



**Centre for  
Evidence and  
Implementation**

**Evidence scan of educational  
interventions for children in out-  
of-home care**

Developed for Social Ventures Australia

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# 1. Executive Summary

As part of an effort to refresh their education perspective papers, Social Ventures Australia (SVA) is reviewing the education needs and experiences for selected cohorts of vulnerable children. To understand the needs and experiences of youth in out-of-home care (OOHC), SVA contracted the Centre for Evidence and Implementation (CEI) to review the effectiveness of policies, programs, practices and interventions aimed at strengthening educational and wellbeing outcomes for children and youth of all ages in OOHC.

In order to scope the review, CEI conducted a literature search to identify systematic reviews on interventions targeting educational and wellbeing outcomes for young people in OOHC. This search yielded nine relevant reviews. CEI then used the reference lists of each review to identify and summarise relevant primary studies (n = 58).

Overall, there was little high-quality evidence on the topic of interest and the findings were very mixed. There were few randomised controlled trials (RCTs), studies were usually based on small sample sizes, and at least a third of the studies came from non-peer-reviewed sources. Additionally, there were no studies conducted in Australia. As a result, it is not possible to draw conclusions with high confidence about the interventions described.

Interventions fell into six main categories: behavioural, educational support, transitional services, structural changes, natural mentoring, and an 'other' category. Some of the interventions that had more positive educational outcomes were: multi-dimensional treatment, additional instruction (particularly for literacy outcomes), and natural mentoring (although these findings were from surveys and longitudinal data as this type of mentoring relies on relationships that have developed organically).

This report consists of a background on the project, a detailed description of the methods, and a summary of findings (including a description of how relevant literature was identified, and a summary of key insights). Tables that outline the findings of the nine reviews and 58 primary studies are included as appendices.

## 2. Background

SVA is in the process of refreshing its education strategy and therefore wants to understand the education needs and experiences for selected cohorts of vulnerable children.

For each cohort SVA plans to document:

1. A clear definition of the cohort
2. Key challenges, strengths and opportunities
3. High-level mapping of ecosystem activity (players, policies, programs)
4. Activities that have the greatest impact on addressing the cohort's challenges
5. A summary of what is known about what works and why in relation to addressing challenges for the cohort

SVA's Education Driver Tree will function as the overarching framework for the project. It encompasses the home/community environment and formal education including early learning, K-12 schooling and transitions from school.

For each cohort, a scan of the current best evidence base commences the work. One cohort comprises children in out-of-home care. The overarching research question guiding this evidence scan is:

***What is the evidence on the effectiveness of policies, programs, practices and interventions aimed at strengthening educational and wellbeing outcomes for infants, children and young people in relation to out-of-home care?***

### 3. Methods

Based on the above, a scoped but systematic search for systematic reviews focused on what works in enhancing educational outcomes for children in out-of-home care was conducted. The details of this search and the subsequent screening of the literature is described in the following.

#### 3.1. Research question

Identification of relevant literature was based on the parameters of the project and guided by the research question:

*What is the evidence on the effectiveness of policies, programs, practices and interventions aimed at strengthening educational and wellbeing outcomes for infants, children and young people in relation to out-of-home care (including those who are at risk of entering OOHC, those who are in OOHC, and those who are transitioning from OOHC)?*

#### 3.2. Search terms

The database PsychINFO, was searched in June 2018 to identify systematic reviews relevant to the research question published in the past ten years (since 2008).

Search terms (adapted from O’Higgins, 2017) used with this database are provided in Table 1, below:

**Table 1. Search terms**

<b>Study design:</b> SR	("systematic adj review*" or metaanalysis or "meta analysis" or meta-analysis or review).mp
<b>Population:</b> Children in out of home care	("foster care" or "foster home" or "foster family" or "foster parent" or "foster carer" or "substitute family" or "family foster home" or "kinship care" or "child in care" or "children in care" or "out-of-home care" or "out of home care" or "looked after" or "looked-after" or "public care" or "group home").mp
<b>Outcomes:</b> Educational	(educat* or school* or class* or college* or teach* or diploma* or certificate* or achiev* or perform* or academic OR "academic* adj3 interven*" OR academic* OR "academic* adj3 succe*" OR "academic adj3 engage*" OR "school adj3 engage*" OR "educat* adj5 outcome*").mp

#### 3.3. Inclusion and exclusion criteria

Reviews that contained studies examining interventions aimed at enhancing educational outcomes for children from preschool age to year 12 in OOHC (i.e., foster care, kinship care, group homes, etc.) were included. Specific criteria for the in- and exclusion of reviews are provided in Table 2, below:

**Table 2. Inclusion and exclusion criteria**

Criteria Topic	Included	Excluded
Population	<ul style="list-style-type: none"> <li>The review reports on outcomes for children               <ul style="list-style-type: none"> <li>From preschool age to year 12</li> <li>Placed in OOHC (including foster care, kinship care, and residential care)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Adopted children</li> <li>Children living with their biological parents</li> </ul>
Study design	<ul style="list-style-type: none"> <li>Systematic review</li> <li>The review was published in a peer-reviewed journal</li> <li>The study is a meta-analysis that is based on a systematic review</li> </ul>	<ul style="list-style-type: none"> <li>Primary studies</li> <li>Grey literature</li> </ul>
Setting	<ul style="list-style-type: none"> <li>The review is based on studies conducted in Australia and/or comparable high-income countries</li> </ul>	<ul style="list-style-type: none"> <li>Reviews including a majority of studies conducted in a country not comparable to Australia (i.e., Asian countries, African countries, South America, etc.)</li> </ul>
Outcomes	<ul style="list-style-type: none"> <li>The review reports educational outcomes for children in OOHC               <ol style="list-style-type: none"> <li>educational achievements (i.e., grades; level of education)</li> <li>school commitment (i.e., attendance; drop out)</li> <li>health (physical health; lifestyle)</li> <li>wellbeing (i.e., socioemotional and mental health; life skills)</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Reviews that do not report educational outcomes as listed to the left</li> </ul>
Publication	<ul style="list-style-type: none"> <li>The review was published between 2008 and 2018</li> </ul>	<ul style="list-style-type: none"> <li>Reviews published before 2008</li> </ul>

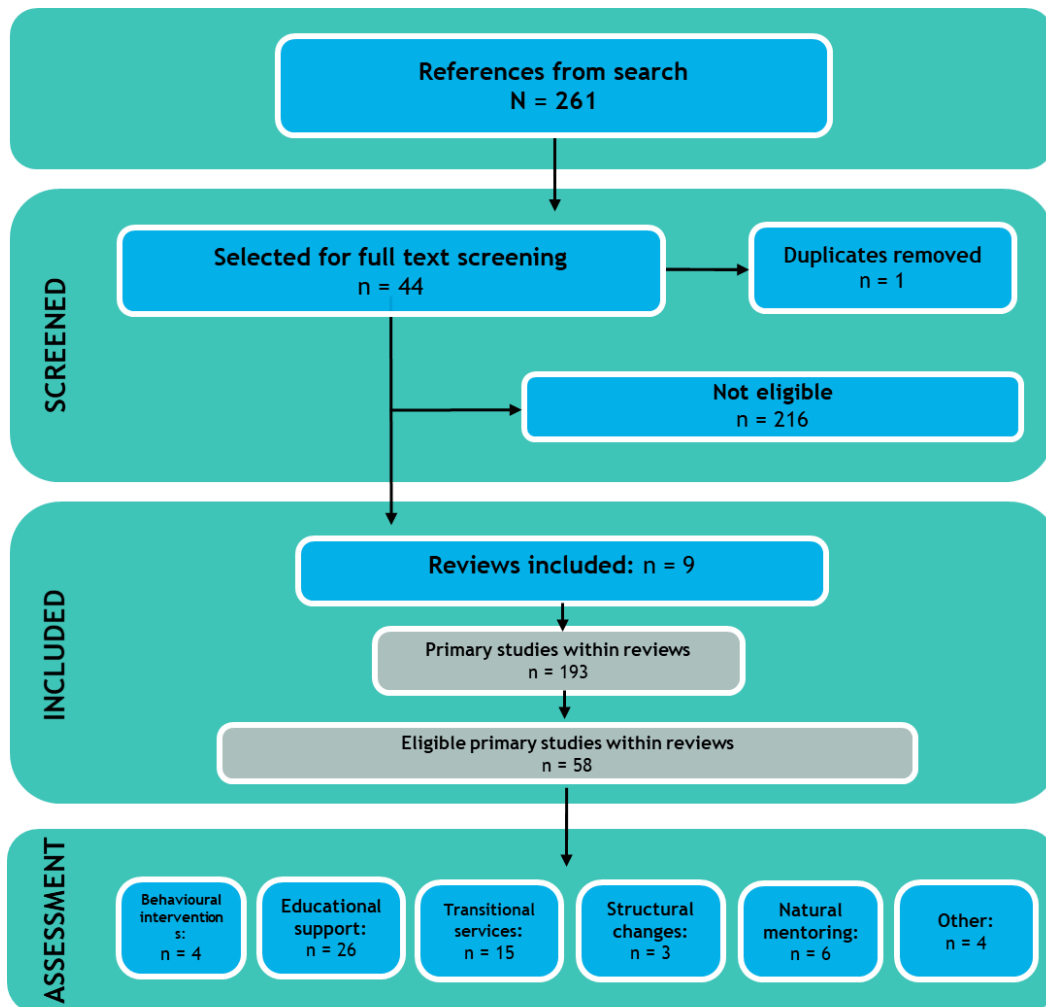
The primary studies were selected based on the references in the reviews. The 9 reviews contained a total of 193 primary studies. A research assistant examined the abstracts, and full text if necessary, of all the primary studies. Inclusion and exclusion criteria were applied to each (with the exception of study design and publication) to yield a total of 58 eligible primary studies which could be grouped into six categories.

## 4. Summary of Findings

The results derived from the screening of the literature are described in the following. In the first section, we provide an overview of the flow of studies through the screening process. Subsequently, we present overview tables with findings included in eligible studies, organised by one of the following intervention types: behavioural, educational support, transitional services, structural changes, natural mentoring, and an 'other' category containing interventions that fell outside of the aforementioned categories. We conclude with a summary of key insights.

### 4.1. Identification of literature

The initial search yielded 261 reviews. The flow of studies through the screening process is summarised in the flow chart below.



### 4.2. Summary tables

The nine relevant reviews included after abstract and full-text screening are described in Appendix A.

Appendix B describes the relevant primary studies included in the reviews. While all studies reported on one or more of the outcomes identified in the Inclusion and Exclusion criteria in Table 2, the interventions targeted different areas. They are arranged by intervention type:



- **Behavioural interventions** (n = 4): Interventions that aim to improve children’s problem behavior. This category included e.g. Multidimensional Treatment Foster Care (MTFC) and other behavioural interventions.
- **Educational support** (n = 26): Interventions in this category were directly related to a child’s education and included e.g. the distribution of resources, basic skills instruction, additional instruction, educational planning, or higher educational support.
- **Transitional services** (n = 15): This category includes services that aid youth older youth in their transition out of care. Some of these services teach youth life skills and others provide transitional housing.
- **Structural changes** (n = 3): This category comprises changes that take place on a larger organizational scale, rather than at an individual level, in the form of additional resources (i.e., people or money) to improve educational outcomes for children in care.
- **Natural mentoring** (n = 6): All studies included in this category were found from one review focused on natural mentoring, which is a natural relationship that a youth forms with a consistent adult in his or her life. Note that, because natural mentoring relies on relationships that have developed organically, it is not technically an ‘intervention’ and it can only be assessed in observational studies.
- **Other** (n = 4): These interventions did not fit in one of the other categories. They included programs that offer overall assistance to children in multiple areas of their lives, working across services, and residential school (i.e. a type of residential care for adolescent foster children that focuses on their education and social development).

### 4.3. Key insights

As a result of this process, we have identified the following key insights regarding OOHC interventions and outcomes.

- There is little rigorous and relevant evidence about educational interventions and outcomes for children in OOHC:
  - Of 58 primary studies, only 14 were randomised controlled trials.
  - The majority of studies had small sample sizes.
  - At least one-third of the studies were reports or dissertations rather than articles in peer-reviewed journals.
  - No studies were conducted in Australia. All were conducted in the USA, Canada, the UK or Sweden.
  - Two of the nine systematic reviews (Evans, 2017; Liabo, 2013) specifically noted they did not include any studies robust enough to demonstrate evidence of effectiveness.
- It is difficult to draw conclusions regarding the efficacy of interventions due to mixed results.
  - The most commonly studied intervention was the use of transitional services teaching life skills to young people; however, there were no clear conclusions regarding the efficacy of this type of intervention as the results were mixed.
  - In general, the interventions with the most positive results involved:
    - Multi-dimensional treatment
    - Additional instruction (more so for literacy than numeracy outcomes)
    - Natural mentoring (although these findings relied on surveys and longitudinal data and did not include any RCTs. This is because natural mentoring relies on organically-formed relationships — see point in Section 4.2 above).

These insights are summarised in Table 3 below.

**Table 3. Summary of evidence strength and intervention effectiveness**

Intervention type		Strength of the evidence	Effectiveness of interventions
Behavioural interventions	Multidimensional treatment	●	●
	Other	●	●
Educational support	Distribution of resources	●	●
	Basic skills instruction	●	●
	Additional instruction (i.e. tutoring)	●	●
	Educational planning	●	●
	Higher education support	●	●
Transitional services	Life skills	●	●
	Housing	●	●
Structural changes		●	●
Natural mentoring*		●	●
Other	Overall assistance	●	●
	Residential school	●	●

**Legend:**  
● High confidence  
● Medium confidence  
● Low confidence

**Note on interpretation:**  
In this table:

- “Strength of the evidence” is a measure of the quality of the research methodology — e.g. interventions that have been the subject of a number of rigorous randomised controlled trials (RCTs) in peer-reviewed journals would be labelled “high confidence”, and interventions relying largely on evidence from other studies such as pre- and post-test data would be labelled “low confidence”.
- “Effectiveness of the intervention” indicates whether studies have found an intervention to have a positive, neutral or negative effect on outcomes — e.g. “high confidence” would be used if studies have consistently found statistically significant positive effects on the outcomes measured, and “low confidence” would be used when the overall weight of evidence shows mixed results, making it difficult to assess whether or not the intervention has or has not resulted in improved outcomes.

\* Note that natural mentoring cannot quite be classified like the other types of interventions — see Sections 4.2 and 4.3 above.

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## Appendix A. Summary of included reviews

**Table 3. Included reviews**

STUDY	# OF INCLUDED STUDIES	OBJECTIVE	SETTING & PARTICIPANTS	FINDINGS
Carpenter-Aeby, 2017	N = 30 (5 studies relevant to RQ)	The purpose of this review was <ul style="list-style-type: none"> <li>to describe the academic needs of youth in foster care,</li> <li>to identify the barriers these children – and their caregivers – experience within the education system</li> <li>to identify interventions that are effective in promoting academic achievement in children in foster care</li> </ul>	Children in foster care	The researchers found that a few types of interventions were particularly useful: <ol style="list-style-type: none"> <li><i>Implementing educational programming tailored to foster children</i> - Tailored programs that promote a child's strengths and address their needs are related to academic success. For example, the Letter Box and Helsingborg study both used these methods and achieved successful outcomes.</li> <li><i>Implementing mentoring and foster care parent engagement</i> - Programs like the Boys and Girls Club and Big Brother, Big Sister help address needs of children with unstable home lives. With the additional time and attention, foster children have better grades, better engagement in school, and decreased problem behaviours.</li> <li><i>Implementing team approach</i> - There is an increase in academic success when there is an individual plan in place and the plan is shared with everyone involved in the care of the youth (i.e., social workers, teachers, biological parents, foster parents, counsellors, etc.).</li> </ol>
Evans, 2017	N = 15 (9 studies relevant to RQ)	This review aimed <ul style="list-style-type: none"> <li>to gather and evaluate evidence on the effectiveness of interventions that address educational outcomes for looked-after children and young people</li> <li>This review included RCTs only.</li> </ul>	Looked-after children and young people (LAYP)	Overall, nine of 12 interventions found some evidence of effectiveness for educational outcomes. The improvements were found in: <ul style="list-style-type: none"> <li>Academic skills (Kids in Transition, Headstart, individual and group-based Teach Your Children Well),</li> <li>Homework completion (Multidimensional Treatment Foster Care for girls leaving the youth justice system)</li> <li>School attendance, suspension, and dropout (Multidimensional Treatment Foster Care, Fostering Individualised Assistance Programme, On the Way Home)</li> <li>Teacher-student relationships (Headstart).</li> </ul> <p>No definitive statement could be made regarding the effect and the outcomes due to relatively high risks of biases and implementation flaws. Results should therefore be interpreted with caution.</p>
Everson-Hock, 2011	N = 7 (5 studies relevant to RQ)	This review sought to synthesise evidence on the effectiveness of transition support services (TSSs) delivered near the end of looked-after young people's care for different adult outcomes.	Looked-after young people (LAYP) aging out of child welfare system / youth ageing out of care	Overall, LAYP who received TSSs were more likely to: <ul style="list-style-type: none"> <li>Complete compulsory education with formal qualifications</li> <li>Be in current employment</li> <li>Be living independently</li> </ul> <p>And less likely to</p> <ul style="list-style-type: none"> <li>Be young parents</li> </ul> <p>There was no effect reported on the impact of TSSs on crime or mental health, and mixed findings for homelessness.</p> <p>Four studies of mixed quality, found that those given TSS were more likely to leave high school (in the USA) with qualifications. One study of reasonable quality found the same, but also found that these LAYP were more likely to have no high school diploma or general educational development credential, although they were more likely to have a college education. Another reasonable quality study found that those receiving TSSs were less likely to have a high school level education when leaving care and one year after leaving care compared to the comparison group.</p>

STUDY	# OF INCLUDED STUDIES	OBJECTIVE	SETTING & PARTICIPANTS	FINDINGS
Forsman, 2012	N = 11 (10 studies relevant to RQ)	This scoping review <ul style="list-style-type: none"> <li>compiled and analysed interventions aimed to improve foster children's school achievements.</li> </ul>	Children in foster care	Nine out of the eleven interventions reported some positive results. Literacy improved in most studies, while attempts to enhance children's skills in numeracy yielded mixed results. Positive results came from a range of different interventions: <ul style="list-style-type: none"> <li>Tutoring</li> <li>Distribution of learning material</li> <li>Structured individualised support</li> <li>Use of educational liaison</li> </ul> The authors concluded that these different types of interventions seemed to improve foster children's academic achievements, but tutoring projects had the best empirical support from rigorously designed evaluations.
Liabo, 2013	N = 11 (10 study relevant to RQ)	This systematic review looked at interventions to support looked-after children in school.	Looked-after children in school	The authors found no studies robust enough to show evidence on effectiveness. The findings from studies were summarised by intervention type: <ul style="list-style-type: none"> <li>Strategic interventions - These interventions were applied at the organisational level to evoke policy and practice change. There were no clear trends for this intervention type.</li> <li>Spending targeted money - Money was given to authorities to improve the educational attainment of their looked-after children. There was a small, but positive, impact on school attendance. Using individualised and flexible approaches were most successful for child outcomes.</li> <li>Residential school - Children placed in this school did not have an option to be placed in foster care. The students achieved outcomes comparable to children in foster care, which the authors considered a favourable outcome.</li> <li>Community project - This community initiative was a combination of mentoring, carer involvement, and vocational support for children in foster care. There was no significant impact of the intervention past the project's first year. Components of the project were not appealing for the youth involved and carers were not engaged.</li> <li>Reading encouragement - This type of intervention was popular amongst the recipients. Children received books as gifts. In one study, children who scored high on attainment showed the greatest improvements. Low achievers deteriorated from pre to post test.</li> <li>Tutoring - Children's skills (math, reading, etc.) seemed to improve and one of the studies found that tutoring was a popular intervention.</li> </ul>
Randolph, 2017	N = 7 (3 studies relevant to RQ)	The purpose of this systematic review was to understand what is known about <ul style="list-style-type: none"> <li>students' views of university campus support programs for foster care alumni</li> <li>the outcomes of interventions to improve post-secondary educational success of foster care alumni.</li> </ul>	Foster care alumni in university	Overall, the authors conclude that the outcome studies yielded positive results for post-secondary outcomes in foster care alumni who participated in campus-support programs.

STUDY	# OF INCLUDED STUDIES	OBJECTIVE	SETTING & PARTICIPANTS	FINDINGS
Thompson, 2016	N = 38 (6 studies relevant to RQ)	This systematic review identified, synthesised, and summarised the knowledge base on natural mentoring – defined as naturally occurring mentoring relationships in a youth's social network – for adolescent youth in foster care.	Youth in foster care	Out of 38 studies included, twelve examined the effectiveness of natural mentoring through quantitative and mixed methods studies. As part of these studies, researchers in general report positive associations between natural mentoring and youth outcomes, e.g. in the form of completing a high school diploma or GED, avoiding vulnerability in adulthood, a heightened view of one's strengths and assets, improved psychological well-being and the development of resilience. However, only one of these studies reported an effect size.
Woodgate, 2017	N = 68 (12 studies relevant to RQ)	This scoping review aimed to identify evidence on interventions addressing youth aging out of the child welfare system.	Youth ageing out of care	Eligible interventions included in this review included housing, employment, education, mentorship, independent living, and health interventions with most studies falling under the independent living category. Overall, the studies showed positive outcomes for youth's completion of education and attaining employment. However, the authors note that the methods to evaluate the effectiveness of interventions for youths' successful transition to independence were methodologically weak.
Yelick, 2017	N = 6 (3 studies relevant to RQ)	This narrative review focused on evaluating the effectiveness of independent living programs for outcomes of youth ageing out of care.	Youth ageing out of care	Studies included in this review examined the following outcomes: <ul style="list-style-type: none"> <li>• educational attainment (i.e., high school completion or obtaining a GED),</li> <li>• employment (i.e., part or full-time employment),</li> <li>• housing (i.e., housing or living status),</li> <li>• mental health or special needs, and</li> <li>• life skills (i.e., daily living skills, money management, etc.).</li> </ul> Taken together, the studies suggest that there is only weak evidence that independent living programs effectively improve outcomes for youth ageing out of care.

## Appendix B. Summary of included primary studies

**Table 4. Included primary studies**

STUDY	DESIGN	SETTING & PARTICIPANTS	INTERVENTION	COMPARISON OR CONTROL	MEASURES & DATA COLLECTION	OUTCOMES AND FINDINGS
<b>BEHAVIOURAL INTERVENTIONS</b>						
<b>Multidimensional treatment</b>						
Jonkam et al. (2013)  [Found in: Carpenter-Aeby, 2017]	RCT	Netherlands Foster children aged 3-7 years who had been referred to the Academic Center for Child and Adolescent Psychiatry and foster parents Parent-child dyads: N = 40	<b>Multidimensional Treatment Foster Care for Preschoolers (MTFC-P):</b> Over nine months, children had a weekly therapeutic playgroup with a skilled trainer. Foster parents participated in weekly group meetings and home visits. The program aims to give children a positive and stimulating foster family setting with tailored behavioural interventions.	Treatment as usual Parent-child dyads: N = 40	Data were collected using: <ul style="list-style-type: none"> <li>• Child Behaviour Checklist</li> <li>• Teacher report form</li> <li>• Strengths and Difficulties Questionnaire</li> <li>• Parent daily report</li> </ul>	N/A – study protocol
Green et al. (2014)  [Found in: Evans, 2017]	RCT	UK Youth in foster care ages 10-17 years N = 20	<b>Multidimensional Treatment Foster Care for Adolescents (MTFC-A):</b> Foster parents receive training and supervision over the course of 9 months as described above. This delivery was aimed at adolescents.	Children in foster care, residential care, or a secure unit ages 10-17 years N = 14	Data were collected post-baseline report after 12 weeks. The primary outcome was the Child Global Assessment Scale (CGAS). Secondary outcomes were: <ul style="list-style-type: none"> <li>• Ratings of educational attendance</li> <li>• Ratings of educational achievement</li> <li>• Rate of offending</li> </ul>	The following outcomes improved for the intervention group: <ul style="list-style-type: none"> <li>• <b>Language skills:</b> Scholastic/language skills (OR = 0.6, 95% CI = 0.15, 2.4)</li> <li>• <b>School attendance:</b> School attendance (OR = 2.5, 95% CI = 0.48, 13.1)</li> </ul>
Leve & Chamberlain (2007)	RCT	USA Girls in the juvenile justice system ages 13-17 years N = 37	<b>Multidimensional Treatment Foster Care (MTFC):</b> This intervention follows the same plan as described	Youth in group care ages 13-17 years N = 44	Data were collected post-baseline reports after 3-6 months and after 12 months Measures included: <ul style="list-style-type: none"> <li>• Reports of educational engagement from the children and their caregivers</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Homework completion:</b> At 3-6 months, there was a significant improvement in homework completion (<math>p &lt; .05</math>). At 12 months, there was a significant improvement in homework completion (<math>p &lt; .05</math>).</li> </ul>

[Found in: Evans, 2017]			above, but caters to young girls who are leaving the juvenile system. The girls are moved into a specialist foster placement for an average of 174 days for the intervention.		<ul style="list-style-type: none"> <li>• Reports of days spent in locked settings from the children and caregivers</li> </ul>	<ul style="list-style-type: none"> <li>• <b>School attendance:</b> At 12 months, there was a significant improvement in school attendance (<math>p &lt; .05</math>).</li> </ul>
<b>Other</b>						
Davidson and Wolfred (1977)  [Found in: Forsman, 2012]	Quasi-experimental (matched groups) pre- and posttest with school records	USA Youth in foster care ages 7-17 years N = 42	<b>CRISIS:</b> This intervention is a community-based behaviour modification program to encourage desirable social outcomes for discharged youth.	N = 42	Data were collected on: <ul style="list-style-type: none"> <li>• Grade point average (GPA)</li> <li>• Attendance</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Academic attainment:</b> No significant differences between groups in GPA</li> <li>• <b>School attendance:</b> No significant differences between groups in attendance</li> </ul>
<b>EDUCATIONAL SUPPORT</b>						
<b>Distribution of Resources</b>						
Griffiths (2010; 2012)- both years report on same evaluation  [Found in: Carpenter-Aeby, 2017; Forsman, 2012; Liabo, 2013]	Pre-post evaluation	UK Youth in foster care ages 7-11 years 1 <sup>st</sup> pilot: N = 20 (children in foster care ages 8-11) 2 <sup>nd</sup> pilot: N = 30 (children in foster care ages 7-11)	<b>The Letterbox Club:</b> This program is a postal club that aims to raise achievement for youth in foster care ages 7 to 11 years. Reading materials were sent to the children at their place of residence for them to use on their own or to share with other family members.	Waitlist control N = 34	Data were collected with age standardised assessment instruments on: <ul style="list-style-type: none"> <li>• Reading</li> <li>• Math</li> </ul> Reading and number assessments were conducted before and after the children received their first parcel and after every two parcels. Semi-structured interviews with the children after the last parcel.	<ul style="list-style-type: none"> <li>• <b>Reading:</b> Reading levels had a significantly positive increase for the intervention group in 2007 and 2008.</li> <li>• <b>Math:</b> Math skills increased significantly for the intervention group in 2007, but there were no significant differences in 2008.</li> </ul>
Mooney et al. (2016)  [Found in: Evans, 2017]	RCT	UK Youth in foster care ages 7-11 years <ul style="list-style-type: none"> <li>• N = 56</li> </ul>	<b>Letterbox club:</b> Described above.	Youth in foster care ages 7-11 years N = 60	Data were collected post-baseline reports after 8 months on average. Measures used were: <ul style="list-style-type: none"> <li>• Neale Analysis of Reading Ability</li> <li>• Elementary Reading Enjoyment Scale</li> </ul>	<p>There was NO effect of the intervention on:</p> <ul style="list-style-type: none"> <li>• <b>Reading accuracy</b> (E.S. = 0.068 (95% CI = -0.296,0.432)</li> <li>• <b>Reading comprehension</b> (E.S. = -0.031 (95% CI = -0.395,0.333)</li> <li>• <b>Reading rate</b> (E.S. = -0.233 (95% CI = -0.598,0.133)</li> <li>• <b>Recreational reading</b> (E.S. = -0.115 (95% CI = -0.480,0.249)</li> <li>• <b>Academic reading</b> (E.S. = -0.096 (95% CI = -0.460,0.268)</li> <li>• <b>Liking school</b> (E.S. = -0.198 (95% CI = -0.564,0.168)</li> <li>• <b>Reading accuracy</b> (E.S. = -0.056 (95% CI = -0.420,0.308)</li> </ul> <p>There was sufficient power to detect a minimum effect size of <math>d = 0.47</math> (<math>\alpha = 0.05</math>, estimated adjusted <math>R^2 = 0.60</math>), but based on an anticipated effect size of between 0.20 and 0.30 the trial was underpowered.</p>
Wolfendale and Bryans (2004)	Pre- and posttest	UK	<b>Learning material distribution:</b>	N/A	Data were collected with age standardised assessment instruments on:	<ul style="list-style-type: none"> <li>• <b>Reading:</b> Reading outcomes increased significantly from pre to posttest</li> </ul>

[Found in: Forsman, 2012]		Youth in foster care ages 9-14 years N = 58	Over the course of 15 months, children in out of home care were given books and a handheld computer. Project workers visited the children monthly to monitor their progress in literacy skills.		<ul style="list-style-type: none"> <li>• Reading</li> <li>• Reading comprehension</li> <li>• Spelling</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Comprehension:</b> Comprehension outcomes increased significantly from pre to posttest</li> <li>• <b>Spelling:</b> Spelling outcomes increased significantly from pre to posttest</li> </ul> <p>Time effect sizes were moderate or large on all three measurements (0.6-0.9).</p>
<b>Basic skills instruction</b>						
Flynn et al. (2011); Flynn et al. (2012); Marquis (2013)  [Found in Evans, 2017; Forsman, 2012]	RCT	Canada Children in foster care aged 6-13 years N = 42	<b>Teach Your Children Well (TYCW):</b> Direct one-to-one instruction by foster carers trained in the program. Children receive 3 hours of instruction each week (2 hours one-to-one instruction in reading, 30 minutes reading aloud by the child, and 30 minutes self-paced instruction in maths).	Wait list control Children in foster care aged 6-13 years N = 35	Data were collected post-baseline report after 30 weeks using the Wide Range Achievement Test- Fourth edition (WRAT4).	The following outcomes were NOT significant: <ul style="list-style-type: none"> <li>• Word reading</li> <li>• Spelling</li> </ul> <p>The following outcomes significantly improved in the intervention group compared to the control:</p> <ul style="list-style-type: none"> <li>• <b>Comprehension:</b> Sentence comprehension (E.S. = 0.38, p = 0.035)</li> <li>• <b>Math:</b> Math computation (E.S. = 0.46, p = 0.009)</li> </ul>
Harper (2012)  [Found in Evans, 2017]	RCT	Canada Youth in foster care and kinship care ages 6-13 years N = 51	<b>Teach Your Children Well (TYCW)</b> (30 weeks) Described above, but in a small group format.	Wait list control Children ages 6-13 years (care status not reported) N = 50	Post-baseline after 20 weeks using the Wide Range Achievement Test- Fourth edition (WRAT4).	There was NO significant effect of the intervention on sentence comprehension. The intervention had a significant effect on: <ul style="list-style-type: none"> <li>• <b>Reading:</b> Word reading (E.S. = 0.40, significance not reported)</li> <li>• <b>Spelling:</b> Spelling (E.S. = 0.25, p = 0.02)</li> <li>• <b>Math:</b> Math computation (E.S. = 0.34, p = 0.044)</li> </ul>
Harper & Schmidt (2012)  [Found in Evans, 2017; Forsman, 2012]	RCT	Canada Youth in foster care and kinship care ages 6-13 years N = 33	<b>Teach Your Children Well (TYCW)</b> (25 weeks) Described above (small group format).	Wait list control Children ages 6-13 years (care status not reported) N = 35	Post-baseline report after 25 weeks using the Wide Range Achievement Test- Fourth edition (WRAT4).	There was a significant effect of the intervention on: <ul style="list-style-type: none"> <li>• Word reading (E.S. = 0.42, p = 0.002)</li> <li>• Spelling (E.S. = 0.38, p = 0.004)</li> </ul> <p>There were no significant effects for:</p> <ul style="list-style-type: none"> <li>• Sentence comprehension (E.S. = 0.095)</li> <li>• Math computation (E.S. = 0.26)</li> </ul>
Pears et al. (2013)  [Found in: Evans, 2017; Carpenter-Aeby, 2017]	RCT	USA Children in foster care younger than 6 years N = 102	<b>Kids in Transition to School:</b> Intervention is delivered to foster children two months before they start kindergarten and during their first two months of school. Children attend sessions to learn early	Children in foster care younger than 6 years N = 90	Data were collected post-baseline report after 2 months using interviews and questionnaires. Literacy was measured with: <ul style="list-style-type: none"> <li>• Letter Naming Fluency and Initial Sound Fluency subsets of the Dynamic Indicators of Basic Early Literacy Skills</li> <li>• Concepts About Print Test</li> <li>• Caregiver rating of prereading skills</li> </ul>	Group differences in early school engagement variables between FC and CC were examined using independent t tests; the associations between dimensions of early school engagement and late elementary outcomes were examined with correlational analyses and SEM. <ul style="list-style-type: none"> <li>• <b>Early literacy skills:</b> These skills improved in the intervention group (E.S. = 0.26).</li> </ul>

			literacy skills, prosocial skills, and self-regulatory activities. Carers attend meetings to develop capacity to support child in practising new skills.		Prosocial skills were measured with: <ul style="list-style-type: none"> <li>• Preschool Penn Interactive Peer Play Scale (PIPPS)</li> <li>• Scores on short vignette situations</li> </ul> Self-regulation was measured with: <ul style="list-style-type: none"> <li>• Children’s Behavior Questionnaire</li> </ul>	
<b>Additional instruction (i.e., tutoring)</b>						
Courtney et al. (2008); Zinn & Courtney (2014)  [Found in: Evans, 2017; Forsman, 2012]	RCT	USA Youth ages 14-15 years in foster care, kinship care, group homes, and other residential care N = 246	<b>Early Start to Emancipation Preparation (ESTEP):</b> Youth in foster care meet with a tutor (college student volunteer) twice a week in the care setting and get up to 50 hours of tutoring. Subjects include math, spelling, reading, and vocabulary. Tutors go to one day of training before tutoring and ongoing development twice yearly. The tutor may serve as a mentor to the youth as well.	Youth ages 14-15 years in foster care, kinship care, group homes, and other residential care N = 219	Data were collected post-baseline report after 26.8 months using the Woodcock Johnson Tests of Achievement III.	No significant improvements in school performance were found for the program in: <ul style="list-style-type: none"> <li>• <b>Reading:</b> Letter word identification (E.S. = 0.10)</li> <li>• <b>Math:</b> Calculation (E.S. = -.01)</li> <li>• <b>Comprehension:</b> Passage comprehension (E.S. = -.01)</li> <li>• <b>Academic attainment:</b> Grade level completed (E.S. = -.03)</li> <li>• <b>Grades:</b> GPA (E.S. = 0.03)</li> <li>• <b>High school completion:</b> High school diploma or GED (E.S. = -0.01)</li> <li>• <b>Behaviour:</b> School behaviour (E.S. = -0.05)</li> </ul>
Olisa et al. (no date)  [Found in: Forsman, 2012]	Quasi-experimental design (matched groups)	UK Youth in foster care ages 5-11 years Reading group: N = 11 Math group: N = 10	<b>Tutoring by teacher volunteers:</b> Teacher volunteers tutored foster children in math or reading. There was a liaison between the school and the child welfare agency. Children received 33 hours of tutoring two times a week for 20 weeks.	Foster youth receiving no tutoring N = 3	Data were collected with age standardised assessment instruments on: <ul style="list-style-type: none"> <li>• Reading</li> <li>• Vocabulary</li> <li>• Spelling</li> <li>• Math</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Reading:</b> Reading outcomes were significantly positive for the intervention group.</li> <li>• <b>Vocabulary:</b> Vocabulary outcomes were significantly positive for the intervention group.</li> <li>• <b>Spelling:</b> Spelling outcomes were significantly positive for the intervention group.</li> <li>• <b>Math:</b> Math outcomes were significantly positive for the intervention group (math group), but not for the intervention group (reading group).</li> </ul> Time effect sizes were small for both measures (Hedges’ g = 0.3).
Osbourne et al. (2010)  [Found in: Forsman, 2012]	Pre- and posttest	UK Youth in foster care ages 5-12 years N = 35	<b>Paired Reading:</b> Foster carers and their children participate in this program for 16 weeks and read together for 20 minutes at a time three times each week.	N/A	Data were collected with age standardised assessment instruments on: <ul style="list-style-type: none"> <li>• Reading</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Reading:</b> Reading outcomes significantly increased from pre to posttest</li> </ul>
Fraser et al. (2008)	Pre- and posttest	UK	<b>Catch Up:</b>	N/A	Data were collected on:	<ul style="list-style-type: none"> <li>• <b>Reading:</b> All children in the intervention gained in reading age (0.3 to 4.0 years), while the average gain for children is 1 year.</li> </ul>

[Found in Liabo, 2013]		Children in foster care ages 11-14 years N = 10 (N = 5 for follow-up)	This intervention is a structured one-to-one program to teach children how to read. Children complete a diagnostic assessment to identify strengths and weaknesses and set literacy targets. Children are provided with appropriate level books that they can read with barely any problems. For this secondary school version, there are two individual one-to-one 15 minute sessions each week to reach an complete a linked writing exercise. Foster parents were trained to deliver the program.		<ul style="list-style-type: none"> <li>• Reading comprehension (gains in reading age)</li> </ul>	3 children exceeded the average, three children met the average, and 2 children fell below the average.
Worsley & Beverley (2008)  [Found in Liabo, 2013]	Pre- and posttest	UK Looked-after children in national curriculum year groups 2-10 N = 26 (N = 20 for follow-up)	<b>Catch Up:</b> Teaching assistants delivered this program to looked-after children. Children complete a diagnostic assessment to identify strengths and weaknesses and set literacy targets. Children are provided with appropriate level books that they can read with barely any problems	N/A	Using children's test results, data were collected on: <ul style="list-style-type: none"> <li>• Reading comprehension (gains in reading age)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Reading:</b> Children gained an average of 17.15 months, but ranged from 1 to 30 months.</li> </ul>
Lustig (2008)  [Found in Liabo, 2013]	Quasi-experimental	USA Looked-after children ages 15-18 years N = 88	<b>Tutoring:</b> Children received one of three slightly different one-to-one tutoring interventions: <i>Success Inc</i> - children receive services at a dedicated tutoring center <i>Tutor Connection</i> - children tutored by university volunteers in remediation, study skills, and specific subjects.	N/A	Data were collected using the Wide Range Achievement Test (WRAT 4) on: <ul style="list-style-type: none"> <li>• Reading</li> <li>• Spelling</li> <li>• Arithmetic</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Reading:</b> Children made statistically significant gains from baseline in reading for Tutor Connection and NCLB tutoring service (<math>p &lt; .05</math>).</li> <li>• <b>Sentence completion:</b> Children made statistically significant gains from baseline in sentence completion for Tutor Connection and NCLB tutoring service (<math>p &lt; .05</math>).</li> <li>• <b>Spelling:</b> Children made statistically significant gains from baseline in spelling for Tutor Connection and NCLB tutoring service (<math>p &lt; .05</math>).</li> <li>• No significant effects reported for Success Inc</li> </ul>



			<i>NCLB Title I supplemental program tutoring service-children receive tutoring through federally allocated funding. Includes individual and group tutoring.</i>			
O'Brien and Rutland (2008)  [Found in Forsman, 2012]	Pre- and posttest	Canada Youth in foster care ages 4-13 years Reading groups: N = 44 Math groups: N = 50	<b>KUMON:</b> This individualised supplemental program is based on children's diagnostic tests. Children work with an instructor twice a week at a learning center for about 20 months. They were assigned worksheets to complete at home. Foster parents and social workers were instructed on how to best support their children.	N/A	Data were collected with age standardised assessment instruments on: <ul style="list-style-type: none"><li>• Reading</li><li>• Math</li></ul>	<ul style="list-style-type: none"> <li>• <b>Reading:</b> Reading outcomes were significantly positive for the intervention group (<math>p &lt; .05</math>). However, this result should be interpreted cautiously because insufficient information about the setting of the program evaluation was provided.</li> <li>• <b>Math:</b> Math outcomes did not differ significantly between groups.</li> </ul>
Finn (2008)  [Found in: Liabo, 2013]	Pre- and posttest	UK Looked-after children ages 7-16 in residential homes N = 74 (N=41 for follow-up data)	<b>Reading Rich:</b> Children receive book gifts and residential care homes are coached to improve their reading environment. Children also participate in reading and writing activities.	N/A	Data were collected on: <ul style="list-style-type: none"><li>• Reading activity</li><li>• Attitudes</li><li>• Ability</li></ul>	<ul style="list-style-type: none"> <li>• <b>Reading:</b> There were no differences in reading ability at post-test. 17 of 22 children increased reading frequency at post-interviews.</li> </ul>
Powers et al. (2012)  [Found in: Yelick, 2014; Woodgate; 2017]	RCT	USA Youth receiving special education services with at least 90 days in foster care and attending a large school district in the study target area (ages 16.5-17.5 years) N = 69 Intervention group: N = 33	<b>TAKE CHARGE:</b> This intervention was provided coaching for youth to apply self-determination skills to goals they identifies themselves. Youth also participated in mentoring workshops with near peer foster care alumni.	Youth in foster care in the Foster Care Independent Living Program (treatment as usual) N = 36	Data were collected from participants at post intervention and at the one year follow up using: <ul style="list-style-type: none"><li>• Arc Self-determination Scale</li><li>• Quality of Life Questionnaire</li><li>• Transition Planning Assessment</li><li>• Outcome Survey</li><li>• School records</li></ul>	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> 38% of the intervention group compared to 28% of the comparison group completed secondary education. At the 1-year follow-up, 72% of the intervention group as compared to 50% of the comparison group finished secondary education</li> <li>• <b>Quality of life:</b> Intervention group youth reported having significantly higher quality of life.</li> </ul>
<b>Educational planning</b>						

<p>Tideman et al. (2011) and Tordon et al. (2014)</p> <p>[Found in: Carpenter-Aeby, 2017; Forsman, 2012]</p>	<p>Pre- and posttest</p>	<p>(2011) Sweden Children in foster care over 12 years of age: Boys: N = 12 Girls: N = 12</p> <p>(2014) Sweden Foster children 7-11 years N = 24</p>	<p><b>Helsingborg study:</b> Foster children receive individualised educational support with tutoring, educational plans, and training for foster parents. The individualised plan is based on the child's cognitive ability, literacy, and numeracy skills.</p> <p>(2014- replication with different age group)</p>	<p>N/A</p>	<p>Data were collected using psychological assessments including:</p> <ul style="list-style-type: none"> <li>• Cognitive ability</li> <li>• WISC-III (IQ), VMI</li> <li>• Beck Young people inventories</li> <li>• Strengths and Difficulties Questionnaire</li> <li>• Visual Analogue Scale</li> </ul> <p>Data were also collected on educational achievement:</p> <ul style="list-style-type: none"> <li>• Reading</li> <li>• Spelling</li> <li>• Math</li> </ul>	<p>(2011)</p> <ul style="list-style-type: none"> <li>• <b>IQ:</b> IQ increased significantly from pre to posttest. (Time effect size was moderate- 0.5)</li> <li>• <b>Reading:</b> Reading outcomes increased significantly from pre to posttest.</li> <li>• <b>Spelling:</b> Spelling outcomes increased significantly from pre to posttest.</li> <li>• <b>Math:</b> Math outcomes did not differ significantly from pre to posttest.</li> </ul> <p>(2014) Results were similar to the 2011 study but were slightly weaker.</p>
<p>Zetlin et al. (2004)</p> <p>[Found in: Evans, 2017; Liabo, 2013]</p>	<p>RCT</p>	<p>USA Youth in foster care aged 5-17 years N = 60</p>	<p><b>Educational Liaison:</b> A certified special education teacher who understands the rules and regulations of the school system and resources in the local community, receives referrals from child-welfare agencies (if social workers could not address educational difficulties). The specialist advocates for the foster child and investigates alternative options for school.</p>	<p>Treatment as usual Youth in foster care aged 5-16 years N = 60</p>	<p>Data were collected post-baseline assessment after 24 months. Academic outcomes were based on test scores.</p>	<p>There was NO significant impact in groups on the following outcomes:</p> <ul style="list-style-type: none"> <li>• <b>Math:</b> Math test achievement scores (p = .082)</li> <li>• <b>Reading:</b> Reading test achievement scores (p = .448)</li> <li>• <b>Grades:</b> GPA</li> </ul> <p>There was a significant impact of the intervention on: <b>School attendance:</b> Daily attendance (p &lt; .03); number of schools attended (p &lt; .05)</p>
<p><b>Higher education support</b></p>						
<p>Kirk and Day (2011)</p> <p>[Found in: Randolph, 2017; Woodgate, 2017]</p>	<p>Post-test three month follow up</p>	<p>USA Young people who participated in the intervention and were currently or had been in foster care and were involved with the Michigan child welfare system (ages 15-19 years) N = 38</p>	<p><b>Michigan Educational Opportunities for Youth in Care program:</b> This residential camp program on the campus of Michigan State University provides support for youth transitioning out of the system. Participants are given social, personal, and informational support in a learning campus environment. This support is meant to promote</p>	<p>N/A</p>	<p>Data were collected from self-report surveys. Outcomes included:</p> <ul style="list-style-type: none"> <li>• Perceived changes in: <ul style="list-style-type: none"> <li>○ Knowledge about higher education</li> <li>○ Life skills</li> <li>○ Sense of self</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Knowledge about higher education:</b> Scores were high at the posttest (mean of above 4.0 on a 5-point scale) and changed little at the 3-month follow-up.</li> <li>• <b>Life skills:</b> Scores were high at the posttest (mean of above 4.0 on a 5-point scale) and changed little at the 3-month follow-up.</li> <li>• <b>Sense of self:</b> Scores were high at the posttest (mean of above 4.0 on a 5-point scale) and changed little at the 3-month follow-up.</li> </ul>

			resilience and prepare youth to transition from high school to college.			
Watt et al. (2013)  [Found in: Randolph, 2017; Woodgate, 2017]	Pre- posttest	USA Foster care alumni at Texas State University N = unknown	<b>Foster Care Alumni Creating Educational Success (FACES):</b> This initiative was developed at Texas State University to offer direct services to foster care alumni at Texas State university. The aim is to encourage recruitment, retention, and success after graduation.	General student population N = 32,572	Data were collected from student records, focus groups and interviews, web-based surveys, and field research.  Outcomes included: • GPA • Retention Graduations	<ul style="list-style-type: none"> <li>• <b>GPA:</b> No significant differences after one year of program participation. Overall, foster care alumni had lower GPAs than the general student population.</li> <li>• <b>College retention:</b> 84% of foster care alumni stayed in college after the program, while only 76.4% of the general student population did.</li> <li>• <b>University graduation:</b> Foster care alumni in the program were more likely to graduate than the general student population (64% compared to 56%)</li> </ul>
Seita Scholars Program (2015)  [Found in: Randolph, 2017]	Retrospective	USA Foster care alumni entering college N = 343	<b>Seita Scholars Program:</b> This program is for former foster care youth attending Western Michigan University. It supports students in accessing additional financial resources and scholarships and provides them year-round housing on campus to create a stable living environment.	N/A	Data were collected from student records. Outcomes included: • 1 <sup>st</sup> to 2 <sup>nd</sup> semester retention • Course withdrawal during 1 <sup>st</sup> semester • 1 <sup>st</sup> semester GPA Graduation	<ul style="list-style-type: none"> <li>• <b>GPA:</b> 82% of youth in the program had a GPA of 2.0 or higher at the end of their first semester in college</li> <li>• <b>University graduation:</b> 19% of the students in the program graduated and 90% were on track to graduate in the coming years.</li> </ul>
<b>TRANSITIONAL SERVICES</b>						
<b>Life skills</b>						
Austin (1993)  [Found in: Everson-Hock, 2011]	Prospective cohort	USA Former foster care youth one year after discharge n = 51	<b>Pennsylvania's Independent Living Program for Youth:</b> Description not available	Former foster youth matched sample one year after discharge n not reported	<ul style="list-style-type: none"> <li>• Less than high school level education at discharge</li> <li>• High school/GED/Vo-tech at discharge</li> <li>• Less than high school level education at 1 year High school GED/Vo-tech at 1 year</li> </ul>	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> The intervention group was less likely to have a high school/GED/vocational technical education at discharge (44% vs 58%) and one year post discharge (59% vs 79%). This result was not statistically significant</li> </ul>
Georgiades (2005)  [Found in: Everson-Hock, 2011]	Retrospective cohort	USA Youth eligible for Independent living services during stay in foster care (ages 18-26 years) n = 49  (N = 67)	<b>Independent living services:</b> Older adolescents are provided with services that will teach them certain skills associated with self-sufficiency (i.e., money management, job readiness and retention,	Foster youth not participating in Independent living programs n = 18	Data were collected through participant's reports (surveys) on how effective the program was in preparing them for: <ul style="list-style-type: none"> <li>• Education</li> <li>• Employment</li> <li>• Money management</li> <li>• Housing</li> <li>• Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> Compared to the control group, youth in the intervention group were more likely to have a high school diploma or GED (53% vs 15%) AND college education (31% vs 0%) (E.S. = 1.73). Compared to the control group, youth in the intervention group were less likely to have a high school diploma/GED without college education (?) (8% vs 6%)</li> <li>• <b>Depression:</b> There were no differences between groups on intensity of self-reported depression</li> </ul>

			housekeeping, and nutrition).		<ul style="list-style-type: none"> <li>• Social skills</li> <li>• Parenting</li> </ul> <p>Data were also collected through case record reviews.</p>	
Lemon et al. (2005)  [Found in: Everson-Hock, 2011; Woodgate, 2017]	Retrospective cohort	USA Foster youth attending college at a large state university n = 81	<b>Independent living services:</b> Older adolescents are provided with services that will teach them certain skills associated with self-sufficiency (i.e., money management, job readiness and retention, housekeeping, and nutrition).	Low-income students attending college and former foster youth not attending college n = 113	Data were collected through a self-administered questionnaire that covered: <ul style="list-style-type: none"> <li>• Educational and employment history</li> <li>• Financial and social support</li> <li>• Health status</li> <li>• History of homelessness</li> <li>• Substance abuse</li> <li>• Criminal activity</li> <li>• Skills training</li> <li>• Personal adjustment</li> <li>• Current life satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Hope for the future:</b> The intervention group was more hopeful about the future compared to the control (86% vs 73%, <math>p &lt; .05</math>)</li> <li>• <b>Life satisfaction:</b> There were no differences between the groups on measures of life satisfaction (i.e., self-reported level of happiness)</li> </ul>
Lindsey & Ahmed (1999)  [Found in: Everson-Hock, 2011; Woodgate, 2017]	Retrospective cohort	USA Youth participating in Independent Living Programs (ILP) and staff n = 44	<b>Independent Living Programs:</b> These programs included training programs that teach basic employment, education, money, and household management skills; support groups; stipends for education; supervised living; and counselling.	Former foster youth that had not been in an ILP n = 32	Data were collected using a mailed survey. The questions focused on outcomes of: <ul style="list-style-type: none"> <li>• Housing and living arrangements</li> <li>• Education and training (Completion of high school or GED; completion of technical/vocational programme or some college; current enrolment in educational program; current enrolment in college)</li> <li>• Employment and earnings</li> <li>• Financial self-sufficiency</li> </ul> <p>Respondents answered these questions in retrospect 1-3 years before the study and at the time of the survey.</p>	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> The intervention group had greater rates of completion for high school and GED education compared to the control (37% vs 18%)</li> </ul>
Scannapieco et al. (1995)  [Found in: Everson-Hock, 2011]	Retrospective cohort (case record analysis)	USA Former foster care youth n = 44	<b>Transition Resource Action Center (TRAC):</b> This resource centre provides Preparation for Adult Living (PAL) services to youth in substitute care and youth who have been emancipated from foster care.	Matched comparison group of current foster youth not in an ILP n = 46	Data were collected from TRAC and Children's Protective Services databases (i.e., case record analysis). The <b>Self-Sufficiency Matrix</b> was used to measure outcomes in: <ul style="list-style-type: none"> <li>• Education</li> <li>• Employability</li> <li>• Employment</li> <li>• Financial literacy</li> <li>• Shelter</li> </ul>	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> The intervention group had significantly greater rates of graduation from high school compared to the control group (50% vs 13%, <math>p &lt; .05</math>)</li> </ul>

					Statistical tests showed differences in outcomes between youth receiving TRAC services before and after care.	
Trout et al. (2012; 2013)  [Found in: Carpenter-Aeby, 2017, Evans, 2017]	Case study  2013: RCT	Children in foster care USA Young people with risk of disabilities ages 13-18 years leaving residential care n = 47	<b>On the Way Home:</b> Families were assigned to a Family Consultant and got 12 months of services to support transitioning youth with or at risk of disabilities into home after out-of-home care. Each family has a trained family consultant who delivers the intervention. This involved working with a school mentor to monitor school engagement and communicating educational goals to the youth and parents, one-to-one sessions to teach parents skills to support academic and behavioural success, and homework support.	Treatment as usual Young people with risk of disabilities ages 13-18 years leaving residential care n = 41	Data were collected post-baseline reports after 3, 6, 9, and 12 months	<ul style="list-style-type: none"> <li>• Children made significant improvements when they received the On the Way Home transitional services.</li> <li>• <b>School enrollment:</b> The intervention increased maintenance in enrollment in a school setting (OR = 0.30, 95% CI = 0.12, 0.75), i.e, young people in the control group were more likely to drop-out than those in the intervention group.</li> </ul>
Nesmith & Christophersen (2014)  [Found in Woodgate, 2017]	Cluster RCT	USA Adolescents 14-19 years old in one of two foster care agencies (1 agency assigned to intervention, one agency assigned to comparison) n = 58 N = 88	<b>Creating Ongoing Relationships Effectively (CORE):</b> This is a foster care program model that aims to address the socioemotional needs of older youth in foster care near the transition to adulthood. The program focuses on building supportive relationships, youth empowerment, and trauma-informed practice and educates the youth, foster parents, and social workers.	Treatment as usual n = 30	Data were collected from in-person interviews with foster youth, which included: <ul style="list-style-type: none"> <li>• Self-report scales</li> <li>• Relationship Competency Assessment</li> <li>• Quality Youth Relationship Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Relationship skills:</b> This model showed promising results for helping these youth develop relationship-building skills and cultivating a relationship with an adult who can support them in their transition. At pre-test, the groups had similar scores, but at post-test, the CORE group's scores were increasing, while the comparison was decreasing. No statistical analysis reported.</li> </ul>
Lenz-Rashid (2004)	Quasi-experimental	USA Former foster care youth using transitional living	<b>Transitional living programs:</b> These "Avenues to independence" teach youth daily living skills,	Homeless transitional youth with no history of foster care	Data were collected regarding the participant's status at intake, discharge, and 6 months post discharge.	<ul style="list-style-type: none"> <li>• <b>Employment:</b> Having a mental health issue was a significant predictor of whether that individual found employment after the employment training program regardless of FC background. Hispanic FC youth has significantly higher hourly wages compared to Hispanic non FC youth</li> </ul>

[Found in: Woodgate, 2017]		services in Northern California N = 23	employment training, education, and supervised practice living. Youth in this program received employment training.			
Ringle et al. (2007)  [Found in: Woodgate, 2017]	Follow-up study	USA Youth who left a residential program five years after discharge N = 40	<b>Treatment family home program (TFH)</b> This program is based on the Teaching-Family Model (1) teaching life skills, 2) using motivational systems, 3) building trusting relationships with peers and adults, 4) living in the most family-style oriented setting possible, 5) encouraging the development of moral and spiritual values, 6) making self-control and self-government a goal for every youth).	N/A	Data were collected by surveys that measured: <ul style="list-style-type: none"><li>• Social functioning</li><li>• Quality of life</li></ul>	<ul style="list-style-type: none"><li>• <b>Social functioning and quality of life:</b> Youth who participated in the program reported positive outcomes.</li></ul>
Valentine et al. (2015)  [Found in: Woodgate, 2017]	RCT	USA Foster care youth n = 659 N = 1114	<b>YVLifeSet:</b> This program helps young people make a successful transition to adulthood. Participants are provided with intensive individualised and clinically focused case management, support, and counselling.	Foster care youth not offered Transitional Living program services, but given a list of other social service resources in the community n = 455	Data were collected through survey and administrative data. Outcomes were measured to assess if Transitional Living services led to better outcomes.	<ul style="list-style-type: none"><li>• <b>Wellbeing:</b> After a year, the program participants had increases in earnings (ES = 0.12, p = 0.043), decreases in homelessness (ES = -0.16, p = 0.005) and material hardship (ES = -.13, p = 0.022), and improved health and safety outcomes (ES = -0.13, p = 0.025).</li></ul>
Uzoebo et al. (2008)  [Found in: Yelick, 2014; Woodgate, 2017]	Pre- post-test	USA Former and current foster youth with a mean age of 17.0 years  N = 89	<b>VISIONS programme:</b> This is an independent living program that aims to prepare youth in a foster care residential treatment program (13-21 years old) for adulthood. The program teaches them basic skills needed to become productive adults after foster care.	N/A	Quantitative data were collected with the Ansell Casey Life Skills Assessment (ACLSA) instrument. This assessed the mastery of skills in: <ul style="list-style-type: none"><li>• Money management</li><li>• Daily living skills</li><li>• Ability to access community social support resources</li><li>• Work and study habits</li><li>• Communication</li></ul> Qualitative data were collected with the Life Skills Evaluation Questionnaire (LSQ) and focus group discussions.	<ul style="list-style-type: none"><li>• <b>Life skills:</b> Program participants reported higher mastery of daily living skills, money management and budgeting, work life, and self care. They demonstrated an increase in overall daily living skills acquisition from 52% to 55% at the follow-up.</li></ul>

Housing						
Brown & Wilderson (2010)  [Found in: Woodgate, 2017]	Quasi-experimental	USA Foster care alumni who received services from transitional housing that served all homeless youth. n = 146	<b>Transitional housing programs:</b> This transitional housing program served homeless youth, including foster care alumni, rather than exclusively foster care alumni	Foster care alumni who received services from transitional housing that served only foster care alumni n = 145	Data were collected upon entry into the programs (self-reports) and staff performed monthly updates of youth status.	<ul style="list-style-type: none"> <li>• <b>Life skills:</b> There were no significant differences reported between groups and little data were available. Youth in both the intervention and the comparison made progress in employment status.</li> </ul>
Mares & Kroner (2009; 2011)  [Found in: Yelick, 2014]	Exploratory principal components factor analysis	USA Former and current foster youth with a mean age of 17.9 years	<b>Lighthouse independent living programme:</b> This program serves dependent foster youth and delinquent youth by providing transitional housing and supervised independent living skills training. It can also be a last resort placement setting for youth who are difficult to place.	N/A	Data were collected from: <ul style="list-style-type: none"> <li>• Administrative client data</li> <li>• Focus groups</li> <li>• Surveys</li> </ul>	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> Participants with mental-health problems were less likely to complete high school (0.61 decreased odds). Participants who stayed in the program longer or who were older at admission were more likely to complete high school.</li> <li>• <b>Employment:</b> Being at least 1 year older when entering the program predicted higher rates of employment (between 1.55 and 2.35 increased odds). Staying in the program at least one month longer and not having a mental health problem predicted a higher rate of paid employment (1.10 and 0.460 increased odds).</li> </ul>
STRUCTURAL						
Berridge et al. (2009)  [Found in: Liabo, 2013]	Pre- and posttest	UK School-aged looked-after children <ul style="list-style-type: none"> <li>• Key Stages results ranged from 100 to 140 children</li> <li>• GCSE (qualification in a specific subject taken by students in the UK) results ranged from 315 to 405 children</li> </ul> Surveys from 31 children, 25 carers, 21 designated teachers, and 10 social workers	<b>Virtual School Head pilot:</b> The Virtual School head is responsible for monitoring and tracking education for looked-after children and working with agencies to achieve outcomes. The work is done within a local authority.	N/A	Data were collected on: <ul style="list-style-type: none"> <li>• Achievement at Key Stages</li> <li>• Achievement in final year exams</li> <li>• Exclusions</li> <li>• Days missed at school</li> <li>• Self-perceived success at school</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Staying in school:</b> No clear change was found.</li> <li>• <b>Attainment:</b> There were generally better figures for attainment in areas where the Virtual School Head was implemented, but the figures were small and could be due to individual differences.</li> </ul>

Harker et al. (2004)  [Found in: Liabo, 2013]	Unknown	UK School-aged looked-after children	<b>Taking Care of Education:</b> Assigning a person responsible for working within the local authority to better looked-after children's education by coordinating local efforts.	N/A	Data were collected on: <ul style="list-style-type: none"> <li>• Achievement at Key Stages</li> <li>• Achievement in final year exams</li> <li>• Exclusions</li> <li>• Days missed at school</li> <li>• Attitudes to education</li> <li>• Sense of belonging at school</li> <li>• Strengths and difficulties questionnaire</li> <li>• Self-esteem questionnaire (standardised)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>School attendance:</b> Permanent exclusions were reduced to zero in the areas where the person was assigned. School absences also fell to below the national average in one authority, were stable in another, and increased to three-fold the national average in another.</li> <li>• <b>Attainment:</b> No clear change was found.</li> </ul>
Connelly et al. (2008)  [Found in: Liabo, 2013]	Pre- and posttest with follow-up	UK School-aged looked after children N = 772 (baseline) N = 551 (follow-up) Interviews with 51 children, 14 foster carers, and 111 professionals	<b>Pilot of spending targeted money:</b> Providing authorities with money that is allocated for "looked-after children's education" and is spent in different ways across authorities	N/A	Data were collected with interviews, baseline data, and fieldwork interviews on: <ul style="list-style-type: none"> <li>• Attendance</li> <li>• Exclusion rates</li> <li>• National assessment results and national qualification results</li> </ul>	<ul style="list-style-type: none"> <li>• <b>School attendance:</b> Attendance increased from 78-81%. Average number of days excluded fell from 0.85 to 0.65.</li> <li>• <b>Attainment:</b> Baseline data were not collected. 40% of children in the pilots progressed by one level (mean improvement 0.4-0.5 level), which was statistically significant (sig. not reported). This is higher than the population's average progress and similar to progress made by youth not in care.</li> </ul>
<b>NATURAL MENTORING</b>						
Ahrens et al. (2008)  [Found in: Thompson, 2016]	Secondary analysis of nationally representative sample	USA Nationally representative sample of foster youth in grades 7-12 N = 310 "Intervention group"- mentored youth: n = 160	<b>Natural mentoring:</b> Foster youth form a meaningful relationship with a self-selected supportive, caring adult in his or her social networks. This pre-existing nonparental adult relationship is formed organically over time and represents a stable relationship.	Non-mentored foster youth: n = 150	Data were used from waves I to III of the National Longitudinal Study of Adolescent Health (1994-2002)	<ul style="list-style-type: none"> <li>• <b>Attainment:</b> Natural mentoring was associated with more participation in higher education. This trend was borderline significant (OR 1.90, 95% CI 0.99-3.63; p = .05)</li> <li>• <b>Physical health:</b> Natural mentoring was associated with favorable overall health. Youth who had mentoring were less likely to receive a diagnosis of a sexually transmitted infection (OR 0.07, 95% CI 0.01-0.39; p &lt; .01).</li> <li>• <b>Mental health:</b> Natural mentoring was associated with a decreased likelihood of suicidal ideation (OR 0.14, 95% CI 0.03-0.60). Youth with mentors were less likely to have hurt someone in a fight in the past year (OR 0.04, 95% CI 0.01-0.15).</li> </ul>
Collins et al. (2010)  [Found in: Thompson, 2016]	Mixed methods (surveys and interviews)	USA Former foster youth aged 19 years and older N = 96	<b>Natural mentoring:</b> Described above.	N/A	Data were collected from surveys.	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> Natural mentoring was associated with a greater likelihood to complete high school or earn a GED (chi-square = 6.12, p &lt; .05)</li> <li>• <b>Life skills:</b> Youth who had mentors were less likely to experience homelessness since the age of 18 (chi-square = 7.69, p &lt; .01).</li> <li>• <b>Mental health:</b> Natural mentoring was marginally associated with feeling sad or hopeless (chi-square = 2.92, p &lt; .10).</li> </ul>



Cushing et al. (2014)  [Found in: Thompson, 2016]	Secondary analysis of survey data	USA 22-year-old youth from a specialised foster care program for youth with histories of RTF and more than one failed placement N = 153	<b>Natural mentoring:</b> Described above.	N/A	Data were collected from surveys.	<ul style="list-style-type: none"> <li>• <b>Resilience:</b> Youth who had multiple sources of support and/or care from adult relationships had a greater likelihood of experiencing resilience. Youth with fewer connections were more vulnerable.</li> </ul>
Greeson et al. (2010)  [Found in: Thompson, 2016]	Secondary analysis of data	USA Nationally representative sample of youth N = 8142 Foster youth: n = 160	<b>Natural mentoring:</b> Described above.	Non-foster youth N = 7977	Data were collected from wave 3 of the National Longitudinal Study of Adolescent Health.	<ul style="list-style-type: none"> <li>• <b>Life skills:</b> For foster youth, the presence of a natural mentor who was a role model was significantly associated with having a bank account (<math>r^2 = .40, p &lt; .05</math>). The mentor's description as "like a parent" was positively associated with increased income expectations (<math>r^2 = .67, p &lt; .05</math>).</li> </ul>
Munson and McMillen (2009)  [Found in: Thompson, 2016]	Longitudinal survey	USA Foster youth in Missouri close to their 17 <sup>th</sup> birthday who identified a nonkin natural mentor N = 211	<b>Natural mentoring:</b> Described above.	N/A	Data were collected from a longitudinal survey. Measurements used were: <ul style="list-style-type: none"> <li>• Depression Outcomes Module</li> <li>• Global Measure of Perceived Stress</li> <li>• Students' Life Satisfaction Scale</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Mental health:</b> Presence of a natural mentor was associated with lower stress levels (<math>t = -3.34, p &lt; .01</math>).</li> <li>• <b>Life satisfaction:</b> Presence of a natural mentor was associated with higher life satisfaction (<math>t = 1.38, p &lt; .05</math>).</li> </ul>
Smith, Peled, Poon, Stewart, Saewyc, and McCreary Centre Society (2015)  [Found in: Thompson, 2016]	Secondary analysis of data	Canada Current or former foster youth in grades 7-12 from British Columbia N = 1300	<b>Natural mentoring:</b> Described above	Current or former foster youth with no mentor	Data were collected from an adolescent health survey given to students in school.	<ul style="list-style-type: none"> <li>• <b>Educational plans:</b> Youth with natural mentors were more likely to think they would be in school in five years and had greater plans to pursue post-secondary education (<math>p &lt; .05</math>)</li> <li>• <b>High school completion:</b> No youth with natural mentors planned to drop out of high school while 17% of those with no mentor did plan to (<math>p &lt; .05</math>).</li> </ul>
<b>OTHER</b>						
<b>Overall assistance</b>						
Clark et al. (1998)  [Found in: Evans, 2017]	RCT	USA Children in foster care aged 7-15 years n = 54	<b>Fostering Individualized Assistance Program (FIAP):</b> Family specialists who serve as family-centred, clinical case managers and home-based counsellors work across all settings to	Children aged 7-15 years in a foster group home, emergency shelter group home, or detention/private child-care facility n = 77	Data were collected post-baseline report after 42 months.	<p>The following outcomes NOT significantly different between the intervention and control:</p> <ul style="list-style-type: none"> <li>• <b>School attendance:</b> Extreme school absences (&gt;40% school days missed); School dropout (&gt;1% school days); Extreme number of school-to-school movements (&lt;3/year)</li> </ul> <p>However, the control group was more than two times as likely to be engaged in school absenteeism.</p>

			tailor services to specific children.			The following outcome improved significantly more in the intervention group: <ul style="list-style-type: none"> <li>• <b>Days on suspension:</b> (OR = 2.5, p &lt; .05)</li> </ul>
Lee et al. (1989)  [Found in: Liabo, 2013]	Pre- and posttest	USA Looked-after children ages 12-15 years at risk of school dropout N = 97 participants, but data from N = 87 children	<b>Community-based project:</b> The project included mentoring, career development activities, and meetings for carers and professionals.	N/A	Data were collected using surveys, tests, observations, personal interviews, and analysis of grades on: <ul style="list-style-type: none"> <li>• Grade changes</li> <li>• Attendance</li> <li>• Staying in school</li> <li>• Self-esteem</li> <li>• Attitude to school</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Staying in school:</b> About 10% of young people in each year dropped out of school and the project did not re-engage them.</li> <li>• <b>Attendance:</b> Attendance improved significantly in the first year of the intervention, but not after that.</li> <li>• <b>Grades:</b> Grades improved after 3 months and 6 months, but did not improve after 1 year.</li> </ul>
<b>Residential school</b>						
Jones & Lansdverk (2006)  [Found in: Liabo, 2013; Woodgate, 2017]	Pre- and posttest	USA Looked-after children with no possibility of returning to birth families and with no stable placement option, but without serious behaviour problems School completion rates for 206 students 6 month follow-up: N =42 12-month follow-up: N = 24	<b>Residential school:</b> Youth attended an academy based on the concept of residential education. The emphasis was on education and social development.	N/A	Data were collected on: <ul style="list-style-type: none"> <li>• School completion status</li> <li>• Further education</li> <li>• Housing</li> <li>• Employment</li> <li>• Social support</li> </ul> Substance abuse	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> 156 of 206 children (76%) finished high school. 7 of 206 (3%) left to a lower level of care.</li> </ul>
Lawler et al. (2014)  [Found in: Woodgate, 2017]	Analysis of secondary data	USA Foster care alumni of a residential education program  N = 478	<b>The Academy:</b> This is a residential education program that aims to address the needs of emerging adults in foster care. Students have access to services through the Academy's parent organisation and in partnership with the country department of health and human services, county office of education and workforce partnership.	N/A	Data were collected from administrative records and information on current living situations was gathered. Academy administrative staff and leadership were interviewed. The outcomes were indicators for: <ul style="list-style-type: none"> <li>• Federal outcome standards of safety</li> <li>• Significant relationships with adults</li> </ul> Wellbeing	<ul style="list-style-type: none"> <li>• <b>High school completion:</b> 92% of youth who attended the Academy at age 18 years or older graduated with a high school diploma or GED.</li> <li>• <b>Employment:</b> 51% of youth at the Academy got part or full-time employment after leaving the program.</li> <li>• <b>Health:</b> More than half the Academy youth had access to healthcare after leaving the program.</li> </ul>

### Our mission

We are dedicated to using the best evidence in practice and policy to improve the lives of children, families and communities facing adversity.

### How we achieve this

We work with a diverse range of key stakeholders who want to achieve social impact for children and families facing adversity. We bring specialist skills in:

- Supporting sustained change in the behaviour of systems, organisations and individuals. We put a strong emphasis on supporting and strengthening the core components of effective program implementation.
- Providing knowledge translation to policymakers, and relevant stakeholders, so they can access – and use – research for evidence-informed decision-making.
- Program design – selecting and creating evidence-informed programs and services to achieve outcomes for children, family and communities.
- Conducting rigorous evaluations, and assessing the long-term effect of outcomes.

### Working with us

Through national and international collaborations, we conduct a range of activities to achieve our mission.

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