</tbody>
</table>
Subtheme: Not comprehensive enough

<table>
<thead>
<tr>
<th>Participant</th>
<th>Example Quote</th>
</tr>
</thead>
</table>
| Participant 1 | “I wasn’t happy with it and in fact I actually, sometimes I ticked two boxes for example and wrote notes which I know is not exactly what you’re meant to do but erm, yeah. I would prefer to discuss, even if it was in 5 minutes.”
| | “And I don’t feel that people would understand my child from it.” |
| Participant 2 | “There isn’t anything about erm, erm, rejecting affection.”
| | “So that’s not really covered anywhere. And that’s one of his big, or was, one of his big behaviours.” |
| Participant 3 | “But she doesn’t come up so easily on the other one because erm, she she, is, cause it, she, you could go through that and not know that she was violent.”
| | “I don’t think there’s a lot about control and my experience is that these children try to control lots of things. Because… they’ve had so much control taken away. There’s nothing that says ‘is this a controlling child?”’ |
| Participant 4 | “There’s the other side of the coin, ‘too friendly with strangers’, which he’s never ever been. But not the other, not the other side.”
| | “The fidgeting. I see you’ve got that on the SDQ. Fidgeting is another one.”
| | “Erm, there’s nothing about how they’re doing in school. Is that relevant?”
| | “Sometimes I just think actually it is better to fill in more than one thing.” |
| Participant 5 | “If they were acting out then the other one would probably be better. I think it probably needs to be dependent on the child.” |
| Focus Groups 1 | “I would want much more qualitative information than just a ‘yes/no’.”
| | “Feels almost like a shopping list”
| | “I actually can’t think of any time that I would be able to use it on its own...”
| | “It’s not in depth enough for what I would want.”
| | “Well you wouldn’t want to, sort of not giving it the attention it deserves by only doing a brief assessment really would you? I think it would be very poor to do that only.”
| | “… under eating and I can’t actually see any sign of that.”
| | “There are few things which I would see as missing from the checklist like, erm, you know the physical expression of erm, their feelings.”
| | “There’s nothing on there for mood that I can see.”
| | “That’s not covered at all so are they having headaches or tummy aches or you know, those kind of things.” |
| Focus Group 2 | “I want to see more.”
| | “Erm, I would, and for the primary school age in particular, I would really expect to see much more of the somatic stuff than than the verbal things.”
| | P1: I would find it also helpful to know how, the child presents in different situations
| | I would want to know why is it hard for them at home when in the ordinary world it might, it should be easier at home and more challenging at school, perhaps
| | “I wouldn’t feel as a very experienced clinician I would have any need to use that at all, I would I would get the answers that I would need particularly thinking about the trauma pathway by taking a good developmental history”
| | “I dunno is functioning, i-is where the child’s functioning or not functioning, captured here?”
| | “…the other measures are much more therapeutically, so it’s looking at specific areas of dys-dysfunction if you like, it’s a how dissociated are you rather than are you dissociated”
| | “P3: I don’t think they’re comparable really the SDQ’s so much more generic and sort of transdiagnostic isn’t it” |
Theme 2: Format and Design

Subtheme: It is easy to use versus it is too simplistic

<table>
<thead>
<tr>
<th>Participant</th>
<th>Example quotes</th>
</tr>
</thead>
</table>
| Participant 1 | “It’s easy to read and it’s in erm, it’s in easy language.”  
                “There’s less questions or less headings.”                                                                                                                                                                 |
| Participant 2 | “Very easy to look at. And you’ve got three options, not true, somewhat true and certainly true. Erm, and I suppose there’s differing erm levels of behaviours on here.”  
                “It seems easier to fill out with the 0, 1, 2. I know it’s exactly the same just in a different format, I don’t mean exactly the same but similar.”  
                “I guess it’s just more succinct maybe.”                                                                                                                                                                   |
| Participant 3 | “I liked that there wasn’t numbers for either of them because I hate the number thing.”  
                “The BAC, was easier to fill in than the other one. There just seemed, kind of more, I could go ‘yep, yep, yep’.  
                “I think there’s one of them that is much more ‘yes’ ‘no’ ‘yes’ ‘no’ with her, whereas the other one it’s more kind of ‘argh’.”  
                “I would probably think the first, the Brief assessment would probably be the one I would find easier to fill in.”                                                                                                                                 |
| Focus Group 1 | “It’s interesting that it’s just 0, 1 or 2 rather than a wider scale.”  
                “Doesn’t lead any, leave any space for nuance because it’s either this or that or somewhere in the middle. So I wonder how useful it will be because it’s not really a scale, it’s just a yes, no or in the middle.”  
                “It’s good to say within the last four to six months because I think that helps carers and parents focus that young people’s story”  
                “I think that’s a very very long period of time in a child’s life developmentally.”  
                “Whereas getting 20 questions back in the waiting room for three minutes, four minutes to fill out. You’re going to get that back.”  
                “Yeah the layout, certainly this particular layout erm, does not seem particularly fantastical. In that you’ve got numbers 1 to 16 alongside 0, 1 and 2.”  
                “I was struggling to work out at first why the last three or last four questions were sort of in their own section.”  
                “To pick out a single incident in 6 months seems a mismatch in terms of the accuracy of the scale.”                                                                                                                                 |
| Focus Group 2 | well they looked very user friendly in that you know, you’re, I think they’re well set out and if you sent this to a carer they’re not going to sit and despair  
                “well this is a, it’s a yes no isn’t it really, it’s it’s not at all, partly true or mostly true so…so it’s it’s limited but it’s…”                                                                                                                                 |


<table>
<thead>
<tr>
<th>Participant</th>
<th>Example Quote</th>
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</thead>
</table>
| Participant 1 | “Lots of foster carers you know are not… you’ve got different types of people that foster and some people don’t have any, you know, haven’t done much training and so don’t have… you know, they just want to be a mum type thing.”
“If I’d answered that question like really, like if I was black and white, well there isn’t room to not be black and white really.”
“That might have got missed with somebody who wasn’t as erm, as erm, emmm intuitive maybe. Or erm, experienced.”
“If he had gone to another family, it may never have been picked up. And I think filling in those sorts of forms wouldn’t, I don’t feel, would have ever helped it to be picked up.” |
| Participant 2 | “One of the questions could be better worded to ‘compared to other children’.” |
| Participant 3 | “Each of our tolerance levels are different. So something that I think of as ‘extreme’, somebody else might not think its extreme, they might think it’s in the middle of. I think, especially when you’re ticking boxes, what somebody thinks of as not at all and what somebody else thinks of as all the time can still be very different.”
“But because I’ve had training in observa-, observing children (Laughter). I put lots of other little things in that lots of other people wouldn’t notice but it’s because actually, part of my training was six weeks on observing children and writing down what they’re saying, not what you think they’re saying.”
“Actually different foster carer’s abilities are different. And they’re they’re… yeah. And for some things, will push buttons in one person and it won’t in somebody else and therefore they won’t see it as important. Cause it doesn’t bother them whereas it would somebody else.”
“I think that can be the case that there are foster carers who can’t be bothered because they know it’s going to involve effort for them.”
“I think there is a lot of differentiation between foster carers.” |
| Focus Group 1: | “I think we would be knowing what we meant by that which might not necessarily mean what somebody else who doesn’t do our type of work would make of that question.”
“I guess it’s open to misinterpretation because the language used in the, that part, whatever that bit is, erm seems really broad. Because it’s a brief thing you’re just kind of getting a sense rather than erm.”
“I guess it depends to what extent the family member or carer understands that ‘as if they were family’ in the same way that we would pick up on that and I can think of of many families that would and I can also think of families who really wouldn’t get the meaning of that and would take it very literally.”
“You’d have to know quite a lot about the child’s internal world to be able to answer that.”
“You know sometimes as a therapist you might elicit that or, you might get told those sorts of things but maybe carers wouldn’t necessarily know that. So they might put a ‘0’ for not true when that may not be the case.”
“…for example like “sexual behaviour not appropriate for his or her age” is a highly subjective thought and you may well get parents, natural parents who may view erm, you know sexual conduct at 14 15 to be entirely appropriate and okay and a normal part of teenage experimentation. Whereas potentially for us we might view that in a child with a trauma background or concerns, that actually that might be a lot more concerning.”
“We understand what those things mean but if a, if a parent or carer they, they might say it from their perspective rather than actually what we understand by craving affection or gorging food. It might be quite different so it’s open to misinterpretation maybe.”
“Because what a foster carer might see as being too friendly or too jealous, we might think as being appropriate or necessary under the circumstances in order to survive.”
P2: “Yeah so it would potentially erm, missing or potentially getting a very concerning picture that actually might not be quite so severe if considered in the
context of the other things we might expect to see.”

Focus Group 2

“well they looked very user friendly in that you know, you’re, I think they’re well set out and if you sent this to a carer they’re not going to sit and despair”

“But the SDQ is so established… everybody from, a-a you know a family therapist to an art therapist to uh a clinical nurse specialist to an assistant psychologist knows what an SDQ is and how to interpret it…”

“… therefore if I had to use something I could use that and know i-it was a-a-a kind of language that I could talk to other people about and I think the language of, questionnaires is is important it’s not, I do-um for me it’s not just a thing in itself it’s how it’s interpreted and used”
### Theme 3: Ways of using the information

#### Subtheme: Highlight concerns

<table>
<thead>
<tr>
<th>Participant</th>
<th>Example quotes</th>
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</table>
| Participant 1: | “You need a way to highlight to people that, you know, I’m not happy and I have concerns.”  
  “Actually if you can identify it and have it on the record to the social worker for example and then…”  
  “They certainly are a starting point but they should just be a starting point really. But often that’s as far as it goes. That form, you know, if it’s, you know, it’s erm, it’s recognised that it’s been filled in, it’s filed away and you know, that’s it.”  
  “You can’t do anything without the, you know, the permission of the social worker. So erm, you would erm… erm… you can then even, sort of, plough ahead looking at sort of the erm, you know, the CAMHS route or the erm, or the sort of more special needs type route, yeah.”  
| Participant 2: | “If I’ve ever got a point to make I will email it… So that it’s in writing. But I think something like this, that is quite specific, for specific behaviours to go on a child’s file and they could be used as a tool for offering support.”  
  “Actually highlight that yes this child does have problems and maybe us as social services should be offering some more support. We should be looking at this child and maybe referring them to mental health services.”  
  “And it’s down there in black and white rather than you know me sending whinging emails saying oh he’s done this or he’s done that.”  
  “I’d like to think that it was a, some sort of stepping stone on to some kind of therapy or higher support or mental health services.”  
  “I would like to have been in the position to refer him myself if I could have done. I was told I could do it through my GP… Erm but we never did get to that stage.”  
| Participant 3: | “I think they can be to start with because they give you a starting point…”  
  “I think it would help me prepare to fight my children’s corner.”  
| Focus Group 1 | “It does provide you with a snapshot of this is what this particular foster carer or parent is identifying as the things that they are concerned about or seeing.”  
  “I think it might be helpful in those cases where we get referrals for complex cases where it’s been thought of as ADHD or ASC or something along those lines. And we kind of reading between the lines at sifting or at referrals meeting we might think well ‘hmm that sounds a bit more attachemently to me’. I think it may be more useful in that instance to just sort of capture some of that. Because referrals are not always accurate in what they’re seeing are they?”  
  “Particularly when parents have got a sense that its attachment or you know particularly ASC or Asperger’s, then anything else that helps them to frame it in a particular way or that flags up that it may be attachment rather than ASC if we’ve been thinking about it in an ASC way would be useful as well so.”  
  “There are many clinicians who are very comfortable to just dive straight in and to to wean out and pick out these things.”  
  “Do have a sort of an awareness about trauma and attachment and possibly more so than other clinicians joining us maybe, or less experienced clinicians. And I wonder whether this might kind of help them to think about these issues in an introductory sort of way.”  
  P3: “One of the times I’ve got to do some sifting where you or I would read between the lines…”  
  P2: “…as a member of staff who’s not terribly experienced in trauma work, actually that would make quite a good list of things that I want to be exploring and considering when assessing within a clinical environment rather than necessarily just providing that to a carer.”  
  “…it could be useful perhaps when, in the way that we do the SDQs when a referral comes in”  
| Focus Group 2 | “…by the time the child’s got into the clinic the young person’s got into a clinic, we’re beyond this I would’ve thought in the sort of information we want to hear.” |
about but how can it might be useful, to be part of a referral, social care might want to send it in, for example which is where the majority of our LAC, referrals come from”

“It’s the case of capturing that on paper though isn’t it unfortunately”

“It certainly gives us um, markers for the therapeutic work that might be indicated with this this child”

“so is it going to highlight how we then offer therapeutic work”

“because it might tell you where the source of the symptom is here because it’s sort of looking a bit at the attachment but I don’t it hasn’t for me got a mental health flavour really”

P6: if I was a social worker and I was going to take a child into care, and I was going into child care proceedings I’d actually find these really useful because it would focus me down into what are the symptoms what am I looking at with this child that suggests that they’ve actually got really significant trauma?

if we had this completed at the time that the social, given that we’ve said that most of our L-LAC referrals come from social workers, would we find this helpful that the social worker does this form with the foster carer or whoever’s caring for the child and send that in with the referral because it certainly gives us um, markers for the therapeutic work that might be indicated with this this child

I think this would be helpful for foster carers because it tunes you into things that they might just find really irritating about the child and they don’t get, and this is a way of saying this is what you’d expect with a traumatised child, you know where is the child that you’re currently looking after on this, this scale it sort of focuses you or refocuses you in a slightly different way
Subtheme: Prompt discussion with professionals

<table>
<thead>
<tr>
<th>Participant</th>
<th>Example quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1:</td>
<td>“And maybe you could, you know, sit down with the social worker and have a discussion about it.”</td>
</tr>
<tr>
<td>Participant 2:</td>
<td>“I’m filling out a questionnaire and yet I’m not hearing, you know, the results of that or whatever, erm, yeah. I’m not being consulted, you know, as erm, as a professional.”</td>
</tr>
<tr>
<td>Participant 3:</td>
<td>“It’s like any other job, you know, you expect some feedback from your employer.”</td>
</tr>
<tr>
<td>Participant 4:</td>
<td>“But, I think... I think, I still think people need to spend time talking to you because you and tick a box.”</td>
</tr>
</tbody>
</table>

P3: “…there is then scope for the follow up questions and the needing to drill down beyond just the numbers.”

Focus Group 1
Something like SDQs an-and something brief like this going into a, um, a choice appointment um, can get me thinking in a, sharper way perhaps, more focused way… and there are somethings I’d want to link up with the child or the carers, I want to build up another picture it’s a bit like a jigsaw puzzle and I want to build the picture so any, any piece, is helpful, I find. Would it be more useful for less experienced clinicians, should less experienced clinicians be asked to deal with um uh, cases where developmental trauma, complex trauma i-i-i is an issue, complex PTSD

P6: I think these are all things that we would be looking out for, as wise monkey’s in this room

P6: whereas I think they are questions or things, themes that not everybody within the team would be, looking out for if we were less focused around uh psychopathology and kind of symptoms, and we were actually ab-able to work in a way where we could offer kind of very responsive, um psychological therapy

this has an advantage that you can use it before you meet, a young person, so you could send this out to to carers

Focus Group 2
would prompt more questions and more thoughts um, more curiosities and wonderings “laughs” and all that, it would start that process

can get me thinking in a, sharper way perhaps, more focused way

“…but would it be helpful for, I mean maybe we’re sitting here as a group of really
experienced clinicians um you know wise old monkeys sitting around this room, would it be more useful for less experienced clinicians, should less experienced clinicians be asked to deal with um uh, cases where developmental trauma, complex trauma is an issue, complex PTSD*
Subtheme: Provide feedback and monitor progress

<table>
<thead>
<tr>
<th>Participant</th>
<th>Example quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>“Well it could give you some idea about how your child is getting on.”</td>
</tr>
<tr>
<td>Participant 2</td>
<td>“Then maybe be used as a tool to, erm, see if the behaviours are improving, or you know, if there's been any escalation… I think it's a really really good idea.”</td>
</tr>
<tr>
<td>Participant 2</td>
<td>&quot;Are they used then to see if a child is, erm, in the category for, erm, assessment by mental health services? Is that how it is, that what they use it for or does it just give a degree of sort of an indication of their trauma or attachment disorder or…?&quot;</td>
</tr>
<tr>
<td>Participant 3</td>
<td>“I think it would be good if, if it was something that, erm, like when you have your-, like every six months when you do your erm LAC reviews. Then you can see where they've progressed and where there are still issues.”</td>
</tr>
<tr>
<td>Participant 3</td>
<td>“I just think that sometimes you would be able to see progress in an area or no, actually that needs to be worked on or actually look you’ve made some progress. Because sometimes as a foster carer you can really feel like you’re going nowhere.”</td>
</tr>
<tr>
<td>Participant 3</td>
<td>“And I think if you’ve actually kind of got something that’s exactly the same that you-, and you don’t go back and read through your notes.”</td>
</tr>
<tr>
<td>Participant 4</td>
<td>“So you haven’t even got that to go back and look at and say, ‘actually we’ve made loads of progress from there’. I have nothing.”</td>
</tr>
<tr>
<td>Participant 4</td>
<td>“They can see the change that they’ve made because you’re dealing in today.”</td>
</tr>
<tr>
<td>Participant 5</td>
<td>Focus Group 1 P2: “You have to know whether or not to expect to see scores go down on it as to whether or not you even could actually use it in that way kind of way as a routine outcome measure.”</td>
</tr>
<tr>
<td>Participant 5</td>
<td>Focus Group 1 P4: “You’d hope that sort of somebody who’s been referred in and who is impulsive or lacks that guilt, after some therapy that it’s going to go from mostly true to something like partly true or actually that issue has resolved itself…”</td>
</tr>
<tr>
<td>Participant 5</td>
<td>Focus Group 1 P4: “But then it’s it’s again about the tracking because you’re not going to do a full assessment on a, to do a track.”</td>
</tr>
<tr>
<td>Focus Group 2</td>
<td>P4: “In therapy as an outcome measure so looking at whether attachment styles or patterns change or settle.”</td>
</tr>
<tr>
<td>Focus Group 2</td>
<td>“I guess having a measure, which might, will this be able to track these sort of things or difficulties?”</td>
</tr>
<tr>
<td>Focus Group 2</td>
<td>“So using it as, as I said, as an outcome or as a screen.”</td>
</tr>
<tr>
<td>Focus Group 2</td>
<td>In a sort of more concrete way coz we, we like to think that we’ve made changes &quot;laugh&quot; but how do- how do we demonstrate that in a more concrete way It’s an adjunct isn’t it to what, what we do and it’s finding a way of measuring change</td>
</tr>
</tbody>
</table>
**Subtheme: It can versus it can’t facilitate access to mental health services**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Example quote</th>
</tr>
</thead>
</table>
| Participant 3: | “I can’t I can’t see her ever in her childhood at the moment, ever actually meeting the criteria.”  
“The criteria in the questionnaires. She doesn’t come out as violent for example, so she gets missed off the list doesn’t she?” |
| Participant 4: | “I think for young young children that I’ve been asked about. They don’t fit the stereotypes in the boxes”.  
“I’ve never been able to get my answers to quite fit with the types of things that they ask whereas the BAC-C I think it’s better.” |
| **Focus Group 1** | “At the point where the person is making a decision as to where to refer or what to put on a referral form as to the nature of the difficulties?”  
“It could be useful for schools to fill in beforehand…before they refer to CAMHS”  
“I think to use this generally within CAMHS would be useful.”  
“Because you might, again it might pick up those kids who haven’t. It might not be looked after but have some specific…”  
“I think you know, a lot of those items on there are the issues which present to CAMHS. So people write in going ‘we have a young person who is having fights, or being really impulsive, not showing remorse’ or young people who are getting into fights is more difficult so using it as, as I said, as an outcome or as a screen to get into CAMHS. It’s quite useful for that in my view.”  
“Often we get people coming in with the school or the paediatrician saying, ‘oh it’s attachment’ and actually maybe that could be some initial screening in whether they, where they refer to.” |
| **Focus Group 2** | “They wouldn’t necessarily meet the referral criteria for us for mental health problems, so they might have attachment disorder but, but they cannot access our service as looked after children for attachment disorder on it’s own”  
“…for us it would be more of a mental health component because you can score twos on all this and, while sitting in this room we might think, gosh you know this is really interesting…unless they’ve got a mental health component…they would be knocked back “…will put pressure on th-the relationship, strained relationship strained, not strange, between social care and CAMHS that says what are you going to do about it CAMHS and we say, nothing.”  
“here is always about looking for a specific mental health condition”  
“…if people are asking specifically for attachment work it’s kind of then batted back to social services” |
### Appendix P: Example of a coded transcript

<table>
<thead>
<tr>
<th>P: He, erm. The the sort of... I, I think it’s a control thing!</th>
<th>Control thing</th>
<th>Controlling behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>He had the control over that situation and erm, he was controlling that one a little bit. Well I will stand here and not on the steps and you know. But he used to, he used to do very strange things like that. He’d just stare, or he’d rock. That’s not mentioned either is it? The rocking?</td>
<td>He was controlling</td>
<td>Strange behaviours</td>
</tr>
<tr>
<td>I: No, no. P: Head banging and punching, punching himself in the head.</td>
<td>I will stand here</td>
<td>Rocking behaviour</td>
</tr>
<tr>
<td>P: Head used to do an awful lot of that. Or wetting himself. God, I sound like I’ve been through the mill don’t I?</td>
<td>Do strange things</td>
<td></td>
</tr>
<tr>
<td>I: You are doing a wonderful, but very difficult job by the sounds of things. All of this is really useful information and these things are really important for us to know. So please keep your opinions coming… (Laughter).</td>
<td>Just stare</td>
<td></td>
</tr>
<tr>
<td>P: Erm, the fidgeting. I see you’ve got that on the SDQ. Fidgeting is another one.</td>
<td>He’d rock</td>
<td></td>
</tr>
<tr>
<td>I: Hmm.</td>
<td>Not mentioned</td>
<td>Self-injurious behaviours</td>
</tr>
<tr>
<td>P: I’m constantly saying, ‘do you need the toilet’, ‘no’. And he can’t keep still. And he stands. He jumps from foot to foot. And you know when he’s sitting on the settee watching tele he’s always fidgeting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I: Hmm…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P: Erm. What else? Pause (0.2). Hmm, there’s nothing about, erm, I suppose this covers 4 to 11 (years). Erm, there’s nothing about how they’re doing in school. Is that relevant?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I: Do you think that would be relevant? To know how he’s doing in school?</td>
<td></td>
<td></td>
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<tr>
<td>P: And he’s he’s fantastic in school. It’s only when he was at his height erm of erm, I don’t want to call it bad behaviour, but you know what I mean, erm, when he was at his worst, that was the only time that it sort of fed into his school life. And he had meltdowns and he’d crawl under tables, erm, climb into corners and stuff. Erm…</td>
<td>He’s fantastic in school</td>
<td></td>
</tr>
<tr>
<td>I: Hmm…</td>
<td></td>
<td></td>
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<tr>
<td>P: The other thing that struck me, erm, about him at the beginning of the year was how much, how tiring it must have been for him to keep up the, it was almost like he was a completely different personality, erm, and he’d flip from one to the other. That’s another thing.</td>
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<td></td>
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<tr>
<td>I: Hmm.</td>
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<tr>
<td>P: He would be good. And then, without any obvious trigger, he would just flip to this other persona. Erm, and his eyes used to go black. And he’d stare at me and I’d say, “Are you okay?” and he’d say things like “Why do you need to know?” and that was how it went on, but it was the speed at which it happened.</td>
<td>Struck me</td>
<td></td>
</tr>
<tr>
<td>P: You know, everything would be fine and then the next minute you’d think “oh my god what’s happened now?”</td>
<td>How tiring he must be</td>
<td></td>
</tr>
<tr>
<td>I: Hmm. P: You know, “I haven’t said anything” but you know, there was obviously something going on in his mind, some thought or maybe a smell, I don’t know…</td>
<td>Flip from one to another</td>
<td></td>
</tr>
<tr>
<td>I: Yeah.</td>
<td>Without any trigger</td>
<td></td>
</tr>
</tbody>
</table>

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**Note:** This table provides a coded transcript example, with highlighted sections indicating coded behaviors and their corresponding labels.
P: ... that took him back somewhere. A memory. Yeah, you know, when he came back, I handled things in a completely different way because I honestly almost had a breakdown and I was paying to go see a counsellor.

I: Yeah. That sounds very difficult.

P: Once I had that two week break, when he came back, I just told him that I wouldn’t tolerate it anymore.
Appendix Q: Example of coded transcript from clinicians focus group

F2: but it can be if you like
F5: but...but these forms wouldn’t give social care an understanding because if, I’m just thinking if kids are k/c, tickling and scoring twos on a lot of these boxes they wouldn’t necessarily meet the referral criteria for us for mental health problems, so they might have attachment disorder but, they cannot access our service as looked after children for attachment disorder on its own
F2: *sigh* well...but would they um, if it’s a complex developmental trauma, which has led to an attachment disorder?
F4: it’s the case of capturing that on paper though isn’t it unfortunately
F2: mmm...I mean, the you know, the child that appears to be spaced out like in a trance I mean that’s a very very significant, um, you know thi-thing to notice
F1: mm, dissociated
F2: they’re dissociative, umm...what’s the what’s the line once for that
F1: there isn’t one
F2: there isn’t one...well does not show pain when physically hurt maybe, it’d be a kind of dissociative response to....um
F4: I can’t really remember ever um, a referral for a child looked after being, rejected, I can’t remember it I’ve been in, um, I’ve been at (team) for 3 years and what’s come in the little that’s come in sometimes is enough to explore further and I think um, so when it
F2: *interrupting* well I think that might be um, um a local thing
F4: is that the same?
F2: no
F4: it’s not exa
F3: from knowing some of your colleagues there’s quite a strong drive around kind of developmental attachment difficulties and trauma
F4: absolutely but in practice, um, I think there’s the assumption when, when a child comes in, a referral and um, I think my colleagues anyway, automatically assume that there’s been some trauma which needs to be further explored before, it’s just sort of rejected or it doesn’t meet the criteria bit um...
F3: but I’m thin-I don’t know if we’re along the same lines, it’s diff- it feels different here like
F2: I’m not saying it’s it’s that’s not right I think it is
F4: ch no, it is...so do I
"Laughs"
F4: but um but it’s interesting, I was just thinking that when was the last time that we said no this child looked after, doesn’t meet the criteria and I cannot think of one, um, maybe that’s because all the cases were complex I don’t know but how...a child who is in foster care or some kind of residential placement has complex difficulties, most of the time and I’m trying to think of a time when that isn’t evident, in some way
F3: um, I’m just thinking about how we’re set up in terms of how we screen our referrals we’re all, you know the barrf here is always about looking for a specific mental health
Chapter Two: Major Research Project Proposal

Developmental Trauma in Looked After Children: Are We Adequately Assessing the Mental Health Needs of This Population?

September 2014

Word Count: 2998
Introduction

Background and theoretical rationale

The terms complex trauma and developmental trauma have been used within the literature to describe traumatic experience that is severe, sustained and developmentally detrimental. Such trauma can have a profound and lifelong impact on psychological and physical development (Kisiel et al, 2014). Given that no single diagnostic criteria adequately considers the range of symptomology in victims of complex trauma, clinicians have proposed a new diagnosis; developmental trauma disorder (Van der Kolk et al, 2009). Although this wasn’t accepted for DSM-V, research continues to examine its clinical utility (Ford, Grasso, Greene, Levine, Spinazzola & van der Kolk, 2013).

Children and young people entering the local authority care system have frequently experienced adversity that would be considered developmental trauma. The majority of children entering care during 2012-2013 had experienced abuse or neglect (43%), whilst others experienced bereavement, disability or serious illness in one or both parents (Department of Educaion, 2013). In addition to this, being ‘looked-after’ often involves traumatic and major upheaval. As a result, this vulnerable group have greater mental health needs than their peers (Utting, Baines & Stuart, 1997), with up to 45% having a diagnosable mental health disorder in one study (Meltzer et al, 2003). Nonetheless, research suggests problems are frequently undiagnosed and remain untreated (McCann et al, 1996). Therefore, early mental health assessment and intervention for LAC remains a clinical priority. The National Institute of Clinical Excellence (NICE) guidelines for LAC indicate services should provide early intervention to promote mental health and well-being, in order to manage challenging behaviour and reduce the risk of placement breakdown (NICE, 2009).
Most commonly, the mental health of LAC are assessed through parent-rated rating scales such as the Child Behaviour Checklist (CBCL; Achenbach & Rescoria, 2001) and the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). Since 2008, all local authorities in England are required to administer the SDQ annually for LAC aged 4 to 16 years (Department for Children, Schools and Families, 2009). The SDQ assesses four domains: emotional symptom, conduct problems, hyperactivity/inattention, peer relationship problems and prosocial behaviour and thus, the mental health of these children have been defined in terms of difficulties measured in this scale. In 2013, around half of all LAC aged 5-16 years fell within the ‘borderline’ or ‘cause for concern’ category, according to this scale (Glenndenning, 2013).

Researchers have questioned the use of generic rating scales for children exposed to developmental trauma (Briere et al, 2001) and specifically in the LAC population (Tarren-Sweeney, 2007). Tarren-Sweeney highlighted that generic tools fail to consider attachment, peer relationship difficulties, dissociative/anxiety responses to trauma or age-inappropriate sexual behaviour; all of which have been identified as areas of difficulty following complex trauma (Cook et al, 2005). A recent literature review evaluated assessment measures used with children under 12 years of age exposed to complex trauma (Denton, Frogley, Jackson, John & Querstret, 2014). The authors highlighted the lack of appropriate measures for developmental trauma with the most promising measures capturing a wide range of symptoms including post-traumatic stress, sexual behaviours and more general anxiety and depressive difficulties such as the Assessment Checklist for Children (ACC; Tarren-Sweeney, 2007) and Trauma Symptom Checklist for Young Children (TSCYC; Briere et al, 2001). Additionally, the Behaviour, Emotional well-being, Relationships, Risk and Indicators of psychological distress in children and young people (BERRI) checklist was developed by Miriam Silver and is used clinically in the UK. To date, it
has not been evaluated for reliability or validity and there are currently no cut-off scores to indicate normal/clinical ranges.

In order to facilitate referrals to child and adolescent mental health services (CAMHS) and to provide the most appropriate treatment for LAC, it is crucial that clinicians are able to accurately identify and assess potential areas of need. Thus, the current research project aims to assess the utility of two psychometric measures in the assessment of LAC; the ACC and BERRI.

Research Question

Primarily, what are foster carers views of using and completing the ACC and BERRI, specifically which one do they find easier to complete and most relevant when thinking about the children in their care? Secondly, do clinicians working in CAMHS believe the questionnaire selected by foster carers can offer useful information within the assessment process?

Method

Design

The study will be a mixed methods cross-sectional design which will be conducted over three stages (see Procedure). The study will be part of a larger research project in which there are two arms. This arm of the project will focus on children aged 4-11 years old and will evaluate the ACC, whilst another trainee clinical psychologist will evaluate the Assessment Checklist for Adolescents (ACA; Tarren-Sweeney, 2013) for young people aged 12-18 years old.
Procedure

Stage 1: Questionnaire consultation (Quantitative data)

Recruitment. The research team will approach local authority social services departments to take part in the research project. Following approval from the Local Authority the researchers will contact social workers in person and/or via email to discuss the study aims and objectives. Social workers will be asked to pass on the study’s advert to foster carers on their caseload either in person, within a letter or via email. If participants are willing to be contacted, the social worker will pass on contact details to the research team and/or foster carers can contact the research team themselves.

Foster carer consultation. Willing participants will be invited to attend a collective meeting with the research team alongside other foster carers. The collective meeting means several datasets can be collected at one time-point and participants have the opportunity to discuss the project with the researchers. A variety of timeslots will be made available to foster carers to enable participants to take part around their work/child commitments. Participants will be given an information pack including a participant information sheet, a consent form, the ACC and the BERRI. Additionally, each questionnaire will be accompanied by a utility questionnaire (Appendix A). For the ACC and BERRI, participants will be asked to examine each item, write down any they believe are irrelevant and complete a utility questionnaire. In order to avoid possible order effects, half the participants will be asked to review the ACC first and the other half will be asked to review the BERRI first.

Selecting one standardised questionnaire (ACC or BERRI). Data gathered at step 2 will be reviewed. The decision as to which of the standardised questionnaires (ACC or BERRI) will be going forward into stage 2 will be made based on the total
scores on the utility questionnaires (Likert scale) and the proportion of items on the standardised questionnaires participants marked as being ‘irrelevant’.  

Stage 2: Focus group with foster carers (Qualitative)

Recruitment. Participants who attended Stage 1 will be contacted and invited to attend a focus group, with the aim to gather more detailed qualitative information about the ACC or BERRI, such as, ease of completion, relevance of the items, areas not covered by the questionnaire and additional comments.

Focus Group. During the first 30 minutes, participants will be asked to complete the following, based on one (looked after) child in their care: 1) demographic information sheet, 2) SDQ and 3) the ACC or BERRI (whichever was determined to be most relevant from Stage 1). The remaining hour will be spent discussing the utility of the measure (ACC or BERRI) and the SDQ when thinking about their child. A semi-structured interview schedule including questions on a) ease of completion, b) user instructions, c) item validity and d) potential distress caused by the questions will be employed. Focus groups will be audiotaped and transcribed.

Data preparation. The research team will randomly select one set of completed data associated with a LAC to take forward into Stage 3.

Stage 3: Focus group with clinicians (Qualitative)

Recruitment. The research team will approach clinicians working in CAMHS via email with information about the study aims and objectives.

Focus group. Willing participants will be invited to attend a focus group lasting approximately 90 minutes. Using a focus group allows us to collect detailed information from more than one person in a cost-effective way. Furthermore, the interaction between group members is likely to result in increased elaboration and
in-depth discussion about the utility of the questionnaires. Participants will be provided with one set of anonymised clinical data collected in Stage 2. The first 30 minutes will be spent reviewing this information. In the subsequent 60 minutes, the clinician’s views on this information will be obtained via a structured interview schedule.

**Participants**

Foster carers will be recruited for Stages 1 and 2 of the project from local authority social care service departments within the South of England. At present, one local authority fostering team has expressed an interest in being involved in the research. Social workers will be approached in person and via email by the research team to consider suitable foster carers on their caseload. Social workers will be asked to forward an advertisement about the research study to potential participants via email, in person or in writing. A maximum of forty foster carers will be contacted with the aim that 50% will take part in the study. This was considered to be a realistic goal given time allocated to the project whilst still providing enough participants to address the research aim. It is anticipated that approximately 3-4 foster carers will participate in stage 2. This was considered to be realistic and is a similar number of participants in similar research utilizing focus groups (Whyte & Campbell, 2008).

**Inclusion criteria for foster carers:**

- Participants will be foster carers offering long-term placements. This will ensure that the foster carers have sufficient knowledge about difficulties in LAC.
- Participants will be currently caring for a child between 4-11 years old (this complies with the ACC)
• Participants will have known the child from a minimum of four months (as the ACC and BERRI specify that behaviour is rated over the last 4-6 months).

Participants in the third stage of the study will be qualified clinical psychologists, psychotherapists, psychiatrists and/or psychiatric nurses working within CAMHS in order to gain a multi-disciplinary perspective. It is anticipated at 4-6 participants will take part in the focus group as this is a similar number of participants in similar research utilizing focus groups (Whyte & Campbell, 2008).

**Inclusion criteria for clinicians:**

- Qualified psychologist, psychiatrist, psychotherapist and/or psychiatric nurse.
- Participants will have worked within CAMHS at least one year. This will ensure participants have sufficient experience of children and adolescents with mental health difficulties.

**Measures**

The ACC (Tarren-Sweeney, 2007) is a 120-item carer-report psychiatric rating scale for children aged 4-11 years (Appendix A). Each item refers to an individual behaviour, emotional state, trait, or manner of relating to others, that is observable by a child’s carer. The ACC employs a three-point response scale and asks that carers consider behaviour over the last 4-6 months. In the initial validation study based on 412 Australian children in long-term care, internal reliability was high (Cronbach’s α= 0.96). The measure also demonstrated good content, construct and criterion-related validity.

The BERRI was developed by Miriam Silver and colleagues in 2008, in association with the Clinical Psychologists working with Looked After and Adopted
Children (CPLAAC) network (Appendix B). It is an 87-item assessment tool covering four domains: behaviour, emotional well-being, relationships, risk and indicators of psychological distress. For each item, the carer is asked to mark how often the child/young person shows evidence of each problem (frequency) and how difficult a problem it is when they show that behaviour (difficulty). The frequency and difficulty scores are then multiplied together to give a ‘challenge’ score. The instrument is used clinically within a number of looked-after children services in the UK but currently there is no published data on reliability, validity or norms.

The SDQ (Goodman, 1997) has 25 items, 20 of which relate to four sub-scales on emotional symptoms (anxiety and depression), conduct problems (oppositional or anti-social behaviour), hyperactivity and peer relationship problems (Appendix C). A fifth sub-scale relates to pro-social behaviour. The total difficulty and sub-scale scores are standardised into well-validated bandings of ‘normal’, ‘borderline cause for concern’ or ‘cause for concern’. Reliability is satisfactory, internal consistency (mean Cronbach α = 0.73), cross-informant correlation (mean: 0.34), and retest stability (mean: 0.62). SDQ scores above the 90th percentile predicted a substantially raised probability of independently diagnosed psychiatric disorders (Goodman, 2001).

A utility questionnaire to assess the foster carer’s views about the trauma-informed measures (ACC and BERRI) will be devised alongside colleagues in the research team for use in Stage 1 (see Appendix D).

A data collection form to gather demographic information about the looked-after children will be devised alongside colleagues in the research team for use in Stage 2 (Appendix E).

Two structured interview schedules will be devised for use in the focus groups at stages 2 and 3 (Appendix F). The question schedule will be developed alongside
other researchers in the team and in accordance with the following guide: Designing and Conducting Focus Group Interviews (Krueger, 2002).

**Ethical Considerations**

An ethical application will be made to the University of Surrey Faculty of Arts and Human Sciences Ethics Committee. Subsequently, permission will be sought from directors in local authority social services departments to take part in the research project. Presently, one local authority fostering team has expressed an interest in being involved in the research. For Stage 3, an NHS Ethics application is not required as the project requires staff participation only. However, permission will be sought from NHS R&D departments of the CAMHS recruitment site.

It is possible that foster carers may become distressed when talking about the LAC in their care. Within the participant information sheet, participants will be advised to speak to their social worker if they have any concerns about behaviours or emotional difficulties of their child. Similarly, if participants raise concerns about their child to the research team they will be referred back to their social worker. The research team will not interpret scores from the questionnaires during Stage 2, given that the researchers are not trained to do so. Finally, participants will be advised that any information disclosed during the focus groups in Stages 2 and 3 will be confidential, unless participants disclose information that the researchers consider a risk to themselves or another person. In this instance, the social worker will be informed and local safe-guarding policies followed.

Data provided by the foster carers in relation to their child will be pseudonymised through coding on the day of collection by researchers. Direct quotations from participants taking part in the focus groups may be published following completion of this study. In this eventuality, all quotations will be
anonymised and no information which may identify the participant will be included. Participants will be informed of this in the Participant Information Sheet. Focus groups will be recorded using audio recording devices. Following completion of the focus groups, the audio will be transferred from the recording device to a secure, passworded university computer and the audio will be deleted from the device. At this point, the audio file will be transcribed by a researcher and any identifying details within the recording will be removed. The audio file will then be deleted from the computer and the transcription will be stored in pseudonymised form.

R&D Considerations

Sussex CAMHS has shown an interest in taking part in the research project. Therefore, approval will be sought from the Sussex Partnership Trust R&D department to complete this project. The research projects falls into their research theme of child and adolescent mental health. Researchers will also abide by the Sussex Partnership Research Policy.

Project Costing

It is anticipated that the main costs involved in this study will be allocated to administrative costs such as photocopying questionnaires and producing participant information sheets (approx. £50). Secondly, some financial expenditure will be allocated to providing refreshments for participants taking part in focus groups (approx. £20).
Proposed Data Analysis

The initial stage of the project will be subject to frequency and descriptive analysis. The total scores on the utility questionnaires (Likert scale) and the proportion of items marked as ‘irrelevant’ on each measure will be calculated and used to determine which measure (ACC or BERRI) is taken forward into Stage 2.

The qualitative data gathered during Stages 2 and 3 will be subjected to thematic analysis to develop an understanding of both foster carers and clinicians experiences of using the psychometric assessments from their narrative accounts. The Braun and Clarke (2006) analytical process will be employed to assess the data.

Involving/Consulting Interested Parties

Interested parties in this research project include foster carers, birth parents of looked-after children, looked-after children and clinicians working with looked-after children. It may be beneficial to consult with interested parties about the design of the study, particularly whether the mode of accessing foster carers views are appropriate. This was not considered feasible given that foster carers may be a difficult group to access and the projects’ time restrictions. The project design involves foster carers views and experiences within the first and second stages of the project, whilst the views of clinicians working with looked-after children will be obtained during Stage 3. Due to difficulties accessing the looked-after children population and potential problems explaining research to young children, it was deemed inappropriate to consult with children in this instance.
Contingency Plan

Stage 1: If participants are unable to attend a meeting, the information pack and utility questionnaires will be posted to participants to complete independently. A follow-up telephone call will be made to participants one week later to address any concerns.

Stage 2: If difficulties arise in recruiting participants for the focus group then data can be collected via telephone interviews. Additional recruitment sites such as independent foster care services may also be approached to access more participants for Stages 1 and 2.

Stage 3: If difficulties arise when recruiting clinicians, the anonymised clinical information and structured interview schedule can be sent to clinicians in the post to complete independently. Once again, a follow-up telephone call will be made to clinicians to discuss any problems arising when completing the questionnaire.

Finally, given that the project has three stages, it is possible to abandon one of these should the initial study design encounter problems.

Dissemination strategy

Primarily, the findings from the study will be fed back to professionals working within CAMHS and Local Authority recruitment sites through oral presentation and/or written information. An executive summary will also be provided to each of the participants who took part in the study. The study will also be disseminated via poster presentation at relevant conferences and a write-up of the study will be submitted to a peer-reviewed journal. Finally, the results may be disseminated within fostering networks such as the British Association of Adoption and Fostering newsletter and results can be made available to the professional network who access the CPLAAC forum.
References


Frogley, C. (2014). Complex trauma and adversity in young children: are we adequately assessing this population? A systematic literature review. Unpublished manuscript, Department of Psychology, University of Surrey, UK.


Chapter Three: Literature Review

Developmental Trauma and Adversity in Young Children: Are We Adequately Assessing the Mental Health Needs in this Population?

A Systematic Literature Review

Year 1

April 2014
Abstract

A large number of children are exposed to adverse early experiences which can include the loss of a caregiver, witnessing family violence, abuse and neglect. The terms *complex trauma* and *developmental trauma* have been used within the literature to differentiate between an isolated traumatic event and traumatic experience that is severe, sustained and developmentally detrimental. Young children are particularly vulnerable to developmental trauma which can have a profound and life-long impact on psychological and physical development. As such, the assessment of developmental trauma remains a clinical priority. The aim of the current systematic review is to provide a representative overview of assessment measures used with children exposed to developmental trauma under 12 years of age. The review focused on research conducted over the last ten years. A total of twenty-three papers evaluating sixteen instruments were identified in the computerised literature search. The measures were grouped into five domains: a) measures of PTSD, b) measures of trauma-related symptomology (not PTSD), c) measures of one particular symptom d) measures of mental health more broadly and e) measures of general functioning. Despite some methodological limitations, a variety of assessment tools are available for clinicians to use. The most promising of these for use with children exposed to developmental trauma appear to be the parent-rated TSCYC and ACC, and the child-informed TAYC. Further research is warranted in the development of measures specifically measuring developmental trauma, which consider both child and parental views of distress and are sensitive to the child’s cognitive and social developmental stage.

Keywords

Developmental trauma, complex trauma, child, assessment, psychometric
Statement of Journal Choice

The Clinical Child Psychology and Psychiatry is a peer-reviewed journal that focuses on clinical and therapeutic aspects of child and adolescent psychology and psychiatry from an international and multidisciplinary perspective. It is a highly regarded journal in the field of child mental health and has a high impact factor (5.4 in 2012). The journal aims to bring together work from a wide range of disciplines working with children, looking at clinical and treatment issues across a range of treatment modalities.

The topic of the current paper, the assessment of complex trauma in children, is an important and interesting area for a range of clinicians working across the field of child psychology and psychiatry worldwide. Therefore, the topic and the quantitative nature of the current review should be of interest to this particular journal. The current paper also includes a number of assessment measures that have been developed and/or evaluated by members of the editorial board which further suggests this would be a relevant topic for inclusion in this journal.
Introduction

A significant number of children are exposed to adverse early experiences which can include witnessing family violence, abuse and neglect. Over half a million referrals were made to child protection services in the UK between 2012 – 2013; abuse and neglect being the most commonly identified need in almost half of cases (Department for Education, 2013). Additionally, 2.5% of under 11’s reported maltreatment by a parent or guardian, and 11% by an adult outside the home, according to an NSPCC prevalence study (Harker et al, 2013). The actual number of children facing adversity is likely to be much higher given that many cases go unreported.

The impact of childhood adversity has been extensively studied in the literature, with difficulties described across several domains of functioning including emotion regulation, impulse control, attention, cognition, dissociation, and interpersonal relationships (see D’Andrea, Ford, Stolbach, Spinazzola & van der Kolk, 2012). Fundamental differences in areas of the brain involved in learning, memory and executive functioning, have been found in children exposed to trauma compared to typically-developing children (Vanderwert et al, 2010). Children are also at greater risk of developing mental health problems when exposed to adverse experiences (Kisiel, Fehrenbach, Small & Lyons, 2009). One study found approximately 50% of individuals’ receiving mental health services report abuse and neglect as children (Read, 1998).

Traumatic experience is especially damaging for young children, who are rapidly acquiring skills and learning to adjust their behaviour according to the environment. Severe mental health difficulties are more likely to develop when the onset of trauma begins earlier in life and involves the caregiver (Kisiel et al, 2014). Research also suggests that the younger the child experiences trauma, the greater
the structural changes in the brain compared to typically-developing children (Beers & De Bellis, 2002; De Bellis & Kuchibhatla, 2006). This is particularly pertinent given that 98% clinicians working with traumatised children reported the average age of onset was under 11 years of age (Spinazzolla, Blaustein, van der Kolk & Bessel, 2005). Therefore, the assessment and treatment of childhood trauma remains a clinical priority, particularly in young children.

Children exposed to trauma are frequently labelled with the Diagnostic and Statistical Manual for Mental Disorders, fourth edition (DSM-IV) diagnosis of post-traumatic stress disorder (PTSD). However, with the arrival of the fifth revision of the DSM, the diagnostic criteria for PTSD have come under scrutiny (American Psychiatric Association, 2000). Clinicians have argued PTSD does not capture the developmental impact of ongoing trauma in childhood as it fails to include a number of potentially traumatic experiences in the definition of a traumatic event, it does not consider differing symptoms according to a child’s developmental stage, and almost half of the criteria require verbal report of internal experience (van der Kolk, 2005). The WHO International Classification of Diseases, tenth revision (ICD-10) has similar concerns with its’ PTSD criteria and the addition of a complex PTSD diagnosis has been proposed for the eleventh edition (Cloitre, Garvert, Brewin, Bryant & Maercker, 2012).

The terms developmental trauma and complex trauma have been adopted within the literature to describe repeated, prolonged, and developmentally adverse traumatic experiences, including chronic verbal abuse, emotional neglect, dependence on an impaired caregiver, community violence, and chronic physical or sexual abuse (van der Kolk, 2005). Several studies have illustrated that children exposed to developmental trauma differ to children exposed to other trauma types (Jonkmon et al, 2013; Stolbach et al, 2013; Wamser-Nanney & Vandenberg, 2013).
Wamser-Nanney and Vandenber (2013) found children meeting criteria for complex trauma displayed higher levels of generalised behaviour problems and trauma related symptoms than those who experienced a) acute non-interpersonal trauma, b) chronic interpersonal trauma in later-life and c) acute interpersonal trauma. Thus, the pervasive difficulties observed in children exposed to complex trauma may go beyond the PTSD criteria.

Research shows that developmental trauma victims commonly meet criteria for a number of DSM-IV diagnoses such as; depression, attention-deficit-hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), conduct disorder, anxiety disorders, eating disorders, sleep disorders, communication disorders, separation anxiety disorder (SAD) and reactive attachment disorder (Ackerman, Newton, McPherson, Jones & Dykman, 1998). In one study, up to 40% had at least one other comorbid mood, anxiety or disruptive behaviour disorder diagnosis (Copeland, Leeler, Angold & Costello, 2007). Notably, no single diagnostic criteria adequately conveys the range of symptoms experienced in this population; a problem highlighted by the Complex Trauma Workgroup (CTWG) of the National Child Traumatic Stress Network. As a result, Cook and colleagues (2005) proposed seven primary domains of impairment for complex trauma; attachment, biology, affect regulation, dissociation, behavioural regulation, cognition and self-concept. The workgroup proposed a new diagnosis named Developmental Trauma Disorder (DTD) for inclusion in the DSM-5, which van der Kolk (2009) argued could be used to appropriately identify and treat children exposed to complex trauma. The diagnosis was not included in DSM-5, though researchers continue to examine DTD’s scientific validity and clinical utility (Ford et al, 2013). Some revisions were made to the DSM-5 PTSD criteria including a subtype: PTSD in pre-school children. Though the criteria remains similar to previous versions and thus, continues to be limited in its conceptualisation of children facing ongoing trauma. The eleventh
version of ICD has proposed two separate but related diagnoses of PTSD and complex PTSD within the spectrum of trauma and stress-related disorders (see Cloitre et al, 2013).

Taken together, the literature supports a link between prolonged trauma in childhood and significant impairment across a number of domains, particularly when trauma starts earlier in life. The range of difficulties experienced by this population may not be adequately captured by the existing diagnostic classification system. Moreover, emerging evidence suggests that treatment specifically addressing the symptoms of complex trauma may be more beneficial to this population (Cook et al, 2005). In order to provide the most appropriate treatment, it is vital that clinicians are able to accurately identify and assess the children experiencing developmental trauma. Without this, children may be missed completely or their difficulties may be misinterpreted and given any number of diagnostic labels, resulting in ineffective (and costly) treatment and medication.

Assessing developmental trauma

A previous literature review identified 25 instruments available for the screening and assessment of traumatised children and adolescents (Strand, Sarmiento & Pasquale, 2005). At the time, the interest in complex trauma was just emerging and as such was not discussed within the paper. Nonetheless, the authors did separate measures assessing PTSD and dissociative symptoms from those measuring other symptoms additional to PTSD. Several measures were highlighted for showing promise in terms of psychometric development and for being free and accessible including the University of Los Angeles PTSD Reaction Index (UCLA-RI), Child Dissociation Checklist (CDC), the Clinician-Administered PTSD Scale for children and adolescents (CAPS-CA) and the Paediatric Emotional Distress Scale.
(PEDS). The review included measures screening for the presence of trauma in addition to instruments assessing the impact of trauma and included tools developed in both children and adolescents.

Since 2005, one subsequent review was published within the field of trauma assessment in children (Tonmyr, Draca, Crain & MacMillan, 2011). However, the authors focused only on emotional maltreatment in children; one very discrete area of complex trauma. Therefore, the latest research developments into assessment processes and instruments for children exposed to trauma has not been reviewed and updated in the last ten years. Moreover, no review has considered assessment tools specifically used within the complex/developmental trauma population.

**Aims**

The aim of the current literature review was to provide a representative overview of assessment measures used with children exposed to developmental trauma under 12 years of age. Specifically, the research questions were i) what psychometric instruments are currently being used with children under 12 years experiencing adversity, and ii) do these adequately capture the impact of what they have experienced?
Method

Search strategy and inclusion criteria


The literature searches were carried out between January and March 2014. The search was limited to English language articles conducted in the following countries: UK, USA, Canada, Australia and Europe. The search was also refined to include publication dates for the last ten years (2004-2014) since the previous review. Papers were included if they used and evaluated an assessment tool in children between 0-12 years and used a sample of children exposed to developmental trauma. Developmental trauma included abuse (emotional, physical, sexual), neglect, maltreatment, domestic violence, witnessing violence, family dysfunction, community violence or loss of caregiver and included children within the looked after children population (foster care or adoptive care). The age range (0-12 years) was selected based on a number of measures being developed for children aged above or below 12 years. Furthermore, according to Piaget’s stages of cognitive development (1958), children move into the ‘formal operational stage’ from
11 years onwards and thus begin higher-order processing of information in their environment.

Relevant researchers in the field were also contacted for any unpublished data and/or further information. Furthermore, measures included in Strand’s review (2005) were individually searched to see whether updated psychometric evaluations had been carried out since 2005.

Papers were excluded if they met any of the following criteria:

- The study did not evaluate the instrument used
- The instrument did not assess symptoms of trauma
- The instrument was designed for children over 12 years
- The sample age-group was over 12 years
- The sample were only exposed to single-event or medical trauma, such as automobile accidents or illness
- The study aims were cross-cultural validation rather than evaluation of psychometric properties

Data Extraction

The multiple strategies yielded 2273 citations (see Figure 1). The author retrieved the references from the search and examined each in turn. An initial title and abstract review allowed for clearly unsuitable manuscripts to be rejected for further review. The full texts of the remaining documents were retrieved and cross referenced against the inclusion and exclusion criteria. Any disagreements were resolved through discussion within a team of researchers.
Figure 1: PRISMA Flow Diagram of Search Procedure

Records identified through database searching (n = 2221)

Additional records identified through other sources (n = 52)

Records after duplicates removed (n = 890)

Records excluded (n = 788)

Records screened (n = 890)

Full-text articles assessed for eligibility

Full-text articles excluded (n = 72)

Studies meeting inclusion criteria (n = 23)

Studies included in qualitative synthesis (n = 32)

Additional original studies sought (n = 9)
Results

The literature search yielded 23 publications based on 16 psychometric measures. Where measures were developed prior to 2004, the original publication was also obtained therefore adding a further 9 papers. Thus, a total of 32 papers have been included in this review. The measures are summarised under five broad categories: (a) instruments assessing symptoms of PTSD (n=10), (b) instruments assessing trauma-related symptomology in addition to PTSD (n=14), (c) instruments assessing one symptom of trauma (n=4), (d) instruments assessing non-trauma psychopathology (n=1) and (e) instruments assessing general functioning (n=3). Each category will be considered in turn.

a) Instruments assessing PTSD

Given that complex trauma can overlap with PTSD and the absence of a formally accepted discrete diagnosis as yet, it is not surprising that many clinicians utilise measures of PTSD to assess trauma-related symptomology in children with complex histories. Of the reviewed papers, two focused on the UCLA-PTSD-RI and five evaluated PTSD scales derived from the Child Behaviour Checklist (CBCL).

UCLA-PTSD-Reaction Index. The UCLA-PTSD Reaction Index is a 48-item semi-structured interview developed to assess a child’s exposure to 26 types of traumatic events and subsequent DSM PTSD diagnostic criteria (Pynoos, Rodriguez, Steinberg, Stuber & Frederick, 1998). Pynoos and colleagues found the measure correctly identified 78% of children who met DSM-III-R criteria for PTSD, and 79% of those who did not, though this was based on exposure to an isolated traumatic incident (earthquake). The UCLA-PTSD-RI’s psychometric properties have since been evaluated within a large population of children experiencing various traumas (Steinberg et al, 2013). The type of trauma included both single event
traumas (automobile accident: 13.7%; medical trauma: 10.6%) and ongoing complex traumas (domestic violence: 49.1%; emotional abuse: 37.2%; physical abuse: 23.2%).

Internal consistencies fell within excellent range for total sample (alpha = .90) and held across gender and ethnic group which, the authors suggest, demonstrates that items are measuring a coherent underlying construct and is applicable to diverse populations. Convergent validity was evidenced by a strong positive correlation (.75) to the PTS scale of Trauma Symptom Checklist for Children – Alternative version (TSCC-A). However, there were high correlations (.54-.67) with the TSCC scales of Depression, Anxiety, Dissociation and Anger, which may suggest the UCLA-PTSD-RI isn’t able to discriminate between PTS and other symptomology.

A second publication with the same data extended the psychometric evaluation by examining the underlying factor structure of the UCLA-PTSD-RI as a measure of PTSD symptoms (Elhai et al, 2013). Using confirmatory factor analysis (CFA) the researchers tested the 3-factor DSM-IV PTSD model, as well as two 4-factor models (Emotional numbing and Dysphoric) and a recently conceptualised 5-factor Dysphoric Arousal model. The researchers found all four PTSD symptom models fit the data reasonably well, though the five-factor model fit best; albeit with a minor improvement. However, high correlations between factors such as, re-experiencing and avoidance (.89), suggests the constructs measured by these factors are not distinct. Hair (2010) suggests correlations between factors should not exceed 0.7.

Child Behaviour Checklist (CBCL) PTSD subscales. The CBCL (Achenbach & Rescoria, 2001) is a widely used assessment tool measuring emotional and behavioural difficulties within children; specifically depressive and
anxiety symptoms, somatic complaints, social and thought problems, inattention/over-activity, defiance and aggression or anti-social behaviour. Several researchers have proposed a sub-set of items from the CBCL can be used to assess PTSD. Wolfe, Gentile & Wolfe (1989) selected 20 PTSD-like symptoms from the CBCL to form a PTSD subscale. The subscale had an alpha value of .89 and children who had been sexually abused scored higher than children who hadn’t experienced sexual abuse (though had been referred to the clinic for other unreported difficulties).

Sim and colleagues (2005) selected items from the CBCL to create three subscales: PTSD, Dissociation and combined PTSD/Dissociation. These were evaluated in children from the community, a psychiatric sample and a sexually abused sample. All three scales demonstrated acceptable internal reliability (.70-.85), though only the ‘dissociation’ and ‘combined PTSD/Dissociation’ scales correlated to children’s self-report via the TSCC. Although scoring higher than the normative sample, the two clinical groups were undistinguishable from each other. The authors suggested this was a result of parents endorsing symptoms of ADHD in the psychiatric sample, which previous research demonstrates loads similarly to PTSD. As the authors did not assess exposure to trauma in the psychiatric sample, it is possible that these children had experienced trauma which may have skewed the results.

Sim’s three scales were later evaluated in 239 children aged 6-18 years who had been physically neglected (Milot, Ethier, St-Laurent & Provost, 2010). Factor structure was supported for the PTSD and Dissociation scales, but not for a combined PTSD/Dissociation factor. Convergent validity was also supported by strong correlations between the PTSD factor and the Trauma Symptom Checklist for Young Children (.63) (Briere et al, 2001), and the dissociation scale and the Child
Dissociative Checklist (.55) (Putnam, Helmers & Trichett, 1993). However, convergent validity was only based on around half of the study sample, as the measures were designed for children younger than 12 years.

A PTSD subscale for the pre-school version of the CBCL (Dehon & Scheeringa, 2006) was comparable to parents reporting of PTSD symptoms at interview, and could differentiate between children with and without a DSM-IV diagnosis of PTSD. However, the population in this instance included single-event and medical trauma (e.g. accident), alongside children who had experienced chronic trauma (e.g. domestic violence). The same CBCL-PTSD subscale was evaluated in a sample of 51 pre-school children with high trauma exposure receiving outpatient child-parent psychotherapy for PTSD (Loeb, Stettler, Gavila, Stein & Chinitz, 2011). A small number of these children met DSM-IV criteria for PTSD (6%) and these children scored significantly higher on the CBCL-PTSD than those without PTSD. However, scores were not significantly greater in children who met criteria for PTSD based on the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood diagnostic criteria (DC:0-3). Scores also failed to correlate with the UCLA-PTSD Reaction Index ($r = 31, p = .55$), which the authors suggest is due to DSM-IV criteria not being sensitive enough to identify young children exposed to trauma. The maximum sensitivity achieved by the CBCL-PTSD scale was 60% which the authors conclude ‘is not sufficient to identify children with PTSD within our population in an efficient manner’. The main limitation was the inclusion of single and complex trauma histories in the sample; the majority of which were of Hispanic descent (60.8%). Like Sim et al (2005), Loeb et al (2011) concluded that the CBCL-PTSD subscale seems to reflect generic distress as opposed to trauma-related distress.
Finally, Rosner, Arnold, Groh & Hagl (2013) compared all three combinations of CBCL-PTSD subscales in their ability to screen for symptoms of PTSD in 36 foster children; 92% of which reported recurrent trauma. Internal consistencies ranged from 0.63 (Sim), 0.67 (Dehon) and 0.73 (Wolfe). The authors found a small insignificant correlation with the CAPS-CA interview across the three scales ($r = 0.12-0.27$) (designed to measure frequency and intensity of 17 DSM-IV PTSD symptoms). Interestingly, only four of the children met the criteria for PTSD, though the authors state some of the children experienced ‘severe interpersonal trauma’ suggesting, perhaps, the presence of complex trauma. The authors recommend caution when using CBCL-PTSD scales to screen for PTSD in children and adolescents. Apart from the small sample size, the quality of this study is limited by its inclusion of children aged 10-18 years, despite one scale being designed for children under 6 years.

b) Instruments assessing trauma-related symptomology beyond PTSD

Twelve publications explored instruments designed to assess trauma-related symptomology, but not specifically (or solely) symptoms of PTSD.

**Trauma Symptom Checklist for Young Children (TSCYC).** The TSCYC is a 90-item caregiver measure to assess for trauma-related symptoms in children aged 3-12 years (Briere et al, 2001). The measure includes 8 subscales which provide a detailed evaluation of post-traumatic stress symptoms and the authors suggest a ‘tentative PTSD diagnosis’. It also provides information on other symptoms such as anxiety, depression, anger and abnormal sexual behaviour. Consideration was given to caregiver difficulties such as intentional/inadvertent misreporting, with two validity scales assessing over/under-report. The tool was initially validated in children experiencing a range of traumas including sexual abuse.
Briere reported good-excellent internal consistency (.81-.93) and significant correlations between abuse type and scores on the PTS subscales, though no significant differences were found between abuse types and the three mood related scales. Dysphoric mood was suggested as a generic symptom across forms of abuse, though the lack of a non-traumatised sample meant it was not possible to assess the relationship between mood and child maltreatment.

Gilbert (2004) later concluded that the measure could differentiate between abused/non-abused children. Internal consistency ranged from an alpha of .81 to .92 and convergent validity was examined through comparisons to the CBCL, with significant correlations between theoretically related scales e.g. TSCYC Anxiety and CBCL Anxious/Depressed ($r = .59$, $p < .01$). TSCYC scores for PTS-Arousal, PTS-Total and Sexual Concerns were able to accurately predict abused (specificity: 75.56%) and non-abused (sensitivity: 86.67%). However, the measure was only examined within a population of sexually abused children.

A second study also accessing a sample of children who had been sexual abused (Pollio, Glover-Orr & Wherry, 2008), focused on TSCYC’s ability to screen for the presence of PTSD. The authors concluded TSCYC could accurately differentiate between children with and without a diagnosis of PTSD as determined by the Diagnostic Interview for Children and Adolescents (DICA). Although this was only based on six of the eight subscales and children considered ‘PTSD-positive’ scored similarly to children without a diagnosis of PTSD on subscales of depression, anxiety, dissociation and avoidance. The focus on PTSD in this instance suggests the more pervasive symptoms of complex trauma were not considered, which may explain this finding. The study is also limited by its use of two versions of the DICA.
instrument and authors warn that the test re-test reliability of the DICA PTSD subscale was sub-optimal (k = .35).

Wherry, Graves and King (2013) evaluated the convergent validity of the TSCYC by comparing it to several measures: CBCL, Child Sexual Behaviour Inventory (CSBI), TSCC and the UCLA-PTSD. Significant correlations were found between the TSCYC and all measures reporting to measure similar behaviours e.g. sexual concerns (CSBI and CBCL Sexual Concerns), anger, anxious, depressed (CBCL) and PTS symptoms (UCLA-PTSD). However, when compared to its companion self-report measure (TSCC) there was modest convergent validity, suggesting differences in child and parent reporting of symptoms. Although this study considered the validity of the measure across symptoms, the population studied was solely sexual abuse and cannot be generalised to other forms of childhood adversity. Furthermore, the sample included children aged 2 to 17 years despite TSCYC being developed in children up to 12 years of age, and sample size for UCLA-PTSD-RI was small as it was introduced halfway through testing.

**TSCYC Short Form (TSCYC-SF).** A short-form of the TSCYC measure was developed and evaluated within 284 child victims of sexual abuse (mean age: 7.19 years) (Wherry, Corson & Hunsale, 2013). Following CFA, the 32-item, 8-factor model showed the best evidence of fit, with acceptable-to-excellent reliability for each factor (.68-.91). The TSCYC-SF was then compared to the CBCL, UCLA-PTSD-RI, CSBI and TSCC to determine the strength of relationship between scales purporting to measure similar behaviours. The results support the convergent validity of the TSCYC-SF scales of Anger, Sexual Concerns, Anxious and Depressed when compared to the CBCL. Similarly, significant correlations were found between the TSCYC Sexual Concerns scale and all scores on the CSBI (.42-.60), and between TSCYC and scores on the UCLA-PTSD-RI (.47-.75). However,
similar to previous research on the TSCYC, only two scales (Anxiety and Depression) showed convergent validity with the child-reported TSCC, suggesting differences between child and parent reporting of symptoms. The study was limited due to its use of a treatment-seeking sample, children did not complete all measures and researchers did not compare to a non-traumatised and/or non-sexual abuse sample.

**Assessment Checklist for Children (ACC).** Tarren-Sweeney (2007) identified a lack of appropriate assessment tools for use within the foster care population (known as the Looked after Children population within the UK). This led to the development of the ACC; an 88-item caregiver-rated instrument to assess for difficulties not captured within the CBCL e.g. attachment-related difficulties, anxiety, dissociation, sexual behaviour and self-harm. The scale was developed in stages starting with review of clinical assessment reports, a state-wide survey of clinicians (n=17), a review of the literature and the development of 129-items which was then reviewed by foster parents and clinicians. Item and factor-analyses were performed on scores for 412 children in long-term care; which yielded a 10-factor model accounting for 49% of the variance. The authors used scores on the CBCL to determine cut-points for clinically significant scores. They also used correlations between the CBCL and ACC as support for its validity with the premise that a child scoring high in one, should score high in the other.

The authors concluded the ACC could differentiate between referred and non-referred children. ‘Referred’ was indicated if the child was engaged in counselling or psychotherapy in the previous year, was prescribed psychotropic medication and/or their carers had received professional advice. Though, the authors suggest diagnostic status (effect size= .83) may represent a better mental health criterion than the child’s referral status (effect size = .84, .42, .49). The ACC
is the only measure that considered differing symptoms according to a child’s age and thereby developed both child and adolescent versions of the instrument.

**Brief Assessment Checklist for Children (BAC-C).** A brief version of the ACC and ACA (adolescent version) was derived and evaluated within a sample of 347 children in long-term care (Tarren-Sweeney, 2013). The reliability of the screening version was good (.89), and the total score showed moderate to strong correlations with the original ACC subscales (.32-.96). Moderate to strong correlations were also demonstrated for the CBCL subscales (.41-.82) and DSM-oriented scale scores (.34-.64). The authors concluded that the short-form child and adolescent versions were highly accurate in screening for clinical range scores on the ACC, and moderately accurate at identifying CBCL clinical range scores. Furthermore, the BAC-C and BAC-A were able to identify a child’s clinical referral status, which was assessed through parent-reported use of mental health services, psychiatric diagnosis or psychotropic medication; though these criteria only provide proxy estimations of clinical severity. The brief version demonstrates utility at screening for trauma-related psychopathology within a clinically relevant population, though it is limited by the lack of a self-report component and the authors warn it should not replace comprehensive, multi-informant assessment.

**Trauma Assessment for Young Children (TAYC).** Noting the lack of self-report measures for trauma symptomology in young children, Strickler (2012) created a 10-item tool to assess self-reported symptoms of trauma in children aged 3-7 years. The TAYC measure was established by reviewing themes in the literature related to childhood symptoms of trauma, including complex trauma theory and developmental trauma disorder. It was then piloted in a sample of 47 children, roughly half of which had experienced trauma (domestic violence, sexual abuse, physical abuse, emotional abuse). The child version of the measure demonstrated
good test re-test reliability at two weeks ($r=0.79$), though this was based on the non-clinical sample. Internal consistency was lower for children with trauma, .48 and .56 without, though this improved when reverse score items were removed. Correlations between child and parent reports were either negligible or weak-to-moderate, with the exception of the non-clinical sample. The TAYC demonstrated good convergent validity with the TSCYC PTSD subscale and the author concluded the measure had good discriminant validity due to a low correlation with the CBCL externalising subscales in the trauma group. It was argued the CBCL scales measured behavioural disorders (ODD, Conduct Disorder, ADHD) rather than attentiveness or aggression related to PTSD. The strength of this measure lies in its self-report nature, the authors’ consideration of complex trauma and age-appropriate cognitive and social skills in the tool’s development.

**Paediatric Emotional Distress Scale (PEDS).** The PEDS was originally developed to measure trauma related behaviours in children as young as 2 years through caregiver report (Saylor et al, 1999). The original validation study sample is limited by its use of upper-middle class families who were largely Caucasian (93%), while trauma types included children exposed to hurricane, family death, divorce or sexual abuse. Spilsbury and colleagues (2005), evaluated the measure within 383 children aged 2-7 years who were predominantly African-American (43.1%) or Caucasian (30.5%), and had witnessed domestic violence. The three factor model suggested by the original authors did not appear to fit with the interpersonal trauma dataset and exploratory factor analysis indicated evidence for a two-factor model. Factor loadings were not significantly different between ethnic groups and convergent validity of the scale was established via correlations to the Revised Behaviour Problem Checklist (an instrument designed to measure behavioural disorders). However, children in the updated study were recruited within 10 days of the trauma event and thus, may only demonstrate the immediate effects of domestic
violence. Notably, other instruments in this review have not discussed the effect of time since the traumatic incident(s) on the expression of distress. Moreover, only one third of the available sample completed PEDS; reasons given for this were caregiver distress and initial focus on survival needs. This suggests those in greater distress were underrepresented in the sample.

**Trauma Play Scale.** The Trauma Play Scale was developed by Findling, Bratton & Henson (2006) as an observation-based measure of play behaviours believed to be evident in children exposed to trauma. Information from a literature review and focus groups with field experts guided the development of five subscales representing the most salient features of posttraumatic play. The scale was piloted in a small sample of children with (n=6) or without a traumatic history (n=6); both actively engaged in play therapy. Inter and intra-rater reliability was good, though there was insufficient power to show statistical significant differences between groups. However, this difference was significant when omitting the ‘repetitive play’ subscale (due to reported difficulties scoring this). Myers, Bratton, Hagen & Findling (2011) later added a non-traumatised, typically-developing sample to the original data to assess discriminant validity. Significant differences were found between the trauma (n=6) and normally developing (n=7) group across all five subscales and total average. There were also large effect sizes for group membership, suggesting a strong positive correlation between trauma history and scores on TPS.

**Story Stem Assessment Profile (SSAP).** Story stem narrative methods have been used to assess the young child’s representations of parent-child and peer attachment relationships. This has usually occurred within typically developing children, though Hodges and colleagues (2000) developed an assessment profile that could capture effects of abuse in young children. The original study evaluated SSAP within two abused (placed with foster or adoptive parents) and two non-
abused groups (disadvantaged background or not). The children were presented with twelve narrative stems (beginnings of a story), which they are encouraged to continue. The interview is recorded, transcribed and each story is rated on the presence or absence of 30 themes based on a criteria set out by the authors. As the themes are based on qualitative analysis, this is idiosyncratic to the author and would therefore be difficult to replicate.

Hillman (2013) later explored differences between maltreated/late-placed and two non-maltreated samples (early adopted and non-adopted) on the SSAP as part of his PhD. Age and verbal ability were used as covariates throughout the analysis, due to age correlating with five SSAP themes and verbal ability being significantly lower in the maltreated group. The maltreated group performed differently across all four attachment constructs, and on 22 out of 30 of the individual SSAP codes. The typically-developing group consistently demonstrated lowest scores on ‘defensive-avoidance’, ‘insecurity’ and ‘disorganisation’ representations and the highest on ‘secure’ representations, with the direct opposite for maltreated children. However, effect sizes were small to medium in spite of statistical significance. Hillman cautions that weightings of the different stories were highly variable and thereby resulted in low internal consistencies. Nevertheless, the SSAP has potential to be a qualitatively rich, clinical assessment tool though it requires specialist training and time to administer.

c) Instruments assessing one symptom of trauma

Two studies identified in the literature search updated psychometric properties for existing measures intended to measure one specific symptom of trauma, in this case, sexual behaviour and dissociation.
Child Sexual Behaviour Inventory (CSBI). The CSBI was originally developed by Friedrich (1998), with good internal consistency (.72) and test re-test reliability at four weeks (.85). It was later examined by Baker et al (2008) with two aims: a) to assess discriminant validity, and b) to determine the prevalence of sexual behaviours in foster children aged 10-12 years. Two groups of looked after children in residential or foster care were utilised alongside a normative sample. There were no significant differences across groups for total scores, though this became significant when limited to number of intrusive items and to a number of sexual-abuse specific items (highest scores for the residential care sample). Children with higher CSBI scores rated significantly higher across nine CBCL scales ($r = .39-.68$), reported a greater number of traumatic events ($r = .33$) and were perceived more negatively by their foster parents or therapists ($r = .36$). The authors also note that the CBCL was unable to identify 41% of children who met the criteria for problematic sexual behaviours according to the CSBI, and thus recommended routine administration of the measure within child welfare samples. However, the measure only considers one range of behaviours following adversity and is limited by using a largely male sample.

Child Dissociative Checklist (CDC). A second instrument focusing on one particular symptom of trauma is the CDC. Children with a history of sexual abuse, dissociative disorders and a normative sample were administered the CDC in its original validation (Putnam, Helmers & Trickett, 1993). The measure demonstrated good test re-test reliability at 1 year and good discriminant validity between groups. A later study (Wherry, Neil & Taylor, 2009) examined whether the taxon model of dissociation was accounted for by the CDC measure using a sample of physically and/or sexually abused children. A principal components analysis found a 3-factor solution, accounting for 46% of variance, which the authors labelled as ‘variable behaviour’, ‘externalising behaviour’ and ‘dissociation’, with good internal reliability
for all three scales (.72-.83). Significant differences were also found between the sexual abuse and physical abuse groups for dissociation, and between physical abuse and normal for externalising behaviour. However, this tool only considers one particular symptom within a complex trauma presentation and limited information was available for those with dissociative disorders.

d) Measures of mental health

One study questioned whether the DIA was an effective measure of difficulties in a sample of children exposed to domestic violence (de la Osa, Ezpeleta, Granero, Olava & Dormenech, 2011).

**Dominic Interactive Assessment (DIA).** The DIA was originally developed as a child self-report measure of psychiatric symptoms related to depressive, anxiety and externalising disorders for children aged 6 to 11 years (Valla, Bergeron & Smolla, 2000). Test re-test reliability (.60), internal consistency (.88) and discriminant validity were good for children with or without psychiatric diagnoses (conduct disorder, ADHD, Depression, Phobia, SAD, OCD). De la Osa et al (2011) compared the measure to the CBCL and diagnostic criteria as rated by DICA. Significant correlations were found to all but three scales, though often these were between theoretically unrelated scales e.g. self-reported ADHD correlated with anxious and withdrawal problems reported by mothers. The sensitivity and specificity of DIA total score for clinical range scores on the CBCL were 52.6% and 81.5%, respectively. However, findings from this study can only be generalised to domestic violence victims and the relatively small sample (n=55) size somewhat limits the findings. Nonetheless, this is one of the few studies that has considered the importance of child’s self-report within clinical assessment of childhood adversity.
e) **Instruments Measuring General Functioning**

Two papers examined whether instruments evaluating general functioning in children facing adversity can adequately measure the difficulties that these children encounter.

**Vineland Adaptive Behaviour Scales-III (VABS).** One study examined whether the VABS, a measure of adaptive functioning, was a useful measure for adopted or foster-care children (Becker-Weider, 2009). The VABS evaluates adaptive functioning in four domains (communication, daily living skills, socialisation and motor skills) providing age-equivalent scores and standard scores for each. The initial standardisation found good internal consistency and test re-test reliability, and an adequate inter-reliability (Sparrow, Cicchetti & Balla, 2005). Becker-Weider used the VABS in children with a diagnosis of reactive attachment disorder and/or complex trauma (as defined by Cook et al, 2005). The findings showed children had clinically significant delays across total and externalising scores, with elevated but not significant delays for internalising scores when compared to age-equivalent, standardised scores. As expected, older children showed significantly greater delays than younger children which was attributed to longer stays in foster care. This illustrates the pervasive consequences of complex trauma and provides important information about general functioning to be considered within treatment. However, it does not provide information on other trauma-related symptoms. Nonetheless, it is the only paper that specifically looks at children with complex trauma, albeit only in a sample of looked after children.

**General Assessment of Functioning (GAF) and Children’s General Assessment of Functioning (CGAS).** The GAF and CGAS are two measures of functioning which have been used clinically in diagnosis, treatment and evaluation of children’s mental health problems. The GAF was first introduced as Axis V in the
DSM-III-R (American Psychiatric Association, 1987). The CGAS was later developed as a more child-specific measure of functioning (Shaffer et al, 1983). Blake, Cangelosi, Johnson-Brooks & Belcher (2007) examined the utility of both measures within a sample of traumatised and non-traumatised children. The study is limited by its use of clinical vignettes rather than actual clinical cases, and its’ small sample size (n=15). Even so, the findings suggest both measures are inappropriate for use with traumatised children as no significant differences were reported on either scale between children with or without trauma, or in fact between both clinical groups and the normal group. Furthermore, internal consistencies were low for clinicians rating of children in the trauma group, but good for the group without trauma. The authors warn against using these measures within trauma groups.
<table>
<thead>
<tr>
<th>Measure</th>
<th>Authors</th>
<th>Population</th>
<th>Informant</th>
<th>Age</th>
<th>Internal reliability</th>
<th>Test Re-Test Reliability</th>
<th>Inter-rater reliability</th>
<th>Construct validity</th>
<th>Convergent validity</th>
<th>Criterion validity (sensitivity / specificity)</th>
<th>Discriminant validity</th>
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<tbody>
<tr>
<td>CBCL PTSD scale</td>
<td>Wolfe, Gentile &amp; Wolfe (1989)</td>
<td>Children with SA (n=68) 88% female. All Caucasian.</td>
<td>Caregiver</td>
<td>6-18</td>
<td>0.89</td>
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<td>Average score CBCL PTSD SA (.734) Norm (.156)</td>
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<td></td>
<td>Sim et al (2005)</td>
<td>Community (n=629), Psychiatric (n=431) and SA samples (n=409)</td>
<td>Caregiver</td>
<td>4-12</td>
<td>PTSD: 0.73 Diss: 0.70</td>
<td>PTSD/D: 0.85</td>
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<td>TSCC-PTSD: Diss (r=.36**), PTSD/D: (r=.32*), PTSD (r=.26) Interscale: PTSD &amp; Diss: (r=.52**), PTSD &amp; Comb: (r=.09**), Diss &amp; Comb: (r=.72***) MANCOVA: PTSD: (F=15.4***) Diss: (F=18.5***) PTSD/D: (F=11.8***)</td>
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<td></td>
<td>Dehon &amp; Scheeringa (2006)</td>
<td>N = 62. Showed at least one PTSD symptom</td>
<td>Caregiver</td>
<td>1–6</td>
<td>0.83 (2-3 yrs) 0.87 (4-18 yrs)</td>
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<td>Parent Interview: r= 0.66***</td>
<td>75% sensitivity, 84.4% specificity at cut-off score (9) DSM criteria: 60%, 80% DC: 0-3 criteria: 67%, 63%</td>
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<td>Loeb, Statler, Gavila, Stein &amp; Chinitz (2011)</td>
<td>N = 51 from outpatient clinic. Foster care not included. 68.6% male.</td>
<td>Caregiver</td>
<td>1–5</td>
<td>0.79</td>
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<td>UCLA PTSD No of criteria met (r=.31, p=.55) No of symptoms endorsed (r=0.4**)</td>
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<tr>
<td>Study</td>
<td>Sample Description</td>
<td>Caregiver Age</td>
<td>PTSD Measure</td>
<td>PTSD AUC</td>
<td>ICD-10 AUC</td>
<td>DSM-III-TR AUC</td>
<td>UCLA PTSD Reaction Index</td>
<td>Subscales</td>
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<td>Rosner, Arnola, Groh &amp; Hagl (2012)</td>
<td>German children in foster care (n=36), 92% reported 1+ trauma.</td>
<td>Caregiver 10-18</td>
<td>Wolfe: 0.73 Sim: 0.63 Dehon: 0.67</td>
<td>CAPS-CA: Wolph (r=0.21), Sim (r=0.27), Dehon (r=0.12)</td>
<td>AUC for DSM: Wolph (0.75), Sim (0.51), Dehon (0.81*)</td>
<td>AUC for ICD10: .53, .37, .53</td>
<td>AUC child DSM: .66, .46, .68</td>
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<td>Miot, Ethier, St-Laurent &amp; Provost (2013)</td>
<td>Physically neglected children (n=239).</td>
<td>Caregiver 6-18</td>
<td>PTSD: TSCYC (r=0.63*), CDC (r=0.51*) Diss: TSCYC (r=0.39*), CDC (r=0.55*)</td>
<td>PTSD SADS (r =0.70*) Clinician administered PTSD Scale (r = 0.82)</td>
<td>DSM-III-TR criteria: 78%, 79% (cut-off of 40)</td>
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<td>Pynoos, Rodriguez, Steinberg, Stuber &amp; Frederick (1993)</td>
<td>Children exposed to Armenian earthquake (n=231).</td>
<td>Child and caregiver 7-12</td>
<td>0.9</td>
<td>PTSD SADS (r =0.70*) Clinician administered PTSD Scale (r = 0.82)</td>
<td>DSM-III-TR criteria: 78%, 79% (cut-off of 40)</td>
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<td>Steinberg et al 2013</td>
<td>N = 6,291; 78% more than one event. Culturally diverse. 55.6% girls.</td>
<td>Child and caregiver 7-18</td>
<td>0.9</td>
<td>TSCC-A PTS &amp; Total: r = 0.75***</td>
<td>TSCC-A PTS &amp; subscales of anger, anxiety, depression (.54***-.68***)</td>
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<td>Elhai et al 2013</td>
<td>Same population as above</td>
<td>Child and caregiver 7-18</td>
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<td>3-factor DSM model: p &lt; .001*** 4-factor model EM: p &lt; .001*** 4-factor Dys: p &lt; .001*** 5-factor DA model: p &lt; .001***</td>
<td>TSCC Anx - AA: r= .59*** Dep - N: r=. 56***</td>
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<td>Effect Size</td>
<td>CBCL Total (r)</td>
<td>CBCL Clinical (%)</td>
<td>CBCL Borderline (%)</td>
<td>ROC ACC (r)</td>
<td>CBCL: (r)</td>
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<td><strong>ACC</strong></td>
<td>Tarren-Sweeney (2007) 412 children in long term care. Average of 3.5 confirmed events.</td>
<td>Caregiver</td>
<td>4-11</td>
<td>0.96 (.70-.86)</td>
<td>10-factor model, 49% variance</td>
<td>CBCL clinical: 83%, 91% CBCL Borderline: 91%, 79% Effect size: diagnosis (.83), referral status (.54-.82)</td>
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<td><strong>BAC-C</strong></td>
<td>Tarren-Sweeney (2013) 347 children in long term care. 3.5 confirmed maltreatment events.</td>
<td>Caregiver</td>
<td>4-11</td>
<td>0.89</td>
<td>AAC: r = 0.96 BPM: r = 0.93 CBCL: r = 0.82</td>
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<td><strong>TSCYC</strong></td>
<td>Briere et al. (2001) Children (n = 219). 62.8% female. Culturally diverse.</td>
<td>Caregiver</td>
<td>3-12</td>
<td>0.81-0.93</td>
<td>SA: AV (.32**), TOT (.28**), SC (.35***), PA: I (.30**), AR (.27**), TOT (.26**), Diss (.31**), DV: I (.25*), AV (.28*) AR (.22*), TOT (.26*), SC (.22*)</td>
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<tr>
<td><strong>Gilbert</strong></td>
<td>SA children (n = 339)</td>
<td>Caregiver</td>
<td>3-12</td>
<td>0.81 - 0.92</td>
<td>Anx - CBCL Anx/D (r = .59*); Dep - CBCL Anx/D (r = .73*); Anger - CBCL Agg (r = .61*); SC - CBCL SP (r = .55*) SC - CSBI (r = .66*) TSCC (.17-.40)</td>
<td></td>
<td></td>
<td>PTS-Ar, PTS-Tot and SC predict abused (75.56%; 86.67%)</td>
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<tr>
<td>Study</td>
<td>Setting</td>
<td>Sample Characteristics</td>
<td>Instrumentation</td>
<td>Correlations</td>
<td>Results</td>
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<tr>
<td>Pollio, Glover-Or &amp; Wherry (2008)</td>
<td>Outpatients referred for SA (n = 34)</td>
<td>52.9% females</td>
<td>PTSD positive: PTS-I (t=4.27**), PTS-A (t=422**), PTS-T (t=4.13**)</td>
<td>3 PTS scales: 97.5%, 72.7%</td>
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<tr>
<td>Wherry, Graves &amp; King (2008)</td>
<td>Outpatients (n = 172) with SA</td>
<td>Majority were female and Caucasian</td>
<td>SC: CBCL SP (r=.72**) CSBI T (r=.52**) CSBI-SASI (r=.50**) CSBI-DRSB (r=.44**)</td>
<td>CBCL: .54**-.84** UCLA-PTSD: .34**-.59** TSCC: .47-.29**</td>
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<tr>
<td>Wherry, Corson &amp; Hunsale (2013)</td>
<td>Outpatients with SA (n = 295)</td>
<td>Majority were female and Caucasian</td>
<td>SC: CBCL SP (r=.74**) CSBI T (r=.63**) CSBI-SASI (r=.52*) CSBI-DRSB (r=.37*)</td>
<td>TSCC: .12-.26** CBCL: .53**-.83** UCLA-PTSD: .47-.75**</td>
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<td>Findling, Bratton &amp; Henson (2006)</td>
<td>Children with (n=6) and without (n=6) trauma. Mainly female.</td>
<td></td>
<td>Clinician 5-7 0.85 - 0.98 0.86</td>
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<tr>
<td>Myers, Bratton, Hagen &amp; Findling (2011)</td>
<td>Children with no known trauma history (n = 7) and above sample. Mainly female.</td>
<td></td>
<td>Clinician 5-7 0.74 86%</td>
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<tr>
<td>Study</td>
<td>Authors</td>
<td>Sample Description</td>
<td>Measure</td>
<td>Child</td>
<td>Caregiver</td>
<td>Adult</td>
<td>Subscale</td>
<td>Effect Size</td>
<td>Notes</td>
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<td>TAYC</td>
<td>Strickler (2012)</td>
<td>Group 1: interpersonal trauma (n=23). Group 2: No trauma (n = 24). 57.4% females. 36.2% Caucasian.</td>
<td>Child</td>
<td>3-7</td>
<td>0.65 (all) 0.48-0.56 in child version</td>
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<td>TSCYC PTSD: $r = .41^<em>$(Total), $r = .59^</em>$(trauma sample)</td>
<td>CBCL Ext: $r = .24$ with trauma</td>
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<tr>
<td>PEDS</td>
<td>Saylor et al (1999)</td>
<td>Norm 1: n=182, Norm 2: n=64, Hurricane: n=179, Outpatient for SA: n = 50</td>
<td>Caregiver</td>
<td>2-7</td>
<td>0.72-0.78 Total: 0.85</td>
<td>k = 0.56</td>
<td>0.65</td>
<td>Acting out &amp; ECBI: ($r=.62^<em>$) UCLA: ($r=.62^</em>$)</td>
<td>Anx/Withdraw n &amp; ECBI: ($r=.42$)</td>
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<td>Spilsbury et al (2005)</td>
<td>Community sample (n = 383) from intervention for DV. African-American or White.</td>
<td>Caregiver</td>
<td>2-7</td>
<td>Total: 0.80 Act Out: 0.80 Internalise: 0.82</td>
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<td></td>
<td>Hodges et al (2000)</td>
<td>1) Adopted children, 2) foster care, 3) disadvantages no abuse, 4) no abuse</td>
<td>Clinician</td>
<td>4-8</td>
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<td>Hillman (2013)</td>
<td>Maltreated (n = 63), non-maltreated (n = 48), no adversity (n = 105); no clinical contact</td>
<td>Clinician</td>
<td>4-8</td>
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<td>Hodges (2000)</td>
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**Note:** The table includes studies using various measures to assess PTSD and trauma symptoms in children, with effect sizes and additional notes provided for each study.
<table>
<thead>
<tr>
<th>Study</th>
<th>Authors</th>
<th>Group</th>
<th>Sample Size</th>
<th>Gender</th>
<th>Mean Age</th>
<th>CBCL</th>
<th>T-scores</th>
<th>MANCOVA/Comparison</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>CSBI</td>
<td>Friedrich et al (2001)</td>
<td>Non-clinical sample (n=1114), 49.7% female. SA (n=620) and psychiatric (n=577) 62.7% female. Mainly Caucasian.</td>
<td>Caregiver 2-12</td>
<td>Normal: 0.72</td>
<td>0.92</td>
<td>0.91 at 2 weeks</td>
<td>Normal: r = .79</td>
<td>Nurses: r = .42</td>
<td>Teachers: r = .44</td>
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<td>Baker et al (2008)</td>
<td>Normative (n=134), residential care home or foster parents (n=97)</td>
<td>Caregiver 10-12</td>
<td>RTC CBCL: 0.7 - 0.68***</td>
<td>FBH CBCL: 0.13 - 0.49***</td>
<td>No of T events: r = 0.33</td>
<td>FAC: r = 0.36*</td>
<td>FBH No of T: r = 0.27</td>
<td>FBH FAC: r = 0.24</td>
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<tr>
<td>CDC</td>
<td>Putnam, Helmers &amp; Trickett (1993)</td>
<td>SA (n=61), Other abuse (n=31), Dissociative disorders (n=22), Control (n=62). 100% female.</td>
<td>Caregiver 5 - 12 years</td>
<td>k = 0.74</td>
<td>1 year</td>
<td>CDC across groups p &lt;.001* each group</td>
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<td>Wherry, Neil &amp; Taylor (2009)</td>
<td>PA &amp; SA children (n=232), 61% girls, 69% Caucasian.</td>
<td>Caregiver 6 - 13 years</td>
<td>0.87 (0.70-0.84)</td>
<td>3-factor = 46% variance</td>
<td>Sig diff's between SA and No SA (p &lt;.001*** and PA and No PA (p &lt; .001***).</td>
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<td>Valla, Bergeron &amp; Smolla (1997)</td>
<td>Norm (n = 250) Inpatients and outpatients (n=150). White and African American.</td>
<td>Child 6 - 11 years</td>
<td>k = 0.71-0.81</td>
<td>DSM-III-R criteria: k = 0.64-0.88</td>
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<td>de la Osa, Ezpeleta, Granero, Olava &amp; Domenec (2011)</td>
<td>Children attending PV counselling centre (n = 55), 85.5% Caucasian, 63.7% male, 72.7% had DSM-IV diagnosis</td>
<td>Child 6 - 11 years</td>
<td>CBCL Total: 0.42* DIA Int &amp; CBCL Int: 0.29* DIA Ext &amp; CBCL Ext: 0.25 DICA Total: 0.31* Diagnoses: 0.05 (GAD) - 0.34* (ADHD)</td>
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<td>CGAS &amp; GAF</td>
<td>Blake, Cangelosi, Johnson-Brooks &amp; Belcher (2009)</td>
<td>Clinical vignettes (n = 15); trauma, clinical (no trauma), no clinical contact</td>
<td>Clinician 4-15</td>
<td>Trauma vs. No Trauma GAF: (Z=1.20, p =.23); CGAS: (Z=.64, p =.52)</td>
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<td>Vineland Adaptive Behaviour Scales II</td>
<td>Shaffer, Balla &amp; Cicchetti (1984)</td>
<td>Standardised in children and adults Caregiver or teacher versions</td>
<td>0 - 90</td>
<td>0.94 (0.83-0.90) 0.88 (0.81-0.86) 0.74 (0.62-0.78)</td>
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<tr>
<td>Becker-Weidman (2009)</td>
<td>N = 57 met criteria for RAD and complex trauma, Adopted or in foster care, 52.6% female, 64.9% Caucasian.</td>
<td>Clinician or caregiver 2:18</td>
<td>ABI: (.58), AAMD: (.40-.70), K-ABC (.07-.52), PPV-TR (.12-.37).</td>
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*p < .05; ** p < .01; *** p < .001
Discussion

This review aimed to explore the clinical assessment of children aged between 0 to 12 years experiencing developmental trauma, and to examine the utility of the assessment tools being employed for this purpose. The field of trauma assessment has grown over the last decade, with 25 papers identified since the last review (Strand et al, 2005). Researchers have examined the utility of a wide range of instruments ranging from those designed to establish symptoms of PTSD, to broader assessments of trauma-related difficulties, and from measures of non-trauma specific psychopathology and general functioning, to very specific assessment of one symptom or behaviour such as dissociation. Most have highlighted the lack of appropriate measures in the field of developmental trauma and some have attempted to fill this gap by developing their own assessment tool. This has included the ACC and BAC-C scales developed within the looked after children population in Australia (Tarren-Sweeney, 2007; Tarren-Sweeney, 2013), both of which are increasing being adopted within Europe, North America and Australia both as a research and clinical tool (Tarren-Sweeney, 2013). Furthermore, a shortened version of the TSCYC (Wherry et al, 2013), the child self-report TAYC (Strickler, 2012), and the Trauma Play Scale (Findling et al, 2006) were all developed within the last decade.

To summarize the reviewed literature, it appears that the UCLA-PTSD-RI may have some utility as a measure of PTSD in children with complex histories, though it does not take into account wider difficulties related to complex trauma. Similarly, the CSBI and CDC show good psychometric properties when measuring a particular symptom i.e. sexualised behaviour and dissociation, but again, are limited by their focus on one area. Thus, these instruments are possibly best used following a broader assessment when detailed information is required for that particular
symptom. Significant limitations were identified for the CBCL-PTSD subscales (both pre-school and child versions), which researchers have argued tend to reflect general distress rather than difficulties related specifically to trauma. This was also true for measures of general functioning i.e. GAF, CGRAS and VABS.

Only two child-report measures were identified in the search (TAYC and DIA); both of which demonstrated significant differences in child and parent reporting of symptoms. The TAYC may be more valuable as it correlated with other measures of trauma (TSCYC) and showed moderate internal reliability in the child version. The trauma play scale and SSAP considered the cognitive level of children and thereby incorporated play into their scales, which were then rated by clinicians. Both were able to differentiate between children with and without complex trauma, though are lengthy and require specialist training to administer. Several studies show encouraging reliability and validity for the TSCYC, which possesses strength in its inclusion of validity scales and ability to capture a wide range of symptoms including PTS, sexual behaviours and more general anxiety and depressive difficulties. Likewise, the ACC also considers a range of symptomology found within children exposed to adversity, which is not assessed by other instruments. Both have been developed with experts in the field and show good psychometric properties. Further development into shortened versions of both also show promise for use as brief screening measures.

Limitations

There are a number of methodological weaknesses that limit our interpretation of many of these studies. Primarily, difficulties inevitably arise when conducting research in children who have been traumatised. In many cases, participants were recruited based on substantiated cases of adversity. This limits
generalizability, given that children with confirmed abuse may differ from children whose abuse has not been confirmed or reported. Additionally, abusive or neglectful parents who are willing to partake in research may differ from those parents who do not consent. This was highlighted in one study where parents who declined to take part in the study were also found to be experiencing greater distress (Spilsbury et al, 2005).

Demographic information about the study sample was often sparse and patient selection strategies were inconsistent. Many restricted their sample to those who had experienced sexual abuse, particularly for the TSCYC and the CBCL-PTSD scales. By doing so, the measures are not generalizable to other forms of adversity. Several studies included mixed samples of both complex and single-event traumas (Dehon & Scheeringa, 2006; Loeb et al, 2011; Steinberg et al, 2013; Elhai et al, 2013). The differences between single and complex trauma have been illustrated by Jonkman et al (2013) who found children exposed to isolated trauma reported symptoms of posttraumatic stress, whereas children exposed to chronic trauma reported more severe trauma-unrelated symptoms. Van der Kolk (2004) has also argued that single incidents of trauma tend to produce distinct behavioural and biological responses to reminders of the trauma, which is captured within the PTSD diagnosis. Whereas exposure to repeated traumatic experience interferes more broadly with the development of the brain and should be classified as complex trauma.

However, very few researchers made reference to the complex trauma debate and fewer still reflected that their study sample may be considered complex and possibly different to children experiencing an isolated trauma. Only one study recruited children based on the complex trauma criteria (Becker-Weider, 2008) and one other considered these criteria when developing their measure (Strickler, 2012).
This is despite the vast amount of literature arguing for a separate diagnosis for developmental trauma, which has been ongoing since 2004.

Moreover, much of the literature in the current review has focused on PTSD; either by evaluating measures intended for PTSD or by investigating whether other tools can accurately detect it. By virtue of their focus on one particular area, these studies do not evaluate the other psychological difficulties associated with childhood adversity. Although PTSD is one possible set of symptoms following adversity, research has indicated it is not the most common psychiatric diagnosis within children exposed to chronic trauma (Cook et al, 2005). In fact one study found the most common diagnoses following child abuse in order of frequency were: SAD, ODD, phobic disorders, PTSD and ADHD (Ackerman et al, 1998). Therefore, the focus on PTSD is too narrow and assessment tools need to consider the broad impact that chronic trauma has. This is particularly crucial within young children as research suggests trauma has its most pervasive impact in the first decade of life and becomes more confined i.e. more like ‘pure’ PTSD with age (van der Kolk, 2005).

Finally, the reliance for data in the majority of cases was on parent or caregiver-report, with only two measures based on child-report and two more relying on clinicians observations of the child engaged in play or story-telling. Significant limitations have been noted when relying on parental reporting, particularly in the case of trauma. Parents may be coping with their own traumatic issues and thus, may not necessarily be aware of their children’s internalising symptoms (Lieberman, Van Horn & Ippen, 2005; Shemesh et al, 2005). Even when not facing adversity, a meta-analysis demonstrated low-to-moderate levels of agreement in ratings of behaviour between child and parents for behavioural and emotional problems on the CBCL (Achenbach, Edelbrock & Howell, 1987). This inconsistency was also echoed
in the two child report measures in the current review (Strickler, 2012; de la Osa et al, 2013). Parents may under-report symptoms, particularly if they are the perpetrators of abuse, or over-report if they are keen to gain treatment for their child. Thus far, only one set of researchers have attempted to address this issue by including two validity scales for over/under reporting in their parent-informed instrument (TSCYC; Briere et al, 2001).

As a family’s understanding of an event is socially constructed, the effects of abuse are likely to be perceived differently among family members. Therefore, it is important that self-report measures form part of the assessment process in addition to collateral reports from caregivers. Children will view the world differently to their parents and their views about their distress need legitimacy.

**Future directions**

Future research is recommended to consider evaluating existing assessment tools in populations of children strictly meeting criteria for developmental trauma only, to truly assess whether these tools are useful in this population. There is also a need for the development of instruments that specifically measure symptoms of complex trauma. Experiences of complex trauma have been theorised to reflect seven areas of dysfunction (Cook et al, 2005) or three symptom clusters according to DTD, and therefore tools should aim to include these. Thus far, one scale has been developed in this vein, though it is retrospective and has only been examined in 18-19 year olds (McDonald, Borntrager & Rostad, 2014). Further research is also recommended to explore differences/similarities between different forms of adversity as the majority of the reviewed literature evaluated the trajectory of sexual abuse only. Consideration also needs to be given to the cognitive and social developmental level of children. Although some measures specifically focused on
younger children, a number of assessment tools were aimed at children aged between 6-18 years. Future research is recommended to explore symptoms at certain age groups, perhaps according to Piaget’s (1958) cognitive developmental stages.

Furthermore, researchers have often neglected to consider the impact of self-reporting symptoms for children and this should also be considered where possible. Interestingly, despite the growing interest in factors that have been linked to resilience in children facing adversity e.g. positive beliefs about self, internal locus of control and positive attachment figure (Cook et al, 2005), no measures of resilience were identified in the search. Measures of resilience have been investigated among adolescents facing complex trauma (Gartland, Bond, Olsson, Buzwell & Sawyer, 2011). It may be worthwhile examining whether taking a strengths-focused approach to assessment can assist clinicians in their conceptualisation of the child and treatment planning. Strengths have an important role in moderating the effects of child trauma on symptoms and risk behaviours (Griffin, Martinovich, Gawtron & Lyons, 2009).

Conclusion

Given that childhood adversity has profound implications on development, particularly in the first ten years of life, children often experience difficulties across many domains of functioning. Without an appropriate and accurate assessment process, these children are likely to be given multiple diagnoses and offered time-consuming and costly therapy and medication that ultimately fail to address the underlying problem. Therefore, a comprehensive and trauma-informed assessment is fundamental in order that symptoms are identified reliably and children can receive the care they need. Despite some methodological shortfalls, there are a
growing variety of assessment tools available for clinicians to use within clinical assessment. The most promising of these measures appear to be the TSCYC and ACC for parental report and the TAYC for child-report. That being said, further research directions are warranted in the development of measures specifically for children exposed to complex trauma, which consider both child and parental views and are sensitive to the child’s cognitive and social developmental stage.
References


Clinical Experience
**Year 1**

**Adult Community Mental Health Service**

I worked with adults aged 18-65 years old presenting with a range of moderate to severe mental health difficulties including: depression, generalised anxiety disorder, social anxiety, panic disorder, obsessive compulsive disorder (OCD), post-traumatic stress disorder (PTSD), persistent delusional disorder, paranoid schizophrenia and bipolar disorder. The majority of my work was on an individual basis using Cognitive Behavioural Therapy (CBT) and Acceptance and Commitment Therapy (ACT). I also co-facilitated an ACT group for individuals with psychosis and evaluated this for the service. Other experience included delivering a systemic intervention with a couple alongside my supervisor and delivering two pieces of training; one on the ACT model to the multi-disciplinary team and a second presentation on the updated NICE guidelines in regards to adults diagnosed with schizophrenia.

**Year 2**

**Older People’s Community Mental Health Team and a Challenging Behaviour Service**

In this placement I was split across a mental health service for older people and a challenging behaviour service. I worked with a range of difficulties which included organic issues (Alzheimer’s and dementia), adjustment issues, challenging behaviour and mental health difficulties (generalised anxiety disorder, depression and panic disorder). I carried out both individual and family based interventions mainly using a variety of systemic approaches and/or CBT. I also led formulation sessions with care home staff using a combination of Life Story work and the Newcastle Model.

Other experience included providing training to care home staff about managing challenging behaviour related to personal care. I also developed, facilitated and evaluated a Cognitive Stimulation Therapy Group for older people with dementia and/or Alzheimer’s in a care home alongside the Activity Coordinator and Assistant Psychologist.

**Community Team for People with Learning Disabilities (Social Services)**

In this placement I worked with adults aged 18-65 years of age who had been diagnosed with a Learning Disability and/or Autistic Spectrum Disorder and were experiencing mental health difficulties including anger, low mood, issues around personal identity, managing transitions and adjustment issues, relationships (including sexual knowledge assessment) and challenging behaviour. I carried out both individual and family based interventions using CBT, narrative and systemic based approaches. I also incorporated ideas from attachment theory, personal construct theory and other psychodynamic approaches into my work.

My work also included assessment and consultation to care home staff and family members regarding challenging behaviour using the Positive Behavioural Support (PBS) model. A significant proportion of my work also included conducting neurocognitive assessment of Learning Disability and/or dementia in people.
diagnosed with Down’s Syndrome. I also participated in meetings regarding the development of a new service for people with challenging behaviour.

**Year 3**

*Child and Adolescent Mental Health Service (CAMHS)*

During this placement, I worked with children aged 6-17 years old who were experiencing moderate to severe mental health difficulties including depression, self-harm, suicidal ideation, anxiety, bipolar disorder, developmental trauma and/or PTSD, emotional intensity, Anorexia Nervosa, Bulimia, Chronic Fatigue Syndrome, low self-esteem, social anxiety, behavioural difficulties, looked-after children, anger management, ADHD and ASD.

I used a range of models to inform my interventions including CBT, narrative therapy, attachment theory, behavioural (parenting) approaches and the Maudsley Family Therapy model. My interventions were both individual and family-based and I also provided consultation and formulation meetings to schools. I also worked as part of the Family Therapy Team one day per week. Finally, I undertook several neuropsychological assessments of children aged 6-17 years old and worked as part of the ASC assessment team one morning per week.

Other experience included supervising an assistant psychologist on a service evaluation project and delivering training to the multi-disciplinary team on the topic of developmental history taking during assessment of children and young people in the service.

*Specialist Placement – Paediatric Oncology Psychological Support Service*

In this placement, I worked in a specialist paediatric hospital for children and young people diagnosed with childhood cancer. I worked with children between the ages of 2 and 17 years and members of their family including siblings, parents and grandparents. I worked with a range of difficulties including separation anxiety, procedural fear, behavioural difficulties, parenting work, anger management, adjustment issues, generalised and health anxiety, body image and self-esteem issues, attachment issues, PTSD, looked after children and adopted children, sibling difficulties, cognitive impairment as a result of brain tumour and/or associated treatment and rehabilitation. The main models applied on this placement were narrative, brief solution focused, CBT, ACT, behavioural, attachment-focused and systemic family therapy approaches. I also co-facilitated a mindfulness group for parents who have a child diagnosed with childhood cancer.

I carried out a number of neuropsychological assessments for children and provided consultation to families and schools regarding memory, concentration and attention issues following cancer and/or treatment. Other experience included coordinating and leading a psychology consultation clinic within the Late Effects Clinic alongside a Consultant Paediatric Oncologist.

Finally, I delivered half-day training to the ward staff on the topic of adherence and compliance to cancer treatment and a full day training to staff working in Children’s Hospice Care on Bereavement, PTSD and Suicide Risk Assessment in Oncology.
Neuropsychological Assessment

Adults:

- Wechsler Adult Intelligence Scale (WAIS-IV)
- Wechsler Test of Adult Reading (WTAR)
- Wechsler Memory Scale (WMS-IV)
- Behavioural Assessment of the Dysexecutive Syndrome (BADS)
- Boston Naming Test
- Addenbrooke’s Cognitive Examination Third Version (ACE-III)
- Hopkins Verbal Learning Test
- Trail Making Tests
- Birt Memory and Information Processing Battery (BMIPB)
- Leiter International Performance Test
- Neurological Assessment of Dementia in Adults with Intellectual Disabilities (NAID)
- Dementia Scale for Down’s Syndrome
- Hampshire Assessment for Living with Others (HALO)

Children and Young People:

- Wechsler Intelligence Scale for Children (WISC-IV)
- Wechsler Preschool and Primary Scale of Intelligence (WPPSI)
- Wechsler Individual Achievement Test (WIAT-II)
- Developmental Neuropsychological Assessment (NEPSY-II)
- Child Memory Scale (CMS)
- Beery-Buktenica Developmental Test of Visual-Motor Integration (Beery VMI)
- Autism Diagnostic Observation Schedule (ADOS-2) (observed and assisted with the administration)
- The Family Relations Test

Relevant training courses

<table>
<thead>
<tr>
<th>Course title</th>
<th>Training provider</th>
<th>Duration</th>
<th>Year obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative and Systemic Approaches in Paediatric Psychology</td>
<td>Great Ormond Street Hospital, London, UK</td>
<td>1 day</td>
<td>2014</td>
</tr>
<tr>
<td>Trauma Focused Cognitive Behavioural Therapy (TF-CBT) for Children and Adolescents with PTSD</td>
<td>David Trickey, Sussex, UK</td>
<td>1 day</td>
<td>2015</td>
</tr>
<tr>
<td>Paediatric Psych-Oncology Conference</td>
<td>Royal Marsden Hospital, London, UK</td>
<td>1 day</td>
<td>2016</td>
</tr>
</tbody>
</table>
# PSYCHD CLINICAL PROGRAMME

## TABLE OF ASSESSMENTS COMPLETED DURING TRAINING

### Year I Assessments

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAIS-III</td>
<td>Short Report of WAIS-III Data and Practice Administration</td>
</tr>
<tr>
<td>Service-Related Project</td>
<td>A Service Evaluation of an Acceptance and Commitment Therapy Group for Individuals Diagnosed with Psychosis</td>
</tr>
<tr>
<td>Practice Case Report</td>
<td>Using Cognitive-Behavioural Therapy with a Woman Presenting with Persistent Delusional Disorder</td>
</tr>
<tr>
<td>Problem Based Learning – Reflective Account</td>
<td>The Relationship to Change: A PBL Reflective Account</td>
</tr>
<tr>
<td>Major Research Project Literature Review</td>
<td>The Assessment of Developmental Trauma in Young Children: A Systemic Literature Review</td>
</tr>
<tr>
<td>Adult – Case Report 1</td>
<td>Using Acceptance and Commitment Therapy and Cognitive-Behavioural Therapy with a Woman Presenting with Persistent Delusional Disorder</td>
</tr>
<tr>
<td>Adult – Case Report 2</td>
<td>Using Trauma-Focused Cognitive-Behavioural Therapy with a Lady Diagnosed with Post-Traumatic Stress Disorder and Recurrent Depression</td>
</tr>
<tr>
<td>Major Research Project Proposal</td>
<td>Developmental Trauma in Looked After Children: Are We Adequately Assessing the Mental Health Needs of this Population?</td>
</tr>
</tbody>
</table>

### Year II Assessments

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Issues Essay</td>
<td>&quot;Traditional treatments for psychological problems in people with learning disabilities have tended towards behavioural management, skills training and medication&quot;. How in contrast might you go about promoting greater attention to psychological health and wellbeing for those with a learning disability?</td>
</tr>
<tr>
<td>Problem Based Learning – Reflective Account</td>
<td>The Stride Family: A PBL Reflective Account</td>
</tr>
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<td>-------------------------------------------</td>
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</tr>
<tr>
<td>Older People – Case Report</td>
<td>The Neuropsychological Assessment of a Man Presenting with Cognitive Impairment</td>
</tr>
<tr>
<td>Personal and Professional Learning Discussion Groups – Process Account</td>
<td>A Reflective Process Account Across Two Years of the Personal and Professional Development Learning Group</td>
</tr>
<tr>
<td>People with Learning Disabilities – Oral Presentation of Clinical Activity</td>
<td>Developing my Clinical Skills in Engagement, Creativity and Systemic Approaches when Working with a Young Man presenting with Anger and Autism</td>
</tr>
</tbody>
</table>

**Year III Assessments**

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal and Professional Learning – Final Reflective Account</td>
<td>On Becoming a Clinical Psychologist: A Retrospective, Developmental, Reflective account of the Experience of Training</td>
</tr>
<tr>
<td>Child and Family – Case Report</td>
<td>Using Narrative Therapy with a Teenage Girl Struggling with 'Depression', 'Anger' and 'Abuse'</td>
</tr>
</tbody>
</table>