

**Effectiveness studies (uncontrolled studies)*****Klag 2010***

<b>Study type</b>	Uncontrolled before-and-after study
<b>Study location</b>	Australia
<b>Study setting</b>	Children in out-of-home care who present with severe and/or complex psychological and/or behavioural problems
<b>Study dates</b>	2006 to 2011
<b>Duration of follow-up</b>	Pre- and post-treatment comparisons were made. ETS interventions are medium to long-term (i.e. 12–18 months); however crisis and short-term interventions may be utilised to stabilise the system and child/young person, so longer term or more intensive work is possible.
<b>Sources of funding</b>	No information provided
<b>Inclusion criteria</b>	Age

	<p>child under 18 years of age</p> <p><b>Care situation</b> In out-of-home care under and on interim or finalised Child Protection Orders</p> <p><b>Emotional or behavioral disorders</b> Presents with severe and/or complex psychological and/or behavioural problems (i.e. a chronic trauma history, extreme behavioural problems across multiple settings, at risk of harming self/others and multiple placement breakdowns)</p>
<b>Sample size</b>	396
<b>Split between study groups</b>	Not applicable (uncontrolled before and after study)
<b>Loss to follow-up</b>	Data was available for 255 participants for "problems with scholastic or language skill" and 249 for "school attendance"
<b>% Female</b>	38.4%
<b>Mean age (SD)</b>	10.6 years (range 1 - 17 years)
<b>Condition specific characteristics</b>	<p><b>Mental health or emotional wellbeing needs</b> 100%. The majority (93.9% of 636) met diagnostic criteria for at least one major mental health disorder (ICD-10; F-Codes; WHO, 2010), with 41.5% diagnosed with multiple mental health disorders. 49.1% of ETS clients were diagnosed with attachment disorders, the most common mental health issue at admission. Subsequent diagnoses were PTSD (20.8%), Mood Disorders (17.8%), Conduct Disorders (17.1%), Disturbances of Activity and Attention (17.1%), Developmental and Intellectual Impairment (16.9%), Emotional and Behavioural Disorders (14.6%) and Anxiety and Stress Disorders (8.0%). A small percentage of C/YP were diagnosed with Childhood Disorders (4.9%), Disorders in Social Functioning (4.4%) and Substance Misuse (2.2%), with 1.5% receiving a diagnosis of Mental Disorder not otherwise specified (MDNOS).</p> <p><b>Non-white ethnicity</b> 26.9% were aboriginal and/or Torres Strait Islander in background.</p>
<b>Outcome measures</b>	<p><b>Educational outcome 1</b> Health of the Nation Outcome Scales for Children and Adolescents: relevant subscales included: problems with scholastic or language skills; and school attendance. The Health of the Nations Outcome Scale for Children and Adolescents, is a 15- item clinician-rated measure designed specifically for assessment of child and adolescent outcomes in mental health services. It includes 13 clinical/psychosocial items (disruptive/aggressive behaviour, overactivity and attentional difficulties, non-accidental self-injury, alcohol or substance/solvent misuse, scholastic and language skills, physical illness/ disability problems, hallucinations and delusions, non-organic somatic symptoms, emotional and related symptoms, peer relationships, self-care and independence, family life and relationships and poor school attendance) and two items relating to knowledge about the child and/or young person's difficulties, management and services available. Each item is scored on a five-point scale from 0 (no problems) to 4 (severe problems) based on the previous two weeks, with a detailed glossary for each point of the scale and item. Pre-/post-HoNOSCA items were completed by clients' clinicians. A rating of 2, 3, or 4 indicates clinically significant problems requiring active monitoring or intervention.</p> <p><b>Health outcome 1</b></p>

	The Children's Global Assessment Scale is clinician-rated and provides a global level of adjustment and functioning on a scale of 1–100. Scores > 70 indicate no clinically significant functional impairment, scores < 70 are associated with increasingly severe dysfunction. Children and young people referred to clinical services generally have scores of <61.	
<b>Study arms</b>	<p><b>Evolve Interagency Services (N = 255)</b></p> <p>The Evolve Interagency Services (EIS) program is an interagency partnership between Queensland Health, the Department of Communities, Child Safety &amp; Disability Services, and the Department of Education, Training &amp; Employment. The key focus of EIS is to provide planned and coordinated therapeutic and behaviour supports to C/YP in out-of-home care, aimed at improving their emotional wellbeing and the development of skills to enhance participation in school and in the community. A collaborative 'wrap-around' model of service. Provision of service is achieved through a flexible use of appropriate evidence-informed individual and systemic therapeutic interventions and a coordinated and sustainable partnership with key government and non-government and private sector agencies. Clinical interventions include a comprehensive assessment of the bio/psycho/social/cultural aspects of the child/young person and their significant others, and attachment and/or trauma focused therapies, which may include dyadic work (where the focus is on the facilitation of therapeutic attachment relationships between the child/young person and their carer), individual therapy, family-based intervention or the use of other treatment modalities. Interventions are targeted not only towards young people, but can extend to carers, biological parents, youth workers, educational staff, and other professionals involved. Systemic interventions include assisting and facilitating (where needed) the development of a regular cohesive stakeholder group, involving all relevant stakeholders and where clinical appropriate the young person, with a focus of (1) having a shared understanding of the child's strengths and needs, (2) working collaboratively in the child's best interests, and (3) developing and reviewing developed therapeutic goals. Other systemic interventions include provision of carer support including foster carer training, specialist consultation-liaison services, and specialist professional development and training. ETS interventions are medium to long-term (i.e. 12–18 months); however crisis and short-term interventions may be utilised to stabilise the system and child/young person, so longer term or more intensive work is possible.</p>	
	Outcome measures	<p><b>Educational outcome 1</b></p> <p>Health of the Nation Outcome Scales for Children and Adolescents - relevant subscales: problems with scholastic or language skills, mean preintervention score: 2.2 ± 1.3, mean postintervention score: 1.56 ± 1.3; Poor school attendance mean score preintervention: 1.26 ± 1.6, mean score postintervention: 0.72 ± 1.3</p>
<b>Risk of Bias</b>	<p><b>1. Bias due to confounding</b></p> <p><b>Critical</b></p>	

(No contemporary comparison group used. Children and young people with severe emotional and behavioral disorders are more likely to discontinue treatment and therefore less likely to be included in the final analysis. Only treatment completers and participants without missing data were included in analysis. This "per-protocol" approach means that the final cohort may have been importantly different to the cohort who were included at the start (n=664).)

## **2. Bias in selection of participants into the study**

### **Moderate**

(Unclear if baseline data was collected prior to the start of intervention and how this varied between participants)

## **3. Bias in classification of interventions**

### **Moderate**

(Evolve Interagency Services describes an interagency model of care, however the interventions delivered within that system may have varied considerably in type and quality. No information about the specific types of services given was reported.)

## **4. Bias due to deviations from intended interventions**

### **Serious**

(A large number of initially eligible participants did not complete and were not included in the final analysis)

## **5. Bias due to missing data**

### **Critical**

(A significant amount of missing data was missing for several outcomes.)

## **6. Bias in measurement of outcomes**

### **Serious**

(Clinicians delivering the treatment were responsible for data collection. It is likely that they were aware whether outcomes were collected pre- or post-intervention)

## **7. Bias in selection of the reported result**

### **Low**

	<p><b>Overall bias</b></p> <p><b>Risk of bias judgement</b></p> <p><b>Critical</b></p> <p><b>Directness</b></p> <p>This question has not yet been answered.</p>
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**Osbourne 2010**

<b>Study type</b>	Uncontrolled before-and-after study
<b>Study location</b>	UK
<b>Study setting</b>	Children in foster care
<b>Study dates</b>	Not reported (published 2010)
<b>Duration of follow-up</b>	12 months
<b>Sources of funding</b>	Not reported
<b>Inclusion criteria</b>	<p>Age Primary school aged</p> <p>Care situation Any looked after children identified by schools to take part in the project</p>
<b>Sample size</b>	68

<b>Split between study groups</b>	NA
<b>Loss to follow-up</b>	33
<b>% Female</b>	Not reported
<b>Mean age (SD)</b>	9 years 4 months $\pm$ 1 year 9 months
<b>Condition specific characteristics</b>	Disabilities, speech or communication needs, or special education needs Mean reading age was 8 years 0 months $\pm$ 1 year 8 months
<b>Outcome measures</b>	Educational outcome 1 Reading age: using the Salford test. Measures were recorded immediately before the paired reading began and again immediately after the intervention was finished.
<b>Study arm</b>	<p><b>Paired Reading (N = 35)</b></p> <p>Paired reading is a literacy intervention that involves the pupil and a partner reading together. The technique involves a number of key elements: The first stage involves both pupil and partner reading together, so that the pupil is provided with a model of competent reading. As the pupil becomes more confident, they are given the option of reading alone. If the pupil subsequently makes a mistake which they are unable to correct themselves, their partner repeats the correct word and begins to read with them again. Thus, paired reading involves a cycle, moving from reading together to reading alone, ensuring the child receives as much help as necessary. The process is designed to be interactive; the child selects their own reading material and is supported by their partner through discussion, questioning and correction, where necessary. This method enables the child to gain extra practice in reading, receive feedback on their performance, and also experience modelling of correct reading by their partner, thereby promoting reading fluency and comprehension. Thus, as well as providing an opportunity for the child to participate in regular reading sessions, it also offers a way of including the carer within this process. Training workshops for foster carers, school staff and social workers in the use and delivery of paired reading were undertaken by the lead area co-ordinator for the programme and the educational psychology service. Foster carers subsequently took part in the paired reading programme with their child for 16 weeks. Carers were advised that the reading should take place at least three times a week, for a minimum of 20 minutes each session. Schools liaised with carers on a weekly basis, and this contact was formalised through the completion of weekly monitoring sheets.</p>

	<table border="1"> <tr> <td data-bbox="448 276 689 504">Outcome measures</td> <td data-bbox="689 276 2042 504"> <p><b>Educational outcome 1</b>  Reading age, mean <math>\pm</math> SD. Initial reading age: 8 years <math>\pm</math> 1 year 8 months; Reading age post-intervention: 9 years <math>\pm</math> 1 year 7 months; Increase in reading age: 1 year <math>\pm</math> 8 months (difference <math>p &lt; 0.001</math>). On average for every month spent on the intervention reading age increased by 2.96 months. Mean increase in reading age of children who were initially 36 months behind (n=3): 1 year 3 months. Mean increase in reading age of children who were initially 24-35 months behind (n=10): 1 year 4 months. Mean increase in reading age of children who were initially 12-23 months behind (n=11): 1 year 2 months. Mean increase in reading age of children who were initially 1-11 months behind (n=4): 6 months. Mean increase in reading age of children who's reading age was better than their own age (n=7): 7 months</p> </td> </tr> </table>	Outcome measures	<p><b>Educational outcome 1</b>  Reading age, mean <math>\pm</math> SD. Initial reading age: 8 years <math>\pm</math> 1 year 8 months; Reading age post-intervention: 9 years <math>\pm</math> 1 year 7 months; Increase in reading age: 1 year <math>\pm</math> 8 months (difference <math>p &lt; 0.001</math>). On average for every month spent on the intervention reading age increased by 2.96 months. Mean increase in reading age of children who were initially 36 months behind (n=3): 1 year 3 months. Mean increase in reading age of children who were initially 24-35 months behind (n=10): 1 year 4 months. Mean increase in reading age of children who were initially 12-23 months behind (n=11): 1 year 2 months. Mean increase in reading age of children who were initially 1-11 months behind (n=4): 6 months. Mean increase in reading age of children who's reading age was better than their own age (n=7): 7 months</p>
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<b>Risk of bias</b>	<p><b>1. Bias due to confounding</b>  Critical  (No contemporary comparison group used)</p> <p><b>2. Bias in selection of participants into the study</b>  Low</p> <p><b>3. Bias in classification of interventions</b>  Low</p> <p><b>4. Bias due to deviations from intended interventions</b>  Serious  (Participants who were unable to adhere to the intervention were likely to have had poorer results, but were not included in this study (missing data))</p> <p><b>5. Bias due to missing data</b>  Critical  (Participants with missing data are likely to be those who would have had poorer responses to intervention)</p> <p><b>6. Bias in measurement of outcomes</b>  Moderate  (A validated measure was used but assessors were aware of intervention status (pre/post))</p>		

	<b>7. Bias in selection of the reported result</b>
	Low
	<b>Overall bias</b>
	<b>Risk of bias judgement</b>
	Critical
	<b>Directness</b>
	This question has not yet been answered.