What Works for Children's Social Care

Centre for Evidence and Implementation

SYSTEMATIC REVIEW AND META-ANALYSIS OF POLICIES, PROGRAMMES AND INTERVENTIONS THAT IMPROVE OUTCOMES FOR YOUNG PEOPLE LEAVING THE OUT-OF-HOME CARE SYSTEM

August 2021

What Works *for* Children's Social Care

Centre for Evidence and Implementation

Acknowledgements

The authors wish to acknowledge the support and assistance of The Fostering Network in organising and facilitating focus groups with key stakeholder groups to support this review. In particular, we wish to acknowledge the work of Sarah McEnhill, Izzy Roberts and Caron Heath. We would also like to acknowledge the foster carers, foster care alumni and local authority service staff for their time and candour.

Authors

David Taylor, Senior Advisor, Centre for Evidence and Implementation; **Bianca Albers**, Associate Director, Centre for Evidence and Implementation; **Georgina Mann**, Research Assistant, Centre for Evidence and Implementation; **Sangita Chakraborty**, Research Assistant, Centre for Evidence and Implementation; **Jane Lewis**, Director, Centre for Evidence and Implementation; **Philip Mendes**, Associate Professor, Department of Social Work, Monash University; **Geraldine Macdonald**, Professor of Social Work, School for Policy Studies, University of Bristol; **Kevin Williams**, Chief Executive Officer, The Fostering Network; **Aron Shlonsky**, Professor and Head of Department (Social Work), Monash University

Author contributions

Review element	Author involved
Content drafting	David Taylor
Manuscript screening	David Taylor, Sangita Chakraborty, Bianca Albers, Georgina Mann
Data extraction from included studies	Sangita Chakraborty, Georgina Mann, David Taylor, Bianca Albers
Risk of bias assessment	David Taylor, Sangita Chakraborty, Georgina Mann, Bianca Albers
Statistical analysis	David Taylor
Search strategy	David Taylor and Sangita Chakraborty
Information retrieval	Sangita Chakraborty and David Taylor
Stakeholder engagement	Kevin Williams, Georgina Mann, Bianca Albers, Jane Lewis
Subject matter expertise	Philip Mendes, Geraldine Macdonald
Quality assurance	Jane Lewis, Philip Mendes, Bianca Albers, Geraldine Macdonald, Aron Shlonsky

Funding and competing interests

Funding for this review was provided by What Works for Children's Social Care (WWCSC). In their capacity as funders WWCSC reviewed and provided comment on the draft protocol. They also facilitated an independent peer review process with anonymous reviewers. The views expressed in this report are the views of the authors and do not necessarily reflect those of What Works for Children's Social Care.

David Taylor and Aron Shlonsky were authors of a study that was included in this review. Their conflict of interest was minimised by a) ensuring that they were not part of decisions to include the study in the review, b) they did not extract data for this study and c) other team members undertook a risk of bias assessment. Kevin Williams is Chief Executive of a large UK-based charity that provides support to fostering services and that has previously advocated for policies that provide for extended care and support for young people leaving care. Their conflict of interest was minimised by excluding them from decisions about the inclusion of relevant research. All other authors – Bianca Albers, Sangita Chakraborty, Georgina Mann, Jane Lewis, Philip Mendes, Geraldine Macdonald – declare they have no conflicts of interest.

About What Works for Children's Social Care

What Works for Children's Social Care seeks better outcomes for children, young people and families by bringing the best available evidence to practitioners and other decision makers across the children's social care sector. We generate, collate and make accessible the best evidence for practitioners, policy makers and practice leaders to improve children's social care and the outcomes it generates for children and families.

About Centre for Evidence and Implementation

The Centre for Evidence and Implementation (CEI) is a global, not-for-profit evidence intermediary dedicated to using the best evidence in practice and policy to improve the lives of children, families and communities facing adversity. Established in Australia in late 2015, CEI is a multi-disciplinary team across four offices in London, Singapore, Melbourne and Sydney. We work with our clients, including policymakers, governments, practitioners, programme providers, organization leaders, philanthropists and funders in three key areas of work:

- Understand the evidence base
- Develop methods and processes to put the evidence into practice
- Trial, test and evaluate policies and programmes to drive more effective decisions and deliver better outcomes

If you'd like this publication in an alternative format such as Braille, large print or audio, please contact us at: info@whatworks-csc.org.uk

CONTENTS

PLAIN LANGUAGE STATEMENT

Extended care may improve outcomes for young people leaving care, but more evidence is needed

A diverse range of policies, programmes and interventions exist that seek to improve outcomes for young people as they transition from out-of-home care into independent living arrangements. They include policies that extend the age at which young people can remain in care, programmes that develop independent living skills, provide wraparound support or transitional accommodation as well as interventions that provide coaching and peer support or health information/coaching. This review found that the evidence base for almost all of these approaches was of poor quality with no clear finding that they are better or worse than services as usual. The exception to this was for extended care policies, where the evidence is similarly limited. There is some emerging evidence that such an approach could be beneficial, but more research is required to increase certainty and to better describe which aspects of extending care and its implementation work for which young people.

What is this review about?

Young people who 'age-out' of out-of-home care face increased risks of poor outcomes, including homelessness, unemployment and substance abuse. The types of support provided to these young people vary around the world, and debate continues about the optimal timing, type, frequency, intensity, combinations and ordering of services to support young people as they transition from care into independent living arrangements.

This review assesses the effectiveness of a diverse range of policies, programmes and interventions that seek to improve housing, health, education, economic and employment, exposure to violence, relationships and life skills outcomes for young people leaving care.

What is the aim of this review?

This What Works for Children's Social Care systematic review assesses the effectiveness of policies, programmes and interventions that improve outcomes for young people leaving out-of-home care and entering into independent living arrangements. It summarises the best evidence from around the world.

What studies are included?

The included studies were about young people, aged 16-25, who had been in out-of-home care due to concerns about child maltreatment and who were leaving care and entering independent living arrangements. Studies had either to have used random assignment to create treatment and control groups; or to have assessed outcomes for young people who received transition services compared to a statistically similar group of young people who did not.

Any policy, programme or intervention was eligible for inclusion if it targeted, and was provided to, young people leaving care or who had recently left out-of-home care.

What are the findings of this review?

The review authors found 25 eligible study reports, providing findings from 16 studies. Eight of the studies were randomised controlled trials. All but one study, which was from Australia, were conducted in the United States.

The wide scope of the policies, programmes and interventions included in the review limited the capacity to statistically combine studies (otherwise known as meta-analysis). Still, we were able to conduct 19 small meta-analyses that encompassed both independent living programmes and coaching and peer support programmes. Only one of the 19 analyses reported a significant positive result, indicating that coaching and peer support programmes have a medium sized impact on high school or equivalent completion. However, we have some concerns about the risk of bias in both of the included studies in that analysis, and the certainty we have in this evidence is therefore very low.

Of those studies that were not included in a meta-analysis, most reported small or very small impacts, many of which were not significant. In all cases, there is considerable variation in effects between studies.

What do the findings of this review mean?

There is little evidence that, on their own, standard independent living services achieve positive outcomes, yet they continue to be financially supported in the United States. It may be the case that they are beneficial when combined with other support services, but they appear to be insufficient on their own. These findings do not necessarily mean this approach should be discarded, but without considerable improvement and pairing with other approaches, it is unlikely to improve outcomes for young people.

There is limited but emerging evidence that extending care can improve outcomes across a number of domains. However, we currently know very little about the best way to deliver this support, which young people may need something more, and which combination of additional support services is best for which young people.

Research in this area is reaching a tipping point in terms of the number of rigorous studies available to do more complex synthesis. Future syntheses would be aided by more careful coordination of future studies. Specifically, for those programmes that demonstrate some positive effect, more replication studies are needed to increase the certainty of findings that can be used to test the core components of high-quality transition programmes over time.

How up-to-date is this review?

The review authors searched for studies published up to November 2020.

EXECUTIVE SUMMARY

Introduction

Young people who transition from out-of-home care (OOHC) arrangements are leaving a system that provides formal support and entering into mostly unsupported living arrangements, at an age where most young people still live with their families. Relative to their counterparts in the general population, young care leavers commonly experience poorer outcomes across a range of indicators, including higher rates of homelessness, unemployment, reliance on public assistance, physical and mental health problems, and contact with the criminal justice system. The age at which young people transition from OOHC varies between and within countries, but for most, formal support ceases between the ages of 18 and 21.

Programmes designed to support transitions are generally available to young people toward the end of their OOHC placement, although some can extend beyond. They often encourage the development of skills required for continued engagement in education, obtaining employment, and maintaining housing and general life skills. Little is known about the effectiveness of these programmes, or of extended care policies that raise the age at which support remains available to young people after leaving OOHC.

Previous reviews were unable to identify any programmes or interventions, backed by methodologically rigorous research, that improve outcomes for this population. This review seeks to update this previous work, taking into account changes in the provision of extended care, which is now available in some jurisdictions.

Fifteen years ago, Donkoh et al. (2006) conducted the first methodologically rigorous systematic review of independent living programmes and were unable to find any studies that met their inclusion criteria. In the period since then, a number of reviews have explored various aspects of policies, programmes or interventions for youth transitioning from care (Everson-Hock et al., 2011; Greeson, Garcia, Tan, Chacon, & Ortiz, 2020; Häggman-Laitila, Salokekkilä, & Karki, 2020; Liu, Vazquez, Jones, & Fong, 2019; Naccarato & DeLorenzo, 2008; Randolph & Thompson, 2017; Woodgate, Morakinyo, & Martin, 2017; Yelick, 2017). However, these have limitations in their scope, methodology or lack of end-user involvement.

A systematic review conducted by Sundell, Åström, Jonsson, Håkanson, & Tranæu (2020) rigorously assessed the strength of the evidence for transition services. However, they combined diverse interventions together in their meta-analyses – including all forms of support to young people, provided during or after a placement and aimed at facilitating an independent life after completion of care. This review seeks to emulate Donkoh et al.'s (2006) review by focusing on the impact of policies, programmes and interventions on outcomes for young people leaving care. Additionally, this review seeks to expand the scope of previous work by contextualising the findings through engaging with young people with lived experience of the care system and others with different perspectives of the system, namely foster carer and fostering services agencies. By doing so we hope to supplement our effectiveness review with information about the context in which such services are provided and to understand the factors that affect successful implementation.

Objectives

The objective of this systematic review is to assess the effectiveness of programmes and/or interventions designed to improve outcomes for youth transitioning from the out-of-home care system into adult living arrangements. The review question that guided this research was: What programmes, interventions or services are effective at improving health and psychosocial outcomes for young people leaving the out-of-home care system?

Search Methods

This review followed a published protocol (PROSPERO registration number: CRD42020146999). Published and grey literature were considered eligible for this review. The review team undertook a systematic search of eleven databases. We also examined the reference lists of included studies and of previously published reviews. Grey literature was sourced through expert contacts and the websites of seven organisations known to be undertaking or consolidating research in this space.

Selection Criteria

The population of interest was youth aged between 16 and 25 who are: not living with their birth parents/birth family; and are in foster care/out-of-home care/public care/looked after (UK)/state care/government care/kinship care/residential care; and have been placed in care due to concerns related to child maltreatment; and who are transitioning from care into adult living arrangements. Interventions of interest include those that: provide support and/or assistance to help youth prior to leaving care and/or as they transition and/or after they leave care; are delivered in the community; support young people to transition from their country's statutory out-of-home care systems into adult living. Comparators included: services as usual, another intervention, no intervention, or wait-list control. Primary outcomes of interest were: homelessness, health, education, employment, exposure to violence from others or conduct of violence toward others, risky behaviour. Secondary outcomes of interest were: supportive relationships and life skills. Study designs needed to be either randomised controlled trials or quasi-experimental designs with parallel cohorts that are assessed at the same point in time.

Data collection and Analysis

Data extraction was undertaken by pairs of review authors, with one checking the results of the other. Data were extracted into a shared GoogleSheet that was developed for this review. Risk of bias assessments were also undertaken by a pair of reviewers, with one reviewer checking the work of the other. If the population, intervention, outcome measure, follow-up time, effect size type and study design were considered to be similar, results from multiple studies were pooled in a meta-analysis. Certainty of evidence was assessed using GRADE for meta-analysis results. In cases where results were not able to be synthesised in a meta-analysis, they are described narratively.

Additionally, a series of focus groups were held with stakeholder groups with different experience of the foster care system to understand what they consider to be beneficial for young people transitioning from care. Attendees were United Kingdom-based and included: young people aged over 18 with care experience, individuals with current or former experience as foster carers and individuals employed by fostering services and/or agencies.

Results

Sixteen eligible studies were included, reported in 25 papers. Eight were randomised controlled trials (RCTs) and eight quasi-experimental design (QED) studies with parallel cohorts. Only one study, from Australia, was conducted outside the United States.

The review authors considered there to be a significant risk of bias present across all of the included studies. Six of eight included randomised controlled trials were considered to have some concerns surrounding the risk of bias, with the remaining two considered to be high risk. Twelve separate assessments were undertaken for the eight QED studies, to account for different methods used across different outcomes. Of those, eight were considered to have a serious risk of bias and four a moderate risk of bias.

Included studies investigated the effectiveness of a diverse range of policies, programmes and interventions. Independent living programmes (ILP) were the most widely studied (n=7; 4 RCTs; 3 QEDs), followed by intensive support services (n=2, 1 RCT; 1 QED), coaching and peer support (n=2, 2 RCTs), transitional housing service (n=1, 1 QED), health information or coaching intervention (n=2, 2 QED) and extended care (n=2, 2 QED).

Included studies reported a very wide range of measures of the outcomes of interest. Nineteen outcomes from RCTs that captured measures of homelessness, education, economic or employment, risky behaviour and life skills outcomes were considered to be similar enough to be pooled in a meta-analysis. Sixteen of these measures were from ILPs, with the remaining three from coaching and peer support programmes.

Key results by primary outcome include:

Homelessness – With the exception of one study, most of the reported results indicate very small effects. Both meta-analyses and three of the results reported in the narrative summary were not statistically significant. Of those that were statistically significant, moderate concerns surround the risk of bias in the reduction observed in homelessness outcomes for those aged 18-21 and 21-23 in the study of extended care in Washington State. Concerns about risk of bias also exist for other results that indicate very small reductions in homelessness and couchsurfing in YVLifeSet and serious concerns surround the very small effect on homelessness seen for ILPs – budgeting and financial education services.

Health – For transitions support programmes, serious concerns with the risk of bias identified in the ICare2Check study undermine the confidence which we have in the small significant reduction in unexpected health care visits. We have some concerns with the risk of bias and clinical meaningfulness of the large improvement in mental health empowerment reported in the Better Futures trial. We also have some concerns with the risk of bias in the small improvement in depression and anxiety symptoms observed in those who received YVLifeSet, however it could be considered 'clinically' meaningful. Moderate concerns with the risk of bias undermine our confidence in the statistically significant reductions reported in health care utilisation (emergency department presentations, inpatient and outpatient mental health treatment and inpatient and outpatient substance abuse treatment) and diagnosed substance abuse conditions (alcohol and/or drug substance abuse disorders) amongst those who received extended care in Washington State.

Education – For transitions support programmes, most of the reported results for education outcomes were not statistically significant, including three of the four meta-analyses. The single meta-analysis

that reported a statistically significant result has an extremely wide confidence interval that almost touches the line of no effect. All of the outcomes assessed in the meta-analyses were assessed by GRADE to have very low confidence due to risk of bias and imprecision. Where the results from the narrative summary were statistically significant, the effect sizes were also small or very small. The very small effects observed in current education enrolment in both Budgeting and Financial Education Services ILPs and Post-Secondary Education Services ILPs are undermined by the serious concerns surrounding their risk of bias. Concerns of risk of bias also surround the small effect of the Massachusetts Outreach ILP on two-semester college persistence and the very small effect of YVLifeSet on high school completion. A statistically significant effect was observed in the single study that examined the impact of extended care in Illinois on high-school graduation.

Economic and employment – For transitions support programmes, none of the four outcomes that were included in a meta-analysis for independent living programmes were statistically significant. The single outcome that was meta-analysed for coaching and peer support services, employment at 12-months follow up, was also not statistically significant. All five outcomes were judged to have a very low certainty of evidence. Of those results included in the narrative summary that were statistically significant, all were very small or small. Some concerns of risk of bias undermine our confidence in the findings that YVLifeSet is responsible for a very small increase in part-time employment by age 21 and in average earnings. For ILPs with post-secondary employment services, a very small increase in current part-time employment at age 23 was observed, however, there are serious concerns surrounding the potential for risk of bias. For extended care policies, we have moderate concerns surrounding the risk of bias present in the study on extended care in Washington State. However, the findings from this study suggest consistent small and medium beneficial effects on wages and reduction in the need for two types of public assistance.

Exposure to violence from others or conduct of violence toward others outcomes –For transitions support programmes, a meta-analysis measuring the impact of independent living programmes on delinquency was not statistically significant and had a very low certainty surrounding its confidence. Of the results that suggest effectiveness from the narrative summary, we have some concerns surrounding the risk of bias present in the very small reduction in victimisation observed amongst those who received YVLifeSet. For extended care policies, a moderate concern about risk of bias undermines our confidence in the stated impact of extended care observed in Washington State. The small and medium reductions in convictions at ages 21-23 and 18-21 are both statistically significant and meaningful. Likewise, the intergenerational impact of extended care is both statistically significant and meaningful. We have serious concerns surrounding the risk of bias in the reduction in arrest rates seen amongst both male and female youth who were eligible for extended care in Illinois.

Risky behaviour – The meta-analysis examining the impact of independent living programmes on pregnancy was not statistically significant and had a very low certainty surrounding its confidence. Of the results that suggest effectiveness from the narrative summary, significant risk of bias needs to be considered in relation to the small reduction in STI cases reported amongst participants in the NYNY III transitional housing programme. We also have some concerns about the risk of bias in the small increase in self-reported percent days a youth was abstinent from substance use observed amongst iHeLP participants.

For the secondary outcomes, supportive relationships or life skills, no statistically significant or clinically meaningful results were observed.

Stakeholders who participated in focus groups reported a common thread of feedback that support services for young people need to be 'humanised' and need to consider the needs and preferences of individuals. There was also a common call for a different type of 'longevity' or 'continuity' culture of support for the foster care system which could provide young people with ongoing support as required. There was also a willingness from foster carers to continue to support young people after they have left care.

Recommendations for practice and policy

Unfortunately, the scope and strength of current evidence on the effectiveness of policies, programmes and interventions for young people leaving care remains insufficient to draw conclusions about the effectiveness of any particular approach. The findings suggest that certain policies and programmes have promise, particularly extended care, however it is too early to recommend a particular approach. Instead, the very small effects observed in included studies suggest that decision-makers in policy and practice need to work towards improving the quality of policies, programmes and interventions targeting young people leaving care and services as usual. This could be achieved through targeted local, regional or national policy initiatives or through systematic efforts by sector organisations and service agencies to change practice based on principles of continuous quality improvement. Such efforts would require policymakers to provide the means, the support and incentives to review and enhance current services. It would require decision-makers in the field to truly operationalise and apply important service principles such as continuity and flexibility, autonomy and choice, but also accountability and responsibility. The use of evidence-based practices in transition services will require dedicated leadership, supported by data-informed improvement cultures, however it has the potential to facilitate such an urgently needed system change.

Recommendations for research

It is promising to see an increase in the number of high-quality studies investigating policies, programmes and interventions designed to improve outcomes for youth leaving care. However, this progress is coming from a low base, and there remains ample opportunity to both expand and strengthen future research on transition services. Promoting and initiating more rigorous effectiveness research, particularly in countries other than the United States, is essential. Designing rigorous studies that measure the practice and policy contexts in which transition interventions are being delivered would take into account the high degree of complexity of routine service settings affecting even the most well-designed interventions. Testing the feasibility and effectiveness of different implementation strategies to support the use of transition interventions could help us to better understand the difference intentional implementation practice may make to intervention effectiveness. Clear articulation of the theory of change, causal mechanisms and key elements of a policy or programme could allow future researchers to identify and test the effectiveness of 'key ingredients' of transition interventions to better understand those elements and activities that cause changes in young people and therefore are important to nurture and maintain. Finally, it would be helpful if researchers collecting primary outcome data sought to use more common outcomes and measures.

Conclusion

The scope and strength of current evidence on the effectiveness of policies, programmes and interventions for young people leaving care is insufficient to draw firm conclusions about the effectiveness of any particular approach. However, the findings suggest that independent living services, on their own, are unlikely to improve the often-poor outcomes we observe for care leavers.

The findings also suggest that certain approaches have promise, particularly extended care. However, more rigorous effectiveness research is required, particularly with populations of care leavers in countries other than the United States. Moreover, rigorous studies that measure the practice and policy contexts in which these interventions are being delivered, as well as studies that test the effectiveness of implementation strategies within these contexts, are in short supply. The relatively small effects found in studies where approaches were successful, along with scant implementation research associated with such studies, may well indicate that efforts to measure and improve implementation will lead to stronger findings and greater certainty. As well, rigorous exploration of different combinations of services, delivered in different ways, may go a long way toward meeting the complex needs of young people as they transition from state care.

1 BACKGROUND

1.1 Young people leaving care are at risk of poor outcomes

Youth who experience abuse and neglect by their parents or carers can be placed in out-of-home care (OOHC) in jurisdictions where such formal systems exist. OOHC takes three major forms: foster care – where care services are provided by individuals not necessarily known to the recipient; kinship or kith (friendship) care – where those providing care are connected to the recipient through blood or kin ties; and residential care – where care is provided in an institutional setting. Youth can experience one or more of these care types while in OOHC.

Whilst the forms of OOHC are quite different, they also have similarities: children in OOHC are often the victims of childhood trauma (Garland, Landsverk, Hough, & Ellis-MacLeod, 1996; Stein et al., 2001); minimal standards of care are required; and financial and other support, if provided, ceases when youth reach a certain age (Bergström et al., 2020).

OOHC is a policy area of considerable contemporary cross-national interest (Strahl, van Breda, Mann-Feder, & Schröer, 2020; van Breda et al., 2020). Within the United Kingdom, there is considerable variation in the rates of children and young people in care, the latest available figures (2020) show 67 per 10,000 in England, 109 per 10,000 in Wales, 136 per 10,000 in Scotland and 75 per 10,000 in Northern Ireland (National Statistics, 2020b, 2020a). Definitions of care leavers vary across the UK, making cross-country comparisons difficult. In England 28,510 young people aged between 18-21 left care in 2018, in Scotland there were 1,268 young people who were at least 16 years of age when they ceased to be looked after during 2018-19, in Wales there were 697 young people aged between 16-18 who left care in 2018-19 and in Northern Ireland there were 295 care leavers aged 16-18 and 242 aged 19 in 2019/20 (Department of Health, 2021; National Statistics, 2020a; Statistics for Wales, 2019).

Figures for other advanced economies show a similar scale, for example in Australia, there are approximately 45,000 children in care (156 per 10,000), with 3,300 of these aged between 15-17 transitioning from OOHC in 2018-19 (Australian Institute of Health and Welfare, 2020). In the United States there are approximately 60 per 10,000 children and young people in care, of whom, approximately 20,000 left care in FY2017, because they reached the legal age of adulthood in their state (Fernandes-Alcantara, 2019).

Young people who leave or transition out of OOHC arrangements commonly experience poorer outcomes across a range of indicators relative to their counterparts in the general population, including higher rates of homelessness, unemployment, reliance on public assistance, physical and mental health problems and contact with the criminal justice system (Crawford, Pharris, & Dorsett-Burrell, 2018; Doyle, 2007; Dworsky & Gitlow, 2017; Dworsky, Napolitano, & Courtney, 2013; Fowler, Marcal, Zhang, Day, & Landsverk, 2017; Greeno, Lee, Tuten, & Harburger, 2019). These poorer outcomes may be due to pre-existing psychological and developmental problems and other challenges arising from their traumatic experiences before entering care or whilst in care, for example educational disruption. They may also be due to deficiencies in the care and support they receive, insufficient life skills knowledge or training, or may simply be related to the fact that, if support is terminated, they

must fend for themselves at a much earlier age than peers who can rely on their birth families for ongoing personal and material support (Donkoh et al., 2006).

The age at which young people transition from OOHC varies between and within some countries – for most, formal support ceases between the ages of 18 and 21 (Gypen, Vanderfaeillie, De Maeyer, Belenger, & Van Holen, 2017). Young people transitioning from care are often ill-equipped for independent living, and the type and amount of support they receive is insufficient to prevent adverse outcomes (Heerde, Hemphill, & Scholes-Balog, 2018; Kushel, Yen, Gee, & Courtney, 2007).

1.2 Support available to young people leaving care

The type and mode of support to care leavers varies between jurisdictions. Available support falls into two broad categories: transitions support programmes and extended care policies.

1.2.1 Transitions support programmes

The type and mode of transitions support programmes vary between jurisdictions but can exist in the form of independent living programmes, coaching or peer support programmes, intensive individualised support services and transitional housing programmes. Their purpose is typically to encourage the development of the skills required for continued engagement in education, obtaining employment, maintaining housing and general life skills (Donkoh et al., 2006; O'Donnell et al., 2020). They are available to young people toward the end of their care placement, although some extend beyond.

1.2.2 Extended care policies

Policies that extend the age at which care is available provide additional funding and other support to carers to look after young people beyond the age of 18, or alternatively pay allowances directly to young people who are living independently. Some jurisdictions provide this option for all young people leaving care, whilst others only do so under certain conditions, for example if young people are engaged in education or employment. These policies provide young people with the option to continue with existing living arrangements during a formative period, providing them with support until they are both prepared and ready to leave (Mendes & Rogers, 2020; van Breda et al., 2020). These policies have been implemented in the United Kingdom (England), Denmark, the Netherlands, Norway, Canada (12 provinces and territories), Australia (2 states), New Zealand, South Africa, the United States (25 states and the District of Colombia) and Switzerland (Andersen, 2019; Mendes, 2021; Mendes & Rogers, 2020; van Breda et al., 2020).

1.3 How the intervention might work

The implicit mechanisms of change behind transitions support programmes and extended care policies can be rather different when examined in detail. For example:

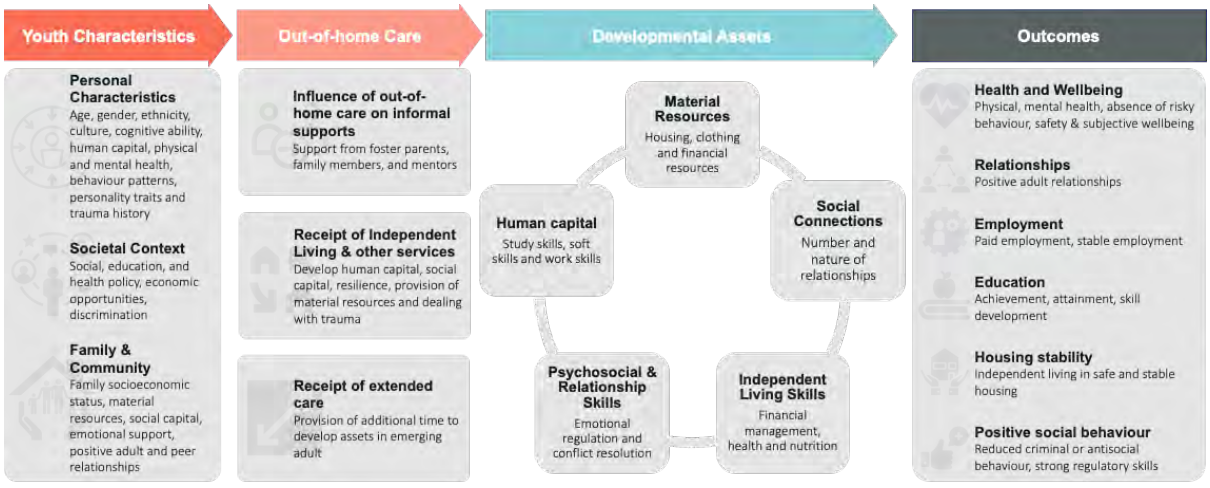
- *Transitions support programmes* – aim to provide young people with a specific set of skills that they need to build the developmental assets required to succeed on their own. They can do this by providing formal training (e.g. to develop financial literacy), material support (e.g. provision of accommodation) or informal coaching and/or mentoring to build life skills, confidence, knowledge, etc.

- *Extended care policies* – aim to work through the mechanism of providing 'more time' for young people to build maturity, identify goals, develop skills, etc., thereby increasing the likelihood that young people will be ready to live independently when they choose to move out on their own terms.

However, they also share commonalities in their basic rationale, as summarised in the framework by McDaniel et al. (2014). This framework – which was originally developed to assist in programme development and evaluation, to conceptualise how varying policies, programmes and interventions might work – considers that young people will leave care with a diverse range of experiences and needs. These will in turn affect the type, level and mode of support and/or assistance provided to young people as they transition to independence – see Figure 1.1, which considers the following elements:

- **Young people's characteristics** – varied backgrounds and experiences in terms of the structure and capacity of their families, the type and extent of abuse or neglect, the age at which they enter care, experiences pre-care and care experiences and context can all influence a young person's ability to transition to independence successfully.
- **Out-of-home care experiences** – individual experiences as young people transition to independence including formal and informal support, independent living programmes and extended care can assist young people to build developmental assets.
- **Developmental assets** – refers to those skills and elements that youth acquire at different stages and times in both formal and informal contexts to support them in their independent lives.
- **Outcomes** – intermediate- and long-term health, psychosocial and economic outcomes are influenced by a young person's ability to build and maintain development assets.

Figure 1.1 Theory of change for policies, programmes and interventions that support young people leaving care



Adapted from: McDaniel, Courtney, Pergamit & Lowenstein (2014)

We expected to find policies, programmes and interventions that were heterogeneous in their mechanism of change, mode of delivery, manner of implementation and the outcomes they sought to influence. Recognising this, we adapted the framework developed by McDaniel et al. (2014) and used it as an organising framework for this review as it provided the necessary flexibility to accommodate a

diverse range of policies, programmes and interventions that sought to improve outcomes for this population.

1.4 Why is it important to do this review?

Fifteen years ago, Donkoh et al. (2006) conducted the first methodologically rigorous systematic review of independent living programmes and were unable to find any studies that met their inclusion criteria. In the period since then, a number of reviews have explored various aspects of policies, programmes or interventions for youth transitioning from care. However, these have limitations in their scope, methodology or lack of end-user involvement.

Some reviews have limited their scope, either to particular geographies (O'Donnell et al., 2020); to interventions delivered while youth were in care (Donkoh et al., 2006; Everson-Hock et al., 2011); to independent living programmes (Donkoh et al., 2006; Liu et al., 2019; Yelick, 2017); or to specific outcomes, e.g. education (Liu et al., 2019; Randolph & Thompson, 2017). Current knowledge about interventions aimed at supporting young people transitioning from OOHC may therefore lack sufficient breadth to inform practice and policy and may also be of limited transferability to geographically or otherwise different settings than those in which studies were conducted.

Other reviews have substantial methodological limitations, such as not conducting a transparent, systematic search (Heerde et al., 2018) or not addressing the risk of bias of included studies (Everson-Hock et al., 2011; Woodgate et al., 2017). Some also do not critically appraise the effectiveness of the specific policy or practice interventions they included (Greeson, Garcia, Kim, & Courtney, 2015; Häggman-Laitila et al., 2020; Liu et al., 2019; Naccarato & DeLorenzo, 2008; Yelick, 2017). These reviews are at risk of relevant studies having been missed and/or not sufficiently taking study quality into account when synthesising findings – thereby lowering the confidence review users might have in both these findings and the conclusions they allow to be drawn.

A systematic review conducted by Sundell, Åström, Jonsson, Håkanson, & Tranæu (2020) rigorously assessed the strength of the evidence for transition services. However, they went about it in a different way than we have. They combined or 'lumped' diverse interventions together in their meta-analyses – including all forms of support to young people, provided during or after a placement and aimed at facilitating an independent life after completion of care. The synthesis, therefore, provided an overall answer to the question – do these approaches, not otherwise specified, work? – but it does not disentangle which approaches within these combinations are effective. At present, there are insufficient studies to conduct high quality meta-regressions within such an approach, which is one way to address this limitation. In addition, they did not cover studies of a relatively novel intervention for young people transitioning out of OOHC which has been increasingly used in recent years, extending OOHC, and also excluded studies with a high risk of bias. This practice of excluding studies at high risk of bias has been disputed due to the absence of a clear distinction between high- and low-quality trials and the possibility of excluding studies for which there are transparent and reasonable explanations for the identified risk of bias (Harvey & Dijkers, 2019). In addition, *risk* of bias is just that – risk. That does not mean the studies are incorrect – it is just that the level of certainty is lower. This more conservative approach is defensible but the review, therefore, does not cover the full scope of relevant transition interventions and may potentially be built upon a narrow a range of studies.

This review seeks to emulate Donkoh's (2006) review by focusing on the impact of policies, programmes and interventions on outcomes for young people leaving care. That is, we think that an

analysis of an emerging set of interventions is best served by 'splitting' rather than 'lumping'; that by conducting a methodologically rigorous review of current best evidence of all interventions designed to improve outcome for care leavers, the review meets a clear need. Additionally, this review seeks to expand the scope of previous work by contextualising the findings through engaging with young people with lived experience of the care system and others with different perspectives of the system, namely foster carer and fostering services agencies. By doing so we hope to supplement our effectiveness review with information about the context in which such services are provided and to understand the factors that affect successful implementation.

2 METHODS

2.1 Objectives

The objective of this systematic review is to assess the effectiveness of programmes and/or interventions designed to improve outcomes for youth transitioning from the out-of-home care system into adult living arrangements. The review question that guided this research was:

What programmes, interventions or services are effective at improving health and psychosocial outcomes for young people leaving the out-of-home care system?

2.2 Protocol registration

This review followed an explicit protocol. The review was registered with International Prospective Register of Systematic Reviews (PROSPERO, http://www.crd.york.ac.uk/PROSPERO, registration number: CRD42020146999) in April 2020.[1]

2.3 Study eligibility criteria

2.3.1 Types of participants

Youth aged between 16 and 25 who are:

- not living with their birth parents/birth family; AND
- are in foster care/out-of-home-care/public care/looked after (UK)/state care/government care/kinship care/residential care; AND
- have been placed in care due to concerns related to child maltreatment; AND
- are transitioning from care into adult living arrangements.

2.3.2 Types of intervention

Policies, programmes, interventions that:

- provide support and/or assistance to help youth prior to leaving care and/or as they transition and/or after they leave care;

[1] The registration was updated in July 2020 to reflect receipt of WWCSC funding and changes in review team membership.

- are delivered in the community;
- support young people to transition from their country's statutory out-of-home care systems into adult living.

2.3.3 Types of comparators

The following comparisons were included: intervention compared with services as usual, another intervention, no intervention, or wait-list control.

2.3.4 Types of outcomes

Outcomes of interest include the following, which had to be measured at least three months following the age at which eligibility for standard out-of-home care terminated in the jurisdiction in which the study took place. Outcomes were considered if they were obtained from linked administrative data sources (i.e. employment, health or other records), validated measures (e.g. conflict tactics scale) and non-validated measures (e.g. self-reported homelessness) administered by interview or survey.

Primary outcomes

- **Homelessness** – we included measurement that allowed us to determine whether or not an individual had or did not have a permanent place to live;
- **Health** – we included health outcomes or service usage, including emergency department presentations, hospitalisations, mental health outcomes and sexual health test results;
- **Education** – we included measurements of high school completion, high school grades, enrolment in or attainment of a vocation or trade qualification and enrolment in or attainment of a university or other tertiary qualification;
- **Economic or employment** – we included measurements of whether an individual had a job, their wages or use of unemployment benefits;
- **Exposure to violence from others or conduct of violence toward others** – we included any measurement of crime perpetration i.e. whether or not an individual has been arrested, convicted, spent time in a locked setting (jail/prison) or crime victimisation;
- **Risky behaviour** – we included measurement of risky behaviour, including illicit drug use, alcohol use, risky sexual activity and either the onset or delay of teen pregnancy.

Secondary outcomes

- **Supportive relationships** – we included measurements of whether individuals have attained or maintained supportive relationships with others, including paid workers and unpaid community members (i.e. mentors, peer mentors or supportive peers);
- **Life skills** – we included measurements of the attainment of competencies required for independent living; these include, but are not limited to, learning how to budget, attain essential services and perform essential household tasks.

2.3.5 Types of studies

The following experimental and quasi-experimental study designs were included:

- **Randomised Controlled Trials (RCTs)** – including individual RCTs, cluster RCTs, Step-Wedge designs with random time allocation.
- **Quasi-experimental designs (QED)** – including difference-in-difference estimation, synthetic control group methods, studies based on covariate matching, propensity score-based methods, doubly robust methods, regression adjustment, regression discontinuity designs, instrumental variable estimation and non-equivalent control group designs using parallel cohorts that adjust for baseline equivalence.
- **Economic evaluation methodologies** – including cost-benefit analysis, cost-utility analysis, cost-effectiveness analysis, cost-analysis.

Economic evaluations and qualitative studies were included if they were conducted as part of a qualifying study and were used only to inform or deepen our understanding of the quantitative findings. Specific inclusion and exclusion criteria are detailed in Table 2.1.

Table 2.1 Inclusion and exclusion criteria

PICOS domain	Inclusion criteria	Exclusion criteria
Study design	Randomised Controlled Trials (RCT) including: • individual RCTs • cluster RCTs Step-Wedge designs with random time allocation Non-equivalent control group designs using parallel cohorts that adjust for baseline equivalence Difference-in-difference estimation Synthetic control group methods Studies based on: • covariate matching • propensity score-based methods • doubly robust methods • regression adjustment • regression discontinuity designs, and • instrumental variable estimation Qualitative studies and economic evaluations were included if conducted as part of a qualifying study and used only to generate hypotheses, gather information about interventions and populations, and to	Non-primary studies, including: • Literature reviews • Systematic reviews • Meta-analyses Studies without a valid counterfactual, including designs that do not include a parallel cohort that do not establish or adjust for baseline equivalence, including: • Single group pre-post designs • Control group designs without matching in time and establishing baseline equivalence • Cross-sectional designs • Non-controlled observational (cohort) designs • Case-control designs • Case studies/series • Surveys Qualitative designs and economic evaluations not undertaken in the context of any included quantitative study.

	inform or deepen our understanding of quantitative findings.	
Population	Youth aged between 16 and 25 Youth in OOHC for reasons of child maltreatment, neglect or risk of child maltreatment, relinquishment, or lack of provision of support. OOHC settings include: • foster care • guardianship • kinship care • group care • residential care/congregate care	Youth in OOHC settings for reasons other than child maltreatment, neglect, risk of child maltreatment, relinquishment, or lack of provision of support. • Youth who are not in OOHC. • Youth who are currently incarcerated, including in youth justice settings. • Youth aged less than 16 and greater than 25.
Intervention	Interventions, programmes or services delivered in the home/community.	Interventions, programmes or services delivered in other settings, for example: custodial settings.
Comparison	Treatment as usual, another intervention, no intervention, or wait-list control.	Studies using other comparators.
Outcome	**Primary Outcomes:** • Homelessness • Health • Education • Economic or employment • Exposure to violence from others or conduct of violence toward others • Risky behaviour **Secondary Outcomes:** • Supportive relationships • Life skills	Studies looking at other outcomes.
Setting	Countries where a statutory care system for child maltreatment exists.	Countries where a statutory care system for child maltreatment does not exist.

2.4 Search strategy

2.4.1 Electronic searches

A search strategy was developed using similar sources and terms to one used by Sundell et al. (2020). Details of the databases searched are outlined in Table 2.2 below. No year of publication or language restrictions were implemented in the database searches. Search strategies and results for each database are detailed in Appendix A.

Table 2.2 Details of electronic searches

Database	Platform	Dates of search coverage		Search strategy
		Period start	Period end	
Cochrane Controlled Register of Trials	Ovid	1991	6 November 2020	See Table A.1
CINAHL	EBSCO	1937	6 November 2020	See Table A.2
ERIC	Proquest	1966	6 November 2020	See Table A.3
PsycINFO	Ovid	1806	6 November 2020	See Table A.4
MEDLINE	Ovid	1946	6 November 2020	See Table A.5
EMBASE	Ovid	1974	6 November 2020	See Table A.6
Sociological Abstracts	Proquest	1952	6 November 2020	See Table A.7
Social Services Abstracts	Proquest	1980	6 November 2020	See Table A.8
SocIndex	EBSCO	1895	6 November 2020	See Table A.9
NHS Economic Evaluation Database	Ovid	1995	6 November 2020	See Table A.10
Health Technology Assessment	Ovid	2001	6 November 2020	See Table A.11

2.4.2 Searching other resources

Clearinghouses, government agencies and organisations known to be undertaking or consolidating research in this area were reviewed using methods detailed in Table 2.3.

Table 2.3 Unpublished literature sources and search methods

Source	Search method	Date searched
Analysis and Policy Observatory	Two searches were undertaken for 'foster care' and 'out-of-home care'. All results were reviewed.	1 December 2020
Australian Institute of Family Studies	Search terms for AIFS library: 'leaving care' or 'transition*' or 'leaving OOHC'	30 November 2020
California Evidence-Based Clearinghouse for Child Welfare	Manual review of all interventions included in the topic area: 'Support Services for Youth in the Child Welfare System: Youth Transitioning into Adulthood Programs'	27 November 2020

Source	Search method	Date searched
Chapin Hall at the University of Chicago	Review all publications under the following categories: 'Youth Homelessness', 'Foster Care', 'Transition Age Youth' and 'Youth Homelessness Capacity Building'	30 November 2020
Children's Social Care Innovation Programme (GOV.UK)	Manual review of all reports for the Children's Social Care Innovation Programme (CSCIP)	4 December 2020
International Research Network on Transitions to Adulthood from Care	Manual review of 'recent publications' spreadsheet	27 November 2020
Social Care Online (SCIE)	Adapted PsycINFO search for SCIE library	20 November 2020
Washington State Institute for Public Policy	Manual review of all publications in the category 'children's services'	14 December 2020

2.4.3 Expert contacts

Authors of each included study were contacted by email by a member of the review team to ascertain if they were aware of any additional unpublished or in-press literature, by themselves or colleagues, that may be relevant to this review. Responses were included if they were received prior to 8 March 2021[2]. Additionally, members of the review team identified any unpublished literature known to them that might be relevant to this review.

2.4.4 References of included studies

References of the included studies were screened for eligibility at title and abstract by two reviewers. A third reviewer screened any candidate full texts for inclusion.

2.4.5 Included studies of related reviews

Several systematic reviews have been published examining various aspects of programmes that improve outcomes for young people leaving care. Two team members reviewed included studies in systematic reviews conducted by Everson-Hock (2011), Greeson et al. (2020), Häggman-Laitila et al. (2020), Liu et al. (2019), Naccarato & DeLorenzo (2008), Randolph & Thompson (2017), Woodgate et al. (2017) and Yelick (2017). A third reviewer screened any candidate studies that were not located in our other searches.

[2] No responses were received after March 8 2021.

2.5 Study selection

2.5.1 Results of electronic search results

Each title/abstract identified by the search strategy was independently screened by two reviewers. An expert reviewer independently screened titles/abstracts where the initial reviewers did not agree or were unsure. If the third reviewer was unsure, the study was included in full-text screening. The full text of studies that were deemed potentially relevant at the title/abstract screening stage were further assessed by two independent reviewers against the inclusion and exclusion criteria outlined in Table 2.1. Any discrepancies/conflicts in the decision made by the reviewers were resolved by discussion with an additional reviewer.

Team members who were authors of any of the studies identified by the search did not take part in the screening or selection studies in which they participated.

Endnote was used for deduplication, the Covidence platform was used for literature screening and library storage, and Mendeley was used for referencing (Mendeley, 2019; The EndNote Team, 2013; Veritas Health Innovation, n.d.).

2.5.2 Unpublished literature

Unpublished literature was identified through the sources and methods outlined and detailed in Table 2.3. These sources were scanned by two experienced reviewers and potentially relevant titles were added to a shared GoogleSheet. Titles and/or abstracts included in this shared GoogleSheet were reviewed by two experienced reviewers. Full-text versions of those deemed to be relevant by at least one reviewer were sourced and reviewed for inclusion by two reviewers working independently. Any conflicts were resolved through a discussion with a third reviewer.[3]

2.6 Data extraction

Data extraction was undertaken by pairs of experienced reviewers, with one checking the results of the other. 'Study-level data' were extracted into a shared GoogleSheet that was developed for this review. The following information was extracted: first author, year of publication, publication title, publication type, intervention name, study design, study method, study aim, sample size, location, country income status, study timeframe, study population, population demographics (i.e. mean age at commencement and end of intervention, gender and ethnicity), setting, intervention details including type of intervention, target population and delivery mode, study outcomes which were grouped into eight categories including homelessness, health, education, economic or employment, exposure to violence from others or conduct of violence toward others, risky behaviour, supportive relationships and life skills. This data extraction form proved to be unwieldy when working with 'outcome-level' results. As a result, we created a second GoogleSheet to re-extract quantitative data from included studies. Data

[3] The results of this process are included in Table A.12 in Appendix A.

was re-extracted by two-experienced reviewers, with one checking the results of the other. A layout of this template is included in Appendix I.

2.7 Study design categorisation

Included studies were stratified by the study design they employed. Randomised controlled trials were analysed separately from studies that used quasi-experimental designs.

2.8 Risk of bias assessment

Risk of bias from included randomised controlled trials was assessed using the Revised Cochrane Risk of Bias tool for randomised trials (RoB2) (Sterne et al., 2019). Non-randomised studies were assessed using the Risk Of Bias In Non-randomized Studies - of Interventions (ROBINS-I) tool (Sterne et al., 2016).

Risk of bias assessments were conducted at the outcome-level, as authors used different analysis methods within their studies which introduce varying risks of bias. Each assessment was undertaken by a pair of reviewers, with one reviewer checking the work of the other.

For the RoB2 tool, risk of bias was explored for each domain and for overall risk. Decisions about the level of bias for each domain and overall were made by consulting guidance documents for RoB2 (Higgins, Savovi , Page, Sterne, & RoB2 Development Group, 2019). Three results are possible for each outcome:

- **Low risk of bias** – the study is judged to be at a low risk of bias for all domains;
- **Some concerns** – there are some concerns regarding at least one domain, and there are no high-risk-of-bias assessments for any single domain; and
- **High risk of bias** – the study is judged to be at high risk of bias in at least one domain OR there are some concerns for multiple domains in a way that substantially lowers confidence in the study's findings.

For the ROBINS-I, risk of bias was explored for each domain and for overall risk. Decisions about the level of bias for each domain and overall were made by consulting guidance documents for ROBINS-I (Sterne et al., 2016). Five results are possible for each outcome:

- **Low risk of bias** – the study is judged to be at low risk of bias for all domains. It is comparable to a well-performed randomized trial.
- **Moderate risk of bias** – the study is judged to be at low or moderate risk of bias for all domains. The study appears to provide sound evidence for a non-randomised study but cannot be considered comparable to a well-performed randomized trial.
- **Serious risk of bias** – the study is judged to be at serious risk of bias in at least one domain, but not at critical risk of bias in any domain.
- **Critical risk of bias** – the study is too problematic to provide any useful evidence and should not be included in any synthesis.

- **No information** – there is no clear indication that the study is at serious or critical risk of bias, but there is not enough information available on which to base a judgement about risk of bias.

2.9 Assessing the certainty of evidence

The GRADE approach (Grading of Recommendations Assessment, Development and Evaluation) was used to summarise the confidence in meta-analysed results (Guyatt et al., 2008). GRADE is used 'by outcome' and – ideally – summarises the quality and confidence in the evidence from several studies completed for the results of meta-analysis. When doing so, five factors are considered per outcome for downgrading the evidence:

- Risk of bias – e.g. methodological limitations,
- Consistency of results – e.g. unexplained heterogeneity,
- Imprecision – e.g. small sample sizes, small number of events,
- Indirectness – e.g. relevance of evidence to research question,
- Publication bias – e.g. published studies differ systematically from all studies conducted on a topic.

A further three factors are considered per outcome for upgrading the evidence:

- Large magnitude of effect i.e. strong association,
- Dose-response, and
- Effect of all plausible confounding factors.

Based on an assessment of each of these factors, the quality of the evidence behind a given outcome can be judged to be high (⨁⨁⨁⨁), moderate (⨁⨁⨁), low (⨁⨁) or very low (⨁).

2.10 Data analysis and synthesis

2.10.1 Measures of treatment effect

Studies reported quantitative results in a range of forms, some with effect sizes (ES), and some without. In many cases, effect sizes needed to be estimated from available data, while transformation was required in others.

The standardised Mean Difference (SMD) was selected as the most appropriate effect size to transform to, as most studies that reported an ES also reported an SMD. Noting that Cohen's *d* has a known bias for small studies (in which it overestimates the effect), for studies that were included in a meta-analysis we decided to transform estimates of Cohen's *d* to Hedges' *g*, which corrects for this bias. Studies that reported an ES as Cohen's *d*, and were not included in a meta-analysis were not transformed. A range of methods were employed to transform effect sizes – see Table 2.4 – some which required multiple steps in order to estimate Hedges' *g* from available information.

Table 2.4 Methods used to transform reported results to SMD

Reported result	Transformation method	Transformation result	Transformation source	Comment
Odds ratio	$d = \log OR \times \frac{\sqrt{3}}{\pi}$	Cohen's *d*	Borenstein, Hedges, Higgins, & Rothstein (2009)	Subsequently transformed to Hedges *g* using R (esc package)
Chi-square from 2 x 2 table	Function included in esc R package	Hedges' *g*	Lüdecke (2019)	
Chi-square p-value	Function included in esc R package	Hedges' *g*	Lüdecke (2019)	
2x2 frequency table	Function included in esc R package	Hedges' *g*	Lüdecke (2019)	Binary outcomes, post-test only
Regression coefficient (2SLS, GLM, mixed-effects)	$exp(\beta)$	Odds ratio	Fernandes, Lynch, & Netemeyer (2014)	Transformed to Cohen's *d* using Odds ratio method, subsequently transformed to Hedges *g* using R (esc package)
Poisson regression model coefficient	Transformation of regression coefficient using ES calculator	Cohen's *d*	Coxe (2018)	Subsequently transformed to Hedges *g* using R (esc package)
Negative binomial regression model coefficient	Transformation of regression coefficient using ES calculator	Cohen's *d*	Coxe (2018)	Subsequently transformed to Hedges *g* using R (esc package)

2.10.2 Unit of analysis issues

The unit of analysis for included studies was at the individual level. No unit of analysis issues were identified in the included studies.

2.10.3 Dealing with missing data

For those studies that did not report sufficient data to calculate or transform effect sizes, the primary authors were contacted to request the necessary information. Five authors were contacted, three of whom responded. When information was either unavailable or insufficient to calculate an effect size, results are presented narratively.

2.10.4 Assessment of heterogeneity

Clinical heterogeneity was minimised by careful selection of outcomes suitable for inclusion in meta-analysis. Amongst studies that were included in a meta-analysis, consistency of results of was

assessed using the I^2 statistic (Higgins & Thompson, 2002; Higgins, Thompson, Deeks, & Altman, 2003). Evidence of heterogeneity – where the *p* value < 0.1 and I^2 statistic is greater than 25 per cent – are highlighted in the reporting of that outcome. The scale of heterogeneity was assessed based upon the criteria:

- I^2 0 per cent to 40 per cent – might not be important,
- I^2 30 per cent to 60 per cent – may represent moderate heterogeneity,
- I^2 50 per cent to 90 per cent – may represent substantial heterogeneity,
- I^2 75 per cent to 100 per cent – considerable heterogeneity.

2.10.5 Quantitative synthesis

Meta-analyses were only conducted for outcomes that were not heterogeneous with respect to intervention type (i.e. we did not combine independent living programmes and intensive support services) and study designs (i.e. we did not combine the results from randomised and non-randomised studies). Due to the small number and wide scope of included studies, this radically narrowed the outcomes that could be synthesised in this manner.

For outcomes that could be quantitatively synthesised, meta-analysis was conducted using the *meta* package from the R Project for Statistical Computing (R Core Team, 2020; Schwarzer, 2021).

Fixed effect models were used in cases where no heterogeneity was detected. In the one case where it was, a random effects model was used. Outcomes that could not be synthesised using meta-analysis are presented narratively.

2.10.6 Subgroup analysis and investigation of heterogeneity

Insufficient studies were identified that would allow us to undertake subgroup analysis that considered age at which statutory out-of-home care support ceases (18 vs greater than 18) and sex (female vs male).

2.10.7 Sensitivity analysis

Sensitivity analysis that considered study design (randomised controlled trials vs non-randomised controlled trials) could not be undertaken due to the small number of included studies and the scope of the included meta-analyses.

2.10.8 Assessment of publication bias

Attempts were made to minimise publication bias by undertaking an extensive search of both published and grey literature – including author contracts and reference list searching. Two of the included studies in this review were not published in academic journals, indicating that this approach was somewhat successful.

For each individual meta-analysis, publication bias was assessed by producing and visually examining funnel plots. Each plot was examined to assess the symmetry of effect sizes distributed around the pooled effect size estimate. If the funnel plot was symmetrical, as per standard practice we inferred that publication bias is unlikely (Borenstein et al., 2009). We also used Egger's test of the intercept to assess funnel plot asymmetry (Egger, Smith, Schneider, & Minder, 1997).

2.11 Deviations from the protocol

The following deviations were made from the published protocol:

- In the protocol we specified that we would limit our search to studies published since 1990. In practice we did not apply this limit and studies were included if they were published at any time,
- In the protocol we specified that we would consider 'any study with an abstract, or translation, available in English, Swedish, Norwegian, Danish, German, Mandarin or Cantonese'. Ultimately, we did not apply any language filters during the screening process, so we have changed the description to 'no language filters were applied'.

2.12 Stakeholder engagement

In order to ensure that our review is relevant to stakeholders, the review team sought to explore what the different stakeholder groups have experienced as beneficial for young people in transition. Feedback on this was sought by engaging with a sample of United Kingdom-based representatives from the following groups:

- Young people aged over 18 with care experience.
- Individuals with current or former experience as foster carers; and
- Individuals employed by foster care agencies.

The goal of this engagement was to determine:

- What different stakeholder groups consider to be important factors to support youth in transitions,
- What are the barriers and facilitators for different stakeholder groups in supporting young people to transition?
- If there are any other implementation factors that are important to consider.

Feedback was sought via five, ninety-minute focus groups across the populations of interest held between 13-25 January 2021. Three of the focus groups were with foster carers (n=16); one group was with foster care alumni (n=5); and one group was with foster care service/agency staff (n=9). The groups were held online, via videoconference (Zoom) due to the ongoing COVID-19 pandemic and hosted and facilitated by staff from The Fostering Network.

Recruitment for the groups was carried out via The Fostering Network's extensive membership and social media (Twitter, Facebook, e-newsletter) networks. Additionally, The Fostering Network staff shared information with their contacts including local authority and independent fostering managers; carers and staff engaged with an evaluation of a fostering programme (Mockingbird); foster carers who had made use of one-to-one support; and those engaged with local foster care associations. Care-experienced young people were reached via social media, directly via The Fostering Network and, indirectly, via followers of The Fostering Network, many of whom themselves are high-profile care-experienced young adults.

Ethical approval was obtained from the Monash University Human Ethics Research Ethics Committee (MUHREC) – project identification number: 27067. Informed consent was obtained prior to the commencement of each focus group. Electronic gift cards – valued at £20 – for a retailer of their choice were provided to participants in the foster care alumni group.

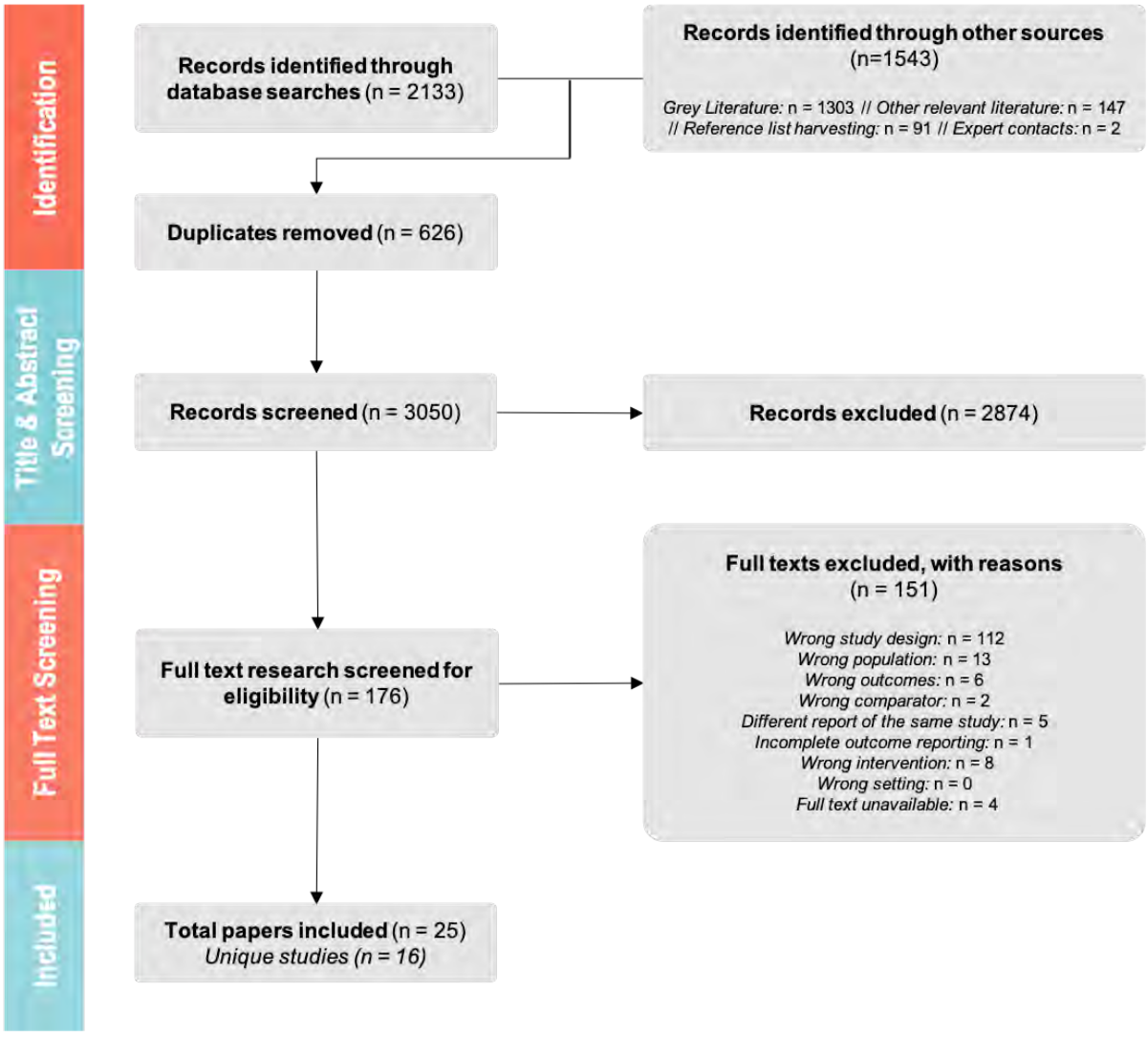
3 RESULTS

3.1 Search Results

3.1.1 Results of the search

The search strategy yielded a total of 3,583 studies, of which 2,133 were unique and screened for inclusion. After reviewing 2,957 titles and abstracts, 174 full-text studies were assessed for eligibility and 16 (n=16) were included. This process is summarised in the PRISMA flowchart in Figure 3.1 below. A checklist that maps the PRISMA-S reporting requirements against review content has been provided as a checklist in Table H.1 in Appendix H (Rethlefsen et al., 2019).

Figure 3.1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses flowchart



3.1.2 Included studies

Sixteen (n=16) studies (reported in 25 papers) met our inclusion criteria and were included in this review. Of these,

- Eight (n=8) used a randomised study design and eight (n=8) used a non-randomised design.
- Thirteen (n=13) were published in peer-reviewed journals and three (n=3) were published as grey literature outside of traditional academic journals (grey literature).

Fifteen (n=15) papers reported the results of the same study or trial and were treated as a single study for the purposes of this review. One (n=1) study reported two separate analyses of different independent living programmes and was treated as two separate studies (Nadon, 2020). For studies reported in multiple papers, a primary study was selected to serve as the primary reference – see Table 3.1 for details.

Table 3.1 Distinguishing between multiple references of the same study

Study	Primary reference	Secondary reference(s)
Evaluation of the Life Skills Training Program: Los Angeles County	Greeson, Garcia, Kim, Thompson, & Courtney (2015)	Courtney et al. (2008b)
Extended care in Illinois (Midwest Evaluation of the Adult Functioning of Former Foster Youth)	Courtney & Hook (2017)	Dworsky, Napolitano, et al. (2013) J. S. Lee, Courtney, & Hook (2012) J. S. Lee, Courtney, & Tajima (2014) Okpych & Courtney (2020)
Extended Foster Care in Washington State	Miller, Bales, & Hirsch (2020a)	Miller, Bales, & Hirsch (2020b)
Independent Living – Employment Services Program, Kern County, California	Zinn & Courtney (2017)	Courtney, Zinn, Koralek, & Bess (2011)
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care	Greeson, Garcia, Kim, & Courtney (2015)	Courtney, Zinn, Johnson, & Malm (2011)
YVLifeSet	Courtney, Valentine & Skemer (2019)	Valentine, Skemer & Courtney (2018)

3.2 Characteristics of included studies

An overview of all of the included studies is provided in Table 3.2, additional detail about each of the policies, programmes and interventions is included in Appendix C.

Table 3.2 Summary of primary study characteristics – grouped by experiment/study and stratified by study design

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Randomised study design								
Braciszewski, Tzilos Wernette, Moore, Bock, et al. (2018)	Randomised control trial	Young people aged 18-19, who were no more than two years removed from foster care, who self-reported moderate or severe alcohol, tobacco or substance abuse and who received post-foster care transitions services from a large agency in New England (United States)	Interactive Healthy Lifestyle Preparation (iHELP), a smartphone/tablet app	Contact control i.e. receipt of text messages	Total: 25 Intervention: 11 Comparison: 14	Risky behaviour: (a) Substance use frequency: reported per cent days abstinent	12 months	Youth were recruited through an agency, intervention was delivered through participants' smartphone
Courtney et al. (2008a)	Randomised control trial	Young people in out-of-home care placements under the guardianship of the Los Angeles Department of Child and Family Services (DCFS) in Los Angeles, California	Early Start to Emancipation Preparation Tutoring Program: Los Angeles County	Services as usual	Total: 445 Intervention: 236 Comparison: 209	Education: (a) High school diploma/GED	2 years	Offered through 12 community colleges by student tutors in the home of the youth being served

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Courtney, Valentine & Skemer (2019)	Randomised control trial	Young people between 18 and 24 years of age who had been in the custody of the State of Tennessee children's services agency for at least one year (not necessarily continuously) after age 14 or for at least one day after age 17.	YVLifeSet	Signposting to other resources available in the community	Total: 1,322 Intervention: 788 Control: 534	Homelessness: (a) Housing instability scale, (b) Experienced homelessness, (c) Couch-surfed, (d) Unable to pay rent, (e) Lost housing due to inability to pay rent Health: (a) Mental health (DASS-21) Education: (a) High school diploma, (b) GED, (c) Participate in vocational training, (d) Enrolled in 2-year/4-year college Economic or employment: (a) Earnings (average), (b) Ever employed, (c) Full time employment, (d) Part time employment Exposure to violence from others or conduct of violence toward others: (a) Robbed or assaulted (in last year), (b) In a violent relationship (in last year), (c) Spent at least 1 night in jail/prison (in last year), (d) Arrested (in last year), (e) Convicted of crime (in last year) Risky behaviour: (a) Days of binge drinking in last month, (b) Used illegal drugs (in last year), (c) Did not use condom in last sexual encounter Supportive relationships: (a) Score on social support scale, (b) Very close to an adult	1 year	Not reported

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Geenen et al. (2015)	Randomised control trial	Youth in foster care who had been identified as experiencing a significant mental health condition	Better Futures	Not reported	Total: 67 Intervention: 36 Control: 31	Education: (a) High school graduation or GED, (b) Participation in post-secondary education, (c) Attended college Economic or employment: (a) Employed at 12-month follow-up	16 months	Three-night residential at university campus and peer coaching and workshops delivered in community settings

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Greeson, Garcia, Kim, & Courtney (2015)	Randomised control trial	Youth in foster care who have a service plan goal of independent living or long-term substitute care	Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care	Services as usual	Total: 230 Intervention: 100 Comparison: 103	Homelessness: (a) Homeless since baseline Education: (a) High school diploma/GED, (b) College enrolment, (c) College persistence Economic or employment: (a) Employed in past 12 months, (b) Currently employed, (c) Earnings is past 12 months, (d) Net worth, (e) Received financial assistance Exposure to violence from others or conduct of violence toward others: (a) One or more delinquent acts Risky behaviour: (a) Became pregnant (female), (b) Got someone pregnant (male) Life skills: (a) Overall preparedness, (b) Job-related preparedness, (c) Any financial accounts, (d) Social security card, (e) Birth certificate, (f) Driver's licence Supportive relationships: (a) Social support	2 years	Not reported

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Greeson, Garcia, Kim, Thompson, & Courtney (2015)	Randomised control trial	Youth aged 17 and over in out-of-home care in Los Angeles, California	Evaluation of the Life Skills Training Program: Los Angeles County	Services as usual	Total: 411 Intervention: 196 Comparison: 215	Homelessness: (a) Homeless since baseline, (b) Number of residential moves Education: (a) High school diploma/GED, (b) College enrolment Economic or employment: (a) Currently employed, (b) Earnings in past 12 months, (c) Net worth, (d) Received financial assistance Exposure to violence from others or conduct of violence toward others: (a) One or more delinquent acts Risky behaviour: (a) Became pregnant (female) Life skills: (a) Overall preparedness, (b) Job-related preparedness, (c) Any financial accounts, (d) Social security card, (e) Birth certificate, (e) Driver's licence	2 years	Delivered in 19 community colleges throughout Los Angeles County and involved outreach in community settings
Powers et al. (2012)	Randomised control trial	Youth who are in foster care and receive special education services	TAKE CHARGE	Foster care independent living programme	Total: 61 Intervention: 29 Comparison: 32	Education: (a) High school graduation or GED, (b) Attended college Economic or employment: (a) Employed at 12-month follow-up	1 year	School and community settings

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Zinn & Courtney (2017)	Randomised control trial	Youth who (1) were in an out-of-home care placement in Bakersfield, CA or a nearby community that was under the guardianship of the Kern County Department of Human Services between September 2003 and July 2006 and (2a) reached the age of 16 while in care or (2b) entered care after age 16	Independent Living – Employment Services Program, Kern County, California	Did not receive Independent Living – Employment Services Program, Kern County, California	Total: 262 Intervention: 140 Comparison: 122	Homelessness: (a) Homeless since baseline, (b) Number of residential moves Education: (a) High school diploma/GED, (b) College enrolment Economic or employment: (a) Currently employed, (b) Earnings in past 12 months, (c) Net worth, (d) Received financial assistance Exposure to violence from others or conduct of violence toward others: (a) One or more delinquent acts Risky behaviour: (a) Became pregnant (female) Life skills: (a) Overall preparedness, (b) Job-related preparedness, (c) Any financial accounts, (d) Social security card, (e) Birth certificate, (f) Driver's license	2 years	Community setting
Non-randomised design								
Beal, Nause, Lutz and Greiner (2020)	Matched comparison group	Adolescents aged between 16-22 who were in child protective services for at least 12 months and expected to emancipate due to age, case plan goals and legal status	ICare2CHECK	No information	Total: 302 Intervention: 151 Comparison: 151	Health: (a) total health care use, (b) mandated foster care visits, (c) scheduled visits, (d) unscheduled visits	1 year	Study was based at a university-run medical centre

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Courtney & Hook (2017)	Natural experiment with various regression analyses	Foster youth a) who were 17 in 2002, b) were in foster care for at least one year before turning 17 and c) resided in either one of Wisconsin, Illinois and Iowa	Extended care in Illinois (Midwest Evaluation of the Adult Functioning of Former Foster Youth)	Non-extended care in Wisconsin and Iowa	Total: 732 Intervention: 474 Comparison: 258	Homelessness: (a) Self-reported homelessness Education: (a) High school completion or one year of college or more, (b) College enrolment by age 21, (c) College enrolment by age 29/30, (d) Two semester college persistence, (e) Two or four-year Degree completion by Age 29/30 Exposure to violence from others or conduct of violence toward others: (a) Arrested, (b) Convicted, (c) Incarcerated, (d) Property crime, (e) Violence crime, (f) Drug crime, (g) Any crime	Varies: 1-10 years	Not applicable
Kim, Ju, Rosenberg, & Farmer (2019)	Propensity score matching	Youth aged 17 and over (in fiscal year 2011) in foster care across 50 US States, the District of Columbia and Puerto Rico	Independent Living Services	Not reported	Total: 4,206 Intervention: 2,757 Comparison: 1,449	Education: (a) High school completion, (b) Post-secondary education Economic or employment: (a) Full-time employment at age 21	4 years	Not reported
Lim, Singh, & Gwynn (2017)	Propensity score matching with inverse probability of treatment weighting	Youth aged 18-25 who are planning to leave foster care in the next 6 months or have left foster care in the last 2 years or have been in foster care for more than 1 year after their 16th birthday in New York, NY	New York City/New York State-Initiated Third Supportive Housing Program (NYNY III)	Received the NYNY III for less than 5 days or have received alternative government-based subsidised housing programmes	Total: 895 Intervention: 251 Comparison: 644	Homelessness: (a) Stable housing, (b) Unstable housing Risky behaviour: (b) Diagnosed STI cases	2 years	Not reported

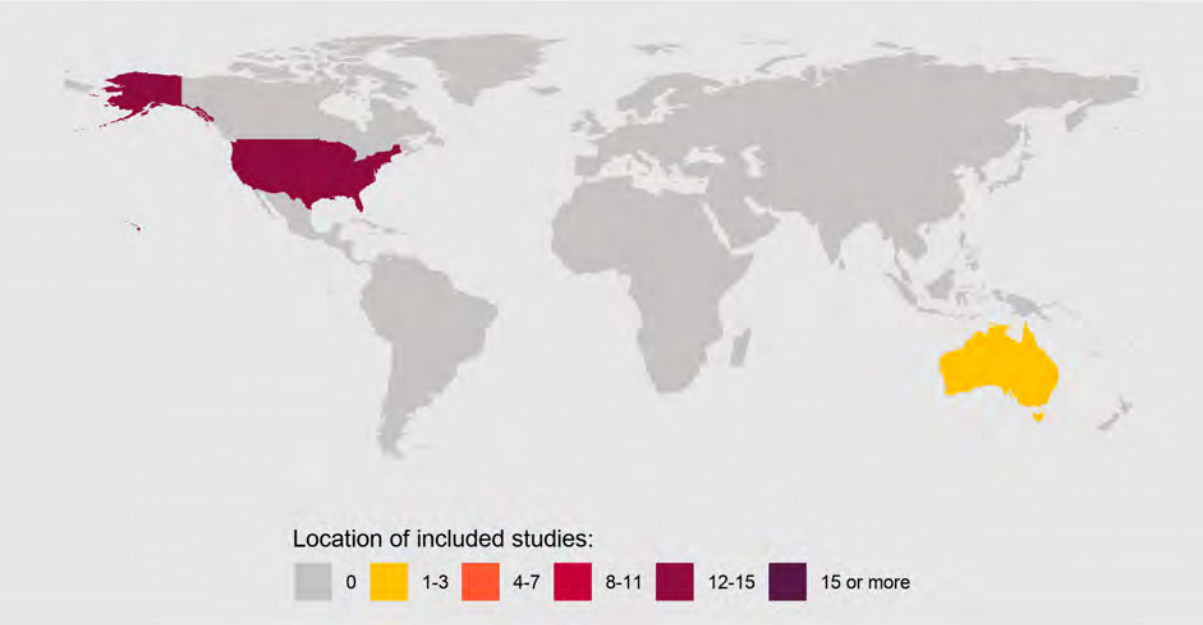
Miller, Bales & Hirsh (2020a)	Propensity score matching with inverse probability of treatment weighting	Foster youth who left foster care between 2006 and 2019 in Washington	Extended foster care in Washington	No extended care	Total: 5,715 Intervention: 1,751 Comparison: 3,948	Homelessness: (a) Any homelessness, aged 18-21, (b) Any homelessness, aged 21-23, (c) Average months homeless per year, aged 18-21, (d) Average months homeless per year, aged 21-23 Health: (a) Anxiety, (b) Depression, (c) Any mental illness, (c) Mental health treatment – outpatient, (d) Mental health treatment – inpatient, (e) Diagnosed substance abuse disorder – alcohol or drug, (f) Diagnosed substance abuse disorder – alcohol, (g) Diagnosed substance abuse disorder – drug, (h) Substance abuse treatment – outpatient, (i) Substance abuse treatment – inpatient, (j) Emergency department visits (aged 18-21), (k) Emergency department visits (aged 21-23) Economic or employment: (a) Any earnings, aged 18-21, (b) Any earnings, aged 21-23, (c) Wages, aged 18-21, (d) Wages, aged 21-23, (e) Any Supplemental Nutrition Assistance Program, aged 18-21, (f) Any Supplemental Nutrition Assistance Program, aged 21-23, (g) Average months SNAP per year, aged 18-21, (h) Average months SNAP per year, aged 21-23, (i) Any Temporary Assistance to Needy Families, aged 18-21, (j) Any Temporary Assistance to Needy Families, aged 21-23, (k) Average months TANF per year, aged 18-21, (l) Average months TANF per year, aged 21-23 Exposure to violence from others or conduct of violence toward others: (a) Convictions, aged 18-21, (b) Convictions, aged 21-23, (c) Child reported to child protective services, (d) Child in foster care	Varies, 3 or 5 years	Not applicable

Reference	Study design	Population	Policy, programme or intervention	Comparison condition	N	Outcomes	Follow up period	Setting
Nadon (2020)	Propensity score matching	Foster youth transitioning out of care in the United States	Independent Living Services – Budgeting and Financial Education Services	Not reported	Total: 2,374 Intervention: 1,187 Comparison: 1,187	Homelessness: (a) Homelessness Education: (a) Current education enrolment (high school, GED, vocational education or college), (b) Use of education-related financial aid – either scholarship or social security Economic or employment: (a) Current part-time employment	4 years	Not reported
Nadon (2020)	Propensity score matching	Foster youth transitioning out of care in the United States	Independent Living Services – Post-secondary education services	Not reported	Total: 2,378 Intervention: 1,189 Comparison: 1,189	Homelessness: (a) Homelessness Education: (a) Current education enrolment (high school, GED, vocational education or college), (b) Use of education-related financial aid – either scholarship or social security Economic or employment: (a) Current part-time employment	4 years	Not reported
Taylor et al. (2020)	Propensity score matching	Young people leaving care in target locations in New South Wales, Australia	Premier's Youth Initiative	Services as usual	Total: 580 Intervention: 290 Comparison: 290	Homelessness: (a) Use of homelessness services	1 year	Community setting

Location of studies

All of the studies were conducted in high-income settings. Fifteen (n=15) were conducted in the United States and one (n=1) was conducted in Australia – see Figure 3.2.

Figure 3.2 Countries in which included studies were conducted



3.2.1 Excluded studies

One hundred and fifty-one (n=151) studies were excluded during full-text screening. A majority (n=112) were excluded because their study design did not meet our methodological criteria. A further six studies either met or almost met the inclusion criteria but were ultimately excluded for a range of reasons. These studies included:

- Andersen (2019) – used a quasi-experimental design (difference-in-difference regression) to quantify the impact of extended care on earnings of foster care alumni. However, they did not publish the results of their modelling, which prevented us from extracting an effect size. Attempts to contact the author to obtain copies of these results were unsuccessful.
- Courtney, Okpych, & Park (2018) – used a quasi-experimental design (instrumental variable with historical control group) in their analysis of the impact of the California Fostering Connections Act which extended care to age 21. This was excluded because the control group was not contemporaneous with the intervention group.
- Geenen (2013) – undertook a randomised controlled trial of TAKE CHARGE/Better Futures. Two other trials of TAKE CHARGE/Better Futures were included in this review, however this one was excluded as the population receiving the services are not transitioning from care.
- Gjertson (2016) – undertook a secondary analysis of data from the three randomised controlled trials of independent living programmes listed in Table 3.2.
- Greeson & Thompson (2017) – undertook a randomised controlled trial of a mentoring intervention, however it only explored intervention acceptability and feasibility of implementing the intervention, outcomes that were not included in this review.

- Nesmith & Christophersen (2014) – compared outcomes for youth who received the 'CORE model' with a comparison site that did not. After careful review, we concluded that the methodology used did not meet the inclusion criteria for quasi-experimental methods.

A full list excluded studies and their reason for exclusion are provided with Table B.1 in Appendix B.

3.3 Risk of bias within studies

3.3.1 Risk of bias assessments

Risk of bias assessments were conducted separately for each paper that made up each study, therefore some variation was observed between outcomes. The review authors considered there to be a significant risk of bias present across all of the included studies. For randomised controlled trials, three quarters (n=6) were considered to have some concerns, with the remaining studies (n=2) considered at high risk – see Figure 3.3. For nonrandomised studies, a serious risk of bias was identified in two thirds (n=8) of included papers, with the remaining papers (n=4) identified as having moderate concerns – see Figure 3.4. A breakdown of results of each risk of bias tool, by domain and study is included in Appendix F.

Figure 3.3 RoB2 summary for included randomised studies

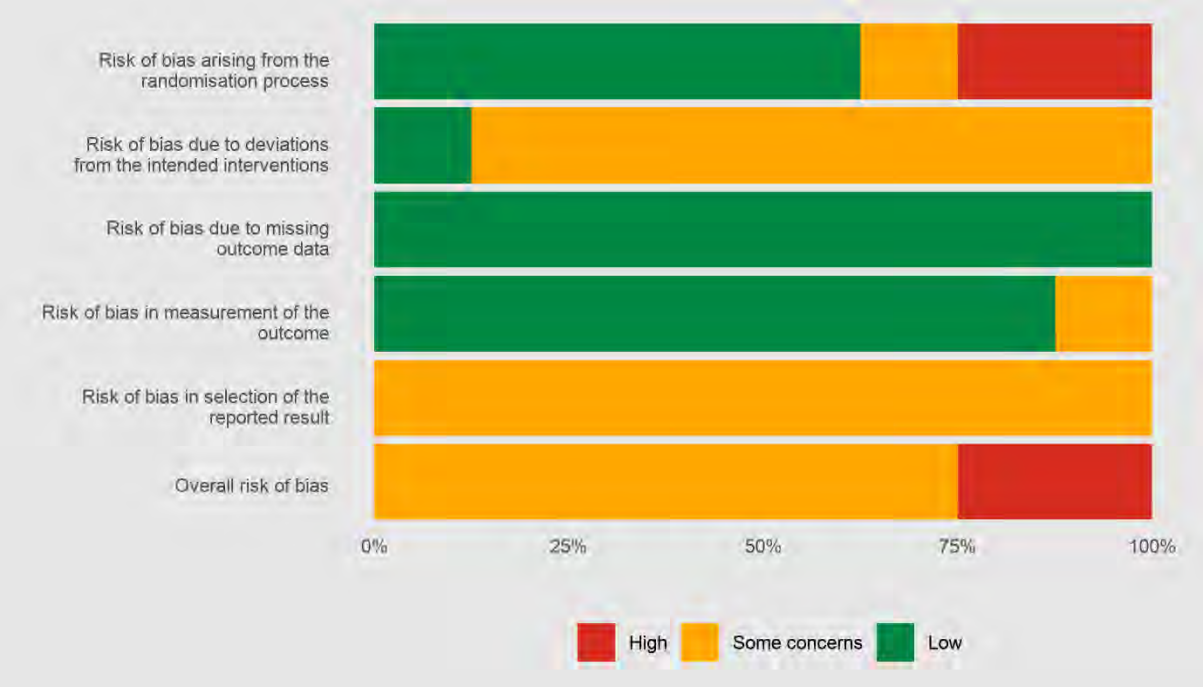
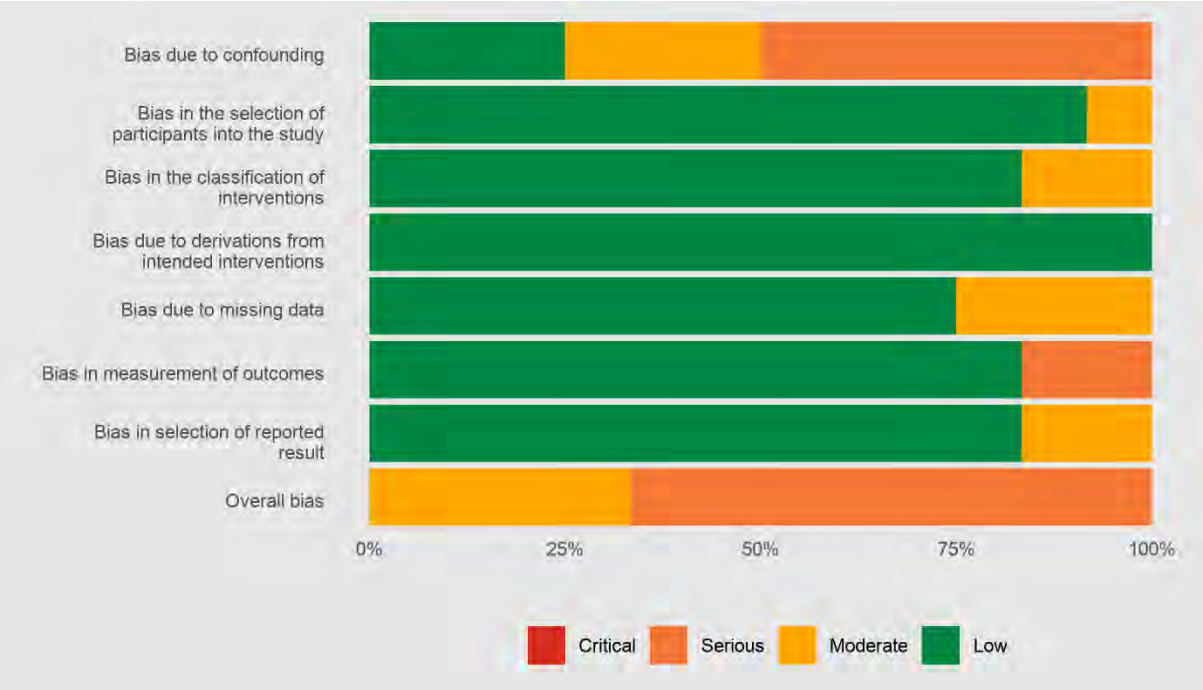


Figure 3.4 ROBINS-I summary for included non-randomised studies



3.3.2 Publication bias

The presence of any publication bias was not detected in any of the outcomes subject to meta-analysis either through:

- Visual inspection of symmetry in inspection in either funnel plots, or
- Significant results in Egger's test of the intercept.

The results of both analyses are included in Appendix G. However, caution should be taken in interpreting the results as the very small number of included studies in each meta-analysis mean that the results of these tests are unreliable.

3.4 Selection of outcomes for meta-analysis

Nineteen (n=19) outcomes were identified that could be synthesised quantitatively. The three-step identification process involved using a spreadsheet to: 1.Organise included studies into comparable programme types of which we identified six: a) coaching and peer support services, b) extended care, c) health information or coaching, d) independent living programmes, e) intensive support services, f) transitional housing; 2. Identify common outcome domains examined in studies of comparable programme types; and 3. Applying a series of criteria to determine which of the outcomes are suitable for meta-analysis, for which each outcome had to meet all criteria. These criteria were:

- **Study design** – are the studies randomised or non-randomised?
- **Intervention type** – are the policies, programmes or interventions investigated similar?
- **Population** – are the study populations similar?
- **Outcome similarity** – are they assessing the same construct?

- **Effect size** – can the effect be transformed into a common measure?
- **Time of measurement** – are the studies measuring the outcome at a comparable point in time?

Details of the results of this assessment are included in Table E.1 in Appendix E.

3.5 Homelessness outcomes

3.5.1 Included studies – homelessness

Transition support programmes

Nine (n=9) studies examined the impact of transition support programmes on homelessness:

- Four (n=4) of the studies examined independent living programmes (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Nadon, 2020; Zinn & Courtney, 2017),
- Two (n=2) focused on programmes that provided individualised intensive support services (Courtney, Valentine, et al., 2019), one of which provided some recipients with accommodation (D. Taylor et al., 2020), and
- A single study (n=1) examined a transitional housing programme (Lim et al., 2017).

Extended care policies

Two (n=2) studies examined the impact of extended care on homelessness (Dworsky, Napolitano, et al., 2013; Miller et al., 2020a).

3.5.2 Measurement of homelessness outcomes

Across the nine studies, four high-level homelessness outcomes were reported. The specific measures varied between studies and included:

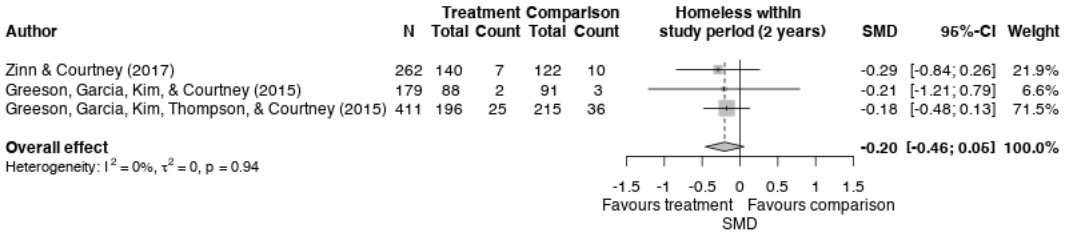
- *Homelessness* – seven (n=7) studies measured homelessness through either self-report, or use of homelessness services (Courtney, Valentine, et al., 2019; Dworsky, Napolitano, et al., 2013; Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Miller et al., 2020a; Nadon, 2020; D. Taylor et al., 2020; Zinn & Courtney, 2017),
- *Housing stability* – four (n=4) studies measured this in two ways. One study measured housing stability as well as housing instability (Lim et al., 2017). Three studies measured number of residential moves (Courtney, Valentine, et al., 2019; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017),
- *Housing stress* – one (n=1) study captured measured of an inability to pay rent and loss of housing due to inability to pay rent (Courtney, Valentine, et al., 2019), and
- *Couchsurfing* – one (n=1) study measured couchsurfing (Courtney, Valentine, et al., 2019).

3.5.3 Synthesis of results – homelessness

Meta-analysis of homelessness outcomes

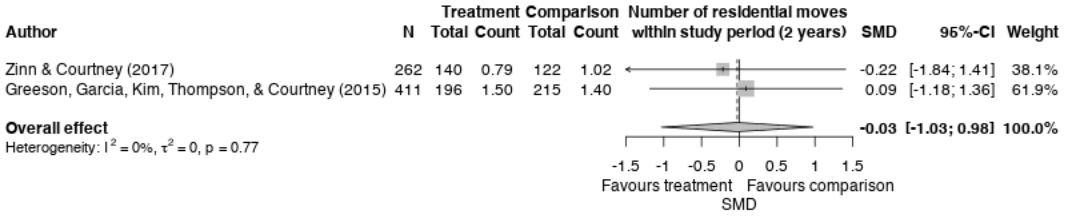
Three (n=3) studies assessing the impact of ILP on homelessness within two years were combined in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.94$). As can be seen in Figure 3.5, all three studies had small effect sizes favouring ILP, but their confidence intervals span the line of no effect (0 on the x-axis) indicating they are not statistically significant. Taken together, the overall SMD ($g = 0.2$, 95% CI: [-0.46, 0.06], $p > 0.05$) shows a small, non-significant effect favouring ILP. That is, these data suggest that ILP does not decrease homelessness as measured in these studies.

Figure 3.5 Forest plot for ILP: homelessness during two-year study period



Two (n=2) studies that examined the impact of ILP on the number of residential moves were combined in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.77$). No difference was observed between the two studies individually or when synthesised ($g = -0.03$, 95% CI: [-1.03, 0.98], $p > 0.05$) – see Figure 3.6.

Figure 3.6 Forest plot for ILP: number of residential moves during two-year study period



GRADE assessment of homelessness outcomes

An assessment of the certainty of findings of the included studies in the meta-analyses of homelessness outcomes using the GRADE methodology is summarised in Table 3.3. As indicated in the table below, we have a very low level of confidence in the included evidence for independent living programmes due to issues identified with risk of bias and imprecision.

Table 3.3 GRADE quality assessment for homelessness outcomes: Independent living programmes

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Homelessness	The number of young people who became homeless was on average -0.20 SDs 95% CI: [-0.46, 0.06] lower in the intervention group relative to the comparison group		–	852 (3), 2 years	⊕ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium (SD = 0.5), and large (SD = 0.8)
Number of residential moves	The number of residential moves was on average -0.03 SDs 95%CI: [-1.03, 0.98] lower in the intervention group relative to the comparison group		–	637 (2), 2 years	⊕ Very low[2]	

Notes:
[1.] Downgraded two levels for risk of bias and one level for imprecision
[2.] Downgraded two levels for risk of bias and one level for imprecision
Additional detail is available in Table F.3 in Appendix F.

Narrative summary of homelessness outcomes

For the six studies not included in the meta-analysis, the following results were observed[4]:

- *Homelessness* – an RCT which tested the YVLifeSet programme reported a very small reduction in homelessness (d = -0.14, 95% CI: [not reported], $p < 0.05$) during the 1-year follow up period (Courtney, Valentine, et al., 2019). A similar sized effect (d = -0.14, 95% CI: [not reported], $p < 0.05$) was observed by age 21 in a quasi-experimental analysis of ILPs that fell into the category of Budgeting and Financial Education Services (Nadon, 2020). A QED analysis of extended care in Washington State reported a large and statistically significant reduction in homelessness between the ages of 18-21 (d = -0.80, 95% CI: [-0.89, -0.72], $p < 0.05$) and a smaller, but also statistically significant, reduction between the ages of 21-23 (d = -0.43, 95% CI: [-0.51, -0.34], $p < 0.05$) (Miller et al., 2020a). Finally, another QED analysis of extended care in Illinois reported a large, but not statistically significant, increase in

[4] See Table D.1 in Appendix D for complete detail of results.

homelessness amongst those young people who had left care, relative to those who had remained in extended care between ages of 19-21 (d = 0.84, 95% CI: [0.39, 2.16], p > 0.05). However this effect decreased over time between the ages of 21-23 (d = 0.35, 95% CI: [0.23, 0.74], p > 0.05) and 23-24 (d = 0.43, 95% CI: [0.26, 0.97], p > 0.05) (Dworsky, Napolitano, et al., 2013).

- *Housing stability and instability* – the NYNY III transitional housing programme reported a very large statistically significant increase in housing stability (d = 1.84, 95% CI: [1.40, 1.53], p < 0.001) during the two-year study period, however it also reported a large increase in housing instability (d = 0.96, 95% CI: [0.64, 1.27], p < 0.001) for participants in the same time frame (Lim et al., 2017).
- *Housing stress* – the YVLifeSet RCT reported a very small reduction in the number of young people who were unable to pay rent (d = -0.09, 95% CI: [not reported], p > 0.05) during the 12-month study period and a medium sized reduction in those who lost their housing due to an inability to pay rent (d =-0.7, 95% CI: [not reported], p > 0.05) in the same period, however neither result was statistically significant (Courtney, Valentine, et al., 2019).
- *Couchsurfing* – the YVLifeSet RCT reported a statistically significant, if very small (d = -0.17, 95% CI: [not reported], p < 0.05) effect on couchsurfing at any time during the 12-month period (Courtney, Valentine, et al., 2019).

Summary – homelessness

With the exception of one study, most of the reported results indicate very small effects. Both meta-analyses and three of the results reported in the narrative summary were not statistically significant. Of those that were statistically significant, moderate concerns surround the risk of bias in the reduction observed in homelessness outcomes for those aged 18-21 and 21-23 in the study of extended care in Washington State. Concerns about risk of bias also exist for other results that indicate very small reductions in homelessness and couchsurfing in YVLifeSet and serious concerns surround the very small effect on homelessness seen for ILPs – budgeting and financial education services.

3.6 Health outcomes

3.6.1 Included studies – health

Transition support programmes

Three (n=3) studies examined the impact of transition support programmes on health outcomes:

- an individualised intensive support service (Courtney, Valentine, et al., 2019),
- a coaching and peer support programme (Geenen et al., 2015), and
- a health education intervention ICare2CHECK (Beal et al., 2020).

Extended care policies

A single (n=1) study explored the impact of extended care on health outcomes (Miller et al., 2020a).

3.6.2 Measurement of health outcomes

The four studies reported health outcomes that fell into four high-level groups:

- *Health care utilisation* – one (n=1) study used electronic health records to measure this using four indicators: total use of services, mandated health visits (undertaken as part of leaving care), scheduled visits and unexpected visits were assessed (Beal et al., 2020). Another study (n=2) used administrative data from Medicaid to track five measures encompassing both inpatient and outpatient mental health treatment, inpatient and outpatient substance abuse treatment and emergency department visits (Miller et al., 2020a).
- *Self-reported mental health* – two (n=2) studies included two measures for mental health. One study measured depression, anxiety and stress (DASS-21) (Courtney, Valentine, et al., 2019), another examined youth perceptions of efficacy in dealing with their mental health condition using the Youth efficacy/empowerment scale – mental health (YES-MH) (Geenen et al., 2015).
- *Diagnosed mental health conditions* – one (n=1) study used administrative data from Medicaid to identify participants who were diagnosed with anxiety, depression or any mental illness (Miller et al., 2020a).
- *Diagnosed substance abuse conditions* – one (n=1) study used administrative data from Medicaid to identify participants who were diagnosed with either: an alcohol or drug substance abuse disorder, an alcohol substance abuse disorder or a drug substance abuse disorder (Miller et al., 2020a).

3.6.3 Synthesis of results – health

We were unable to quantitatively synthesise any of the health outcomes due to differences in programme type and outcome measurement, therefore the results from the four included studies are summarised narratively by outcome[5]:

- *Health care utilisation* – a QED analysis of the ICare2Check intervention reported large, but not statistically significant effects on three health care use outcomes: total use of services (d = 1.34, 95% CI [0.55, 2.51], $p > 0.05$), mandated health visits (d = 5.1, 95% CI [-2.47, 26.73], $p > 0.05$) and scheduled visits (d = 3.37, 95% CI [1.00, 7.78], $p > 0.05$). A small statistically significant reduction (d = 0.17, 95% CI [-0.26, 1.35], $p < 0.05$) in unexpected health care visits was observed during the 12-month study period (Beal et al., 2020). Another QED analysis of extended care in Washington State reported a range of results, all of which were statistically significant. A medium sized reduction was observed in inpatient substance abuse treatment by age 23 (d = -0.51, 95% CI: [-0.75, -0.28], $p < 0.01$) and small reductions were seen in inpatient mental health treatment by age 23 (d = -0.29, 95% CI: [-0.50, -0.10], $p < 0.01$), outpatient substance abuse treatment by age 23 (d = -0.33, 95% CI: [-0.46, -0.19], $p < 0.01$) and emergency department visits between the ages of 18-21 (d = -0.22, 95% CI: [-0.28, -0.16], $p < 0.01$). Finally, very small reductions were observed in mental health outpatient treatment until age 23 (d = -0.05, 95% CI: [-0.12, -0.03], $p < 0.01$) and emergency department visits when

[5] A detailed summary of the quantitative findings from these four studies is provided in Table D.2 in Appendix D.

young people are aged between 21-23 (d = -0.18, 95% CI: [-0.25, -0.12], p < 0.01) (Miller et al., 2020a).

- *Self-reported mental health* – the RCT of the Better Futures intervention reported a large (d = 1.5, CI [not reported], p < 0.05), statistically significant effect on a young person's mental health empowerment (as measured by the YES-MH) (Geenen et al., 2015). The YVLifeSet RCT reported a statistically significant reduction in depression and anxiety symptoms (as measured by the DASS-21), however the effect was very small (d = -0.13, CI [not reported], p < 0.05) (Courtney, Valentine, et al., 2019).
- *Diagnosed mental health conditions* – the QED analysis of extended care in Washington State identified no statistically significant differences between the prevalence of anxiety (d = 0.02, 95% CI: [-0.05, -0.10], p > 0.05), depression (d = -0.02, 95% CI: [-0.10, 0.05], p > 0.05), or any mental illness (d = 0.02, 95% CI: [-0.05, 0.10], p > 0.05), by age 23 between those who received extended care and those who did not (Miller et al., 2020a).
- *Diagnosed substance abuse conditions* – the QED analysis of extended care in Washington State also reported one medium and two small statistically significant reductions in diagnosed drug-related substance abuse disorder by age 23 (d = -0.67, 95% CI: [-0.76, -0.57], p < 0.01), diagnosed drug or alcohol-related substance abuse disorder by age 23 (d = -0.36, 95% CI: [-0.45, -0.27], p < 0.01) and diagnosed alcohol-related substance abuse disorder by age 23 (d = -0.26, 95% CI: [-0.37, -0.14], p < 0.01) (Miller et al., 2020a).

Summary – health

For transitions support programmes, serious concerns with the risk of bias identified with the ICare2Check study undermine the confidence we have in the statistically significant, but small reduction in unexpected health care visits. We have some concerns with the risk of bias and clinical meaningfulness of the large improvement in mental health empowerment reported in the Better Futures trial. Despite concerns with the risk of bias in the small improvement in depression and anxiety symptoms observed in those who received YVLifeSet, however it could be considered clinically meaningful.

Moderate concerns with the risk of bias undermine our confidence in the statistically significant reductions reported in health care utilisation (emergency department presentations, inpatient and outpatient mental health treatment and inpatient and outpatient substance abuse treatment) and diagnosed substance abuse conditions (alcohol and/or drug substance abuse disorders) amongst those who received extended care in Washington State.

3.7 Education outcomes

3.7.1 Included studies – education

Transition support programmes

Ten (n=10) studies examined the impact of transition support programmes on education outcomes:

- Two RCTs explore the impact of a similar coaching and peer support programme Better Futures/TAKE CHARGE (Geenen et al., 2015; L. E. Powers et al., 2012),

- One reports on YVLifeSet, an individualised intensive support service (Courtney, Valentine, et al., 2019),
- Three analyses explore the aggregate impact of independent living programmes on education outcomes using administrative data and quasi-experimental methods (Y. Kim et al., 2019; Nadon, 2020).
- Four randomised controlled trials assess the impact of individual independent living programmes. Three were conducted in California (Courtney et al., 2008a; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017) and one in Massachusetts (Greeson, Garcia, Kim, & Courtney, 2015).

Extended care policies

A single (n=1) study explored the impact of extended care on education outcomes in the state of Illinois (Courtney & Hook, 2017).

3.7.2 Measurement of education outcomes

The ten studies assessed outcomes that fell into five high-level education-related domains. The measures varied between studies and included:

- *Measures of high-school or equivalent completion* – nine (n=9) studies measured high-school completion/graduation or General Education Development (GED) attainment. Two (n=2) studies examined high-school graduation in combination with another outcome – such as GED attainment and college enrolment separately – whilst the remaining seven considered it alone (Courtney & Hook, 2017; Courtney, Valentine, et al., 2019; Courtney et al., 2008a; Geenen et al., 2015; Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Y. Kim et al., 2019; L. E. Powers et al., 2012; Zinn & Courtney, 2017).
- *Vocational education participation* – four (n=4) studies measured this in three ways. One study used a specific measure of vocational education participation (Courtney, Valentine, et al., 2019), two studies included a measure of post-secondary education which could include either vocation or tertiary education (Geenen et al., 2015; Y. Kim et al., 2019) and one study measured current education enrolment, which included vocational education (Nadon, 2020).
- *University (College) enrolment* – nine (n=9) studies measured this in six different ways. Two studies included a measure of post-secondary education which could include either college enrolment (Geenen et al., 2015; Y. Kim et al., 2019). One study measured current education enrolment, which included college (Nadon, 2020). One study used receipt of education-related financial aid as a proxy measure for post-secondary enrolment (Nadon, 2020). Four studies included a measure of enrolment without specifying the type of post-secondary education (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; L. E. Powers et al., 2012; Zinn & Courtney, 2017). One study distinguished between enrolment at either a two-year (Community College/Associate's Degree) or four-year (University/Bachelor's Degree) institution (Courtney, Valentine, et al., 2019). One study measured enrolment by age 21 and also by age 29/30 (Courtney & Hook, 2017).
- *University (College) persistence* – two (n=2) studies measured persistence or completion of one year of college (Courtney & Hook, 2017; Greeson, Garcia, Kim, & Courtney, 2015).

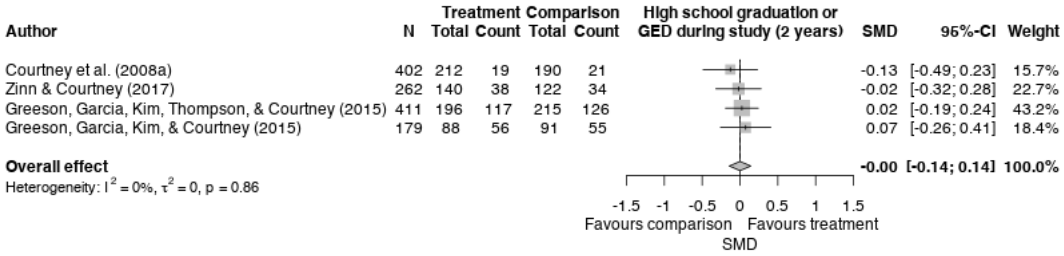
- *University (College) graduation* – one (n=1) study assessed graduation by age 29/30 (Courtney & Hook, 2017).

3.7.3 Synthesis of results – education

Meta-analyses of education outcomes

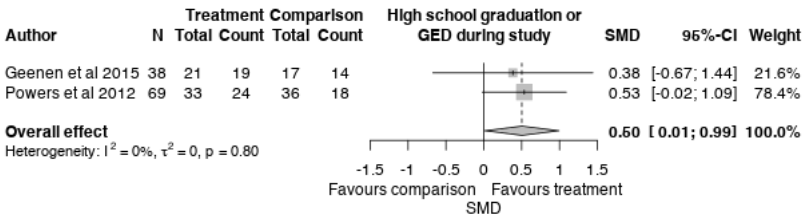
Data from four (n=4) studies assessing the impact of ILP on high school graduation or GED within the two-year study period were synthesised in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.86$). As can be seen in Figure 3.7, all four studies had very small effects, two of which favoured ILP and two of which favoured the comparison. However, all of their confidence intervals span the line of no effect (0 on the x-axis) indicating that they are not statistically significant. The overall SMD (g = -0.00, 95% CI: [-0.14, 0.14], $p > 0.05$) shows no difference between the ILP and the comparison, suggesting that ILP have no effect on high school completion or GED attainment.

Figure 3.7 Forest plot for ILP: high school graduation or GED during two-year study period



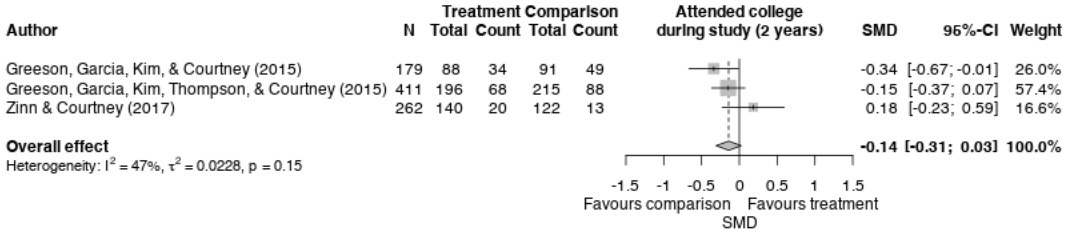
Two (n=2) studies that examined the impact of coaching and peer support on high school graduation or GED attainment – during the 12-month study period – were combined in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.45$). As can be seen in Figure 3.8, both individual studies and the pooled SMD (g = 0.50, 95% CI: [0.01, 0.99], $p < 0.05$) favour the treatment. The confidence intervals for the individual studies cross the line of no effect (indicating that the results are not statistically significant), while the confidence interval for the pooled result does not cross the line, it comes extremely close to doing so. Taken together, these results suggest that the intervention does not have an impact on high school graduation.

Figure 3.8 Forest plot for coaching and peer support: high school graduation or GED during 12-month study period



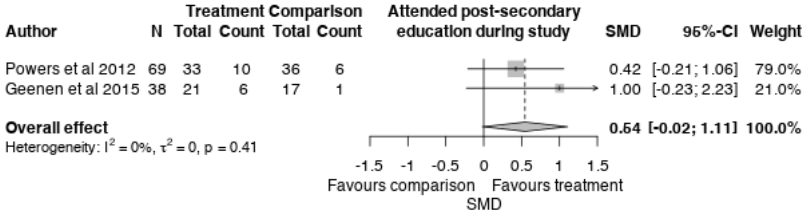
Data from three studies that examined the impact of ILP on college attendance during the two-year study period were combined in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.15$). As can be seen in Figure 3.9, the pooled effect (g = -0.14, 95% CI: [-0.31, 0.03], $p > 0.05$) favours the comparison, however the 95 per cent confidence intervals for both individual studies and the pooled effect spans the line of no effect, indicating the result is not statistically significant. Taken together this data suggests the ILP has no effect on college attendance.

Figure 3.9 Forest plot for ILP: college attendance during two-year study period



Data from two studies that examined the impact of coaching and peer support on high school graduation or GED attainment – during the 12-month study period – were combined in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.42$). As can be seen in Figure 3.10 both individual studies and the pooled SMD ($g = 0.64$, 95% CI: [-0.02, 1.11], $p > 0.05$) favour the treatment, however the confidence intervals for the pooled SMD cross the line of no effect, indicating that the results are not statistically significant. As a result, these results suggest that the intervention does not have an effect on attending post-secondary education.

Figure 3.10 Forest plot for coaching and peer support: post-secondary education during 12-month study period



GRADE assessment of education outcomes

An assessment of the certainty we have in the included evidence from meta-analyses of education outcomes using the GRADE methodology is summarised in Table 3.4 and

Table 3.5. As indicated in the tables below, we have a very low level of confidence in the included evidence for both independent living programmes and coaching and peer support programmes due to issues identified with risk of bias and imprecision.

Table 3.4 GRADE quality assessment for education outcomes: Independent living programmes

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
High school graduation	The proportion of young people who graduated from high school was on average -0.00 SDs 95% CI: [-0.14, 0.14] higher in the intervention group relative to the comparison group	–		1,254 (4), 2 years	⊕ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium (SD = 0.5), and large (SD = 0.8)
College attendance	The proportion of young people who attended college was on average -0.14 SDs 95%CI: [-0.31, 0.03] lower in the intervention group relative to the comparison group	–		852 (3), 2 years	⊕ Very low[2]	

Notes:
[1.] Downgraded two levels for risk of bias and one level for imprecision
[2.] Downgraded two levels for risk of bias and one level for imprecision
Additional detail is available in Table F.3 in Appendix F.

Table 3.5 GRADE quality assessment for education outcomes: coaching and peer support programmes

Outcomes	Anticipated absolute effects*		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
High school graduation	The proportion of young people who graduated from high school was on average -0.41 SDs 95% CI: [-0.04, 0.86] higher in the intervention group relative to the comparison group	–		107 (2), 1 year	⊕ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
						(SD = 0.5), and large (SD = 0.8)
Post-secondary education	The proportion of young people who attended post-secondary education was on average 0.54 SDs 95%CI: [-0.02, 1.10] lower in the intervention group relative to the comparison group	–		107 (2), 1 year	⊕ Very low[2]	

Notes:
[1.] Downgraded one level for risk of bias and two levels for imprecision
[2.] Downgraded one level for risk of bias and two levels for imprecision
Additional detail is available in Table F.4 in Appendix F.

Narrative summary of education outcomes

For the six studies not included in the meta-analysis, the following results were observed[6]:

- *Measures of high-school or equivalent completion* – An RCT of the YVLifeSet programme found a very small but statistically significant effect on high school completion during the 12-month study period (d = 0.06, 95% CI: [not reported], $p < 0.05$) and a medium sized (d = -0.3, 95% CI: [not reported], $p > 0.05$), but not statistically significant, reduction in GED attainment during the same period (Courtney & Hook, 2017). An analysis of the impact of extended care in Illinois found a small, statistically significant effect on high school completion or a year or more of college (d = 0.19, 95% CI: [not reported], $p < 0.05$). Another quasi-experimental analysis of ILPs reported a non-statistically significant effect on high-school completion by age 21 (d = 0.05, 95% CI: [not reported], $p > 0.05$) (Y. Kim et al., 2019).
- *Participation in vocational or non-defined post-secondary education* – participation in vocation education during the 12-month study period was examined in the YVLifeSet RCT, finding a non-statistically significant, very small positive effect (d = 0.1, 95% CI: [not reported], $p > 0.05$) (Courtney, Valentine, et al., 2019). A quasi-experimental analysis of Post-Secondary Education Services, reported statistically significant impacts on two outcomes: current education enrolment (which encompasses high school, GED, vocational school or college) by age 23 (d = 0.18, 95% CI: [0.17, 0.20], $p < 0.05$) and use of financial aid for education by age 23 (d = 0.20, 95% CI: [0.18, 0.21], $p < 0.05$) (Nadon, 2020). Another analysis by Nadon (2020) of Budgeting and Financial Education Services reported a very small but statistically significant

[6] See Table D.3 in Appendix D for complete detail of results.

positive effect on use of financial aid for education by age 23 (d = 0.18, 95% CI: [0.17, 0.19], p < 0.05) and current education enrolment by age 23 (d = 0.16, 95% CI: [0.15, 0.18], p > 0.05). Another quasi-experimental analysis reports a very small non-statistically significant effect on participation in post-secondary education by age 23 (d = 0.04, 95% CI: [not reported], p > 0.05) (Y. Kim et al., 2019).

- *University (College) enrolment* – A quasi-experimental analysis of Illinois' extended care policy found a very small positive effect (d = 0.19, 95% CI: [not reported], p < 0.05) on college enrolment by age 21. The same analysis found a very small non-statistically significant effect on college enrolment by age 29/30 (d = 0.17, 95% CI: [not reported], p > 0.05) (Courtney & Hook, 2017). The YVLifeSet RCT reported non-statistically significant impacts on enrolment in both two- (d = 0.05, 95% CI: [not reported], p > 0.05) and four-year (d = 0.20, 95% CI: [not reported], p > 0.05) degree programmes (Courtney, Valentine, et al., 2019).
- *University (College) persistence* – persistence or completion of one year of college was assessed by two studies. An RCT of an ILP in Massachusetts reported a small statistically significant effect on ever persisting with college during the two-year study period (d = 0.39, 95% CI: [not reported], p < 0.05) (Greeson, Garcia, Kim, & Courtney, 2015). A quasi-experimental analysis of Illinois' extended care policy reported a very small non-statistically significant effect on persisting with college for two semesters by age 29/30 (d = 0.18, 95% CI: [not reported], p > 0.05) (Courtney & Hook, 2017).
- *University (College) graduation* – a single quasi-experimental design study examined the impact of extended care in Illinois on graduation from a two- or four-year degree by age 29/30, it found a non-significant positive effect (d = 0.16, 95% CI: [not reported], p > 0.05) (Courtney & Hook, 2017).

Summary – education

For transitions support programmes, most of the reported results for education outcomes were not statistically significant, including three of the four meta-analyses. The single meta-analysis that reported a statistically significant result has an extremely wide confidence interval that almost touches the line of no effect. All of the outcomes assessed in the meta-analyses were assessed by GRADE to have very low confidence due to risk of bias and imprecision. Where the results from the narrative summary were statistically significant, the effect sizes were also small or very small. The very small effects observed in current education enrolment in both Budgeting and Financial Education Services ILPs and Post-Secondary Education Services ILPs are undermined by the serious concerns surrounding their risk of bias. Concerns of risk of bias also surround the small effect of the Massachusetts Outreach ILP on two-semester college persistence and the very small effect of YVLifeSet on high school completion. A statistically significant effect was observed in the single study that examined the impact of extended care in Illinois on high-school graduation.

3.8 Economic or employment outcomes

3.8.1 Included studies – economic or employment

Transition support programmes

Nine (n=9) studies examined the impact of transition support programmes on employment outcomes:

- Two (n=2) studies explored the impact of the same coaching and peer support programme Better Futures/TAKE CHARGE (Geenen et al., 2015; L. E. Powers et al., 2012),
- One (n=1) study evaluates the impact of YVLifeSet, an individualised intensive support service – that was delivered in Tennessee (Courtney, Valentine, et al., 2019),
- Three (n=3) studies explore the aggregate impact of independent living programmes in the United States on employment outcomes using administrative data and quasi-experimental methods (Y. Kim et al., 2019; Nadon, 2020),
- Three (n=3) studies report the results of RCTs of ILPs in the United States, two in California and one in Massachusetts (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017).

Extended care policies

One (n=1) study assessed the impact of extended care in Washington State using QED methods (Miller et al., 2020a).

3.8.2 Measurement of economic or employment outcomes

The nine studies reported three high-level groupings of economic or employment-related outcomes:

- *Employment status* – seven (n=7) studies measured employment status in three different ways. Three (n=3) assessed whether a youth was employed currently (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017). One (n=1) study included measures of ever employed, part-time employment and full-time employment (Courtney, Valentine, et al., 2019). Two (n=2) studies measured employment at follow-up (Geenen et al., 2015; L. E. Powers et al., 2012). One study measured full-time employment at age 21 (Y. Kim et al., 2019) and two studies assessed current part-time employment (Nadon, 2020).
- *Earnings* – five (n=5) studies measured a young person's earnings in three different ways. One (n=1) study measured average earnings in the experiment and comparison group (Courtney, Valentine, et al., 2019). Three (n=3) studies measured earnings in the prior 12-month period and a measure of net worth, which provides some indication of an individual's financial situation (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017). One (n=1) study measured if an individual had any earnings and the amount they earned between the ages of 18-21 and 21-23 (Miller et al., 2020a).
- *Receipt of financial assistance* – four (n=4) studies included a measure of the receipt of any financial assistance. Three (n=3) studies included a measure which combined use of either formal (i.e. public assistance) or informal (i.e. loans from friends) channels at any time during the two-year study (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017). Another study included measures of any use and average use (in months) per year of two specific public assistance programmes – Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance to Needy Families (TANF) – at two time points, age 18-21 and 21-23 (Miller et al., 2020a).

3.8.3 Synthesis of results – economic or employment

Quantitative synthesis of economic or employment outcomes

Two (n=2) studies assessing the impact of coaching and peer support interventions on employment at 12-months follow-up were synthesised in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.35$). As can be seen in Figure 3.11, both studies had positive effects which favoured the treatment group. However, their confidence intervals span the line of no effect (0 on the x-axis) indicating that they are not statistically significant. The overall SMD shows a small, non-statistically significant effect ($g = 0.24$, 95% CI: [-0.16, 0.64], $p > 0.05$) favouring the treatment. These data suggest that coaching and support programmes do not improve employment, as measured in these studies.

Figure 3.11 Forest plot for coaching and peer support: employment at greater than 12 months follow-up

Three (n=3) studies assessing the impact of ILPs on currently employed ($I^2 = 0$, $p = 0.78$; Figure 3.12), net worth ($I^2 = 0$, $p = 0.69$; Figure 3.13), earnings in last 12 months ($I^2 = 0$, $p = 0.68$; Figure 3.14) and receipt of any financial assistance ($I^2 = 0$, $p = 0.15$; Figure 3.15) were synthesised in four fixed effect meta-analyses. Confidence intervals for both individual study results and the pooled SMD for each of the four meta-analyses – current employment ($g = -0.06$, 95% CI: [-0.21, 0.09], $p > 0.05$), net worth ($g = 0.06$, 95% CI: [-0.08, 0.19], $p > 0.05$), earnings in last 12 months ($g = -0.07$, 95% CI: [-0.21, 0.06], $p > 0.05$) and receipt of any financial assistance ($g = -0.10$, 95% CI: [-0.21, 0.06], $p > 0.05$) – all of which span the line of no effect, indicate the results are not statistically significant. These results suggest that ILPs have no impact on any of these employment-related outcomes.

Figure 3.12 Forest plot for ILP: currently employed (during two-year study)

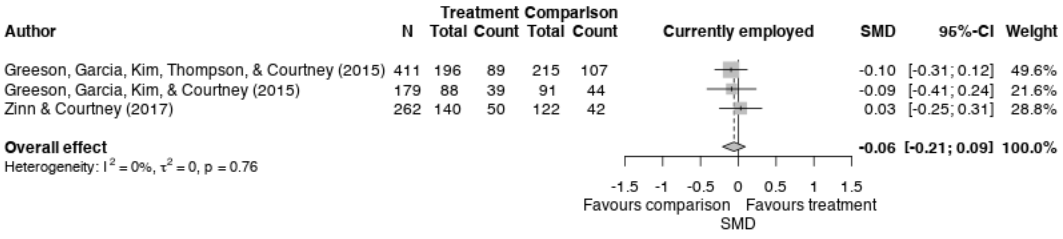


Figure 3.13 Forest plot for ILP: net worth at end of two-year study

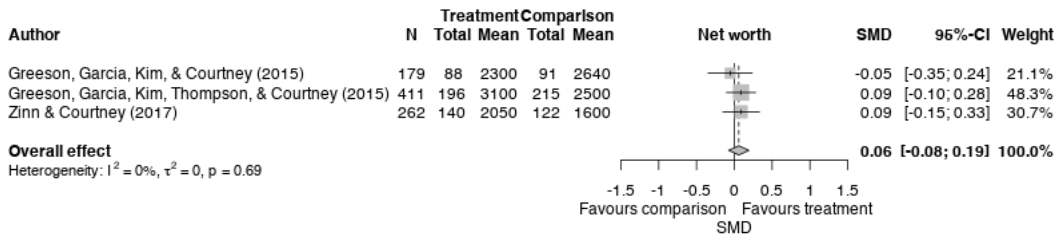


Figure 3.14 Forest plot for ILP: earnings 12 months prior to the end of two-year study

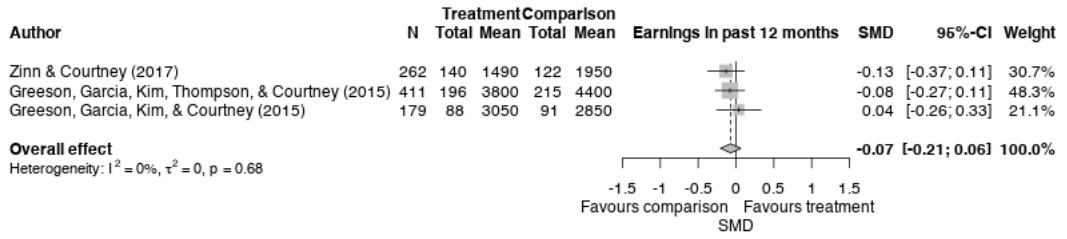
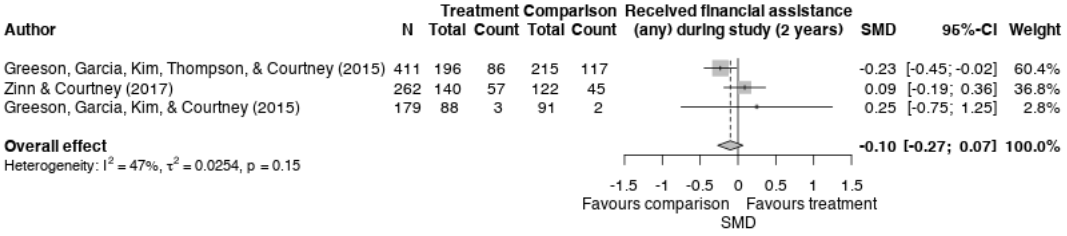


Figure 3.15 Forest plot for ILP: received any financial assistance during two-year study



GRADE assessment of economic or employment outcomes

An assessment of the certainty we have in the included evidence from meta-analyses of economic or employment outcomes using the GRADE methodology is summarised in Table 3.6 and Table 3.7. As indicated in the tables below, we have a very low level of confidence in the included evidence for both independent living programmes and coaching and peer support programmes due to issues identified with risk of bias and imprecision.

Table 3.6 GRADE quality assessment for economic or employment outcomes: Independent living programmes

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Currently employed (at end of study)	The proportion of young people who were currently employed at the time of their last interview was on average -0.06 SDs 95% CI: [-0.21, 0.09] lower in the intervention group relative to the comparison group	–		852 (3), 2 years	⨁ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium (SD = 0.5), and large (SD = 0.8)

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Net worth (at end of study)	The net worth of young people who participated in the intervention was on average 0.06 SDs 95% CI: [-0.08, 0.19] higher in the intervention group relative to the comparison group		–	852 (3), 2 years	⊕ Very low[2]	
Earnings in 12 months prior to end of study	The earnings of young people who participated in the intervention was on average -0.07 SDs 95% CI: [-0.21, 0.06] lower in the intervention group relative to the comparison group		–	852 (3), 2 years	⊕ Very low[3]	
Receipt of any financial assistance during study	The proportion of young people who received any financial assistance was on average -0.10 SDs 95% CI: [-0.27, 0.07] lower in the intervention group relative to the comparison group		–	852 (3), 2 years	⊕ Very low[4]	

Notes:
[1.] Downgraded two levels for risk of bias and one level for imprecision
[2.] Downgraded two levels for risk of bias and one level for imprecision
[3.] Downgraded two levels for risk of bias and one level for imprecision
[4.] Downgraded two levels for risk of bias and one level for imprecision
Additional detail is available in Table F.3 in Appendix F.

Table 3.7 GRADE quality assessment for economic or employment outcomes: coaching and peer support programmes

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Employed at greater than 12-months follow up	The proportion of young people who were employed at 12-months follow up was on average 0.24 SDs 95% CI: [-0.16, 0.64] higher in the intervention group relative to the comparison group	–		136 (2), 1 year	⊕ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium (SD = 0.5), and large (SD = 0.8)

Notes:
[1] Downgraded one level for risk of bias and two levels for imprecision
Additional detail is available in Table F.4 in Appendix F.

Narrative summary of economic or employment outcomes

For the three studies not included in the meta-analysis, the following results were observed[7]:

- *Employment status* – The RCT of YVLifeSet reported very small non-statistically significant effects on ever employed (d = 0.1, 95% CI: [not reported], $p < 0.05$), part-time employment (d = 0.12, 95% CI: [not reported], $p > 0.05$) and full-time employment (d = 0.01, 95% CI: [not reported], $p > 0.05$) (Courtney, Valentine, et al., 2019). Kim's (2019) analysis of ILP found a very small (d = 0.05, 95% CI: [not reported], $p < 0.05$) increase in part time employment by age 21. Nadon's (2020) twin quasi-experimental analyses of ILPs reported positive effects on current part-time employment for both Budgeting and Financial Education Services (d = 0.18, 95% CI: [0.16, 0.19], $p > 0.05$) and Post-secondary education services (d = 0.18, 95% CI: [0.17, 0.19], $p < 0.05$), however only the latter was statistically significant.
- *Earnings* – the YVLifeSet RCT reports a very small positive effect (d = 0.12, 95% CI: [not reported], $p < 0.05$) on earnings (Courtney, Valentine, et al., 2019). The analysis of extended care in Washington State reported small statistically significant effects on receipt of any earnings for young people aged 18-21 (d = 0.28, 95% CI: [0.20, 0.35], $p < 0.05$) and 21-23 (d = 0.37, 95% CI: [0.28, 0.45], $p < 0.05$), it also found small or very small positive impacts on wages

[7] See Table D.4 in Appendix D for complete detail of results.

earned for both age groups: 18-21 (d = 0.19, 95% CI: [0.13, 0.25], p < 0.05) and 21-23 (d = 0.30, 95% CI: [0.23, 0.37], p < 0.05) (Miller et al., 2020a).

- *Receipt of public assistance* – the analysis of extended care in Washington State found that youth in extended care were less likely to use SNAP at any time between the ages of 18-21 (d = -0.61, 95% CI: [-0.69, -0.54], p < 0.05) and 21-23 (d = -0.24, 95% CI: [-0.32, -0.16], p < 0.05), they also spent less time in SNAP at both age groups: 18-21 (d = -0.53, 95% CI: [-0.59,-0.46], p < 0.05) and 21-23 (d = -0.19, 95% CI: [-0.26, -0.12], p < 0.05). The analysis also reported lower use of TANF by young people who were in extended care between the ages of 18-21 (d = -0.55, 95% CI: [-0.65, -0.45], p < 0.05) and 21-23 (d = -0.51, 95% CI: [-0.65, -0.38], p < 0.05). There was no difference in time in TANF for 18-21-year-olds (d = -0.00, 95% CI: [-0.06, 0.06], p < 0.05), however there was a small reduction amongst those when aged 21-23 (d = -0.23, 95% CI: [-0.30, -0.17], p < 0.05) (Miller et al., 2020a).

Summary – economic or employment

For transitions support programmes, none of the four outcomes that were included in a meta-analysis for independent living programmes were statistically significant. The single outcome that was meta-analysed for coaching and peer support services, employment at 12 months follow up, was also not statistically significant. All five outcomes were judged to have a very low certainty of evidence. Of those results included in the narrative summary that were statistically significant, all were very small or small. Some concerns of risk of bias undermine our confidence in the findings that YVLifeSet is responsible for a very small increase in part-time employment by age 21 and in average earnings. For ILPs with post-secondary employment services a very small increase in current part-time employment at age 23 was observed, however we have serious concerns surrounding the potential for risk of bias.

For extended care policies, we have moderate concerns surrounding the risk of bias present in the study on extended care in Washington State. However, the findings from this study suggest consistent small and medium beneficial effects on wages and reduction in the need for two types of public assistance.

3.9 Exposure to violence from others or conduct of violence toward others outcomes

3.9.1 Included studies – Exposure to violence from others or conduct of violence toward others

Transition support programmes

Four studies examined the impact of transition support programmes on exposure to violence from others or conduct of violence toward others (exposure to violence) outcomes:

- One (n=1) study of an individualised intensive support service – YVLifeSet – that was delivered in Tennessee (Courtney, Valentine, et al., 2019),
- Three (n=3) RCTs of ILPs in the United States, two in California and one in Massachusetts (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017).

Extended care policies

One (n=1) study reported on the impact of extended care policies in Illinois (Courtney & Hook, 2017) and another assessed the impact of extended care in Washington state (Miller et al., 2020a).

3.9.2 Measurement of exposure to violence outcomes

A broad approach was taken to defining exposure to violence outcomes. Ultimately indicators of delinquency and interaction with the criminal justice system were included – even when violence was not involved – as we consider it to increase an individual's risk of exposure to violence, either in locked settings or in engaging with the police. Child welfare outcomes were also included where the impact of the policy, programme or intervention was considered to be intergenerational. Outcomes fell into seven high-level groups:

- *Delinquency* – three (n=3) studies assessed if a youth was involved in one or more delinquent acts (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017).
- *Victimisation* – one (n=1) study measured if an individual was robbed or assaulted in the last year or if they were in a violent relationship (Courtney, Valentine, et al., 2019).
- *Criminal behaviour* – one (n=1) study measured involvement in property crime, violent crime, drug crime and any crime, stratified by gender (Courtney & Hook, 2017).
- *Arrest* – two (n=2) studies measured this in different ways. One study measured if an individual was arrested in the last 12 months (Courtney, Valentine, et al., 2019). Another study reported any arrest, both in aggregate and stratified by gender four times between age 17 and 23 (Courtney & Hook, 2017).
- *Conviction* – three (n=3) studies measured this in different ways. One study assessed whether or not an individual had been convicted of a crime in the previous 12 months (Courtney, Valentine, et al., 2019), another study assessed conviction between 18-21 and 21-23 (Miller et al., 2020a) and the final study reported any conviction stratified by gender four times between age 17 and 23 (Courtney & Hook, 2017).
- *Incarceration* – two (n=2) studies measured this in different ways. One study included a binary measure indicating whether or not an individual was incarcerated in jail or prison in the last year (Courtney, Valentine, et al., 2019). Another study reported any period of incarceration, both in aggregate and stratified by gender four times between age 17 and 23 (Courtney & Hook, 2017).
- *Child abuse and neglect* – one (n=1) study assessed intergenerational outcomes by identifying former foster youth who had a child (by age 23) and examining if they had been reported as 'at-risk' to child protective services and if that child had been placed in foster care due to concerns arising from abuse and/or neglect (Miller et al., 2020a).

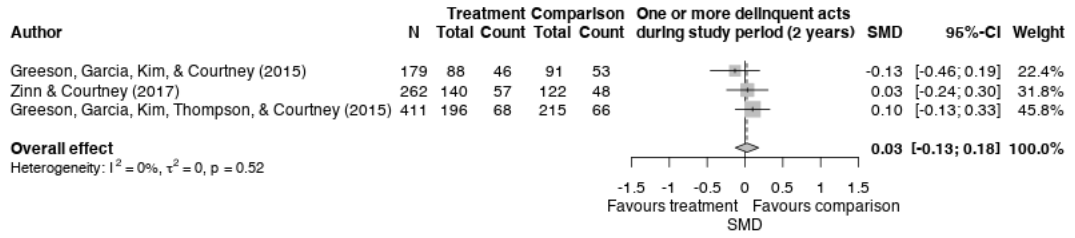
3.9.3 Synthesis of results – exposure to violence

Meta-analysis of exposure to violence outcomes

Three (n=3) studies assessing the impact of ILP on committing a delinquent act within the two-year study period were combined in a fixed effect meta-analysis (I^2=0, p=0.52). As can be seen in Figure

3.16, all three studies had small effect sizes with confidence intervals that span the line of no effect (0 on the x-axis) indicating they are not statistically significant. Taken together, the overall SMD (g = 0.08, 95% CI: [-0.13, 0.18], p > 0.05) shows a very small, non-statistically significant effect favouring ILP. That is, these data suggest that ILP does not decrease youth delinquency.

Figure 3.16 Forest plot for ILP: Committed one or more delinquent acts



GRADE assessment of exposure to violence outcomes

An assessment of the certainty we have in the included evidence from meta-analyses of exposure to violence outcomes using the GRADE methodology is summarised in **Error! Reference source not found.**. It suggests we can have only a very low level of confidence in the included evidence for independent living programmes on delinquency due to issues identified with risk of bias and imprecision.

Table 3.8 GRADE quality assessment for exposure to violence outcomes: Independent living programmes

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Committed one or more delinquent acts during the study period	The proportion of young people who committed one or more delinquent acts during the study period was on average -0.03 SDs 95% CI: [-0.13, 0.18] lower in the intervention group relative to the comparison group		–	852 (3), 2 years	⨁ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium (SD = 0.5), and large (SD = 0.8)

Notes:
[1] Downgraded two levels for risk of bias and one level for imprecision
Additional detail is available in Table F.3 in Appendix F.

Narrative summary of exposure to violence outcomes

For the three studies not included in the meta-analysis, the following results were observed[8]:

- *Victimisation* – YVLifeSet RCT reported a statistically significant effect on the likelihood of being involved in a violent relationship in the 12 month study period (d = -0.16, 95% CI: [not reported], $p < 0.05$), however there was no statistically significant difference between the groups on whether or not they had been robbed or assaulted in the same time period (d = 0.01, 95% CI: [not reported], $p > 0.05$) (Courtney, Valentine, et al., 2019).
- *Criminal behaviour* – the Midwest Evaluation of the Adult Functioning of Former Foster Youth (Midwest study) on extended care examined the impact of extended care on involvement in a series of criminal measures by age 23 or 24 in separate gender-based models: violent crime (male: d = 0.06, 95% CI: [not reported], $p > 0.05$; female: d = 0.01, 95% CI: [not reported], $p > 0.05$), drug crime (male: d = -0.11, 95% CI: [not reported], $p > 0.05$; female: d = -0.08, 95% CI: [not reported], $p > 0.05$), property crime (male: d = -0.13, 95% CI: [not reported], $p > 0.05$; female: d = 0.00, 95% CI: [not reported], $p > 0.05$) or any crime (male: d = 0.04, 95% CI: [not reported], $p > 0.05$; female: d = 0.09, 95% CI: [not reported], $p > 0.05$) – none of which reported a statistically significant effect (Courtney & Hook, 2017).
- *Arrest* – young people who received YVLifeSet were less likely to be arrested during the 12 month study period (d = -0.4, 95% CI: [not reported], $p > 0.05$), however this effect was not statistically significant (Courtney, Valentine, et al., 2019). In the Midwest study on extended care in Illinois, statistically significant differences were observed in arrest rates by age 23 or 24 between those young people who were in extended care and those who were not for females (d = -0.18, 95% CI: [not reported], $p < 0.05$), but not males (d = -0.11, 95% CI: [not reported] $p > 0.05$). The effect of receipt of extended care on arrest by 18-19 was statistically significant for both males and females for both general arrest (male: d = -0.32, 95% CI: [-0.53, -0.11], $p < 0.05$; female: d = -0.51, 95% CI: [-0.73, -0.28], $p < 0.05$) and violent arrest (male: d = -0.20, 95% CI: [-0.41, 0.01], $p < 0.05$; female: d = -0.22, 95% CI: [-0.44, -0.00], $p < 0.05$) categories, where youth in extended care were observed to have statistically significant reductions in both types of arrest (Courtney & Hook, 2017).
- *Conviction* – the study from Washington State reported a medium-sized, statistically significant reduction in convictions for those in extended care between the ages of 18-21 (d = -0.56, 95% CI: [-0.65, -0.47], $p < 0.05$) and a small reduction between the age of 21-23 (d = -0.44, 95% CI: [-0.55, -0.34], $p < 0.05$) (Miller et al., 2020a). No statistically significant differences were observed between those that received YVLifeSet and those that did not on conviction measures (d = 0.07, 95% CI: [not reported], $p > 0.05$) (Courtney, Valentine, et al., 2019). The Midwest study found a statistically significant difference in conviction rates between young people who were in extended care and those that were not, however their gender-based models did not report any statistically significant differences (male: d = -0.01, 95% CI: [not reported], $p > 0.05$; female: d = -0.15, 95% CI: [not reported], $p > 0.05$) (Courtney & Hook, 2017).

[8] See Table D.5 in Appendix D for complete detail of results.

- *Incarceration* – there was no difference between those that received YVLifeSet and a comparison group on whether or not an individual was incarcerated in jail or prison for one night or more in the last year (d = 0.01, 95% CI: [not reported], p > 0.05) (Courtney, Valentine, et al., 2019). The gender-based models from the Midwest study did not report any statistically significant difference between those who received extended care and those that did not (male: d = -0.08, 95% CI: [not reported], p > 0.05; female: d = -0.16, 95% CI: [not reported], p > 0.05) (Courtney & Hook, 2017).
- *Child abuse and neglect* – the study from Washington state reported a medium-sized, statistically significant reduction in children (of youth who had transitioned) who were reported to child protective services by age 23 (d = -0.61, 95% CI: [-0.75, -0.46], p < 0.05) and a large statistically significant reduction in children (of youth who had transitioned) who were placed in foster care by the time the transitioned youth was 23 (d = -1.03, 95% CI: [-1.35, -0.70], p < 0.05) (Miller et al., 2020a).

Summary – exposure to violence

For transitions support programmes, a meta-analysis measuring the impact of independent living programmes on delinquency was not statistically significant and had a very low certainty surrounding its confidence. Of the results that suggest effectiveness from the narrative summary we have some concerns for the risk of bias observed in the very small reduction in victimisation observed amongst those in YVLifeSet.

For extended care policies, a moderate concern about risk of bias undermines our confidence in the stated impact of extended care observed in Washington State. The small and medium reductions in convictions at ages 21-23 and 18-21 are both statistically significant and meaningful. Likewise, the intergenerational impact of extended care is both statistically significant and meaningful. We have serious concerns surrounding the risk of bias in the reduction in arrest rates seen amongst both male and female youth who were eligible for extended care in Illinois.

3.10 Risky behaviour outcomes

3.10.1 Included studies – risky behaviour

Six (n=6) studies examined the impact of transition support programmes on risky behaviour outcomes:

- Three (n=3) RCTs assessed independent living programmes (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017),
- A single (n=1) RCT tested an individualised intensive support service (Courtney, Valentine, et al., 2019),
- A single (n=1) RCT assessed a mobile-app designed to reduce substance abuse (Braciszewski, Tzilos Wernette, Moore, Bock, et al., 2018), and
- A quasi-experimental analysis examined the impact of a transitional housing programme (Lim et al., 2017).

3.10.2 Measurement of risky behaviour outcomes

A decision was made to include pregnancy in this category, although this is not necessarily always unplanned and is not necessarily a negative outcome. Our rationale was the statistically significant negative impacts that pregnancy can have on an individual's earning capacity and the possibility of increased reliance on financial assistance. The five studies reported relevant outcomes that fall into three high-level groupings:

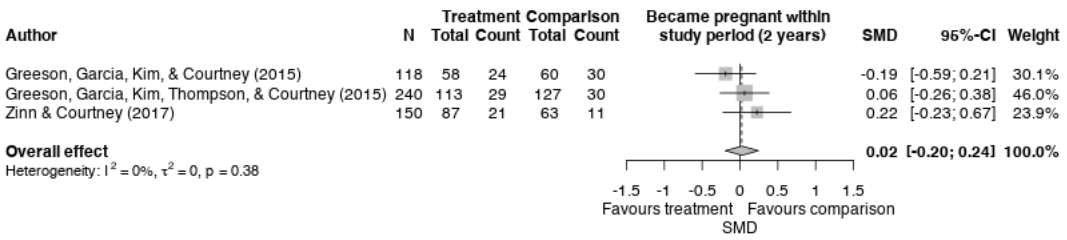
- *Pregnancy* – three (n=3) studies measured this in two ways. Becoming pregnant (for females) was explored by three studies (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017), one of those studies also examined getting someone pregnant, which is the equivalent outcome for males (Greeson, Garcia, Kim, & Courtney, 2015).
- *Risky sexual behaviour* – two (n=2) studies measured this in different ways. One assessed diagnosed STI cases (Lim et al., 2017). Another measured individuals who did not use a condom in their last sexual encounter (Courtney, Valentine, et al., 2019).
- *Substance abuse* – two (n=2) studies measured this in three different ways. One assessed both days of binge drinking in the last month and use of illegal drugs (in prior twelve months) (Courtney, Valentine, et al., 2019). Another study measured the per cent days that a participant self-reported their abstinence from substance abuse (Braciszewski, Tzilos Wernette, Moore, Bock, et al., 2018).

3.10.3 Synthesis of results – risky behaviour

Meta-analysis of risky behaviour outcomes

Data from three studies assessing the impact of ILP on whether or not a young woman became pregnant within the two-year study period were combined in a fixed effect meta-analysis ($I^2 = 0$, $p = 0.26$). As can be seen in Figure 3.17, all three studies had small effect sizes with confidence intervals that span the line of no effect (0 on the x-axis) indicating they are not statistically significant. The pooled SMD ($g = 0.02$, 95% CI: [-0.20, 0.25], $p > 0.05$) shows a small, non-statistically significant effect with a confidence interval that also spans the line of no effect. Taken together these data suggest that ILP does not have an impact on how likely a young woman is to become pregnant during their transition from care.

Figure 3.17 Forest plot for ILP: pregnancy during two-year study period



GRADE assessment of risky behaviour outcomes

An assessment of the certainty we have in the included evidence from meta-analyses of risky behaviour outcomes using the GRADE methodology is summarised in Table 3.9. As indicated in the

table below, we have a very low level of confidence in the included evidence for independent living programmes due to issues identified with risk of bias and imprecision.

Table 3.9 GRADE quality assessment for risky behaviour outcomes: Independent living programmes

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Pregnancy	The proportion of young women who became pregnant was on average -0.02 SDs 95% CI: [-0.20, 0.24] lower in the intervention group relative to the comparison group	–		508 (3), 2 years	⊕ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium (SD = 0.5), and large (SD = 0.8)

Notes:
[1] Downgraded two levels for risk of bias and one level for imprecision
Additional detail is available in Table F.3 in Appendix F.

Narrative summary of risky behaviour outcomes

For the six studies not included in the meta-analysis, the following results were observed[9]:

- *Pregnancy* – the Massachusetts Adolescent Outreach Program reported a not statistically significant, but medium effect (d = 0.59, 95 % CI: [not reported], p > 0.05) showing an increase in males who got someone pregnant during the two-year study period (Greeson, Garcia, Kim, & Courtney, 2015).
- *Risky sexual behaviour* – the NYNY III reported a small effect (d = -0.23, 95% CI: [-0.38, -0.08]) on the reduction of STI cases during the 2-year study period amongst young people who received the service, however tests for statistical significance were not reported, could not be conducted using available information in the report and the authors did not respond to queries (Lim et al., 2017). The YVLifeSet RCT reported a large (d = -0.8, 95% CI: [not reported], p > 0.05), but not statistically significant, reduction in the number of youth who reported that they did not use a condom in their last sexual encounter during the 1-year study period (Courtney, Valentine, et al., 2019).

[9] See Table D.6 in Appendix D for complete detail of results.

- *Substance abuse* – YVLifeSet had no impact on either days of binge drinking in last month (d = 0.07, 95% CI [not reported], $p > 0.05$) or use of illegal drugs during the 12-month study period (d = -0.03, 95% CI: [not reported], $p > 0.05$) (Courtney, Valentine, et al., 2019). The iHeLP mobile intervention had a medium-sized statistically significant impact on the self-reported percent days a youth was abstinent from substance use (d = 0.46, [-0.26, 1.18], $p < 0.05$).

Summary – risky behaviour

The single programme and outcome – impact of independent living programme on pregnancy – that was included in a meta-analysis was both not statistically significant and had a very low certainty surrounding its confidence. Of the results that suggest effectiveness from the narrative summary, we have serious concerns about the risk of bias surrounding the small reduction in STI cases amongst participants in the NYNY III transitional housing programme. We also have some concerns about the risk of bias in the small increase in self-reported percent days a youth was abstinent from substance use observed amongst iHeLP participants. Taken as a whole, we have very limited confidence that any of the included studies of policies, programmes or studies had an effect on risky behaviour outcomes.

3.11 Supportive relationships outcomes

3.11.1 Included studies – supportive relationships

Four studies examined the impact of transition support programmes on supportive relationships outcomes:

- Two (n=2) studies of the efficacy of coaching and peer support programmes using an RCT (Geenen et al., 2015; L. E. Powers et al., 2012),
- An RCT (n=1) of the impact of YVLifeSet, an individualised intensive support service (Courtney, Valentine, et al., 2019), and
- An RCT (n=1) of the impact of the Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015).

3.11.2 Measurement of supportive relationships outcomes

Relationships-related outcomes fell into three categories:

- Adult relationships – one (n=1) study assessed whether an individual was very close to an adult (Courtney, Valentine, et al., 2019).
- Social support – two (n=2) studies measured social support through the use of a scale. No information is provided on the scale used in one study, but the other study notes that it 'is calculated as the average number of people to whom a young person can turn for help' (Courtney, Valentine, et al., 2019; Greeson, Garcia, Kim, & Courtney, 2015).
- Quality of Life – two (n=2) studies used the quality of life questionnaire which, among other domains, includes measures of: connections with others, social inclusion and community integration (Geenen et al., 2015; L. E. Powers et al., 2012).

3.11.3 Synthesis of results – supportive relationships

We were unable to quantitatively synthesise supportive relationships outcomes due to differences in programme type and outcome measurement, therefore the results from the four included studies are summarised narratively by outcome[10]:

- *Adult relationships* – for YVLifeSet no difference was observed between those that received the programme and those that did not for the outcome very close to an adult over 12 months (d = 0.05, 95% CI: [not reported], $p > 0.05$) (Courtney, Valentine, et al., 2019).
- *Social support* – the RCT of YVLifeSet reported no difference on social support scale scores over 12 months (d = 0.03, 95% CI: [not reported], $p > 0.05$) and the Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care reported a non- statistically significant positive effect (d = 0.57, 95% CI: [not reported], $p > 0.05$) for the same measure over a 2 year period (Courtney, Valentine, et al., 2019; Greeson, Garcia, Kim, & Courtney, 2015).
- *Quality of Life* – although two RCTs of Better Futures/TAKE CHARGE reported the same outcome, insufficient information about the timing of measurement was provided to allow us to pool the results. The Better Futures RCT reported a medium-sized, non-statistically significant effect (d = 0.66, 95% CI: [not reported], $p > 0.01$] (L. E. Powers et al., 2012). The TAKE CHARGE RCT reported a large non-statistically significant effect on quality of life scale at 12-month follow up (d = 0.81, 95% CI: [not reported], $p > 0.01$) (Geenen et al., 2015).

Summary – supportive relationships

None of the results from the transitions support programmes that assessed relationship outcomes were statistically significant or clinically meaningful.

3.12 Life skills outcomes

3.12.1 Included studies – life skills

Three studies examined the impact of transition support programmes on life skills outcomes. All three were concerned with the impact of ILPs. Two were conducted in California (Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017) and one in Massachusetts (Greeson, Garcia, Kim, & Courtney, 2015).

3.12.2 Measurement of life skills outcomes

Life skills-related outcomes fell into two categories:

- *Perceived preparedness* – the three RCTs of ILPs used two scales to assess how prepared youth felt for adult living. An overall measure includes an average of eighteen items and a job-related measure includes an average of three job-related items (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017).

[10] A detailed summary of the quantitative findings from these four studies is provided in Table D.7 in Appendix D.

- *Access to documentation and services* – the three RCTs of ILPs included a series of measures that asked whether or not youth had possession of a series of documents and services that could be considered essential for independent life: bank account, social security number, driver's licence and birth certificate (Greeson, Garcia, Kim, & Courtney, 2015; Greeson, Garcia, Kim, Thompson, et al., 2015; Zinn & Courtney, 2017).

3.12.3 Synthesis of results – life skills

Meta-analyses of life skills outcomes

Three studies assessing the impact of ILPs on a youth's perceived preparedness – either job-related ($I^2 = 0$, $p = 0.66$; Figure 3.19) or overall ($I^2 = 0$, $p = 0.82$; Figure 3.18) over the course of the two-year study – were synthesised in separate fixed effect meta-analyses. Pooled SMD for overall preparedness (g = -0.01, 95% CI: [-0.16, 0.12], $p > 0.05$) and job-related preparedness (g = -0.04, 95% CI: [-0.18, 0.09], $p > 0.05$) favoured the comparator, however confidence intervals for both individual studies and the pooled effect spanned the line of no effect, indicating the results are not statistically significant. Based on this data, ILPs do not improve an individual's perceived preparedness.

Figure 3.18 Forest plot for ILP: overall preparedness score at end of two-year study

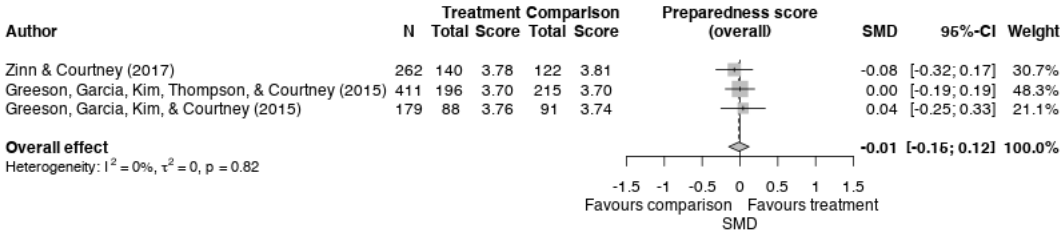
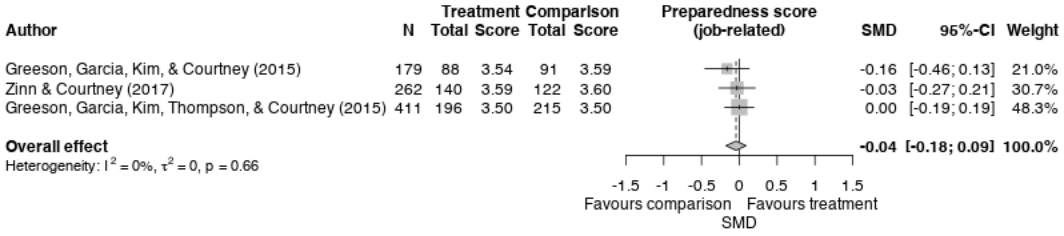


Figure 3.19 Forest plot for ILP: job-related preparedness score at end of two-year study



The same three studies reported the impact of ILPs on whether or not a young person had a bank account or if they were in the possession of key documents: possession of any financial accounts ($I^2 = 0$, $p = 0.39$; see Figure 3.20), social security number ($I^2 = 0$, $p = 0.73$; see Figure 3.21) and birth certificate ($I^2 = 0$, $p = 0.46$; see Figure 3.22). All three outcomes were pooled using a fixed effect meta-analysis. Pooled SMD for possession of any financial accounts (g = -0.01, 95% CI: [-0.17, 0.14], $p > 0.05$) favours the comparator, while for social security number (g = 0.02, 95% CI: [-0.23, 0.27], $p > 0.05$) and birth certificate (g = 0.18, 95% CI: [-0.23, 0.27], $p > 0.05$) it favours independent living programmes. However, the confidence intervals for both individual studies and the pooled effect all span the line of no effect, indicating the results are not statistically significant. These results suggest that ILPs have no impact on whether young people will have possession of a bank account and key documents.

Figure 3.20 Forest plot for ILP: possession of any financial accounts by end of two-year study

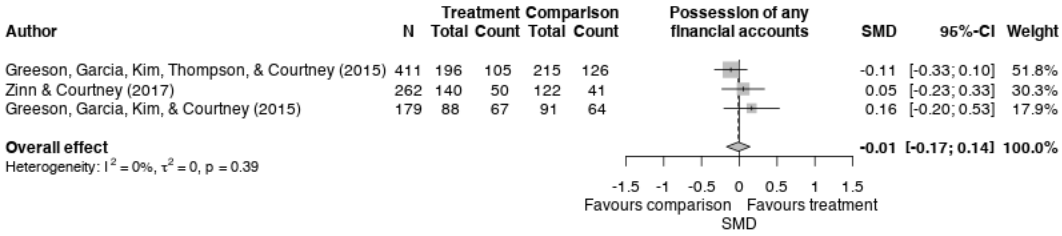


Figure 3.21 Forest plot for ILP: possession of a social security number by end of two-year study

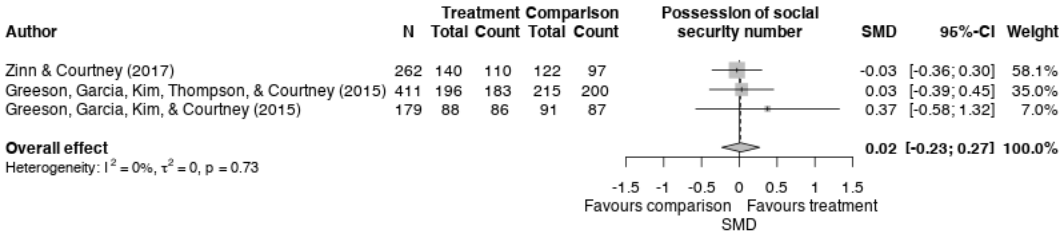
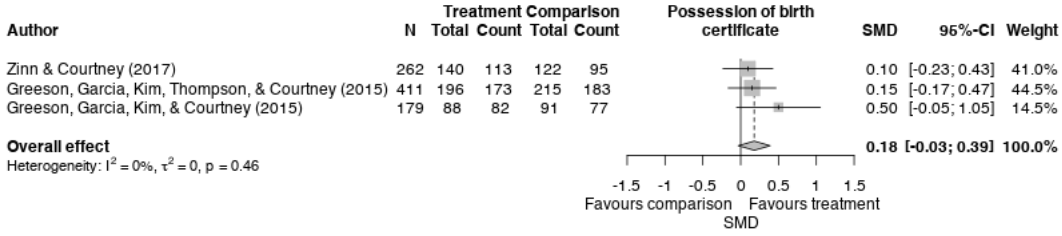
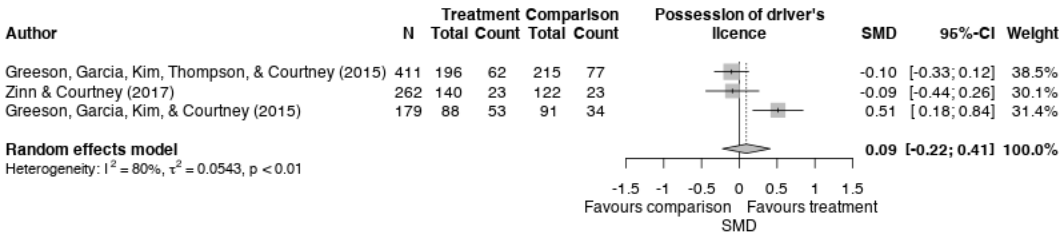


Figure 3.22 Forest plot for ILP: possession of birth certificate by end of two-year study



Significant heterogeneity was detected in the I^2 test for three studies that assessed possession of a driver's licence amongst ILP participants ($I^2 = 80$, $p < 0.01$; see Figure 3.23). Therefore, a random effects meta-analysis was used to synthesise the results. Two of the three studies included in the meta-analysis had confidence intervals that spanned the line of no effect. The overall SMD slightly favoured ILP ($g = 0.09$, 95% CI: [-0.22, 0.41], $p > 0.05$), however the confidence interval of the pooled effect also spanned the line of no effect indicating that the result is not statistically significant. Therefore, the data suggest that ILPs do have an effect on attainment of a drivers' licence.

Figure 3.23 Forest plot for ILP: possession of driver's licence by end of two-year study



GRADE assessment of life skills outcomes

An assessment of the certainty we have in the included evidence from meta-analyses of risky behaviour outcomes using the GRADE methodology is summarised in Table 3.10. As indicated in the table below, we have a very low level of confidence in the included evidence for independent living programmes due to issues identified with risk of bias and imprecision.

Table 3.10 GRADE quality assessment for life skills outcomes: Independent living programmes

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Overall preparedness score	The overall preparedness score of young people who received the intervention was on average -0.01 SDs 95% CI: [-0.16, 0.12] lower relative to the comparison group	–		852 (3), 2 years	⨁ Very low[1]	Cohen's (1988) benchmarks assist in interpreting the magnitude of these results: small (SD = 0.2), medium (SD = 0.5), and large (SD = 0.8)
Job-related preparedness score	The job-related preparedness score of young people who received the intervention was on average -0.04 SDs 95% CI: [-0.18, 0.09] lower relative to the comparison group	–		852 (3), 2 years	⨁ Very low[1]	
Possession of any financial accounts	The proportion of young people who had any financial accounts was on average -0.01 SDs 95% CI: [-0.17, 0.14] lower in the intervention group relative to the comparison group	–		852 (3), 2 years	⨁ Very low[2]	
Possession of a social security number	The proportion of young people who had a social security number was on average 0.02 SDs 95% CI: [-0.23, 0.27] higher in the intervention group relative to the comparison group	–		852 (3), 2 years	⨁ Very low[3]	

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Number of participants (studies), follow up	Certainty of the evidence (GRADE)	Comments
	Estimated risk in comparison group	Estimated risk in intervention group				
Possession of a birth certificate	The proportion of young people who had a birth certificate was on average 0.18 SDs 95% CI: [-0.03, 0.39] higher in the intervention group relative to the comparison group		–	852 (3), 2 years	⨁ Very low[4]	
Possession of a driver's licence	The proportion of young people who had a driver's licence was on average 0.09 SDs 95% CI: [-0.22, 0.41] higher in the intervention group relative to the comparison group		–	852 (3), 2 years	⨁ Very low[5]	

Notes:
[1.] Downgraded two levels for risk of bias and one level for imprecision
[2.] Downgraded two levels for risk of bias and one level for imprecision
[3.] Downgraded two levels for risk of bias and one level for imprecision
[4.] Downgraded two levels for risk of bias and one level for imprecision
[5.] Downgraded two levels for risk of bias and one level for imprecision
[6.] Downgraded two levels for risk of bias and one level for imprecision
Additional detail is available in Table F.3 in Appendix F.

Summary – life skills

None of the results reporting the impact of transitions support programmes on life skills outcomes reported statistically significant or clinically meaningful results. The results of the GRADE assessment indicate that the certainty we have in the included evidence is very low due to risk of bias and imprecision. Taken together, these findings indicate that the transitions support programmes had no impact on life skills outcomes.

3.13 Stakeholder insights

Six young people with care experience, fifteen current or former foster carers and nine fostering services agencies helped to contextualise this review by providing insights based on their experience of different aspects of the fostering system during five focus groups – see Table 3.11.

Table 3.11 Details of focus groups used for stakeholder engagement

Participants	# of focus groups	Total number of attendees
Young people aged over 18 with care experience	1	6
Individuals with current or former experience as foster carers	3	15
Individuals employed by either government-run or non-government fostering agencies	1	9

Across the three groups, a common thread of feedback was that support services for young people need to be 'humanised' and to 'consider the needs and preferences of individuals'. There was also a common call for a different type of 'longevity' or 'continuity' culture of support for the foster care system, which should be based on an expectation that young people need, and foster carers often want to provide, continued support, just as young people living with their parents need, and parents provide, continued support. Youth with care experience shared a preference for remaining in care for longer, given the option. Failing that, they described ideal support as something that should last for many years and be available when it is needed, and help to build skills and confidence sequentially, over time. Foster carers observed that the system makes it very difficult to provide ongoing support to young people formerly in their care, even when they have a strong preference to. They would like to have the option of providing additional support, even if they are not compensated for it. Some representatives from fostering services agencies noted that the level and quality of support provided or available to a young person during their transition from care is highly dependent on the individual (i.e. key worker) involved and that the turnover of key workers is high.

Participants make a number of suggestions regarding the important features and content for policies, programmes and interventions:

- **Provide young people with choice, control and opportunity for participation** – recognise the autonomy of the young person, the diversity and individual needs of young people, involve them in decisions, provide clarity about the process so that they can participate fully;
- **Tailor support to their needs** – personalised and tailored to the specific needs, wishes, and circumstances of the young person and their carers;
- **Provide continuity** – provide a single point of contact with whom young people can build a relationship, and minimise staff turnover;
- **Offer flexibility in engagement** – young people may initially not wish to engage with a service, but can change their mind later, so providing the ability to 'dip in' and 'dip out' of services as required is important for youth engagement;
- **Start earlier** – support services often commence at a later, more developed age. Starting younger (i.e. at age 15-16) could provide more opportunity to develop a trusting relationship with a young person and also provide the young person with a longer window to develop skills;

- **Consider other people involved with the young person** – consider how the programme meaningfully engages with other people in the system and the young person's life, particularly their foster carers and case worker;
- **Be realistic** – providing support over an appropriate time frame, recognising that support needs are unlikely to be met in a short time frame, particularly with young people who have experienced complex trauma; and
- **Be inclusive** – some policies or programmes use eligibility criteria that exclude young people who are not in employment or education or those leaving residential care. These should be considered carefully as they can exclude the most vulnerable young people.

4 DISCUSSION

4.1 Summary of findings

The key messages from this review are that there is a limited number of primary studies of sufficiently high rigour to have been included, almost all of which are characterised by substantial risk of bias. Most reported null results. Where results are statistically significant, effect sizes are mostly very small and only reported by individual studies. The overall quality of the evidence in these studies is very low.

As outlined in the protocol, the primary outcomes of interest for this review were: homelessness, health, education, economic or employment and exposure to violence from others or conduct of violence toward others. We found insufficient evidence to conclude that any of the included policies, programmes or interventions have an effect on the outcomes of interest.

The fact that this review was able to identify 20 studies marks an improvement from the empty review conducted by Donkoh et al. (2006) fifteen years ago. However, we know from other systematic reviews – that have not applied methodological filters – that there are other policies, programmes and interventions in operation that have not been subject to methodologically rigorous evaluation. Moreover, the concentration of included studies in the United States is surprising given the policy and advocacy interest in transitions outcomes for youth in other countries – particularly in the United Kingdom and Europe.

The presence of very small effects is not necessarily surprising, nor an indication that we have nothing to learn from the studies included in this review. It is worth remembering that the dependent variables of most interest to this review are tangible and substantial outcomes and achievements. It is high demand for any programme or intervention to improve outcomes such as increasing high school graduation or reducing homelessness, particularly amongst an at-risk population that has been exposed to significant trauma. That means that, at an individual level, even outcomes that occur only rarely in a research sample or service user population can be exceedingly important to those individuals and may transform their life changes and lead to huge dividends over time. Equally, at a population level, even seemingly small effects may be socially significant if enough individuals experience them. While the measures in these studies do not often lend themselves to solid evaluations of clinical significance as is seen in, for example, clinical measures of depression that push an individual over the threshold between having a diagnosis and not having one, they are often of practical and life-changing significance and should not be quickly dismissed as meaningless.

4.1.1 Main results for transition support programmes

The transition support programmes included in this review fell into five broad categories: independent living programmes; intensive support services; coaching and peer support services; health information and coaching, and transitional housing programmes.

Nineteen meta-analyses synthesised a range of outcomes for young people who received some type of transitions support – three ILPs and two similar coaching and peer support programmes. Every single

one of these pooled estimates spanned the line of no effect, indicating that there is not yet enough evidence to conclude that they can improve these outcomes of interest.

Of the three groups, ILPs are the most studied. In the United States, individual states are funded by the Federal government to provide ILPs designed specifically for young people leaving care. The services are delivered at state or sub-state (county or city) level, and as a result, there is significant variation in the design, intensity and implementation of ILPs in different locations. Four RCTs of individual ILPs report some positive effects, but whether pooled or viewed individually, their impact is very small. Quasi-experimental analyses that use administrative data to examine the receipt of *any* ILPs or a *particular type* of ILP, report similar results. Very small changes were observed in homelessness (Y. Kim et al., 2019), education enrolment (Nadon, 2020), access to financial aid (Nadon, 2020), part-time employment (Nadon, 2020) and college persistence (Courtney, Zinn, Johnson, et al., 2011; Greeson, Garcia, Kim, & Courtney, 2015).

Two very similar coaching and peer support programmes were developed by the same team of researchers. The studies examined post-secondary and employment outcomes for youth in foster care, one for those with mental health issues and the other for those who received special education services. Positive effects were reported, but a meta-analysis found no statistically significant difference between programme recipients and the control group for high school graduation, college attendance and employment (Geenen et al., 2015; L. E. Powers et al., 2012).

Intensive support services (ISS) may or may not involve accommodation and can contain similar elements to ILPs. Where they differ is that ISS provide a greater intensity of support at an individual or small-group level that is tailored to the youth's needs and wishes. Two studies examined the impact of ISS on a range of outcomes, one in Australia (PYI) and another in the United States (YVLifeSet). YVLifeSet reported some very small, positive effects for a range of outcomes: reduced homelessness, reduction in depression and anxiety, increase in high school completion, increase in earnings and reduced rate of being in a violent relationship (Courtney, Valentine, et al., 2019; Valentine et al., 2018).

Despite the relative ubiquity of transitional housing programmes globally, only one study examined their impact on outcomes for young people leaving care. The programme showed large statistically significant increases on stable housing, while also increasing housing instability. It also showed a reduction in STI rates, however it was not possible to determine if that effect was statistically significant (Lim et al., 2017). Finally, a health information intervention reported positive but not statistically significant increases in health care utilisation (Beal et al., 2020).

4.1.2 Main results for extended care policies

A study from Washington State used quasi-experimental methods to assess the impact of Washington's extended care policy on a range of outcomes. The analysis found that extended care has a large effect on reducing homelessness (between age 18-21) and reducing the number of young people who have a child (before age 23) that is subsequently placed in foster care. It also found medium reductions on diagnosis with a drug-related substance abuse disorder, receipt of inpatient treatment for substance abuse, use of and time spent receiving SNAP benefits (between 18-21), receipt of TANF benefits between both 18-21 and 21-23), conviction of a crime between 18-21 and having a child (before age 23) that is subsequently reported to child protective services. Other small and very small statistically significant and clinically meaningful effects were also observed (Miller et al., 2020a).

An analysis of a 'natural experimental' followed a cohort of young people in a state where extended care was available (Illinois) and compared them with similar young people in two neighbouring states (Iowa and Wisconsin) where it is not. The analyses found very small positive effects by age 21 for those in extended care: increases in high-school completion, college enrolment by age 21, reduction in property crime and arrest rates (for females) (Courtney & Hook, 2017).

4.2 Discussion of findings

4.2.1 Mechanisms, mediators and moderators

There were insufficient studies to conduct meta-regressions testing mechanisms and potential mediators and moderators. The framework outlined in section 1.3 conceptualises the theory of change behind how transition support services and extended care are thought to help youth to collect and build the developmental assets they require to thrive as young adults living independently. Future primary studies should use this as a guide to planning and analysis, forming a body of research that can, over time, be quantitatively synthesised in more complex meta-analyses.

4.2.2 Implementation factors

If any transition policy or programme is to work, there needs to be alignment between the intervention and the context (i.e. the wider OOHC sector) into which it will be embedded. The widely used Consolidated Framework for Implementation Research (CFIR) describes five contextual domains, each of which influences the implementation of evidenced interventions. These are the intervention itself (i.e. the programme, practice or policy), the quality of the process with which it is implemented, the individuals involved in this implementation, and the structure and functioning of its inner (organisational) and outer (system) settings (Damschroder et al., 2009). Using this framework as a lens, the context of delivering transition interventions like the ones examined in this study can be described as consisting of:

- *Individuals involved* – young people, their case workers and foster carers will have different knowledge and beliefs and a broad range of personal attributes that will influence how they perceive, support or work with an intervention.
- *The intervention itself* – different transition interventions, be they policies or programmes, will be characterised by varying degrees of complexity, adaptability or design qualities, all of which are factors affecting their implementability.
- *Inner setting* – typically, statutory agencies, service provider agencies and other organisations will form the inner setting of transition intervention implementation. At this level potential implementation barriers and facilitators include the broader set of OOHC services as usual, intervention-specific implementation readiness and/or the dominant organisational culture and climate.
- *Outer setting* – OOHC regulations, policy and funding structures, but also the wider service system including education and health services form the outer setting of and influence transition intervention implementation.
- *Implementation processes* – organisations and systems may invest and engage in the process of implementing transition intervention in different ways, thereby enabling or hampering the implementation of transition interventions.

This review included focus groups with key stakeholders, including youth with care experience, current and former foster carers and individuals employed by fostering services agencies. The themes they highlighted mostly centred on how the actions of individuals (i.e. staff) interplay with the inner and outer settings that characterise the context into which policies, programmes and interventions for young people leaving care are implemented.

As it relates to the interface between individuals involved in transition service delivery and their organisations (i.e. the inner setting), a common theme identified across different focus group participants was the disjointed nature of the delivery of these services.

Focus group participants identified that different actors (i.e. representatives for statutory authorities, fostering service providers and transitions support providers) often do not interact consistently or productively with each other and, in some cases, the interaction can be problematic. Young people with care experience reflected on the multiple individuals who provided support over time and noted two things. Firstly, the turnover is very high (amongst social workers and personal advisors), which affects the quality of support and the strength of the relationship. Secondly, different actors in the system provide inconsistent information, which makes it difficult to access support. Current or former foster parents explained how they felt 'shut out' of the leaving care process by local authorities from the moment a young person turns 16, which they felt was a missed opportunity to help the young person prepare. This is broadly consistent with the findings reported in the PYI evaluation, which also highlighted how stressed young people valued continuity and how the agencies providing the service reported having highly variable, but mostly very limited, engagement with a young person's case worker (D. Taylor et al., 2020).

The other consideration is the outer setting of transition services, where local contextual factors can influence the availability of opportunities for young people, particularly those relating to employment, housing or education. The shortage and poor quality of accommodation options was an issue that was emphasised in focus groups. Where they are available, participants said that housing options for young people were, in their experience, often located in less desirable neighbourhoods, which can limit their employment options (e.g. if no public transport is available) and may even place them at risk of violence or expose them to other negative social influences (e.g. illicit drug use/sales).

Considering these contextual influences is important for decision makers in policy and practice. Even if a promising programme or intervention can be identified, its implementation may be of risk at failing because the wider – disjointed – context into which it is embedded represents a threat to an intervention's implementability and/or sustainability. Creating enabling contexts will therefore be a central task when promoting the use of evidenced interventions in OOHC and transition services. If programmes are to succeed, mechanisms are needed to better interlink services supporting young people in order to provide more seamless support.

4.2.3 Costs and benefits

A cost-benefit analysis (CBA) of extended care measured the lifetime benefits and costs that arise from implementing extended care in Washington State. This analysis includes the benefits to participants, taxpayers, others and those that are indirect. The results of the CBA suggest that the benefits – particularly in terms of increased lifetime earnings and decreased chance of a participant's children being involved in child welfare – significantly outweigh the costs of providing additional care. The authors report a benefit–cost ratio of 3.95, suggesting that for every dollar invested in extended care

there is a potential return of $3.95. Sensitivity analysis suggests that an investment in this policy would generate a return greater than zero in 99.9 per cent of cases (Miller et al., 2020).

A briefing note from Chapin Hall, the research unit that also undertook the Midwest study, summarises findings from a cost-benefit analysis that also suggests that the benefits of extended care outweigh its costs (Peters, Dworsky, Courtney, & Pollack, 2009). The PYI study included a cost analysis which calculated the marginal cost of providing the services per client, however they did not undertake an analysis that quantified the benefits (D. Taylor et al., 2020).

4.3 Strengths and limitations of the review methods

We acknowledge that the methods used to assess publication bias are not reliable when there are only a small number of studies included. As such, we are uncertain about publication bias but our efforts to locate and include all studies, published and unpublished, were substantial and, we believe, minimise this important concern. As mentioned throughout, the clinical heterogeneity of populations, interventions, comparisons, outcomes and study designs substantially limited our capacity to undertake larger, potentially informative meta-analyses. At best, we were able to statistically combine three studies for an outcome and often there were only two. While informative, far more primary studies are needed to establish what works for whom and when.

4.4 Strengths and limitations of available evidence

4.4.1 Overall completeness and applicability of evidence

All of the studies, bar one, were conducted in the United States. Noting the role of policy and local context to the successful implementation of interventions in social welfare, this could potentially affect the applicability of these results to other contexts. However, in this case, there is no reason to suspect that implementation of the policies, programmes or interventions identified in this review in other similar contexts will result in radically different results. With ongoing global interest in the concept of extended care, additional research is required, particularly from outside the United States, to examine its effects.

4.4.2 Quality of the evidence

This review included 19 papers that report the results of 14 unique studies. The variation between the different policies, programmes and interventions, the variation in outcomes of interest, the way in which outcomes were measured and the diverse array of study designs worked together to limit the scope of meta-analyses we could undertake. That notwithstanding, all of the meta-analyses indicated that no difference was observed between programme participants and non-participants across all measured outcomes. Small and very small but still statistically significant measures of effect in individual studies provide promising indications for further study and programme development, although they do not represent a strong endorsement of a particular approach. As a result, the quality and quantity of the current evidence prevents us from providing robust conclusions about the effectiveness of policies, programmes and interventions to improve outcomes for young people leaving care.

4.4.3 Agreements and disagreements with other studies or reviews

This review disagrees with the conclusions on the effectiveness of ILPs reached by Sundell et al. (2020) who pooled results from ILPs, intensive support services and coaching and peer support programmes. Our approach was to combine only studies with sufficient heterogeneity, in order to ascertain whether specific interventions were effective, whereas the Sundell et al. (2020) review tested whether there was an overall effect for all programmes. This is a philosophical difference, perhaps, but we believed that, in this instance, it is more helpful to the field to evaluate specific types of interventions in order to assist policy makers and providers in their decision-making about which specific interventions to choose.

This review disagrees with the findings with narrative reviews by Everson-Hock (2011) and Yelick (2017) that highlighted the positive aspects of transitions support programmes, without considering the methodological rigour of the studies that informed their conclusions.

We do not believe there is sufficient evidence to support the conclusion of the narrative review by Randolph & Thompson (2017) that studies of programmes that support post-secondary education outcomes for foster care alumni find overall positive outcomes/evidence of effectiveness, however we do agree with their conclusion that additional effectiveness research is required.

This review agrees with the conclusion of the scoping review by Liu et al. (2019) that the impact of ILPs on educational outcomes is inconclusive and that there could be value in integrating ILPs and housing interventions, however we are unsure that amending ILPs can hope to overcome difficulties presented by young people who have experienced placement instability.

This review agrees with the scoping review by Greeson et al. (2020) that found an increase in the availability of programmes and interventions but also argued that more effectiveness studies are required to assess their impact. This review also agrees with the conclusions of: an integrative review by Häggman-Laitila et al. (2020) that many programmes are poorly described and heterogenous and that more rigorous evaluations are required. This review also concurs with a narrative review by Naccarato & DeLorenzo (2008) that called for more effectiveness research; and a narrative review by Woodgate et al. (2017) that found that the current evidence base is weak and future research should consider longitudinal outcomes of youth and cost–benefit analyses.

4.5 Recommendations for practice and policy

Out-of-home care and the transition to independent living is a particularly challenging area of practice. Young people enter a system presenting with complex trauma, receive varying quality of care, face challenges in finding a permanent place to stay, confront systematic inequality in access to the care they need from the wider system (e.g. psychological support, education, health, employment etc.) and then need to be supported to live independently in a short period of time. On the service provision side, there is a significant challenge in providing appropriate support in a system that is widely recognised to be underfunded.

Unfortunately, the scope and strength of current evidence on the effectiveness of policies, programmes and interventions for young people leaving care is insufficient to draw conclusions about the effectiveness of any particular approach. The findings suggest that certain policies and programmes have promise, particularly extended care, however it is too early to recommend a particular approach.

The conclusion is by no means that services to support young people should be withdrawn or reduced: the focus must be on improvement. The very small effects observed in included studies suggest that decision makers in policy and practice need to work towards improving the quality of services to support young people as they transition, and particularly services as usual. This should involve targeted local, regional or national policy initiatives or systematic efforts by sector organisations and service agencies to change practice based on principles of continuous quality improvement. Such efforts would require policy makers to provide resources, support and incentives for reviewing and enhancing current services, and decision makers in the field to truly operationalise and apply important service principles such as continuity and flexibility, autonomy and choice but also accountability and responsibility. Dedicated leadership, grounded around an ambition to provide the best possible futures for young people and to establish evidence-based practice in transition services through data-informed improvement cultures and the parallel integration of selected evidenced practices, has the potential to facilitate such an urgently needed system change.

4.6 Recommendations for research

It is promising to see an increase in the number of high-quality studies investigating policies, programmes and interventions that improve outcomes for youth leaving care. However, this progress is coming off a low base, and there remains ample opportunity to both expand and strengthen future research on transition services. Among the pertinent research needs are:

- To promote and initiate more rigorous effectiveness research, particularly with populations of care leavers in countries other than the United States.
- To design rigorous studies that measure the practice and policy contexts in which transition interventions are being delivered, thereby taking into account the high degree of complexity of routine service settings affecting even the most well-designed interventions.
- To test the feasibility and effectiveness of different implementation strategies to support the use of transition interventions to better understand the difference intentional implementation practice may make to intervention effectiveness. The relatively small effect found in studies where approaches were successful, along with scant implementation research associated with such studies, may well indicate that efforts to measure and improve implementation will lead to stronger findings and greater certainty.
- To identify and test the effectiveness of 'key ingredients' of transition interventions to better understand those elements and activities that cause changes in young people and therefore are important to nurture and maintain. Such research will only be possible if future effectiveness studies clearly articulate both the theory of change, the causal mechanisms and the key elements of a programme and/or intervention and the conditions required to implement it.

Finally, in order to build a more shareable and comparable base for transition services, it would be beneficial if researchers collecting primary outcome data sought to use more common outcomes and measures. The RCTs of ILPs undertaken by the team at Chapin Hall and the YVLifeSet RCT offer some inspiration in this regard. However, translating these measures for use in settings outside the US to thereby enable greater international collaboration in this field research remains an important task.

4.7 Conclusion

The scope and strength of current evidence on the effectiveness of policies, programmes and interventions for young people leaving care is insufficient to draw firm conclusions about the effectiveness of any particular approach.

There is little evidence that standard independent living services, alone, achieve positive outcomes, yet they continue to be financially supported in the United States. It may be the case that they are beneficial combined with other support services, but they appear to be insufficient on their own. These findings do not necessarily mean this approach should be discarded entirely, but without considerable improvement and pairing with other approaches, it is unlikely to improve outcomes for young people.

There is limited but emerging evidence that extending care can improve outcomes across a number of domains. However, we currently know very little about the best way to deliver this support, which young people may need something more, and which combination of additional support services are best for which young people.

More rigorous effectiveness research is required, particularly with populations of care leavers in countries other than the United States. Moreover, rigorous studies that measure the practice and policy contexts in which these interventions are being delivered, as well as studies that test the effectiveness of implementation strategies within these contexts, are in short supply. The relatively small effect found in studies where approaches were successful, along with scant implementation research associated with such studies, may well indicate that efforts to measure and improve implementation will lead to stronger findings and greater certainty. As well, rigorous exploration of different combinations of services, delivered in different ways, may go a long way toward meeting the complex needs of young people as they transition from state care.

Research in this area is reaching a tipping point in terms of the number of rigorous studies available to do more complex synthesis. Future syntheses would be aided by more careful coordination of future studies. Specifically, more replication studies are needed to increase the certainty of findings and that can be used to test the core components of high-quality transition programmes over time.

LIST OF INCLUDED STUDIES

Beal, S. J., Nause, K., Lutz, N., & Greiner, M. V. (2020). The Impact of Health Care Education on Utilization Among Adolescents Preparing for Emancipation From Foster Care. *Journal of Adolescent Health*, *66*(6), 740–746. https://doi.org/10.1016/j.jadohealth.2019.12.009

Braciszewski, J. M., Tzilos Wernette, G. K., Moore, R. S., Bock, B. C., Stout, R. L., & Chamberlain, P. (2018). A Pilot Randomized Controlled Trial of a Technology-Based Substance Use Intervention for Youth Exiting Foster Care. *Child Youth Services Review*, *94*, 466–476. https://doi.org/10.1016/j.childyouth.2018.08.011.A

Courtney, M. E., & Hook, J. L. (2017). The potential educational benefits of extending foster care to young adults: Findings from a natural experiment. *Children and Youth Services Review*, *72*, 124–132. https://doi.org/10.1016/j.childyouth.2016.09.030

Courtney, M. E., Valentine, E. J., & Skemer, M. (2019). Experimental evaluation of transitional living services for system-involved youth: Implications for policy and practice. *Children and Youth Services Review*, *96*(June 2018), 396–408. https://doi.org/10.1016/j.childyouth.2018.11.031

Courtney, M. E., Zinn, A., Johnson, H., & Malm, K. E. (2011). *Evaluation of the Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care: Final Report*. Washington DC. Retrieved from http://www.acf.hhs.gov/programs/opre/index.html

Courtney, M. E., Zinn, A., Koralek, R., & Bess, R. (2011). *Evaluation of the Independent Living – Employment Services Program, Kern County, California: Final Report*. Washington DC. Retrieved from https://www.acf.hhs.gov/opre/resource/evaluation-of-the-independent-living-employment-services-program-kern

Courtney, M. E., Zinn, A., Zielewski, E. H., Bess, R. J., Malm, K. E., Stagner, M., & Pergamit, M. (2008a). *Evaluation of the Early Start to Emancipation Preparation Tutoring Program: Los Angeles County*. Washington DC. Retrieved from https://www.acf.hhs.gov/opre/resource/evaluation-of-the-early-start-to-emancipation-preparation-tutoring

Courtney, M. E., Zinn, A., Zielewski, E. H., Bess, R. J., Malm, K. E., Stagner, M., & Pergamit, M. (2008b). *Evaluation of the Life Skills Training Program: Los Angeles County*. Washington DC. Retrieved from https://www.acf.hhs.gov/opre/resource/evaluation-of-the-life-skills-training-program-los-angeles-county

Dworsky, A., Napolitano, L., & Courtney, M. E. (2013). Homelessness during the transition from foster care to adulthood. *American Journal of Public Health*, *103*(SUPPL. 2), 318–323. https://doi.org/10.2105/AJPH.2013.301455

Geenen, S., Powers, L. E., Phillips, L. A., Nelson, M., McKenna, J., Winges-Yanez, N., … Swank, P. (2015). Better Futures: a Randomized Field Test of a Model for Supporting Young People in Foster Care with Mental Health Challenges to Participate in Higher Education. *Journal of Behavioral Health Services and Research*, *42*(2), 150–171. https://doi.org/10.1007/s11414-014-9451-6

Greeson, J. K. P., Garcia, A. R., Kim, M., & Courtney, M. E. (2015). Foster Youth and Social Support: The First RCT of Independent Living Services. *Research on Social Work Practice*, *25*(3), 349–357. https://doi.org/10.1177/1049731514534900

Greeson, J. K. P., Garcia, A. R., Kim, M., Thompson, A. E., & Courtney, M. E. (2015). Development & maintenance of social support among aged out foster youth who received independent living services: Results from the multi-site evaluation of foster youth programs. *Children and Youth Services Review*, *53*, 1–9. https://doi.org/10.1016/j.childyouth.2015.03.016

Kim, Y., Ju, E., Rosenberg, R., & Farmer, E. (Betsy) M. Z. (2019). Estimating the effects of independent living services on educational attainment and employment of foster care youth. *Children and Youth Services Review*, *96*(August 2018), 294–301. https://doi.org/10.1016/j.childyouth.2018.11.048

Lee, J. S., Courtney, M. E., & Hook, J. L. (2012). Formal Bonds During the Transition to Adulthood: Extended Foster Care Support and Criminal/Legal Involvement. *Journal of Public Child Welfare*, *6*(3), 255–279. https://doi.org/10.1080/15548732.2012.683336

Lee, J. S., Courtney, M. E., & Tajima, E. (2014). Extended foster care support during the transition to adulthood: Effect on the risk of arrest. *Children and Youth Services Review*, *42*, 34–42. https://doi.org/10.1016/j.childyouth.2014.03.018

Lim, S., Singh, T. P., & Gwynn, R. C. (2017). Impact of a Supportive Housing Program on Housing Stability and Sexually Transmitted Infections among Young Adults in New York City Who Were Aging out of Foster Care. *American Journal of Epidemiology*, *186*(3), 297–304. https://doi.org/10.1093/aje/kwx046

Miller, M., Bales, D., & Hirsch, M. (2020a). *Extended Foster Care in Washington State: Final Report*. Olympia, WA. Retrieved from https://www.wsipp.wa.gov/ReportFile/1721/Wsipp_Extended-Foster-Care-in-Washington-State-Final-Report_Report.pdf

Miller, M., Bales, D., & Hirsch, M. (2020b). *Extended Foster Care in Washington State: Technical Appendix*. Olympia, WA. Retrieved from https://www.wsipp.wa.gov/ReportFile/1722/Wsipp_Extended-Foster-Care-in-Washington-State-Final-Report_Technical-Appendix.pdf

Nadon, M. L. (2020). Making the transition: How asset building services can promote positive adult outcomes for foster youth. *Children and Youth Services Review*, *115*(December 2019), 105083. https://doi.org/10.1016/j.childyouth.2020.105083

Okpych, N. J., & Courtney, M. E. (2020). The relationship between extended foster care and college outcomes for foster care alumni. *Journal of Public Child Welfare*, *14*(2), 254–276. https://doi.org/10.1080/15548732.2019.1608888

Powers, L. E., Geenen, S., Powers, J., Pommier-Satya, S., Turner, A., Dalton, L. D., … Swank, P. (2012). My Life: Effects of a longitudinal, randomized study of self-determination enhancement on the transition outcomes of youth in foster care and special education. *Children and Youth Services Review*, *34*(11), 2,179–2,187. https://doi.org/10.1016/j.childyouth.2012.07.018

Taylor, D., Roberts, J., Rose, V., Gyani, A., Harrigan, S., & Shlonsky, A. (2020). *Evaluation of the Premier's Youth Initiative: Final Report*. Sydney.

Valentine, E. J., Skemer, M., & Courtney, M. E. (2018). *Making Their Way: Summary Report of the Youth Villages Transitional Living Evaluation*. New York, NY. Retrieved from https://www.mdrc.org/sites/default/files/Youth_Villages_Short_Report_2018_final_web.pdf

Zinn, A., & Courtney, M. (2017). Helping foster youth find a job: a random-assignment evaluation of an employment assistance programme for emancipating youth. *Child and Family Social Work*, *22*(1), 155–164. https://doi.org/10.1111/cfs.12212

REFERENCES

Allen, D., Heyes, K., Hothersall, G., Leary, C. O., Ozan, J., Mitchell-Smith, Z., & Szifris, K. (2020). *Bristol City Council Staying Close Pilot*. London, England. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/931990/Staying_Close_Bristol.pdf

Andersen, S. H. (2019). The effect of aftercare on human capital acquisition among foster care alumni. *Children and Youth Services Review*, *103*, 28–41. https://doi.org/10.1016/j.childyouth.2019.05.025

Austin, T., & Diethorn, R. (1993). *An Evaluation of Pennsylvania's Independent Living Program for Youth*. Shippensburg, PA, USA: Shippensburg University Center for Juvenile Justice Training and Research.

Australian Institute of Health and Welfare. (2020). *Child protection Australia 2018–19*. Canberra: Australian Government. Retrieved from https://www.aihw.gov.au/reports/child-protection/child-protection-australia-2018-19/data

Barnow, B. S., Buck, A., O'Brien, K., Pecora, P., Ellis, M. L., & Steiner, E. (2015). Effective services for improving education and employment outcomes for children and alumni of foster care service: correlates and educational and employment outcomes. *Child & Family Social Work*, *20*, 159–170.

Barth, R. P. (1990). On their own: The experiences of youth after foster care. *Child & Adolescent Social Work Journal*, *7*(5), 419–440. https://doi.org/10.1007/BF00756380

Batista, T., Johnson, A., & Friedmann, L. B. (2018). The effects of youth empowerment programs on the psychological empowerment of young people aging out of foster care. *Journal of the Society for Social Work and Research*, *9*(4), 531–549. https://doi.org/10.1086/700275

Beal, S. J., Nause, K., Lutz, N., & Greiner, M. V. (2020). The Impact of Health Care Education on Utilization Among Adolescents Preparing for Emancipation From Foster Care. *Journal of Adolescent Health*, *66*(6), 740–746. https://doi.org/10.1016/j.jadohealth.2019.12.009

Bengtsson, M., Sjöblom, Y., & Öberg, P. (2018). Young care leavers' expectations of their future: A question of time horizon. *Child and Family Social Work*, *23*(2), 188–195. https://doi.org/10.1111/cfs.12399

Bergström, M., Cederblad, M., Håkansson, K., Jonsson, A. K., Munthe, C., Vinnerljung, B., … Sundell, K. (2020). Interventions in Foster Family Care: A Systematic Review. *Research on Social Work Practice*, *30*(1), 3–18. https://doi.org/10.1177/1049731519832101

Berzin, S. C. (2008). Difficulties in the Transition to Adulthood: Using Propensity Scoring to Understand What Makes Foster Youth Vulnerable. *Social Service Review*, *82*(2), 171–196.

Biehal, N., Clayden, J., Stein, M., & Wade, J. (1994). Leaving care in England: a research perspective. *Children and Youth Services Review*, *16*, 231–254.

Bonella, B., Beirwolf, K., Coleman, L., Sterger, C., Pulli, K., Anguiano, C., & Barton, K. (2020). Mixed Methods Evaluation of Formal Mentoring: Journey UP for Aging out of Foster Care. *Global Social Welfare*, *7*, 121–130. https://doi.org/10.1007/s40609-019-00157-0

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to Meta-Analysis*. Chichester, United Kingdom: John Wiley & Sons. https://doi.org/10.1002/9780470743386

Boston, Q. R. (2012). *Self-Sufficiency among former foster youth who did or did not participate in transitional living programs*. Capella University.

Braciszewski, J. M., Tzilos Wernette, G. K., Moore, R. S., Bock, B. C., Stout, R. L., & Chamberlain, P. (2018). A Pilot Randomized Controlled Trial of a Technology-Based Substance Use Intervention for Youth Exiting Foster Care. *Child Youth Services Review*, *94*, 466–476. https://doi.org/10.1016/j.childyouth.2018.08.011.A

Braciszewski, J. M., Tzilos Wernette, G. K., Moore, R. S., Tran, T. B., Bock, B. C., Stout, R. L., … Vose-O'Neal, A. (2018). Developing a tailored substance use intervention for youth exiting foster care. *Child Abuse and Neglect*, *77*(December 2017), 211–221. https://doi.org/10.1016/j.chiabu.2018.01.013

Braning, M. (2012). *Educational Outcomes for Foster Youth Receiving Independent Life Skills Program Services' Youth Leadership Training. (Doctoral dissertation).*

Broad, B. (1999). Young People Leaving Care: Moving Towards 'Joined Up' Solutions? *Children & Society*, *13*, 81–93. https://doi.org/10.2307/j.ctt9qgv5d.7

Brown, A., Courtney, M. E., & McMillen, J. C. (2015). Behavioral health needs and service use among those who've aged-out of foster care. *Children and Youth Services Review*, *58*, 163–169. https://doi.org/10.1016/j.childyouth.2015.09.020

Brown, S., & Wilderson, D. (2010). Homelessness prevention for former foster youth: Utilization of transitional housing programs. *Children and Youth Services Review*, *32*(10), 1,464–1,472. https://doi.org/10.1016/j.childyouth.2010.07.002

Camacho, C. B., & Hemmeter, J. (2013). Linking youth transition support services: results from two demonstration projects. *Social Security Bulletin*, *73*(1), 59–71.

Cameron, N., Mcpherson, L., Gatwiri, K., & Parmenter, N. (2019). *Research Briefing: Good Practice in Supporting Young People Leaving Care*. Retrieved from https://cetc.org.au/app/uploads/2019/03/Research-Briefing-Leaving-Care-16Feb19-1.pdf

Campo, M., & Commerford, J. (2016). *Supporting young people leaving out-of-home care*. *Child Family Community Australia*. Melbourne. Retrieved from https://aifs.gov.au/cfca/sites/default/files/publication-documents/leaving-care.pdf

Cantu, L. (2013). *Supporting the dream: How California community colleges are responding to the needs of foster youth on their campuses.* University of California, Los Angeles. Retrieved from https://escholarship.org/uc/item/0b78r9p7

Citizens' Committee for Children of New York. (2000). *Can they make it on their own? Aging out of foster care – A report on New York City's Independent Living Program*.

Clare, M., Anderson, B., Murielle, B., & Brenda, C. (2017). Leaving Care and at Risk of Homelessness: The Lift Project. *Children Australia*, *42*(1), 9–17. Retrieved from https://www.cambridge.org/core/journals/children-australia/article/abs/div-classtitleleaving-care-and-at-risk-of-homelessness-the-lift-projectdiv/8C3370C38763A0766ECBFE56F9539D80#access-block

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. New York, NY: Routledge Academic.

Coldiron, J. S., Hensley, S. W., Parigoris, R. M., & Bruns, E. J. (2019). Randomized Control Trial Findings of a Wraparound Program for Dually Involved Youth. *Journal of Emotional and Behavioral Disorders*, *27*(4), 195–208. https://doi.org/10.1177/1063426619861074

Coleman, E. A., & Rosenbek, S. (2006). The Care Transitions Intervention. *Arch Intern Med*, *166*, 1,822–1,828. https://doi.org/10.1002/9781118785775.ch13

Collins, C. C., Bai, R., Fischer, R., Crampton, D., Lalich, N., Liu, C., & Chan, T. (2020). Housing instability and child welfare: Examining the delivery of innovative services in the context of a randomized controlled trial. *Children and Youth Services Review*, *108*(June 2019). https://doi.org/10.1016/j.childyouth.2019.104578

Collins, M. E. (2001). Transition to adulthood for vulnerable youths: A review of research and implications for policy. *Social Service Review*, *75*(2), 271–291. https://doi.org/10.1086/322209

Cook, R. (1993). *A National Evaluation of Title 1V-E Foster Care Independent Living Programs For Youth Final Report Phase 2 Final Report Volume 1*. Rockville, MD, US. Retrieved from http://www.eric.ed.gov/PDFS/ED348599.pdf

Courtney, M. E., Charles, P., Okpych, N. J., Napolitano, L., & Halsted, K. (2014). *Findings from the California Youth Transitions to Adulthood Study (CalYOUTH): Conditions of foster youth at age 17*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/CY_YT_RE1214-1.pdf

Courtney, M. E., & Dworsky, A. (2006). Early outcomes for young adults transitioning from out-of-home care in the USA. *Child and Family Social Work*, *11*(3), 209–219. https://doi.org/10.1111/j.1365-2206.2006.00433.x

Courtney, M. E., Dworsky, A., Cusick, G. R., Havlicek, J., Perez, A., & Keller, T. (2007). *Midwest evaluation of the adult functioning of former foster youth: Outcomes at 21*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-21.pdf

Courtney, M. E., Dworsky, A., Lee, J. S., & Raap, M. (2010). *Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Ages 23 and 24*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-23-and-24.pdf

Courtney, M. E., Dworsky, A., Lee, J. S., & Raap, M. (2011). *Midwest evaluation of the adult functioning of former foster youth: Outcomes at 26*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-

Age-26.pdf

Courtney, M. E., Dworsky, A., & Peters, C. M. (2009). *California's Fostering Connections to Success Act and the Costs and Benefits of Extending Foster Care to 21*. Seattle WA.

Courtney, M. E., & Hook, J. L. (2017). The potential educational benefits of extending foster care to young adults: Findings from a natural experiment. *Children and Youth Services Review*, *72*, 124–132. https://doi.org/10.1016/j.childyouth.2016.09.030

Courtney, M. E., Hook, J., & Lee, J. S. (2010). *Distinct Subgroups of Former Foster Youth during the Transition to Adulthood: Implications for Policy and Practice. Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/Midwest_IB4_Latent_Class_2-1.pdf

Courtney, M. E., & Okpych, N. (2015). *Memo from CalYOUTH: Early findings on extended foster care and legal permanency*. Chicago, Illinois. Retrieved from https://www.chapinhall.org/wp-content/uploads/07_15_Early-Findings-on-Ex-Foster-Care_IB_R3.pdf

Courtney, M. E., & Okpych, N. J. (2017). *Memo from CalYOUTH: Early Findings on the Relationship between Extended Foster Care and Youths' Outcomes at Age 19*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/CY_EF_IB0317.pdf

Courtney, M. E., Okpych, N. J., Charles, P., Mikell, D., Stevenson, B., Park, K., … Feng, H. (2016). *Findings from the California Youth Transitions to Adulthood Study (CalYOUTH): Conditions of Youth at Age 19*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/CY_YT_RE0516_4-1.pdf

Courtney, M. E., Okpych, N. J., Harty, J., Feng, H., Park, S. (Ethan), Powers, J., … Park, K. (2020). *Findings from the California Youth Transitions to Adulthood Study (CalYOUTH): Conditions of Youth at Age 23*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/CY_YT_RE1020.pdf

Courtney, M. E., Okpych, N. J., Park, K., Harty, J., Feng, H., Torres-Garcia, A., & Sayed, S. (2018). Wave 3 of CalYOUTH Study Surveys Former Foster Youth at Age 21. Retrieved from https://www.chapinhall.org/wp-content/uploads/cy_yt_re0518_1.pdf

Courtney, M. E., Okpych, N. J., & Park, S. (2018). *Report from CalYOUTH: Findings on the Relationship between Extended Foster Care and Youth's Outcomes at Age 21*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/PDF/Impacts-of-extended-care-age-21.pdf

Courtney, M. E., Park, S. (Ethan), Harty, J., & Feng, H. (2019). *Memo from CalYOUTH: Relationships between Youth and Caseworker Perceptions of the Service Context and Foster Youth Outcomes*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/PDF/Service-context-and-foster-youth-outcomes.pdf

Courtney, M. E., Terao, S., & Bost, N. (2004). *Midwest Evaluation of the Adult Functioning of Former Foster Youth: Conditions of Youth Preparing to Leave State Care*. *Chapin Hall at the University of Chicago Hall*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-

content/uploads/Midwest-Study-Youth-Preparing-to-Leave-Care.pdf

Courtney, M. E., Valentine, E. J., & Skemer, M. (2019). Experimental evaluation of transitional living services for system-involved youth: Implications for policy and practice. *Children and Youth Services Review*, *96*(June 2018), 396–408. https://doi.org/10.1016/j.childyouth.2018.11.031

Courtney, M. E., Zinn, A., Johnson, H., & Malm, K. E. (2011). *Evaluation of the Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care: Final Report*. Washington DC. Retrieved from http://www.acf.hhs.gov/programs/opre/index.html

Courtney, M. E., Zinn, A., Koralek, R., & Bess, R. (2011). *Evaluation of the Independent Living – Employment Services Program, Kern County, California: Final Report*. Washington DC. Retrieved from https://www.acf.hhs.gov/opre/resource/evaluation-of-the-independent-living-employment-services-program-kern

Courtney, M. E., Zinn, A., Zielewski, E. H., Bess, R. J., Malm, K. E., Stagner, M., & Pergamit, M. (2008a). *Evaluation of the Early Start to Emancipation Preparation Tutoring Program: Los Angeles County*. Washington DC. Retrieved from https://www.acf.hhs.gov/opre/resource/evaluation-of-the-early-start-to-emancipation-preparation-tutoring

Courtney, M. E., Zinn, A., Zielewski, E. H., Bess, R. J., Malm, K. E., Stagner, M., & Pergamit, M. (2008b). *Evaluation of the Life Skills Training Program: Los Angeles County*. Washington DC. Retrieved from https://www.acf.hhs.gov/opre/resource/evaluation-of-the-life-skills-training-program-los-angeles-county

Coxe, S. (2018). Effect size measures for nonlinear count regression models. In *Poster presented at the American Statistical Association Conference on Statistical Practice*. Portland OR. Retrieved from https://stefany.shinyapps.io/RcountD/

Crawford, B., Pharris, A. B., & Dorsett-Burrell, R. (2018). Risk of serious criminal involvement among former foster youth aging out of care. *Children and Youth Services Review*, *93*(August), 451–457. https://doi.org/10.1016/j.childyouth.2018.08.027

Cusick, G. R., Havlicek, J. R., & Courtney, M. E. (2012). Risk for arrest: The role of social bonds in protecting foster youth making the transition to adulthood. *American Journal of Orthopsychiatry*, *82*(1), 19–31. https://doi.org/10.1111/j.1939-0025.2011.01136.x

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, *4*(50). https://doi.org/10.1186/1748-5908-4-50

Department of Health. (2021). *Northern Ireland Care Leavers 2019/20*. Belfast. Retrieved from https://www.health-ni.gov.uk/sites/default/files/publications/health/nicl-19-20.pdf

Dixon, J., Cresswell, C., & Ward, J. (2020a). *The Break Staying Close, Staying Connected Project*. London. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/931987/Staying_Close_Break.pdf

Dixon, J., Cresswell, C., & Ward, J. (2020b). *The House Project for young people leaving care*. London. Retrieved from https://www.york.ac.uk/media/spru/projectfiles/House_Project_Final_evaluation_report.pdf

Donkoh, C., Underhill, K., & Montgomery, P. (2006). Independent living programmes for improving outcomes for young people leaving the care system. *Cochrane Database of Systematic Reviews*, *8*. https://doi.org/10.1002/14651858.CD005558.pub2

Doyle, J. J. (2007). Child protection and child outcomes: Measuring the effects of foster care. *American Economic Review*, *97*(5), 1,583–1,610. https://doi.org/10.1257/aer.97.5.1583

Durham, J., & Forace, L. (2015). *Review of the Transition to Independent Living Allowance (TILA): An analysis of the 1 January 2014 reforms to TILA*. Canberra. Retrieved from https://www.dss.gov.au/families-and-children/benefits-payments/transition-to-independent-living-allowance-tila/review-of-the-transition-to-independent-living-allowance

Dworsky, A. (2020). *Supporting College Students Transitioning Out of Foster Care: A Formative Evaluation Report on the Seita Scholars Program*. Washington DC. Retrieved from https://www.acf.hhs.gov/opre/research/project/multi-site-evaluation-of-foster-youth-programs-chafee-independent-living.

Dworsky, A., Ahrens, K., & Courtney, M. E. (2013). Health insurance coverage and use of family planning services among current and former foster youth: Implications of the health care reform law. *Journal of Health Politics, Policy and Law*, *38*(2), 421–439. https://doi.org/10.1215/03616878-1966360

Dworsky, A., & Courtney, M. E. (2010a). *Assessing the Impact of Extending Care beyond Age 18 on Homelessness: Emerging Findings from the Midwest Study*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/research/extended-foster-care-delays-but-does-not-prevent-homelessness/

Dworsky, A., & Courtney, M. E. (2010b). The risk of teenage pregnancy among transitioning foster youth: Implications for extending state care beyond age 18. *Children and Youth Services Review*, *32*(10), 1,351–1,356. https://doi.org/10.1016/j.childyouth.2010.06.002

Dworsky, A., & Gitlow, E. (2017). Employment outcomes of young parents who age out of foster care. *Children and Youth Services Review*, *72*, 133–140. https://doi.org/10.1016/j.childyouth.2016.09.032

Dworsky, A., Gitlow, E., & Ethier, K. (2018). *Evaluation of the Home Visiting Pilot for Pregnant and Parenting Youth in Care: FY 2018 Preliminary Report*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/Home-Visiting-Preliminary-Report-FY-2018.pdf

Dworsky, A., Napolitano, L., & Courtney, M. E. (2013). Homelessness during the transition from foster care to adulthood. *American Journal of Public Health*, *103*(SUPPL. 2), 318–323. https://doi.org/10.2105/AJPH.2013.301455

Dworsky, A., & Pérez, A. (2010). Helping former foster youth graduate from college through campus support programs. *Children and Youth Services Review*, *32*(2), 255–263. https://doi.org/10.1016/j.childyouth.2009.09.004

Edelman, P. B., & Holzer, H. J. (2013). *Connecting the Disconnected: Improving Education and Employment Outcomes among Disadvantaged Youth*. *IRP Discussion Papers*. Bonn.

Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *BMJ*, *315*, 629. https://doi.org/https://doi.org/10.1136/bmj.315.7109.629

Everson-Hock, E. S., Jones, R., Guillaume, L., Clapton, J., Duenas, A., Goyder, E., … Swann, C. (2011). Supporting the transition of looked-after young people to independent living: A systematic review of interventions and adult outcomes. *Child: Care, Health and Development*, *37*(6), 767–779. https://doi.org/10.1111/j.1365-2214.2011.01287.x

Feng, H., Harty, J. S., Okpych, N. J., & Courtney, M. E. (2020). *Memo from CalYouth: Predictors of Homelessness*. Chicago IL. Retrieved from https://www.chapinhall.org/research/calyouth-efc-homelessness/

Fernandes-Alcantara, A. L. (2019). *Youth transitioning from foster care: Background and federal programs*. Washington DC. Retrieved from https://crsreports.congress.gov/product/pdf/RL/RL34499

Fernandes, D., Lynch, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, *60*(8), 1861–1883. https://doi.org/10.1287/mnsc.2013.1849

Foster, E.M. & Gifford, E. J. (2005). *The transition to adulthood for youth leaving public systems. In R. A. Settersten Jr., F. F. Furstenberg Jr. & R. G. Rumbaut (Eds.), On the frontier of adulthood: Theory, research, and public policy.* Chicago IL: University of Chicago Press.

Fowler, P. J., Marcal, K. E., Zhang, J., Day, O., & Landsverk, J. (2017). Homelessness and aging out of foster care: A national comparison of child welfare-involved adolescents. *Children and Youth Services Review*, *77*(December 2016), 27–33. https://doi.org/10.1016/j.childyouth.2017.03.017

Garland, A. F., Landsverk, J. L., Hough, R. L., & Ellis-MacLeod, E. (1996). Type of maltreatment as a predictor of mental health service use for children in foster care. *Child Abuse and Neglect*, *20*(8), 675–688.

Geenen, S., Powers, L. E., Phillips, L. A., Nelson, M., McKenna, J., Winges-Yanez, N., … Swank, P. (2015). Better Futures: a Randomized Field Test of a Model for Supporting Young People in Foster Care with Mental Health Challenges to Participate in Higher Education. *Journal of Behavioral Health Services and Research*, *42*(2), 150–171. https://doi.org/10.1007/s11414-014-9451-6

Geenen, S., Powers, L. E., Powers, J., Cunningham, M., McMahon, L., Nelson, M., … Fullerton, A. (2013). Experimental Study of a Self-Determination Intervention for Youth in Foster Care. *Career Development for Exceptional Individuals*, *36*(2), 84–95. https://doi.org/10.1177/2165143412455431

Georgiades, S. (2005). A multi-outcome evaluation of an independent living program. *Child and Adolescent Social Work Journal*, *22*(5–6), 417–439. https://doi.org/10.1007/s10560-005-0020-y

Georgiades, S. D. (2003). *A follow-up outcome evaluation of independent living services for foster care youth*. Florida International University.

Giffords, E. D., Alonso, C., & Bell, R. (2007). A transitional living program for homeless adolescents: A case study. *Child and Youth Care Forum*, *36*(4), 141–151. https://doi.org/10.1007/s10566-007-9036-0

Gjertson, L. M. (2016). *After care: Essays on foster care alumni in young adulthood. Essays on Foster Care Alumni in Young Adulthood*. University of Wisconsin-Madison. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc14&NEWS=N&AN=2016-53063-068

Goddard, J., & Barrett, S. (2008). Guidance, policy and practice and the health needs of young people leaving care. *Journal of Social Welfare and Family Law*, *30*(1), 31–47. https://doi.org/10.1080/09649060802124760

Goerge, R. M., Bilaver, L., Lee, B. J., Needell, B., Brookhart, A., & Jackman, W. (2002). *Employment Outcomes for Youth Aging Out of Foster Care*. Chicago IL. Retrieved from https://aspe.hhs.gov/basic-report/employment-outcomes-youth-aging-out-foster-care#Summary2

Gray, L., Font, S., Unrau, Y., & Dawson, A. (2018). The Effectiveness of a Brief Mindfulness-Based Intervention for College Freshmen Who Have Aged out of Foster Care. *Innovative Higher Education*, *43*(5), 339–352. https://doi.org/10.1007/s10755-018-9433-3

Greeno, E. J., Lee, B. R., Tuten, M., & Harburger, D. (2019). Prevalence of Substance Use, Housing Instability, and Self-Perceived Preparation for Independence Among Current and Former Foster Youth. *Child and Adolescent Social Work Journal*, *36*(4), 409–418. https://doi.org/10.1007/s10560-018-0568-y

Greeson, J. K. P., Garcia, A. R., Kim, M., & Courtney, M. E. (2015). Foster Youth and Social Support: The First RCT of Independent Living Services. *Research on Social Work Practice*, *25*(3), 349–357. https://doi.org/10.1177/1049731514534900

Greeson, J. K. P., Garcia, A. R., Kim, M., Thompson, A. E., & Courtney, M. E. (2015). Development & maintenance of social support among aged out foster youth who received independent living services: Results from the multi-site evaluation of foster youth programs. *Children and Youth Services Review*, *53*, 1–9. https://doi.org/10.1016/j.childyouth.2015.03.016

Greeson, J. K. P., Garcia, A. R., Tan, F., Chacon, A., & Ortiz, A. J. (2020). Interventions for youth aging out of foster care: A state of the science review. *Children and Youth Services Review*, *113*(April), 105005. https://doi.org/10.1016/j.childyouth.2020.105005

Greeson, J. K. P., & Thompson, A. E. (2017). Development, Feasibility, and Piloting of a Novel Natural Mentoring Intervention for Older Youth in Foster Care. *Journal of Social Service Research*, *43*(2), 205–222. https://doi.org/10.1080/01488376.2016.1248269

Greeson, J. K. P., Usher, L., & Grinstein-Weiss, M. (2010). One adult who is crazy about you: Can natural mentoring relationships increase assets among young adults with and without foster care experience? *Children and Youth Services Review*, *32*(4), 565–577. https://doi.org/10.1016/j.childyouth.2009.12.003

Guyatt, G. H., Oxman, A. D., Vist, G. E., Kunz, R., Falck-Ytter, Y., Alonso-Coello, P., … Group, for the G.

W. (2008). GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ*, *336*(924). https://doi.org/https://doi.org/10.1136/bmj.39489.470347.AD

Gypen, L., Vanderfaeillie, J., De Maeyer, S., Belenger, L., & Van Holen, F. (2017). Outcomes of children who grew up in foster care: Systematic-review. *Children and Youth Services Review*, *76*, 74–83. https://doi.org/10.1016/j.childyouth.2017.02.035

Häggman-Laitila, A., Salokekkilä, P., & Karki, S. (2020). Integrative review of the evaluation of additional support programs for care leavers making the transition to adulthood. *Journal of Pediatric Nursing*, *54*, 63–77. https://doi.org/10.1016/j.pedn.2020.05.009

Hamilton, R. (2016). Fostering Success Coach Model. Retrieved from https://www.cebc4cw.org/program/fostering-success-coach-model/

Harvey, L. A., & Dijkers, M. P. (2019). Should trials that are highly vulnerable to bias be excluded from systematic reviews? *Spinal Cord*, *57*(9), 715–716. https://doi.org/10.1038/s41393-019-0340-y

Heerde, J. A., Hemphill, S. A., & Scholes-Balog, K. E. (2018). The impact of transitional programmes on post-transition outcomes for youth leaving out-of-home care: a meta-analysis. *Health and Social Care in the Community*, *26*(1), e15–e30. https://doi.org/10.1111/hsc.12348

Hernandez, L., & Naccarato, T. (2010). Scholarships and supports available to foster care alumni: A study of 12 programs across the US. *Children and Youth Services Review*, *32*(5), 758–766. https://doi.org/https://doi.org/10.1016/j.childyouth.2010.01.014

Herrman, H., Humphreys, C., Halperin, S., Monson, K., Harvey, C., Mihalopoulos, C., … Moeller-Saxone, K. (2016). A controlled trial of implementing a complex mental health intervention for carers of vulnerable young people living in out-of-home care: The ripple project. *BMC Psychiatry*, *16*(1), 1–16. https://doi.org/10.1186/s12888-016-1145-6

Heyes, K., Allen, D., Hothersall, G., Mitchell-Smith, Z., Leary, C. O., Ozan, J., & Szifris, K. (2020). *St Christopher's Staying Close Pilot*. London. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932014/Staying_Close_St_Christopher_s.pdf

Higgins, J. P. T., & Thompson, S. G. (2002). Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine*, *21*(11), 1,539–1,558. https://doi.org/10.1002/sim.1186

Higgins, J. P. T., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *BMJ*, *327*, 557–560.

Hogan, S. R. (2020). Foster Youth, Health, and College Campus Support Program Participation: The First-Year Experience. *Journal of Student Affairs Research and Practice*, *57*(1), 1–14. https://doi.org/10.1080/19496591.2019.1622550

Hook, J. L., & Courtney, M. E. (2011). Employment outcomes of former foster youth as young adults: The importance of human, personal, and social capital. *Children and Youth Services Review*, *33*(10), 1,855–1,865. https://doi.org/10.1016/j.childyouth.2011.05.004

Johnson, G., Natalier, K., Bailey, N., Kunnen, N., Liddiard, M., Mendes, P., & Hollows, A. (2009).

Improving housing outcomes for young people leaving state out of home care. Retrieved from ahuri.edu.au/__data/assets/pdf_file/0019/2809/AHURI_Positioning_Paper_No117_Improving-housing-outcomes-for-young-people-leaving-state-out-of-home-care.pdf

Jones, L. (2011). The Impact of Transitional Housing on the Post-Discharge Functioning of Former Foster Youth. *Residential Treatment for Children & Youth*, *28*(1), 17–38.

Jones, L., & Lansdverk, J. (2006). Residential education: Examining a new approach for improving outcomes for foster youth. *Children and Youth Services Review*, *28*(10), 1152–1168. https://doi.org/10.1016/j.childyouth.2005.10.015

Karpur, A., Clark, H. B., Caproni, P., & Sterner, H. (2005). Transition to Adult Roles for Students With Emotional/Behavioral Disturbances: A Follow-Up Study of Student Exiters From Steps-to-Success. *Career Development and Transition for Exceptional Individuals*, *28*(1).

Katz, C. C., & Courtney, M. E. (2015). Evaluating the self-expressed unmet needs of emancipated foster youth over time. *Children and Youth Services Review*, *57*, 9–18. https://doi.org/https://doi.org/10.1016/j.childyouth.2015.07.016

Kim, H. K., Buchanan, R., & Price, J. M. (2017). Pathways to Preventing Substance Use Among Youth in Foster Care. *Prevention Science*, *18*(5), 567–576. https://doi.org/10.1007/s11121-017-0800-6

Kim, Y., Ju, E., Rosenberg, R., & Farmer, E. (Betsy) M. Z. (2019). Estimating the effects of independent living services on educational attainment and employment of foster care youth. *Children and Youth Services Review*, *96*(August 2018), 294–301. https://doi.org/10.1016/j.childyouth.2018.11.048

Kroner, M. J., & Mares, A. S. (2009). Lighthouse independent living program: Characteristics of youth served and their outcomes at discharge. *Children and Youth Services Review*, *31*(5), 563–571. https://doi.org/https://doi.org/10.1016/j.childyouth.2008.10.011

Kroner, M. J., & Mares, A. S. (2011). Living arrangements and level of care among clients discharged from a scattered-site housing-based independent living program. *Children and Youth Services Review*, *33*(2), 405–415. https://doi.org/10.1016/j.childyouth.2010.11.001

Kushel, M. B., Yen, I. H., Gee, L., & Courtney, M. E. (2007). Homelessness and Health Care Access After Emancipation. *Archives of Pediatrics & Adolescent Medicine*, *161*(10), 986–933. https://doi.org/10.1001/archpedi.161.10.986

Lee, J., Powers, L., Geenen, S., Schmidt, J., Blakeslee, J., & Hwang, I. (2018). Mental health outcomes among youth in foster care with disabilities. *Children and Youth Services Review*, *94*(May), 27–34. https://doi.org/10.1016/j.childyouth.2018.09.025

Lee, J. S., Courtney, M. E., & Hook, J. L. (2012). Formal Bonds During the Transition to Adulthood: Extended Foster Care Support and Criminal/Legal Involvement. *Journal of Public Child Welfare*, *6*(3), 255–279. https://doi.org/10.1080/15548732.2012.683336

Lee, J. S., Courtney, M. E., & Tajima, E. (2014). Extended foster care support during the transition to adulthood: Effect on the risk of arrest. *Children and Youth Services Review*, *42*, 34–42. https://doi.org/10.1016/j.childyouth.2014.03.018

Lee, S. (2016). MyPath Savings. Retrieved from https://www.cebc4cw.org/program/mypath-savings/

Lee, S. J. (2017). *Independent Living Programs and changes in resilience of transition-age foster care youth. Dissertation Abstracts International Section A: Humanities and Social Sciences*. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc14&NEWS=N&AN=2016-58390-238

Lemon, K., Hines, A. M., & Merdinger, J. (2005). From foster care to young adulthood: The role of independent living programs in supporting successful transitions. *Children and Youth Services Review*, *27*(3), 251–270. https://doi.org/10.1016/j.childyouth.2004.09.005

Lim, S., Singh, T. P., & Gwynn, R. C. (2017). Impact of a Supportive Housing Program on Housing Stability and Sexually Transmitted Infections among Young Adults in New York City Who Were Aging out of Foster Care. *American Journal of Epidemiology*, *186*(3), 297–304. https://doi.org/10.1093/aje/kwx046

Liu, C., Vazquez, C., Jones, K., & Fong, R. (2019). The impact of independent living programs on foster youths' educational outcomes: A scoping review. *Children and Youth Services Review*, *98*(September 2018), 213–220. https://doi.org/10.1016/j.childyouth.2019.01.006

Lloyd, T. (2016). Opportunity Passport. Retrieved from https://www.cebc4cw.org/program/opportunity-passport-sup-tm-sup/

Lüdecke, D. (2019). esc: Effect Size Computation for Meta Analysis. https://doi.org/10.5281/zenodo.1249218

Malina, C. (2016). Threshold Mothers Project Transitional Living Program (TLP). Retrieved from https://www.cebc4cw.org/program/threshold-mothers-project-transitional-living-program/

Malm, K., Vandivere, S., Allen, T., Williams, S. C., & McKlindon, A. (2014). *A Rigorous Evaluation of Family Finding in North Carolina*. Bethesda, Maryland.

Manno, M., Jacobs, E., Alson, J., & Skemer, M. (2014). *Moving into Adulthood: Implementation Findings from the Youth Villages Transitional Living Evaluation*. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED545451&site=ehost-live&scope=site

McDaniel, M., Courtney, M. E., Pergamit, M. R., & Lowenstein, C. (2014). *Preparing for a "Next Generation" Evaluation of Independent Living Programs for Youth in Foster Care*. Chicago IL. Retrieved from https://www.urban.org/research/publication/preparing-next-generation-evaluation-independent-living-programs-youth-foster-care

McDonald, P., & Mendes, P. (2019). Extending care: Supporting young people's transition from out-of-home care to adulthood. *Australian Institute of Family Studies*. Retrieved from https://aifs.gov.au/cfca/webinars/extending-care-supporting-young-peoples-transition-out-home-care-adulthood

MDRC. (2018). *Lessons from the Implementation of Learn and Earn to Achieve Potential (LEAP)*. New York. Retrieved from https://www.mdrc.org/publication/lessons-implementation-learn-and-earn-

achieve-potential-leap

Mendeley. (2019). Mendeley Reference Manager. Amsterdam: Elsevier. Retrieved from https://www.mendeley.com/reference-management/reference-manager/

Mendes, P. (2012). Examining the experiences of young people transitioning from out-of-home care in rural Victoria. Rural Society. *Communities, Children and Families Australia*, *6*(1), 30–42.

Mendes, P., & Purtell, J. (2017). An evaluation of housing outcomes from a support program for young people transitioning from out-of-home care in Victoria, Australia. *Scottish Journal of Residential Child Care*, *16*(2), 1–16. Retrieved from http://www.celcis.org/resources/scottish_journal

Mezey, G., Meyer, D., Robinson, F., Bonell, C., Campbell, R., Gillard, S., … White, S. (2015). Developing and piloting a peer mentoring intervention to reduce teenage pregnancy in looked-after children and care leavers: An exploratory randomised controlled trial. *Health Technology Assessment*, *19*(85), 1–139. https://doi.org/10.3310/hta19850

Miller, M., Bales, D., & Hirsch, M. (2020a). *Extended Foster Care in Washington State: Final Report*. Olympia, WA. Retrieved from https://www.wsipp.wa.gov/ReportFile/1721/Wsipp_Extended-Foster-Care-in-Washington-State-Final-Report_Report.pdf

Miller, M., Bales, D., & Hirsch, M. (2020b). *Extended Foster Care in Washington State: Technical Appendix*. Olympia, WA. Retrieved from https://www.wsipp.wa.gov/ReportFile/1722/Wsipp_Extended-Foster-Care-in-Washington-State-Final-Report_Technical-Appendix.pdf

Minnesota Department of Human Services Family and Children's Service Division. (1999). *IV-E-IL: Adolescent living skills. Final Report*.

Mitchell-Smith, Z., Allen, D., Heyes, K., Hothersall, G., Leary, C. O., Ozan, J., & Szifris, K. (2020). *Staying Close Suffolk*. London. Retrieved from https://www.suffolk.gov.uk/assets/Children-families-and-learning/children-in-care-and-care-leavers/Staying-Close-Operating-Model.pdf

Mitchell-Smith, Z., Caton, S., & Potter, A. (2020). *Shared Lives 16 + (Pilot)*. London. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933114/Shared_Lives.pdf

Mollidor, C., Bierman, R., Akhurst, E., & Mori, I. (2020). *Evaluation of the Care Leavers Partnership: Southwark Council and Catch22*. London. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/931984/Catch22_Southwark_-_Ipsos_MORI_final_report.pdf

Mollidor, C., Bierman, R., Goujon, C., Zanobetti, L., & Akhurst, E. (2020). *Evaluation of the Derby Local Area Coordination Approach*. London. Retrieved from https://lacnetwork.org/wp-content/uploads/2020/11/Evaluation-Derby_Local_Area_Coordination.pdf

Morton, B. M., Kull, M., Carreon, E. D., Daferede, S., Wood, E., Cohen, L., & Barreyro, P. (2020). *Direct Cash Transfers Programs Can Help Youth Sustainably Exit Homelessness. Chapin Hall at the University of Chicago Hall*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/Developing-a-Direct-Cash-Transfer-Program-for-Youth.pdf

Muir, S., & Hand, K. (2018). *Beyond 18: The longitudinal study on leaving care. Wave 1 Research Report: Transition planning and preparation*. Melbourne. Retrieved from http://www.dhs.vic.gov.au/about-the-department/plans,-programs-and-projects/projects-and-initiatives/youth-specific/beyond-18-the-longitudinal-study-on-leaving-care

Muller-Ravett, S., & Jacobs, E. (2012). *After Foster Care and Juvenile Justice: a preview oF The youth village Transitional living evaluation*. New York. Retrieved from https://www.mdrc.org/sites/default/files/After Foster Care.pdf

Munson, M. R., Stanhope, V., Small, L., & Atterbury, K. (2017). "At times I kinda felt I was in an institution": Supportive housing for transition age youth and young adults. *Children and Youth Services Review*, *73*, 430–436. https://doi.org/https://doi.org/10.1016/j.childyouth.2016.11.027

Naccarato, T., Brophy, M., & Courtney, M. E. (2010). Employment outcomes of foster youth: The results from the Midwest Evaluation of the Adult Functioning of Foster Youth. *Children and Youth Services Review*, *32*(4), 551–559. https://doi.org/10.1016/j.childyouth.2009.11.009

Naccarato, T., & DeLorenzo, E. (2008). Transitional youth services: Practice implications from a systematic review. *Child and Adolescent Social Work Journal*, *25*(4), 287–308. https://doi.org/10.1007/s10560-008-0127-z

Nadon, M. L. (2020). Making the transition: How asset building services can promote positive adult outcomes for foster youth. *Children and Youth Services Review*, *115*(December 2019), 105083. https://doi.org/10.1016/j.childyouth.2020.105083

National Statistics. (2020a). *Children's Social Work Statistics, 2018-19*. Edinburgh. Retrieved from http://www.gov.scot/Resource/0049/00499452.pdf

National Statistics. (2020b). Children looked after in England including adoptions. Retrieved March 1, 2021, from https://explore-education-statistics.service.gov.uk/find-statistics/children-looked-after-in-england-including-adoptions/2020

Neagu, M., Centre, R., & Dixon, J. (2020). *The Portsmouth Aspiration Staying Close Project*. London. Retrieved from https://www.york.ac.uk/media/spru/projectfiles/Staying_Close_Portsmouth.pdf

Neagu, M., & Dixon, J. (2020). *The Fair Ways Staying Close Project*. London. Retrieved from https://www.york.ac.uk/media/spru/projectfiles/Staying_Close_Fair_Ways.pdf

Nesmith, A., & Christophersen, K. (2014). Smoothing the transition to adulthood: Creating ongoing supportive relationships among foster youth. *Children and Youth Services Review*, *37*, 1–8. https://doi.org/10.1016/j.childyouth.2013.11.028

O'Donnell, R., Hatzikiriakidis, K., Mendes, P., Savaglio, M., Green, R., Kerridge, G., … Skouteris, H. (2020). The impact of transition interventions for young people leaving care: a review of the Australian evidence. *International Journal of Adolescence and Youth*, *25*(1), 1076–1088. https://doi.org/10.1080/02673843.2020.1842216

O'Leary, C., Allen, D., Hothersall, G., Heyes, K., Mitchell-Smith, Z., Ozan, J., & Szifris, K. (2020). *Lincolnshire Staying Close pilot*. London. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data

/file/932000/Staying_Close_NE_Lincolnshire.pdf

Office of the Auditor General Western Australia. (2018). *Young people leaving care – Report 2 August 2018-19*. Perth. Retrieved from https://audit.wa.gov.au/reports-and-publications/reports/young-people-leaving-care/

Okpych, N. J. (2017). *Make or Break: College-going and College-leaving among foster care youth*. University of Chicago.

Okpych, N. J., & Courtney, M. E. (2020). The relationship between extended foster care and college outcomes for foster care alumni. *Journal of Public Child Welfare*, *14*(2), 254–276. https://doi.org/10.1080/15548732.2019.1608888

Okpych, N. J., Park, K., Feng, H., Torres-Garcia, A., & Courtney, M. E. (2018). Many California Foster Youth Have Inadequate Social Support and Need More Support From Adults. Retrieved from https://www.chapinhall.org/research/calyouth-social-support/

Okpych, N. J., Park, S. E., & Courtney, M. E. (2019). California Foster Youth in Extended Care Have Better Postsecondary Education Outcomes. Retrieved from https://www.chapinhall.org/research/california-foster-youth-in-extended-care-have-better-postsecondary-education-outcomes/

Osgood, D., Foster, E., Flanagan, C., & Ruth, G. (2007). *On Your Own Without a Net: The Transition to Adulthood for Vulnerable Populations*. *Bibliovault OAI Repository, the University of Chicago Press*. Chicago IL. https://doi.org/10.7208/chicago/9780226637853.001.0001

Parent-Johnson, W. (2019). Self-Determined Career Design Model (SDCDM). Retrieved from https://www.cebc4cw.org/program/self-determined-career-design-model-sdcdm/

Park, K., Courtney, M. E., Okpych, N. J., & Nadon, M. (2020). *Memo from CalYOUTH: Trends in Justice System Involvement from Ages 17 to 21*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/CJ-involvement-memo.pdf

Park, S., Okpych, N. J., & Courtney, M. E. (2020). Predictors of remaining in foster care after age 18 years old. *Child Abuse and Neglect*, *108*. https://doi.org/10.1016/j.chiabu.2020.104629

Peters, C. M., Dworsky, A., Courtney, M. E., & Pollack, H. (2009). *Extending foster care to age 21: Weighing the costs to government against the benefits to youth*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/Peters-Extending-foster-care-to-age-21.pdf

Powers, J., Park, S. (Ethan), Okpych, N. J., & Courtney, M. E. (2020). *Foster Youths' Roles and Satisfaction Related to the Planning of their Transitions to Independent Adulthood*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/TILP-Participation-memo.pdf

Powers, L. E., Fullerton, A., Schmidt, J., Geenen, S., Oberweiser-Kennedy, M., Dohn, J. A., … Blakeslee, J. (2018). Perspectives of youth in foster care on essential ingredients for promoting self-determination and successful transition to adult life: My life model. *Children and Youth Services Review*, *86*(November 2017), 277–286. https://doi.org/10.1016/j.childyouth.2018.02.007

Powers, L. E., Geenen, S., Powers, J., Pommier-Satya, S., Turner, A., Dalton, L. D., … Swank, P. (2012). My Life: Effects of a longitudinal, randomized study of self-determination enhancement on the transition outcomes of youth in foster care and special education. *Children and Youth Services Review*, *34*(11), 2,179–2,187. https://doi.org/10.1016/j.childyouth.2012.07.018

Powers, L. E., Sowers, J., Turner, A., Nesbitt, M., Knowles, E., & & Ellison, R. (1996). *Take charge: A model for promoting self-determination among adolescents with challenges. In L.E. Powers, G.H.S. Singer & J. Sowers (Eds.), On the road to autonomy: Promoting self-competence for children and adolescents with disabilities*. Baltimore: Paul H Brookes Publishing.

Powers, L. E., Turner, A., Ellison, R., Matuszewski, J., Wilson, R., Phillips, A., & Rein, C. (2001). A multi-component intervention to promote adolescent self-determination. *Journal of Rehabilitation*, *67*, 13–19.

Powers, L. E., Turner, A., Westwood, D., Matuszewski, J., Wilson, R., & Phillips, A. (2001). TAKE CHARGE for the Future: A Controlled Field-Test of a Model to Promote Student Involvement in Transition Planning. *Career Development for Exceptional Individuals*, *24*(1), 89–104. https://doi.org/10.1177/088572880102400107

Purtell, J., Muir, S., & Carrol, M. (2019). *Beyond 18: The Longitudinal Study on Leaving Care Wave 2 Research Report: Transitioning to post-care life*. Melbourne.

Putnam-Hornstein, E., Hammond, I., Eastman, A. L., McCroskey, J., & Webster, D. (2016). Extended Foster Care for Transition-Age Youth: An Opportunity for Pregnancy Prevention and Parenting Support. *Journal of Adolescent Health*, *58*(4), 485–487. https://doi.org/10.1016/j.jadohealth.2015.11.015

R Core Team. (2020). R: A language and environment for statistical computing. Vienna: R Foundation for Statistical Computing. Retrieved from http://www.r-project.org/

Rácz, A., & Korintus, M. (2013). Enabling young people with a care background to stay in education in Hungary: Accommodation with conditions and support. *European Journal of Social Work*, *16*. https://doi.org/10.1080/13691457.2012.724390

Randolph, K. A., & Thompson, H. (2017). A systematic review of interventions to improve post-secondary educational outcomes among foster care alumni. *Children and Youth Services Review*, *79*(July), 602–611. https://doi.org/10.1016/j.childyouth.2017.07.013

Rashid, S. (2004). Evaluating a transitional living program for homeless, former foster care youth. *Research on Social Work Practice*, *14*(4), 240–248. https://doi.org/10.1177/1049731503257883

Rassen, E., Cooper, D. M. ., & Mery, P. (2010). Serving Special Populations: A Study of Former Foster Youth at California Community Colleges. *Journal of Applied Research in the Community College*, *17*(2), 24–34.

Rethlefsen, M., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., & Koffel, J. (2019). PRISMA-S: An Extension to the PRISMA Statement for Reporting Literature Searches in Systematic Reviews, 1–19. https://doi.org/10.31219/osf.io/sfc38

Ringle, J. L., Ingram, S., Newman, V., Thompson, R. W., & Waite, T. (2008). Preparing Youth for the

Transition into Adulthood: A Process Description. *Residential Treatment for Children & Youth*, *24*(3), 231–242. https://doi.org/10.1080/08865710802115346

Rogers, R. (2015). Taking Responsibility for the Provision of Financial, Housing, and Emotional Support for Young People Leaving Care. *Australian Social Work*, *68*(1), 99–114. https://doi.org/10.1080/0312407X.2013.868013

Rosenwald, M., McGhee, T., & Noftall, R. (2013). Perspectives on Independent Living Services Among Resilient Youth. *Journal of Family Social Work*, *16*(2), 148–163. https://doi.org/10.1080/10522158.2013.765816

Scannapieco, M., Schagrin, J., & Scannapieco, T. (1995). Independent living programs: Do they make a difference? *Child & Adolescent Social Work Journal*, *12*(5), 381–389. https://doi.org/10.1007/BF01876737

Scannapieco, M., Smith, M., & Blakeney-Strong, A. (2016). Transition from Foster Care to Independent Living: Ecological Predictors Associated with Outcomes. *Child and Adolescent Social Work Journal*, *33*(4), 293–302. https://doi.org/10.1007/s10560-015-0426-0

Schwab, N. (2006). Independent Living Program-Lighthouse. Retrieved from https://www.cebc4cw.org/program/independent-living-program-lighthouse/

Schwartz-Tayri, T. M., & Spiro, S. E. (2017). The Other Side of the Bridge: A Follow-Up Study of Israeli Young Adults Who Participated in A Transitional Housing Program after Aging Out from Care. *Residential Treatment for Children and Youth*, *34*(3–4), 311–324. https://doi.org/10.1080/0886571X.2017.1334164

Schwarzer, G. (2021). General Package for Meta-Analysis. https://doi.org/10.1007/978-3-319-21416-0>

Simon, A. (2008). Early access and use of housing: care leavers and other young people in difficulty. *Child & Family Social Work*, *13*(1), 91–100. https://doi.org/https://doi.org/10.1111/j.1365-2206.2007.00524.x

Solomita, J., & Clark, H. B. (2016). Transition to Independence Process (TIP) Model. Retrieved from https://www.cebc4cw.org/program/transition-to-independence-tip-model-2/

Sowers, J.-A., & Swank, P. (2017). Enhancing the Career Planning Self-Determination of Young Adults with Mental Health Challenges. *Journal of Social Work in Disability & Rehabilitation*, *16*(2), 161–179. https://doi.org/10.1080/1536710X.2017.1300081

Statistics for Wales. (2019). *Experimental Statistics: Children looked after by local authorities, 2018-19*. Cardiff. Retrieved from https://gov.wales/sites/default/files/statistics-and-research/2019-10/children-looked-after-local-authorities-april-2018-march-2019-964.pdf

Stein, B. D., Zima, B. T., Elliott, M. N., Burnam, M. A., Shahinfar, A., Fox, N. A., & Leavitt, L. A. (2001). Violence exposure among school-age children in foster care: Relationship to distress symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*(5), 588–594. https://doi.org/10.1097/00004583-200105000-00019

Strahl, B., van Breda, A. D. P., Mann-Feder, V., & Schröer, W. (2020). A multinational comparison of

care-leaving policy and legislation. *Journal of International and Comparative Social Policy*, 1–16. https://doi.org/10.1017/ics.2020.26

Sundell, K., Åström, T., Jonsson, A. K., Håkanson, K., & Tranæus, S. (2020). *Stöd till unga som flyttar från social dygnsvård: SBU bereder*. Stockholm.

Szifris, K., Allen, D., Hothersall, G., Heyes, K., Mitchell-Smith, Z., & O'Leary, C. (2020). *Staying Close North Tyneside Pilot*. London. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932004/Staying_Close_North_Tyneside.pdf

Taylor, D., Roberts, J., Rose, V., Gyani, A., Harrigan, S., & Shlonsky, A. (2020). *Evaluation of the Premier's Youth Initiative: Final Report*. Sydney.

Taylor, R. J., Shade, K., Lowry, S. J., & Ahrens, K. (2020). Evaluation of reproductive health education in transition-age youth. *Children and Youth Services Review*, *108*(May 2019), 104530. https://doi.org/10.1016/j.childyouth.2019.104530

The EndNote Team. (2013). Endnote. Philadelphia, PA: Clarivate Analytics.

Torres-Garcia, A., Okpych, N. J., & Courtney, M. E. (2019). *Memo from CalYOUTH: Youths' and Child Welfare Workers' Perceptions of Youths' Educational Preparedness*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/PDF/CalYouth-Youths-Educational-Preparedness-Brief.pdf

Trout, A. L., Lambert, M. C., Epstein, M. H., Tyler, P., Thompson, R. W., Stewart, M., & Daly, D. L. (2013). Comparison of On the Way Home aftercare supports to traditional care following discharge from a residential setting: a pilot randomized controlled trial. *Child Welfare*, *92*(3), 27–45.

Tucker, L. P., Dworsky, A., & Van Drunen, M. (2020). *Formative Evaluation Lessons Learned Evaluating the Implementation of the Youth Transitions Partnership in Alameda County*. *Chapin Hall at the University of Chicago*. Chicago IL. Retrieved from https://www.chapinhall.org/wp-content/uploads/PDF/YTP-FELL-report-2020.pdf

United States General Accounting Office. (1999). *Foster care: Effectiveness of Independent Living Services Unknown*. Washington DC. Retrieved from https://www.gao.gov/new.items/he00013.pdf

Valentine, E. J., Skemer, M., & Courtney, M. E. (2018). *Making Their Way: Summary Report of the Youth Villages Transitional Living Evaluation*. New York, NY. Retrieved from https://www.mdrc.org/sites/default/files/Youth_Villages_Short_Report_2018_final_web.pdf

van Breda, A. D., Munro, E. R., Gilligan, R., Anghel, R., Harder, A., Incarnato, M., … Storø, J. (2020). Extended care: Global dialogue on policy, practice and research. *Children and Youth Services Review*, *119*(April), 105596. https://doi.org/10.1016/j.childyouth.2020.105596

Veritas Health Innovation. (n.d.). Covidence systematic review software. Melbourne.

Vorhies, V., Glover, C. M., Davis, K., Hardin, T., Krzyzanowski, A., Harris, M., … Wilkniss, S. (2009). Improving outcomes for pregnant and parenting foster care youth with severe mental illness: An evaluation of a transitional living program. *Psychiatric Rehabilitation Journal*, *33*(2), 115–124.

https://doi.org/10.2975/33.2.2009.115.124

Wade, J. (2008). The ties that bind: Support from birth families and substitute families for young people leaving care. *British Journal of Social Work*, *38*(1), 39–54. https://doi.org/10.1093/bjsw/bcl342

Watt, T. T., Kim, S., & Garrison, K. (2018). The Relationship between State Supports An Analysis of the National Youth Youth Aging Out of Foster Care: and Post-Secondary Enrollment among in Transition Database. *Child Welfare*, *96*(3).

Wells, M., & Zunz, S. (2009). Challenges and strengths among Chafee Education and Training Voucher eligible youth: The rural service providers' perspective. *Children and Youth Services Review*, *31*(2), 235–242. https://doi.org/https://doi.org/10.1016/j.childyouth.2008.07.015

Woodgate, R. L., Morakinyo, O., & Martin, K. M. (2017). Interventions for youth aging out of care: A scoping review. *Children and Youth Services Review*, *82*(July), 280–300. https://doi.org/10.1016/j.childyouth.2017.09.031

Yelick, A. (2017). Research Review: Independent living programmes: the influence on youth ageing out of care (YAO). *Child and Family Social Work*, *22*(1), 515–526. https://doi.org/10.1111/cfs.12208

Zinn, A., & Courtney, M. (2017). Helping foster youth find a job: a random-assignment evaluation of an employment assistance programme for emancipating youth. *Child and Family Social Work*, *22*(1), 155–164. https://doi.org/10.1111/cfs.12212

Zinn, A., & Courtney, M. E. (2018). Despite Implementation of Extended Foster Care in California, Permanency Rates Declined. Retrieved from https://www.chapinhall.org/research/despite-implementation-of-extended-foster-care-in-california-permanency-rates-declined/

APPENDIX A: SEARCH STRATEGY & RESULTS

Table A.1 Search strategy and results for Cochrane Controlled Register of Trials

#	Search terms	Result
1	child welfare/ or foster home care/	450
2	(foster adj2 (youth or child* or care)).ti.	218
3	(foster adj2 (youth or child* or care)).ab	345
4	Independent Living/	453
5	independent living.ti.	43
6	independent living.ab	408
7	Self Care/	4,120
8	(extend* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	312
9	(leav* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	109
10	(transit* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	1,053
11	(ag* out adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	3,586
12	(emancipat* adj2 (care or foster* or out of home care or OOHC or looked after)).mp	2
13	1 or 2 or 3	777
14	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12	9,827
15	13 and 14	82
16	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or Propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ti.	474,477

#	Search terms	Result
17	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or Propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ab	1,035,601
18	Clinical Trial or Empirical Study or Experimental Replication or Followup Study or Longitudinal Study or Prospective Study or Retrospective Study or Quantitative Study or Treatment Outcome or Field Study or Mathematical Modeling).mp.	577,175
19	16 or 17 or 18	1,275,185
20	15 and 19	64

Table A.2 Search strategy and results for CINAHL via EBSCO

#	Search terms	Result
1	(MM 'Foster Home Care') OR (MH 'Foster Parents') OR (MH 'Child, Foster')	4,999
2	(MH 'Child Welfare+')	37,640
3	TI foster n2 child* OR TI foster n2 youth OR TI foster n2 parent* OR TI foster n2 care* OR TI foster n2 home	2,564
4	AB foster n2 child* OR AB foster n2 youth OR AB foster n2 parent* OR AB foster n2 care* OR AB foster n2 home	3,389
5	(TI (extend* n2 care or foster*)) OR (AB (extend* n2 care or foster*))	23,930
6	(TI (leav* n2 care or foster*)) OR (AB (leav* n2 care or foster*))	23,049
7	(TI (transit* n2 care or foster*)) OR (AB (transit* n2 care or foster*))	27,955
8	(TI (ag* out n2 care or foster*)) OR (AB (ag* out n2 care or foster*))	22,441
9	1 OR 2 OR 3 OR 4	41,875
10	5 OR 6 OR 7 OR 8	30,348
11	9 AND 10	5,114
12	(MH 'Randomized Controlled Trials') OR (MH 'Clinical Trials')	270,809
13	(MH 'Evaluation' OR ('MH Program Evaluation')	2,301

#	Search terms	Result
14	TI 'Randomized Controlled Trials' OR TI 'Clinical Trials'	17,234
15	(MH 'Quasi-Experimental Studies+')	15,888
16	(MH 'Quasi-Experimental Studies') OR (MH 'Nonequivalent Control Group') OR (MH 'Time Series') OR (MH 'Repeated Measures') OR (MH 'Retrospective Design') OR (MH 'Time and Motion Studies')	333,530
17	(quasi-experiment* OR quasiexperiment* OR 'propensity score*' OR 'control* group*' OR 'control condition*' OR 'treatment group*' OR 'comparison group*' OR 'wait-list*' OR 'waiting list*' OR 'intervention group*' OR 'experimental group*' OR 'matched control*' OR 'matched groups' OR 'matched comparison' OR 'experimental trial' OR 'experimental design' OR 'experimental method*' OR 'experimental stud*' OR 'experimental evaluation' OR 'experimental test*' OR 'experimental assessment' OR 'comparison sample' OR 'propensity matched' OR 'control sample' OR 'control subject*' OR 'intervention sample' OR 'no treatment group' OR 'nontreatment control' OR 'pseudo experimental' OR 'pseudo randomi?ed' OR 'quasi-RCT' OR 'quasi-randomi?ed' OR 'compared with control*' OR 'compared to control*' OR 'compared to a control*' OR 'non-randomi?ed controlled stud*' OR 'nonrandom* assign*')	283,938
18	12 or 13 or 14 or 15 or 16 or 17	778,462
19	11 and 18	489

Table A.3 Search strategy and results for ERIC via Proquest

#	Search terms	Result
S1	MAINSUBJECT.EXACT('Child Safety') OR MAINSUBJECT.EXACT('Child Welfare') OR MAINSUBJECT.EXACT('Foster Care')	8,518
S2	ti(foster N/2 child*) OR ti(foster N/2 parent*) OR ti(foster N/2 care*) OR ti(foster N/2 home*)) OR (ab(foster N/2 child*) OR ab(foster N/2 parent*) OR ab(foster N/2 care*) OR ab(foster N/2 home)	1,046
S3	MAINSUBJECT.EXACT('Independent living') OR MAIN SUBJECT.EXACT('Daily living') OR ((extend* NEAR/2 (care OR foster*)) OR (leav* NEAR/2 (care OR foster*)) OR (transit* NEAR/2 (care OR foster*)) OR (ag* out NEAR/2 (care OR foster*))) OR su('Transitional programs')	8,270
S4	S1 OR S2	8,742
S5	S3 AND S4	332

#	Search terms	Result
S6	RCT OR Trial* OR randomi* OR 'random* allocat*' OR 'random* assign*' OR (control* n/1 intervention*) OR (treatment* n/1 control*) OR 'evaluat* study' OR 'control group*' OR 'control condition*' OR 'comparison group*' OR 'comparison condition*' OR 'time series' OR 'before after') OR ('pre post' OR longitudinal OR 'repeated measures' OR 'effect size*' OR 'comparative effective*' OR experiment* OR pre-experiment* OR 'difference?in?difference*' OR 'instrumental variable*' OR 'propensity score*' OR (control* n/1 treat*) OR 'wait* list' OR 'quasi ex*' or quasiexperiment* OR 'matched control' OR 'matched comparison'	49,351
S7	(MAINSUBJECT.EXACT('Control Groups') OR MAINSUBJECT.EXACT('Matched Groups') OR MAINSUBJECT.EXACT('Quasiexperimental Design') OR MAINSUBJECT.EXACT('Randomized Controlled Trials') OR MAINSUBJECT.EXACT('Program Evaluation') OR MAINSUBJECT.EXACT('Outcomes of Treatment') OR MAINSUBJECT.EXACT('Medical Care Evaluation') OR MAINSUBJECT.EXACT('Replication (Evaluation)') OR MAINSUBJECT.EXACT('Evaluation Research') OR MAINSUBJECT.EXACT('Scientific Research') OR MAINSUBJECT.EXACT('Therapy') OR MAINSUBJECT.EXACT('Cost Effectiveness') OR MAINSUBJECT.EXACT('Medical Evaluation') OR MAINSUBJECT.EXACT('Program Effectiveness') OR MAINSUBJECT.EXACT('Outcome Measures') OR MAINSUBJECT.EXACT('Experimental Groups') OR MAINSUBJECT.EXACT('Experimental Programs') OR MAINSUBJECT.EXACT('Data Analysis') OR MAINSUBJECT.EXACT('Comparative Analysis') OR MAINSUBJECT.EXACT('Intervention'))	260,317
S8	S6 OR S7	280,850
S9	S5 AND S8	93

Table A.4 Search strategy and results for PsycINFO via Ovid

#	Search terms	Result
1	foster care/ or child welfare/ or foster children/ or foster parents/ or protective services/	16,041
2	(foster adj2 (youth or child* or care)).ti.	3,288
3	(foster adj2 (youth or child* or care)).ab.	6,769
4	independent living programs/	406
5	independent living.ti.	532
6	independent living.ab.	2,686
7	self-care skills/	4,594
8	self-determination/	4,851
9	(extend* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	684

#	Search terms	Result
10	(leav* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	664
11	(transit* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	1,703
12	(ag* out adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	229
13	(emancipat* adj2 (care or foster* or out of home care or OOHC or looked after)).mp	118
14	1 or 2 or 3	17,926
15	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13	14,746
16	14 and 15	883
17	(Clinical Trial or Empirical Study or Experimental Replication or Followup Study or Longitudinal Study or Prospective Study or Retrospective Study or Quantitative Study or Treatment Outcome or Field Study or Mathematical Modeling).md	2,555,587
18	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ti.	121,815
19	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ab.	799,910
20	17 or 18 or 19	2,821,303
21	16 and 20	638

Table A.5 Search strategy and results for MEDLINE via Ovid

#	Search terms	Result
1	exp Foster Home Care/ or exp Child Welfare/ or exp Child, Foster/ or foster care.mp	33,983
2	child protective services.mp or Child protective services/	1,165
3	(foster adj2 (youth or child* or care)).ti	1,156

#	Search terms	Result
4	(foster adj2 (youth or child* or care)).ab	2,115
5	exp Independent living/ or exp self care/ or exp self-neglect/ or exp social participation	63,873
6	independent living.ti	418
7	independent living.ab	2,141
8	(extend* adj2 (care or foster* or out of home care or OOHC or looked after)).mp	1,807
9	(leav* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	446
10	(transit* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	4,778
11	(ag* out adj2 (care or foster* or out of home care or OOHC or looked after)).mp	43
12	(emancipat* adj2 (care or foster* or out of home care or OOHC or looked after)).mp	34
13	1 or 2 or 3 or 4	34,974
14	5 or 6 or 7 or 8 or 9 or 10 or 11 or 12	72,571
15	13 and 14	364
16	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or Propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ti.	646,672
17	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ab	3,034,459
18	clinical trial/ or observational study/ or comparative study/ or evaluation study/	2,531,962
19	case-control studies/ or cohort studies/ or follow-up studies/ or longitudinal studies/ or prospective studies/ or retrospective studies/ or controlled before-after studies/ or cross-sectional studies/ or historically controlled study/ or interrupted time series analysis/ or feasibility studies/	2,585,003
20	16 or 17 or 18 or 19	6,899,316
21	15 and 20	114

Table A.6 Search strategy and results for EMBASE via Ovid

#	Search terms	Result
1	foster care/ or foster child/	5,129
2	child welfare/ or child protection	16,968
3	(foster adj2 (youth or child* or care)).ti.	1,465
4	(foster adj2 (youth or child* or care)).ab.	3,033
5	independent living/ or independent living program.mp.	4,783
6	independent living.ti.	607
7	independent living.ab.	3,610
8	(extend* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	2,885
9	(leav* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	694
10	(transit* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	10,876
11	(ag* out adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	49
12	(emancipat* adj2 (care or foster* or out of home care or OOHC or looked after)).mp	45
13	self care/ or self care skills.mp.	60,980
14	1 or 2 or 3 or 4	21,982
15	5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13	81,605
16	14 and 15	312
17	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ti.	985,037
18	(RCT or Trial* or randomi* or random* allocat* or random* assign* or (control* adj1 Intervention*) or (treatment* adj1 control*) or evaluat* study or control group* or control condition* or comparison group* or comparison condition* or time series or (before adj1 after) or pre post or longitudinal or repeated measures or effect size* or comparative effective* or experiment* or pre-experiment* or difference in difference* or instrumental variable* or propensity score or (control* adj1 treat*) or wait* list or quasi ex* or quasiexperiment* or matched control or matched comparison).ab	4,947,707

#	Search terms	Result
19	clinical study/ or case control study/ or intervention study/ or longitudinal study/ or major clinical study/ or prospective study/ or retrospective study/ or comparative study/ or controlled study/ or experimental study/ or feasibility study/ or observational study/ or quasi experimental study/ or replication study/ or cross-sectional study/ or controlled clinical trial/ or pretest posttest control group design/ or static group comparison/ or cross-sectional study/ or outcome assessment/	11,712,159
20	17 or 18 or 19	14,431,439
21	16 and 20	126

Table A.7 Search strategy and results for Sociological Abstracts via Proquest

#	Search terms	Result
S1	SU.EXACT.EXPLODE('Foster Children') OR SU.EXACT('Child Welfare Services') OR SU.EXACT.EXPLODE('Foster Care') OR SU.EXACT('Surrogate Parents')	3,567
S2	(ti(foster N/2 child*) OR ti(foster N/2 parent*) OR ti(foster N/2 care*) OR ti(foster N/2 home*)) OR (ab(foster N/2 child*) OR ab(foster N/2 parent*) OR ab(foster N/2 care*) OR ab(foster N/2 home*))	1,917
S3	S1 OR S2	4,248
S4	MAINSUBJECT.EXACT('Self Care') OR MAINSUBJECT.EXACT('Deinstitutionalization') OR MAINSUBJECT.EXACT.EXPLODE('Independent Living') OR MAINSUBJECT.EXACT('Independence')	3,318
S5	(extend* NEAR/2 (care or foster*))	1,279
S6	(leav* NEAR/2 (care OR foster*))	1,704
S7	(transit* NEAR/2 (care OR foster*))	1,309
S8	(ag* out NEAR/2 (care OR foster*))	2,459
S9	S4 OR S5 OR S6 OR S7 OR S8	9,117
S10	S3 AND S9	416
S11	MAINSUBJECT.EXACT('Empirical Methods') OR MAINSUBJECT.EXACT('Treatment') OR MAINSUBJECT.EXACT('Quantitative Methods') OR MAINSUBJECT.EXACT('Evaluation') OR MAINSUBJECT.EXACT('Statistical Significance') OR MAINSUBJECT.EXACT('Treatment Programs') OR MAINSUBJECT.EXACT('Placebo Effect') OR MAINSUBJECT.EXACT('Research Methodology') OR MAINSUBJECT.EXACT('Treatment Outcomes') OR MAINSUBJECT.EXACT('Effectiveness') OR MAINSUBJECT.EXACT ('RANDOMNESS')	23,745

#	Search terms	Result
S12	(quasi-experimental OR quasi-experiment or quasiexperiment OR 'propensity score' OR 'control group*' OR 'control condition*' OR 'treatment group*' OR 'comparison group*' OR 'wait-list*' OR 'waiting list*' OR 'intervention group*' OR 'experimental group*' OR 'matched control' OR 'matched group*' OR 'matched comparison' OR 'experimental trial' OR 'experimental design' OR 'experimental method*' OR 'experimental stud*' OR 'experimental evaluation' OR 'experimental test*' OR 'experimental assessment' OR 'comparison sample' OR 'propensity matched' OR 'control sample' OR 'control subject*' OR 'intervention sample' OR 'no treatment group' OR 'nontreatment control' OR 'pseudo experimental' OR 'pseudo randomi?ed' OR 'quasi-RCT' OR 'quasi-randomi?ed' OR 'compared with control*' OR 'compared to control*' OR 'compared to a control*' OR 'non-randomi?ed controlled stud*' OR 'nonrandomly assigned')	28,936
S13	ti((RCT OR Trial* OR randomi* OR 'random* allocat*' OR 'random* assign*' OR (control* n/1 intervention*) OR (treatment* n/1 control*) OR 'evaluat* study' OR 'control group*' OR 'control condition*' OR 'comparison group*' OR 'comparison condition*' OR 'time series' OR 'before after') OR ('pre post' OR longitudinal OR 'repeated measures' OR 'effect size*' OR 'comparative effective*' OR experiment* OR pre-experiment* OR 'difference in difference*' OR 'instrumental variable*' OR 'propensity score' OR (control* n/1 treat*) OR 'wait* list' OR 'quasi ex*' OR quasiexperiment* OR 'matched control' OR 'matched comparison'))	16,670
S14	ab((RCT OR Trial* OR randomi* OR 'random* allocat*' OR 'random* assign*' OR (control* n/1 intervention*) OR (treatment* n/1 control*) OR 'evaluat* study' OR 'control group*' OR 'control condition*' OR 'comparison group*' OR 'comparison condition*' OR 'time series' OR 'before after') OR ('pre post' OR longitudinal OR 'repeated measures' OR 'effect size*' OR 'comparative effective*' OR experiment* OR pre-experiment* OR 'difference in difference*' OR 'instrumental variable*' OR 'propensity score' OR (control* n/1 treat*) OR 'wait* list' OR quasi ex* OR quasiexperiment* OR 'matched control' OR 'matched comparison'))	83,726
S15	S11 OR S12 OR S13 OR S14	124,937
S16	S10 AND S15	114

Table A.8 Search strategy and results for Social Services Abstracts via Proquest

#	Search terms	Result
S1	SU.EXACT.EXPLODE('Foster Children') OR SU.EXACT('Child Welfare Services') OR SU.EXACT.EXPLODE('Foster Care') OR SU.EXACT('Surrogate Parents')	12,641
S2	(ti(foster N/2 child*) OR ti(foster N/2 parent*) OR ti(foster N/2 care*) OR ti(foster N/2 home*)) OR (ab(foster N/2 child*) OR ab(foster N/2 parent*) OR ab(foster N/2 care*) OR ab(foster N/2 home*))	6,255
S3	S1 OR S2	13,769

#	Search terms	Result
S4	MAINSUBJECT.EXACT('Self Care') OR MAINSUBJECT.EXACT('Deinstitutionalization') OR MAINSUBJECT.EXACT.EXPLODE('Independent Living') OR MAINSUBJECT.EXACT('Independence')	1,703
S5	(extend* NEAR/2 (care or foster*))	922
S6	(leav* NEAR/2 (care OR foster*))	1,454
S7	(transit* NEAR/2 (care OR foster*))	1,480
S8	(ag* out NEAR/2 (care OR foster*))	2,694
S9	S4 OR S5 OR S6 OR S7 OR S8	6,910
S10	S3 AND S9	1,468
S11	MAINSUBJECT.EXACT('Empirical Methods') OR MAINSUBJECT.EXACT('Treatment') OR MAINSUBJECT.EXACT('Quantitative Methods') OR MAINSUBJECT.EXACT('Evaluation') OR MAINSUBJECT.EXACT('Statistical Significance') OR MAINSUBJECT.EXACT('Treatment Programs') OR MAINSUBJECT.EXACT('Placebo Effect') OR MAINSUBJECT.EXACT('Research Methodology') OR MAINSUBJECT.EXACT('Treatment Outcomes') OR MAINSUBJECT.EXACT('Effectiveness') OR MAINSUBJECT.EXACT ('RANDOMNESS')	16,947
S12	(quasi-experimental* OR quasi-experiment OR quasiexperiment OR 'propensity score*' OR 'control* group*' OR 'control condition*' OR 'treatment group*' OR 'comparison group*' OR 'wait-list*' OR 'waiting list*' OR 'intervention group*' OR 'experimental group*' OR 'matched control*' OR 'matched groups' OR 'matched comparison' OR 'experimental trial' OR 'experimental design' OR 'experimental method*' OR 'experimental stud*' OR 'experimental evaluation' OR 'experimental test*' OR 'experimental assessment' OR 'comparison sample' OR 'propensity matched' OR 'control sample' OR 'control subject*' OR 'intervention sample' OR 'no treatment group' OR 'nontreatment control' OR 'pseudo experimental' OR 'pseudo randomi?ed' OR quasi-RCT OR quasi-randomi?ed OR 'compared with control*' OR 'compared to control*' OR 'compared to a control*' OR 'non-randomi?ed controlled stud*' OR 'nonrandomly assigned')	16,431
S13	ti((RCT OR Trial* OR randomi* OR 'random* allocat*' OR 'random* assign*' OR (control* n/1 Intervention*) OR (treatment* n/1 control*) OR 'evaluat* study' OR 'control group*' OR 'control condition*' OR 'comparison group*' OR 'comparison condition*' OR 'time series' OR 'before after') OR ('pre post' OR longitudinal OR 'repeated measures' OR 'effect size*' OR comparative effective* OR experiment* OR pre-experiment* OR 'difference in difference*' OR 'instrumental variable*' OR 'propensity score' OR (control* n/1 treat*) OR 'wait* list' OR 'quasi ex*' or quasiexperiment* OR 'matched control' OR 'matched comparison'))	6,605

#	Search terms	Result
S14	ab((RCT OR Trial* OR randomi* OR 'random* allocat*' OR 'random* assign*' OR (control* n/1 Intervention*) OR (treatment* n/1 control*) OR 'evaluat* study' OR 'control group*' OR 'control condition*' OR 'comparison group*' OR 'comparison condition*' OR 'time series' OR 'before after') OR ('pre post' OR longitudinal OR repeated measures OR effect size* OR comparative effective* OR experiment* OR pre-experiment* OR 'difference in difference*' OR 'instrumental variable*' OR 'propensity score' OR (control* n/1 treat*) OR 'wait* list' OR 'quasi ex*' or quasiexperiment* OR 'matched control' OR 'matched comparison'))	30,173
S15	S11 OR S12 OR S13 OR S14	53,109
S16	S10 AND S15	381

Table A.9 Search strategy and results for SocIndex via EBSCO

#	Search terms	Result
1	((DE 'FOSTER home care') OR (DE 'FOSTER mothers') OR (DE 'FOSTER parents') OR (DE 'FOSTER children') OR (DE 'FOSTER grandparents') OR (DE 'CHILD protection services'))	7,454
2	TI foster n2 child* OR TI foster n2 youth OR TI foster n2 parent* OR TI foster n2 care* OR TI foster n2 home OR TI 'foster famil*' OR TI 'fostering orphan*' OR TI 'looked after children' OR TI 'out of home care' OR TI 'out of home placement' OR TI 'substitute care' OR TI 'looked after youth*'	4,057
3	AB foster n2 child* OR AB foster n2 youth OR AB foster n2 parent* OR AB foster n2 care* OR AB foster n2 home OR AB 'foster famil*' OR AB 'fostering orphan*' OR AB 'looked after children' OR AB 'out of home care' OR AB 'out of home placement' OR AB 'substitute care' OR AB 'looked after youth*'	8,401
4	(extend* n2 (care or foster*))	1,495
5	(leav* n2 (care or foster*))	1,279
6	(transit* n2 (care or foster*))	945
7	(ag* out n2 (care or foster*))	221
8	DE 'LIFE skills'	1,689
9	1 or 2 or 3	12,571
10	4 or 5 or 6 or 7 or 8	5,409
11	9 and 10	639

#	Search terms	Result
12	DE 'CLINICAL trials' OR DE 'RANDOMIZED controlled trials' OR DE 'OUTCOME assessment (Social services)' OR DE 'SOCIAL services -- Evaluation' OR DE 'FOLLOW-up studies (Medicine)' OR DE 'PLACEBOS (Medicine)' OR DE 'BLIND experiment' OR placebo* OR random* OR 'comparative stud*' OR clinical NEAR/3 trial* OR research NEAR/3 design OR evaluat* NEAR/3 stud* OR prospectiv* NEAR/3 stud* OR (singl* OR doubl* OR trebl* OR tripl*) NEAR/3 (blind* OR mask*)	73,989
13	TI cohort* OR AB cohort* OR TI case-control* OR AB case-control* OR TI cross-section* OR AB cross-section* OR TI comparative* OR AB comparative* OR TI 'validation stud*' OR AB 'validation stud*' OR TI 'evaluation stud*' OR AB 'evaluation stud*' OR TI random* OR TI longitudinal* OR AB longitudinal* OR TI follow-up OR AB follow-up OR TI prospective OR AB prospective OR TI retrospective OR AB retrospective OR TI experimental OR AB experimental OR AB random*	191,601
14	(quasi-experimental OR quasi-experiment OR quasiexperiment* OR 'propensity score*' OR 'control group*' OR 'control condition*' OR 'treatment group*' OR 'wait-list*' OR 'waiting list*' OR 'intervention group*' OR 'experimental group*' OR 'matched control' OR 'matched groups' OR 'matched comparison' OR 'experimental trial' OR 'experimental design' OR 'experimental method*' OR 'experimental stud*' OR 'experimental evaluation' OR 'experimental test*' OR 'experimental assessment' OR 'comparison sample' OR 'propensity matched' OR 'control sample' OR 'control subject*' OR 'intervention sample' OR 'no treatment group' OR 'nontreatment control' OR 'pseudo experimental' OR 'pseudo randomi?ed' OR 'quasi-RCT' OR 'quasi-randomi?ed' OR 'compared with control*' OR 'compared to control*' OR 'compared to a control*' OR 'non-randomized controlled stud*' OR 'nonrandomly assigned')	16,961
15	12 or 13 or 14	219,678
16	11 and 15	112

Table A.10 Search strategy and results for NHS Economic Evaluation Database via Ovid

#	Search terms	Result
1	Child welfare/	19
2	(foster adj2 (youth or child* or care)).mp.	5
3	independent living.ti	3
4	self care/	128
5	(extend* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	11
6	(leav* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	3
7	(transit* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	18
8	(ag* out adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	0
9	(empancipat* adj2 (care or foster* or out of home care or OOHC or looked after)).mp	0
10	1 or 2	23
11	3 or 4 or 5 or 6 or 7 or 8 or 9	163
12	10 and 11	3

Table A.11 Search strategy and results for Health Technology Assessment via Ovid

#	Search terms	Result
1	Foster Home Care/	2
2	Child Welfare/	8
3	(foster adj2 (youth or child or care)).mp	3
4	independent living.mp	4
5	(extend* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	1
6	(leav* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	1
7	(transit* adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	6
8	(ag* out adj2 (care or foster* or out of home care or OOHC or looked after)).mp.	0
9	(empancipat* adj2 (care or foster* or out of home care or OOHC or looked after)).mp	0

#	Search terms	Result
10	self care/	60
11	1 or 2 or 3	11
12	4 or 5 or 6 or 7 or 8 or 9 or 10	72
13	11 and 12	0

Table A.12 Search results for unpublished literature sources

Source	Titles reviewed	Full texts reviewed	Papers included	Studies included
Social Care Online (SCIE)	25	4	0	0
International Research Network on Transitions to Adulthood from Care	252	0	0	0
Analysis and Policy Observatory	240	1	0	0
Australian Institute of Family Studies	589	9	0	0
Chapin Hall at the University of Chicago	72	28	3	1
California Evidence-Based Clearinghouse for Child Welfare	21	8	0	0
Gov.UK	12	12	0	0
Washington State Institute for Public Policy	91	2	2	1
Expert contacts	2	2	1	1
Total	**1,304**	**65**	**6**	**3**

APPENDIX B: LIST OF EXCLUDED STUDIES

Table B.1 Studies excluded at full-text screening

Reference	Reason for exclusion	Additional detail
Allen, Heyes, Hothersall, Mitchell-Smith, & Leary (2020)	Wrong study design	Qualitative methods used, within group analysis, unable to attribute causation
Andersen (2019)	Incomplete outcome reporting	Difference-in-difference regression estimates or models are not reported, unable to determine effect size
Austin & Diethorn (1993)	Full text unavailable	
Barnow et al. (2015)	Wrong study design	Correlation study, no comparison was used
Barth (1990)	Wrong study design	Qualitative methods used, no intervention examined
Batista et al. (2018)	Wrong study design	Cross sectional survey, post test only
Bengtsson, Sjöblom, & Öberg (2018)	Wrong study design	Qualitative methods, no intervention examined
Berzin (2008)	Wrong intervention	Not an intervention
Biehal, Clayden, Stein, & Wade (1994)	Wrong study design	Not a primary study – literature review and/or discussion
Bonella et al. (2020)	Wrong study design	Cross sectional survey, post-test only
Boston (2012)	Wrong study design	Descriptive correlation study
Braciszewski, Tzilos Wernette, Moore, Tran, et al. (2018)	Wrong study design	Qualitative feasibility study
Braning (2012)	Full text unavailable	
Broad (1999)	Wrong study design	Comparative analyses using survey methods, unable to attribute causation
S. Brown & Wilderson (2010)	Wrong study design	Cohort study comparing very different comparison groups
A. Brown, Courtney, & McMillen (2015)	Wrong study design	Longitudinal cohort study measuring prevalence
Camacho & Hemmeter (2013)	Wrong population	Young people with a disability
Cameron, Mcpherson, Gatwiri, & Parmenter (2019)	Wrong study design	Not a primary study – literature review and/or policy briefing

Reference	Reason for exclusion	Additional detail
Campo & Commerford (2016)	Wrong study design	Not a primary study – literature review
Cantu (2013)	Wrong study design	Qualitative study
Citizens' Committee for Children of New York (2000)	Wrong study design	Literature review and/or policy briefing
Clare, Anderson, Murielle, & Brenda (2017)	Wrong study design	Not a primary study – literature review
Coldiron, Hensley, Parigoris, & Bruns (2019)	Wrong population	Youth in foster care involved with the justice system
Coleman, Eric A & Rosenbek, (2006)	Wrong population	Participants were 65+ years old
C. C. Collins et al. (2020)	Wrong population	Participants were caregivers of children in out-of-home-care with housing issues
M. E. Collins (2001)	Wrong study design	Not a primary study – literature review
Cook (1993)	Wrong study design	Mixed methods, quantitative methods did not examine at causation
Courtney (2006)	Wrong study design	Descriptive study, causation not determined
Courtney (2015)	Wrong study design	Longitudinal descriptive study with before and after comparisons
Courtney & Okpych (2017)	Wrong study design	Descriptive and correlation analysis from longitudinal study
Courtney et al. (2007)	Wrong study design	Descriptive cross-section analysis from longitudinal study
Courtney et al. (2016)	Wrong study design	Descriptive cross-section analysis from longitudinal study
Courtney, Okpych, & Park (2018)	Wrong study design	Not a primary study – overview of a cross-sectional study
Courtney, Okpych, Park, et al. (2018)	Wrong study design	Descriptive and correlation cross-section analysis from longitudinal study
Courtney et al. (2020)	Wrong study design	Descriptive and correlation cross-section analysis from longitudinal study
Courtney, Charles, Okpych, Napolitano, & Halsted (2014)	Wrong study design	Descriptive cross-section analysis from longitudinal study
Courtney & Dworsky (2006)	Wrong study design	Descriptive cross-section analysis from longitudinal study
Courtney, Dworsky, Lee, & Raap (2010)	Wrong study design	Descriptive cross-section analysis from longitudinal study
Courtney, Dworsky, Lee, & Raap (2011)	Wrong study design	Descriptive cross-section analysis from longitudinal study

Reference	Reason for exclusion	Additional detail
Courtney, Dworsky & Peters (2009)	Wrong study design	Economic evaluation was undertaken separate to included study, i.e. we did not include the study that is being assessed
Courtney, Hook, & Lee (2010)	Wrong outcomes	Outcomes were stratified by subgroups not relevant to review's scope
Courtney, Park, Harty, & Feng (2019)	Wrong study design	Longitudinal design using descriptive and correlative methods
Courtney, Terao, & Bost (2004)	Wrong study design	Descriptive cross-section analysis from longitudinal study
Cusick, Havlicek, & Courtney (2012)	Wrong intervention	Not an intervention, study explores the bonds formed during foster care and subsequent risk of arrest
Dixon, Cresswell, & Ward (2020a)	Wrong study design	Mixed methods study evaluating programme feasibility
Dixon, Cresswell, & Ward (2020b)	Wrong study design	Mixed methods study evaluating programme feasibility
Durham & Forace (2015)	Wrong study design	Not a primary study – literature review
Dworsky (2013)	Wrong study design	Longitudinal correlation study
Dworsky (2020)	Wrong study design	Mixed-method design, unable to attribute causality
Dworsky & Courtney (2010b)	Wrong intervention	No intervention was assessed
Dworsky & Courtney (2010a)	Wrong study design	Not a primary study – description of research methods
Dworsky & Pérez (2010)	Wrong study design	Implementation-focused descriptive study, quantitative methods did not look at programme impact
Dworsky, Gitlow, & Ethier (2018)	Wrong study design	Mixed-method evaluation assessing programme feasibility and fidelity
Edelman & Holzer (2013)	Wrong study design	Not a primary study – literature review
Feng, Harty, Okpych, & Courtney (2020)	Wrong study design	descriptive and correlation cross-section analysis from longitudinal study
Foster, E.M. & Gifford (2005)	Wrong study design	Not a primary study – book
Fowler et al (2017)	Wrong study design	Cohort study measuring prevalence and probability
Geenen et al. (2013)	Wrong population	Participants were not transitioning out of care
Georgiades (2003)	Wrong study design	Convenience sample, participants were not randomized to groups, no equivalence at baseline
Georgiades (2005)	Wrong study design	No equivalence at baseline
Giffords, Alonso, & Bell (2007)	Wrong study design	Case study design

Reference	Reason for exclusion	Additional detail
Gjertson (2016)	Different report of the same study	Study re-analyses consolidated data from the Chafee RCTs which have been included in this review separately
Goddard & Barrett (2008)	Wrong study design	Qualitative methods used, no intervention examined
Goerge et al. (2002)	Wrong study design	Correlation study using administrative datasets, no comparison used
Gray et al (2018)	Wrong population	Participants had already transitioned out of foster care prior to the intervention
Greeson & Thompson (2017)	Wrong outcomes	Examined the acceptability and feasibility of intervention, not participant outcomes
Greeson et al (2010)	Wrong comparator	Comparison group were young people without foster care experience
Hamilton (2016)	Wrong study design	Not a primary study – brief description of an intervention
Heerde, Hemphill, & Scholes-Balog (2018)	Wrong study design	Not a primary study – meta-analysis
Hernandez & Naccarato (2010)	Wrong study design	Exploratory, qualitative study
Herrman et al (2016)	Wrong study design	Descriptive analysis only
Heyes et al. (2020)	Wrong study design	Mixed-method evaluation of an intervention, no comparison group
Hogan (2020)	Wrong population	Mixed population of young people who had transitioned out of foster care and still in foster care
Hook & Courtney (2011)	Wrong study design	Longitudinal study measuring correlation
Johnson et al (2009)	Wrong intervention	Qualitative methods used, no one specific intervention examined
Jones (2011)	Wrong study design	Inappropriate comparator
Jones & Lansdverk (2006)	Wrong study design	Study evaluating an intervention using a sequential cohort design
Karpur, Clark, Caproni, & Sterner (2005)	Wrong population	Young people with emotional/behavioural difficulties, not foster care experienced
Katz & Courtney (2015)	Wrong intervention	Not an intervention
Kim et al (2017)	Wrong population	Foster care youth aged 11-17, not young people transitioning out of care
Kroner & Mares (2009)	Wrong study design	convenience sample, participants were not randomized to groups, no baseline equivalence
Kroner & Mares (2011)	Wrong comparator	Comparison between young people admitted into and discharged from intervention

Reference	Reason for exclusion	Additional detail
Kushel, Yen, Gee, & Courtney (2007)	Wrong intervention	Not an intervention
J. Lee et al. (2018)	Wrong study design	Cross sectional study measuring correlation
S. J. Lee (2017)	Wrong outcomes	Study examines change in resilience over time
S. Lee (2016)	Wrong study design	Not a primary study – brief description of intervention
Lemon, Hines, & Merdinger (2005)	Wrong study design	Descriptive comparison analysis, qualitative methods do not determine causation
Lloyd (2016)	Wrong study design	Not a primary study – brief description of intervention
Malina (2016)	Wrong study design	Not a primary study – brief description of intervention
Malm, Vandivere, Allen, Williams, & McKlindon (2014)	Wrong population	Intervention to find and engage relatives/kin as possible kinship carers for youth in foster care
Manno, Jacobs, Alson, & Skemer (2014)	Wrong outcomes	Programme implementation and participation outcomes only
McDonald & Mendes (2019)	Wrong study design	Not a primary study – webinar/presentation
MDRC (2018)	Wrong study design	Descriptive statistics from a programme evaluation
Mendes (2012)	Wrong study design	Qualitative methods
Mendes & Purtell (2017)	Wrong study design	Qualitative methods
Mezey et al (2015)	Wrong study design	Intervention implementation as unsuccessful
Minnesota Department of Human Services Family and Children's Service Division (1999)	Full text unavailable	
Mitchell-Smith, Allen, et al. (2020)	Wrong study design	Mixed-method evaluation, not able to attribute causation
Mitchell-Smith, Caton, & Potter (2020)	Wrong study design	Mixed-method evaluation, not able to attribute causation
Mollidor, Bierman, Akhurst, & Mori (2020)	Wrong study design	Mixed-method evaluation, not able to attribute causation
Mollidor, Bierman, Goujon, Zanobetti, & Akhurst (2020)	Wrong study design	Mixed-method evaluation, not able to attribute causation
Morton et al. (2020)	Wrong study design	Qualitative methods
Muir & Hand (2018)	Wrong study design	Descriptive analysis of survey and case file data
Muller-Ravett & Jacobs (2012)	Wrong study design	Protocol summary
Munson (2009)	Wrong study design	Longitudinal study using correlation analysis

Reference	Reason for exclusion	Additional detail
Munson, Stanhope, Small, & Atterbury (2017)	Wrong study design	Qualitative methods
Naccarato, Brophy, & Courtney (2010)	Wrong study design	Descriptive and correlative study using cross-sectional analysis
Neagu & Dixon (2020)	Wrong study design	Mixed-methods evaluation, not able to attribute causation
Neagu, Centre, & Dixon (2020)	Wrong study design	Convenience sample of 14 young people, not able to attribute causation
Nesmith & Christophersen (2014)	Wrong study design	Comparative analysis, effect size not determined
Office of the Auditor General Western Australia (2018)	Wrong study design	Not a primary study – literature review/descriptive analysis
O'Leary et al. (2020)	Wrong study design	Mixed-methods evaluation, not able to attribute causation
Okpych (2017)	Wrong study design	Descriptive and correlation analysis only
Okpych, Park, & Courtney (2019)	Different report of the same study	Not a primary study – research summary
Okpych, Park, Feng, Torres-Garcia, & Courtney (2018)	Different report of the same study	Not a primary study – research summary
Osgood, Foster, Flanagan, & Ruth (2007)	Wrong study design	Not a primary study – book
Parent-Johnson (2019)	Wrong study design	Not a primary study – brief description of intervention
K. Park, Courtney, Okpych, & Nadon (2020)	Wrong study design	Not a primary study – this is a summary report of a published paper
S. Park, Okpych, & Courtney (2020)	Wrong outcomes	Study examined predictors of remaining in care after 18 years old
Peters, Dworsky, Courtney, & Pollack (2009)	Different report of the same study	Not a primary study – this is a summary report of another paper that was reviewed for inclusion
L. E. Powers et al. (1996)	Wrong study design	Not a primary study – description of intervention
L. E. Powers et al. (2018)	Wrong study design	Qualitative methods, programme effect not determined
L. E. Powers, Turner, Ellison, et al. (2001)	Wrong study design	Not a primary study – description of intervention
L. E. Powers, Turner, Westwood, et al. (2001)	Wrong population	Participants are not in care, or transitioning from care
J. Powers, Park, Okpych, & Courtney (2020)	Different report of the same study	Not a primary study – this is a summary report of a published paper
Purtell, Muir, & Carrol (2019)	Wrong study design	Descriptive analysis of survey
Putnam-Hornstein, Hammond, Eastman, McCroskey, & Webster (2016)	Wrong study design	Descriptive study not looking at intervention effects

Reference	Reason for exclusion	Additional detail
Rácz & Korintus (2013)	Wrong study design	Descriptive analysis only
Rashid (2004)	Wrong study design	Cross-sectional design using descriptive analyses
Rassen, Cooper, & Mery (2010)	Wrong intervention	Not an intervention
Ringle, Ingram, Newman, Thompson, & Waite (2008)	Wrong intervention	Not an intervention
Rogers (2015)	Wrong study design	Qualitative methods only
Rosenwald, McGhee, & Noftall (2013)	Wrong study design	Qualitative methods only
Scannapieco, Schagrin, & Scannapieco (1995)	Wrong study design	Cross-sectional design using descriptive analyses
Scannapieco, Smith, & Blakeney-Strong (2016)	Wrong study design	Comparative analyses looking at correlation
Schwab (2006)	Wrong study design	Not a primary study – brief description of intervention
Schwartz-Tayri & Spiro (2017)	Wrong study design	Cross-sectional study using descriptive analyses and qualitative methods
Simon (2008)	Wrong study design	Not a primary study – brief description of intervention
Solomita & Clark (2016)	Wrong population	Brief description of intervention for young people with or at risk of emotional/behavioural difficulties
Sowers & Swank (2017)	Full text unavailable	
Szifris et al. (2020)	Wrong study design	Mixed method evaluation, not able to attribute causation
R. J. Taylor, Shade, Lowry, & Ahrens (2020)	Wrong study design	No comparison group, focus was on programme implementation
Torres-Garcia, Okpych, & Courtney (2019)	Wrong study design	Not a primary study – briefing note
Trout et al. (2013)	Wrong population	Youth are not in transition from care to independence
Tucker, Dworsky, & Van Drunen (2020)	Wrong study design	Formative evaluation
United States General Accounting Office (1999)	Wrong study design	Not a primary study – literature review/policy briefing
Vorhies et al.(2009)	Wrong study design	No comparator
Wade (2008)	Wrong study design	Descriptive statistics and qualitative methods
Watt, Kim, & Garrison (2018)	Wrong study design	Longitudinal study using descriptive and correlational analyses
Wells & Zunz (2009)	Wrong study design	Qualitative methods
Zinn & Courtney (2018)	Wrong Outcomes	Reunification and permanence outcomes for youth in foster care

APPENDIX C: SUPPLEMENTARY INFORMATION ABOUT INCLUDED POLICIES, PROGRAMMES AND INTERVENTIONS

C.1 Early Start to Emancipation Preparation Tutoring Program: Los Angeles County

Description

The Early Start to Emancipation Preparation (ESTEP)-Tutoring programme was created in 1998 in Los Angeles County, California, to improve the reading and maths levels of young people in foster care. Based on an individual learning model, tutors are trained to assess students and deliver weekly tutoring at the young person's skill level. Alongside remedial tutoring, the programme aims to foster an ongoing mentoring relationship between participants and their tutors, as well as to encourage young people to continue in their education by connecting them with educational resources available in their community.

Intended outcomes

The primary 'targeted output' of the programme is that the reading, spelling and maths levels of programme participants are improved upon reassessment, which in turn is intended to facilitate the primary programme 'outcomes': that participants obtain their high school diploma and continue on into higher education.

Eligibility criteria

To be enrolled on the ESTEP-Tutoring programme, young people should:

- be in out-of-home care placements under the guardianship of the Los Angeles Department of Child and Family Services;
- be aged between 14 and 15 years old at referral to the programme;
- have been previously referred by a social worker to the ESTEP independent living programme; and
- have been assessed, through the ESTEP programme, as being one to three years behind grade level in reading or maths.

Table C.1 ESTEP-Tutoring delivery

Length of support	Each youth is eligible for 65 hours of one-on-one support from their tutors.
Mode of delivery	The ESTEP-Tutoring programme is delivered by tutors, master tutors and peer counsellors, with support from ESTEP-Tutoring programme staff. College student tutors provide (a) baseline and ongoing assessment in reading, maths and spelling, b) up to 50 hours of remedial tutoring in the assessed subject areas tailored to the young person's skill level, and (c) an additional 15 hours of time dedicated to each young person that the tutors can use for preparation, 'mentoring' and other relevant activities (such as transportation to workshops or practical support); master tutors (d) match youth with appropriate tutors, (e) provide supervision and support for six to twelve tutors, and (f) liaise with the ESTEP programme office. Tutoring is provided one-to-one and typically in the young person's home. Participants are also encouraged to access programme resources on the college campus: ESTEP independent living workshops and practicums and access to peer counsellors (typically young people 16 years old and over who have completed the ESTEP programme). 'Emancipation Preparation Advisors' (EPAs) provide additional support by identifying and facilitating links to other appropriate services.
Intensity of	The tutor and youth meet weekly, at a minimum, and typically meet for two sessions of two hours each week.
	Tutors receive training and ongoing support from their master tutor. They are also provided with educational materials and a handbook that guides them through the tutoring curriculum and provides information on youth engagement. Master tutors receive training and support from the programme team.

C.2 Youth Villages LifeSet

Description

The Youth Villages LifeSet (YVLifeSet) programme was originally developed in 1999 by 'Youth Villages', a non-profit organisation operating a variety of residential and community-based youth programmes across the United States. The manualized programme is intended to help young people who are leaving foster care or juvenile justice custody to successfully transition to independent living by providing weekly, individualized, and clinically focused case management, counselling and support. Support is tailored to each young person's needs, however, issues commonly addressed include education, employment and finances, stable housing, life skills development, management of relationships, and mental health and substance use.

Intended outcomes

The primary goal of YVLifeSet is to support young people to make a successful transition to independent living from foster care or juvenile justice custody. Due to the individualized nature of the programme, targeted outcomes are wide-ranging and tailored to the particular needs and goals of each young person. Particular emphasis is placed on maintenance of stable housing; avoidance of involvement with the criminal justice system and a reduction in risky behaviours; participation in education or vocational training; obtaining formal employment; and having improved mental health and access to social support.

Eligibility criteria

To be enrolled in YVLifeSet RCT, young people need to:

- be in the custody of the child welfare system, either in foster care or in the juvenile justice system and approaching independence from state custody;
- be contactable and interested in programme services;
- be aged 17 to 24;
- not have a history of severe violence, mental health problems, drug use, and/or developmental delays; and
- be assessed by programme staff as capable of living independently.

Table C.2 YVLifeSet delivery

Length of support	The programme lasts between nine and twelve months.
Mode of delivery	The programme is delivered by 'Transitional Living specialists' ('TL specialists') with supervision from clinical supervisors, and clinical consultants. The programme starts with an assessment and the development of a treatment plan based on the young person's needs and goals. TL specialists meet with the participants on a weekly basis, in their home or in convenient community locations, and engage in activities related to their personal plan. One-to-one sessions are based on three methodologies: (a) the use of evidence-informed tools (including curricula on topics such as money management and behavioural treatment strategies for issues including substance abuse); (b) counselling (oriented towards supporting the young person achieving their stated goals); and (c) appropriate action-oriented activities (e.g. taking a young person to a bank to open an account). TL specialists may also refer young people to other relevant community-based services and encourage participants to attend group social and learning activities with other programme participants. An 'educational/vocational coordinator' is available to provide additional support to young people who want to go to college, enrol in vocational training or find a job. All programme participants are screened for trauma and, where appropriate, have access to (12-20 weeks') therapy by trained staff. TL specialists are not typically clinically qualified but have (as a minimum) a bachelor's degree in a relevant field.
Intensity of support	TL specialists typically have a caseload of eight young people. Participants meet for one-hour, one-to-one meetings on a weekly basis. Young people may also attend monthly group sessions with other programme participants.
implementation	TL specialists are provided with a programme treatment manual which outlines the methodologies that they are expected to employ when working with young people. Training is provided in evidence-based clinical practices (e.g. motivational interviewing). Clinical supervisors provide weekly group supervision to four or five TL specialists and, in turn, clinical supervisors receive supervision from clinical consultants.

C.3 Better Futures

Description

The Better Futures programme aims to empower and support young people who are in foster care and have serious mental health challenges to enter post-secondary education. The programme is grounded in self-determination and involves a range of group and one-to-one interventions designed to support participants to identify and work towards their own post-secondary goals.

Intended outcomes

The primary intended outcome is that participants enrol in higher education.

Eligibility criteria

To be enrolled in Better Futures, young people need to:

- reside in the programme's catchment area,
- be in the guardianship of the state foster care system,
- be in secondary education (high school or GED programme) and one or two years away from completion,
- be open to the possibility of higher or vocation education and have not yet applied,
- have been identified as experiencing significant mental health challenges (for example, be receiving mental health counselling, or be receiving special education services for an emotional disability. Be on a psychotropic medication or be living in a therapeutic setting); and
- be able to attend community-based sessions (i.e. not residing in a secure facility).

Table C.3 Better Futures delivery

Length of support	The programme lasts for approximately ten months.
Mode of delivery	The programme is primarily delivered by 'Peer Coaches' – young people under the age of 28 enrolled in higher education with lived experience of foster care and/or mental health challenges – with support from Intervention Managers. The model comprises three components: (1) A brief residential 'summer institute' with an emphasis on higher education preparation for young people in foster care with mental health difficulties (e.g. through campus tours, information sessions and facilitated discussions on relevant topics, and social activities. (2) One-to-one, peer coaching sessions which focus on identifying and working towards individual post-secondary goals, as well as working through a series of experiential activities and self-determination skills. (3) Group mentoring workshops in which participants and peer coaches come together for expert-guided discussions and related practical activities on relevant topics (e.g. college applications and application writing exercises).
Intensity of support	Over the course of the programme, participants have access to one residential camp (of 4 days/3 nights); followed by bi-monthly, one-to-one coaching sessions for a period of nine months; and four group workshops.

Access to implementation support	The Peer Coaches are provided with approximately 40 hours of training; an intervention protocol and access to weekly group and individual supervision from Intervention Managers.

C.4 Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care

Description

The 'Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care' (or 'Outreach' programme) aims to support young people as they transition out of intensive foster care into independent living. Outreach workers provide one-to-one assistance, tailored to the young person's self-identified needs and goals. Programme activities are geared towards providing a sense of support to the young person, through the development of a trusting relationship with their Outreach worker, while also enabling participants to develop skills and resources for independent living through hands-on assistance in practical tasks (e.g. in accessing available financial support, obtaining housing, applying for further education or employment, and facilitating referrals to appropriate services).

Intended outcomes

The primary goals of the Outreach programme are to support young people leaving intensive foster care to develop the skills, connections and capital that they will need to live as an independent adult. While intended outcomes vary according to participant needs, a particular emphasis is placed on the acquisition of life skills, participation in further education and/or securing employment and the development of supportive relationships.

Eligibility criteria

To be enrolled in the Outreach programme, young people need to:

- be in intensive foster care under the guardianship of Massachusetts Department of Children and Families;
- be aged 16 or older at referral to the programme; and
- have a goal of living independently.

Table C.4 'Outreach' programme delivery

Length of support	The programme duration is not fixed, however, on average young people received support for 22 months: 16 months of hands-on assistance, followed by six months of intermittent check-ins.
Mode of delivery	The programme is delivered by Outreach workers, under supervision from Outreach supervisors. Outreach workers work to (a) develop and follow a plan with the young person through initial and ongoing assessment of their needs and goals, (b) have weekly meetings during which they provide hands-on, individualized support in achieving the young person's goals (e.g. applying for higher education or employment), and (c) refer participants to other services as appropriate. Once a young person is assessed as having met the goals set out in their personal plan, weekly 'assistance' meetings are concluded

	and the young person is moved to 'tracking' status for approximately six months, during which time the Outreach worker maintains intermittent contact with the young person before discharging them from the programme.
Intensity of support	Outreach workers typically meet with young people on a weekly basis; however, young people can request more or less frequent meetings depending on their needs.
Access to implementation support	Outreach workers receive formal pre-service training and informal training through shadowing colleagues 'on the job'. Ongoing training is available, and Outreach supervisors provide weekly supervision.

C.5 Life Skills Training Program: Los Angeles County

Description

The Life Skills Training (LST) Program of Los Angeles County was created in 1987 to equip young people in state custody, either through foster care or on probation[11], with the skills and resources required to live independently. Programme participants are provided access to a five-week classroom-based life-skills course covering core competency areas set by the State: education, employment, daily living skills, survival skills, understanding choices and consequences, interpersonal skills and IT skills. The programme also has an outreach component which involves active recruitment of young people into the programme and short-term case-management services.

Intended outcomes

The intended outcomes of the LST programme of Los Angeles County are that young people develop the skills they require for independent living, complete their high-school education and move on to higher-education or training.

Eligibility criteria

To be enrolled in the LST programme, young people need to:

- reside within the programme catchment area,
- be aged 16 or older at referral to the programme,
- be in a foster care placement under the guardianship of the Department of Child and Family Services (DCFS) or on probation,
- be referred to the programme by their transition coordinator at DCFS or the Probation Department, and
- have a goal of, or be preparing to move to, independent living.

[11] Young people on probation were excluded from the evaluation.

Table C.5 LST programme delivery

Length of support	The programme lasts for approximately five weeks.
Mode of delivery	The LST programme comprises two elements: (1) A brief classroom-based intervention offered in a convenient community college setting which covers core competency areas related to life skills and independent living. Although usually classroom-based, workshop instructors are allowed flexibility in material delivery and sessions may take the form of out-of-classroom practical activities (e.g. taking public transportation, or grocery shopping) or involve guest speakers. Pre- and post-assessments are carried out to evaluate progress in skill acquisition. Transportation, food and money are offered to remove barriers to attendance. (2) 'Outreach' or short-term case-management support offered by 'Outreach Advisors' (OAs) – typically college graduates with experience in youth work. OAs also take an active role in recruiting young people to the programme, usually by visiting the young person in their home. Peer Counsellors, former foster youth and, typically, LST graduates also provide classroom assistance to the workshop instructors and general support for programme operations.
Intensity of support	The classroom-based component involves 30 hours of life skills training, offered as three-hour classes, twice a week over a five-week period. One-to-one case management support is also available during this time.
Access to implementation support	OAs receive (initial and ongoing) training and an 'Outreach Advisor Training Manual' is also provided. Workshop instructors are provided with workshop curriculum and quarterly training.

C.6 TAKE CHARGE

Description

The TAKE CHARGE programme is a coaching and workshop-based intervention, designed to enhance self-determination and improve outcomes for vulnerable young people in the transition to adulthood. Though originally developed for all young people, the model was designed to be accessible for young people with disabilities and was adapted specifically for young people who are both in foster care and receiving special education support.

Intended outcomes

The intended outcomes of the TAKE CHARGE programme are that participants enhance their 'self-determination' skills and are able to identify and work towards self-identified 'transition' goals.

Eligibility criteria

To be enrolled in the TAKE CHARGE RCT, young people need to:

- reside in the programme catchment area;
- be receiving special education support;

- be in foster care (for at least 90 days) under the guardianship of Oregon Department of Human Services (DHS); and
- be aged 16.5 to 17.5 years.

Table C.6 TAKE CHARGE programme delivery

Length of support	The programme lasts for approximately 12 months.
Mode of delivery	The programme model comprises two elements: (1) weekly coaching and (2) group workshops. Weekly one-on-one coaching sessions aim to support young people to develop self-determination skills (e.g. goal setting, problem solving, partnership development and self-regulation); to identify their own 'transition-related' goals; and to work towards achieving their goals over the course of a year (through practical support and encouragement). Direct practical support (e.g. making phone calls to relevant services) is gradually faded out as the participant demonstrates increasing skill level and motivation. Participants receive a 'Self-help guide' which outlines the skill areas covered in their coaching sessions and is designed to guide them through the transition planning process. The timing of sessions is flexible to suit the needs of participants. A number of adaptations were made to TAKE CHARGE to suit the needs of young people in foster care – including flexibility in the sequence of coaching sessions and the revision of the guide to incorporate information relevant to foster youth and the transition to independence. Coaches also liaise closely with foster parents, through monthly updates, to engage them in the process. 'Mentoring workshops' are held on a quarterly basis and focused on topics such as education, employment and transitioning out of foster care. The workshops provide an opportunity for participants to meet with other young people participating in the programme and 'mentors' – TAKE CHARGE graduates with lived experience of foster care, 3 to 4 years older, who are enrolled in higher education, employed or had experience in overcoming barriers during their own transition from foster care.
Intensity of support	Coaching is one-to-one and carried out weekly. Four 'Mentoring Workshops' are held, one per quarter, over the 12-month programme. Coaches provide monthly updates to Foster Parents.
Access to implementation support	'Mentors' received training prior to the workshops. No information was available on training or support to TAKE CHARGE Coaches.

C.7 Independent Living – Employment Services Program, Kern County, California

Description

The Independent Living – Employment Services (IL-ES) programme, created in 1999 by the Department of Human Services in California, is designed to equip young people in foster care (or on probation), with the encouragement, skills and resources they require to secure employment.

Intended outcomes

The primary intended outcome of the IL-ES programme is that participants obtain and maintain secure employment. Secondary goals include participants' development of life skills and resources, enabling them to avoid use of public assistance in future.

Eligibility criteria

To be enrolled in the IL-ES programme, young people need to:

- reside in Kern County, California, the catchment area for the programme;
- be in foster care under Kern County Department of Human Services (DHS) (or have 'aged out' of the foster care system), be on probation or under subsidized guardianship;[12]
- be aged 16 to 21 years old; and
- have been assessed as eligible for independent living services by their social worker.

Table C.7 IL-ES programme delivery

Length of support	Due to the voluntary nature of the programme, the duration of support varies by individual participant. Some participants will receive only the initial letter, while others will receive regular, ongoing support up to the age of 21 years.
Mode of delivery	The IL-ES programme comprises two main elements: (1) An introductory letter and subscription to a regular job listing alert and (2) one-to-one employment support. An introductory letter inviting the young person to participate in the programme and weekly newsletters, highlighting job opportunities, are sent to all eligible young people. Young people who express interest in additional services are assessed by an IL-ES worker to identify their employment needs and goals and have access to a range of other one-to-one and group support. One-to-one support includes support in searching for jobs; support in preparing a CV or job application; financial and practical help in buying interview clothes; and support in accessing other services, as needed. Participants can also access employment skills workshops. Employment services are provided by qualified social services staff with training in employment support.
Intensity of support	Participants receive weekly newsletters. The intensity of one-to-one support varies according to a young person's expressed goals, however, IL-ES staff maintain regular contact either via telephone or through face-to-face visits. Two to four employment-skills workshops are held per year.
Access to implementation support	No information available.

[12] Only young people in foster care were included in the evaluation.

C.8 ICare2CHECK

Description

The ICare2CHECK programme is a brief health care education intervention, providing access to a health care booklet and companion website designed in collaboration with young people with lived experience of foster care, which aim to support young people transitioning out of foster care to navigate the health care system.

Intended outcomes

The primary goals of the programme are to increase use of health care services by foster youth aged 16 and over and to decrease use of urgent care services.

Eligibility criteria

To be enrolled in the ICare2CHECK programme, young people need to:

- be in foster care under the custody of child protective services (CPS) for at least 12 months;
- aged 16 years old or over; and
- be approaching emancipation from CPS custody.

Table C.8 ICare2CHECK programme delivery

Length of support	One-off receipt of health care education materials.
Mode of delivery	The ICare2CHECK programme involves one-off receipt of health care education materials, including a pocket-sized booklet ('ICareGuide') and access to a companion website. The materials aim to support young people to navigate the health care system and include information on how and when to access medical support; information on appropriate hotlines; information on preventive health care including relating to pregnancy and sexually transmitted infections; and instructions on how to apply for health insurance. In addition, the website included interactive tools to assist young people in locating health care services and decision-making around what level of medical service to access.
Intensity of support	One-off receipt of a health care booklet and access to a companion website.
Access to implementation support	No information available.

C.9 Extended foster care (EFC)

Description

'Extended foster care' (EFC) describes the extension of the age limit for foster care, and eligibility for associated support services, from 18 to 21 years of age. In the United States, the 2008 'Fostering

Connections to Success and Increasing Adoptions Act' made it possible for states to implement extended foster care at state level. There is variation in EFC implementation – eligibility, funding and services provided – between states.

Intended outcomes

By enabling young people to remain in care beyond their 18th birthday and up to 21 years of age, EFC aims to improve the outcomes of foster youth into adulthood.

Eligibility criteria

To be eligible for EFC, young people need to:

- be in foster care in the state of Illinois; and
- be aged 18 to 21 years old.

C.10 Independent Living Services

Description

'Independent Living Services' (ILS) encompasses the broad range of federally funded services offered to young people transitioning from foster care to independent living in the United States of America (USA). ILS service delivery varies between states; however, an emphasis is placed on education and employment services.

Intended outcomes

The primary goal of ILS is to support a successful transition into adulthood for young people leaving foster care in the USA. An emphasis is placed on ILS recipients completing high school or GED certification, and on securing employment.

Eligibility criteria

To access ILS, young people need to:

- Be in foster care in the USA;
- Be identified as likely to remain in foster care until the age of 18; and,
- Meet eligibility criteria at state level.

Table C.9 ILS delivery

Length of support	No information available. Varies at individual level.

Mode of delivery	ILS academic support for high-school or GED completion may include (a) tutoring, (b) homework, and (c) provision of educational resources. ILS employment-related services that aim to support young people in securing and maintaining employment may include: (a) career or vocational assessment, (b) internships, classes, or training for skills development in a particular occupation, (c) job coaching. ILS also includes mentoring services through which eligible young people are connected with mentors, who provide regular support. Financial assistance is also provided through ILS for tuition, relevant services and supplies.
Intensity of support	No information available. Varies at individual level.
Access to implementation support	No information available.

C.11 New York City/New York State–Initiated Third Supportive Housing Program (NYNY III)

Description

The 'New York City/New York State-Initiated Third Supportive Housing Program' (NYNY III) was developed in 2007 to provide supportive housing for young people at risk of becoming homeless, including youth transitioning out of the foster care system. The programme is based on a 'housing first' approach, which posits that provision of housing to people with unstable living conditions will ultimately improve health outcomes, even without specific health interventions.

Intended outcomes

The primary intended outcome of the NYNY III programme is that young people transitioning out of the foster care system to independent living avoid homelessness and secure stable housing. In addition, the programme aims to reduce sexually transmitted infections, which are associated with unstable housing experiences, among this group.

Eligibility criteria

To be enrolled in the NYNY III programme, young people need to:

- Be in foster care in the New York State area; and
- Meet one of the following criteria: be preparing to leave foster care within the following six months, have left foster care within the previous two years, or have been in foster care for at least one year following their 16th birthday.

Table C.10 NYNY III programme delivery

Length of support	No information available.

Mode of delivery	The NYNY III programme has two main modes of delivery: (1) provision of affordable housing and (2) access to additional supportive services to help young people live independently. Services available through NYNY III include: case management support, employment training, education-related support, and support in accessing appropriate health (physical and mental health) services
Intensity of support	No information available.
Access to implementation support	No information available.

C.12 Independent Living Services: Budgeting and Financial Education Services

Description

Independent Living Services (ILS) 'Budgeting and Financial Education Services' encompasses a category of services under the broader 'Chafee Foster Care Independence Program' (CFIP). The services take an 'asset building' approach and are designed to support young people who are transitioning from foster care to independent living to acquire the skills and assets they need – such as budgeting and financial literacy, and accumulation of savings – for financial stability.

Intended outcomes

The intended outcome of the Budgeting and Financial Education Services is that young people transitioning out of foster care into independent living achieve financial stability.

Eligibility criteria

To be enrolled in ILS Budgeting and Financial Education Services, young people need to:

- Be in foster care in the United States of America (USA);
- Be approaching the age of emancipation from foster care; and
- Meet eligibility criteria for 'Chafee Foster Care Independence Program' Services.

Table C.11 ILS Budgeting and Financial Education Services programme delivery

Length of support	No information available. A broad range of services is encompassed in this service category.
Mode of delivery	'Budgeting and Financial Education Services' provided under ILS may include education and support around budgeting; increasing consumer awareness; opening and using bank accounts; accumulating savings; available financial support via credit and loans; and information about taxes.

Intensity of support	No information available.
Access to implementation support	No information available.

C.13 Independent Living Services: Post-secondary education services

Description

Independent Living Services (ILS) 'Post-secondary education services' encompasses a category of services under the broader 'Chafee Foster Care Independence Program' (CFIP). The services take an 'asset building' approach and are designed to support young people who are transitioning out of foster care to independent living to acquire the skills and assets they need – such as obtaining a post-secondary qualification and learning how to apply for further education – for independence.

Intended outcomes

The intended outcomes of 'Post-secondary education services' under ILS are that young people transitioning out of foster care participate in, and complete, post-secondary education.

Eligibility criteria

To receive ILS 'Post-secondary education services', young people need to:

- Be in foster care in the United States;
- Be approaching the age of emancipation from foster care; and
- Meet eligibility criteria for 'Chafee Foster Care Independence Program' Services.

Table C.12 ILS 'Post-secondary education' delivery

Length of support	No information available. A broad range of services is encompassed in this service category.
Mode of delivery	'Post-Secondary Education Services' encompass a broad range of services including: test preparation classes; counselling around enrolling in post-secondary education or training; provision of information about available financial aid/scholarships; practical support in completing applications for post-secondary education and/or financial support for post-secondary education; and provision of tutoring to young people enrolled in post-secondary education.
Intensity of support	No information available.

Access to implementation support	No information available.

C.14 Premier's Youth Initiative

Description

The Premier's Youth Initiative (PYI) was developed by the Department of Communities and Justice in New South Wales, Australia. Programme participants are provided access to advice and services facilitated by a team of three workers: The Personal Advisor, who is the key point of contact for the young person, the Education and Employment Mentor and the Transition Support Worker. PYI seeks to build young peoples' material resources, independent living skills, social connections and human capital.

Intended outcomes

The primary goal of PYI is to prevent youth homelessness. Secondary goals are improving the employment, education and relationship outcomes of young people.

Eligibility criteria

To be enrolled in PYI, young people need to:

- Reside in catchments where services are provided (within the state of NSW);
- Be aged between 16.75 (16 years and 9 months) and 17.5 (17 years and 6 months) at the commencement of services;
- Meet one or more of the following criteria: leaving residential OOHC, leaving OOHC with placement instability, leaving a permanent OOHC placement, and leaving OOHC after being in care 12 months or longer; and
- Be capable of living independently.

Table C.13 PYI delivery

Length of support	Service length is not time limited.
Mode of delivery	The PYI team (Personal Advisor, Education and Employment Mentor and Transition Support Worker) work to (a) support the implementation of a leaving care plan, and b) the development of prosocial networks; the team provides (c) education and employment mentoring and (d) transitional support, including housing. Services are provided primarily at the individual level; however, some providers might undertake group activities (e.g. cooking classes). Services providers are paid professionals without clinical qualifications.
Intensity of support	There is no guidance on the intensity of support beyond that it should be 'directed by the individual' engaging with the service.

Access to implementation support	Programme guidelines only.

C.15 Interactive Healthy Lifestyle Preparation (iHeLP)

Description

Interactive Healthy Lifestyle Preparation (iHeLP) is a computer- and mobile phone-based app that dynamically adapts to a participant's current motivation to influence their substance use. The application is based on motivational interviewing principles. Participants complete an initial computer-based screening at baseline that seeks to assess their readiness to change. Future interaction, which is tailored to information provided during the baseline assessment, takes place through text messaging on a participant's phone.

Intended outcomes

The primary goal of iHeLP is to reduce substance misuse by supporting participants to set goals and motivate them to follow through with them.

Eligibility criteria

To be enrolled in the iHeLP trial, young people need to meet the following criteria:

- Aged between 18 and 19,
- Have left foster care no more than two years ago,
- Scored a 'moderate' or 'severe' risk on the Alcohol, Smoking, and Substance Involvement Screening Test,
- Are not currently enrolled in, or seeking, substance abuse treatment,
- Own a mobile phone, and
- Use text messaging at least weekly.

Table C.14 iHeLP delivery

Length of support	Service length is not time limited, although the pilot was limited to a 12-month follow up
Mode of delivery	iHeLP is a text message-based intervention
Intensity of support	Participants are sent poll questions via notifications weekly, prompting them to engage with the app
Access to implementation support	Not available

APPENDIX D: DETAILED QUANTITATIVE RESULTS

D.1 Homelessness

Table D.1 Quantitative results from included studies – homelessness

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[13]	Stat. sig. of result
Transition support services						
YVLifeSet (Courtney, Valentine, et al., 2019)	RCT	Housing instability scale	Cohen's *d*	0.16	Very small	$p < 0.05$
		Experienced homelessness	Cohen's *d*	-0.14	Very small	$p < 0.05$
		Couch surfed	Cohen's *d*	-0.17	Very small	$p < 0.05$
		Unable to pay rent	Cohen's *d*	-0.09	Very small	N.S.
		Lost housing due to inability to pay rent	Cohen's *d*	-0.7	Medium	N.S.
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	RCT	Homelessness (since baseline)	Hedges' *g*	-0.21 [-1.21, 0.79]	Very small	N.S.
Evaluation of the Life Skills Training Program: Los Angeles County (Greeson, Garcia, Kim, Thompson, et al., 2015)	RCT	Homelessness (since baseline)	Hedges' *g*	-0.18 [-0.48, 0.13]	Small	N.S.
		Number of residential moves	Hedges' *g*	-0.09 [-1.18, 1.36]	Very small	N.S.
Independent Living – Employment Services Program, Kern County, California (Zinn & Courtney, 2017)	RCT	Homelessness (since baseline)	Hedges' *g*	-0.29 [-0.84, 0.26]	Very small	N.S.
		Number of residential moves	Hedges' *g*	-0.21 [-1.84, 1.41]	Small	N.S.
NYNY III (Lim et al., 2017)	QED	Unstable housing	Cohen's *d*	0.96 [0.64, 1.27]	Large	$p < 0.05$
		Stable housing	Cohen's *d*	1.83 [1.40, 1.53]	Large	$p < 0.05$

[13] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8). We further defined effect sizes of d < 0.20 as 'very small'.

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[13]	Stat. sig. of result
Premier's Youth Initiative (D. Taylor et al., 2020)	QED	Homelessness (use of homelessness services)	Hazard ratio	1.05 [0.63, 1.74]	Very small	N.S.
Independent Living Services: Budgeting and Financial Education Services (Nadon, 2020)	QED	Homelessness	Cohen's *d*	0.14 [0.13, 0.15]	Very small	$p < 0.05$
Independent Living Services: Post-secondary education services (Nadon, 2020)	QED	Homelessness	Cohen's *d*	0.16 [0.15, 0.17]	Very small	N.S.
Extended care policies						
Midwest Evaluation of the Adult Functioning of Former Foster Youth (Courtney & Hook, 2017)	QED	Experienced homelessness between age 19 & 21	Cohen's *d*	2.80 [0.95, 8.31]	Large	N.S.
		Experienced homelessness between age 21 & 23	Cohen's *d*	0.78 [0.25, 0.41]	Medium	N.S.
		Experienced homelessness between age 23 & 24	Cohen's *d*	1.12 [0.37, 3.34]	Large	N.S.
Extended Care in Washington State (Miller et al., 2020a)	QED	Any homelessness, aged 18-21	Cohen's *d*	-0.80 [-0.89, -0.72]	Large	$p < 0.05$
		Any homelessness, aged 21-23	Cohen's *d*	-0.43 [-0.52, 0.34]	Small	$p < 0.05$
		Average months homeless per year, aged 18-21	Cohen's *d*	-0.42 [-0.48, -0.36]	Small	$p < 0.05$
		Average months homeless per year, aged 21-23	Cohen's *d*	-0.30 [-0.37, 0.23]	Small	$p < 0.05$

D.2 Health

Table D.2 Quantitative results from included studies – health

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[14]	Stat. sig. of result
Transition support services						
YVLifeSet (Courtney, Valentine, et al., 2019)	RCT	Mental Health (DASS-21)	Cohen's *d*	-0.13	Very small	$p < 0.05$
Better Futures (Geenen et al., 2015)	RCT	Youth efficacy/empowerment scale - mental health (YES-MH)	Cohen's *d*	1.5	Large	$p < 0.05$

[14] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8).

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[14]	Stat. sig. of result
ICare2CHECK (Beal et al., 2020)	QED	Total health care use (visits per year)	Cohen's *d*	1.34 [0.55, 2.51]	Large	N.S.
		Mandated foster care visits (per year)	Cohen's *d*	5.11 [-2.47, 26.7]	Large	N.S.
		Scheduled visits (per year)	Cohen's *d*	3.37 [0.99, 7.77]	Large	N.S.
		Unscheduled visits (per year)	Cohen's *d*	0.17 [-0.26, 1.35]	Very small	$p < 0.05$
Extended care policies						
Extended Care in Washington State (Miller et al., 2020a)	QED	Anxiety	Cohen's *d*	0.02 [-0.05, 0.10]	Very small	N.S.
		Depression	Cohen's *d*	-0.02 [-0.10, 0.05]	Very small	N.S.
		Any mental illness	Cohen's *d*	0.02 [-0.05, 0.10]	Very small	N.S.
		Mental health treatment – outpatient	Cohen's *d*	-0.05 [-0.12, 0.03]	Very small	$p < 0.05$
		Mental health treatment – inpatient	Cohen's *d*	-0.30 [-0.50, -0.10]	Small	$p < 0.05$
		Diagnosed substance abuse disorder – alcohol or drug	Cohen's *d*	-0.36 [-0.45, -0.27]	Small	$p < 0.05$
		Diagnosed substance abuse disorder – alcohol	Cohen's *d*	-0.26 [-0.37, -0.14]	Small	$p < 0.05$
		Diagnosed substance abuse disorder – drug	Cohen's *d*	-0.67 [-0.77, -0.57]	Medium	$p < 0.05$
		Substance abuse treatment – outpatient	Cohen's *d*	-0.33 [-0.46, -0.19]	Small	$p < 0.05$
		Substance abuse treatment – inpatient	Cohen's *d*	-0.51 [-0.75, -0.28	Medium	$p < 0.05$
		Emergency department visits (aged 18-21)	Cohen's *d*	-0.22 [-0.28, -0.16]	Small	$p < 0.05$
		Emergency department visits (aged 21-23)	Cohen's *d*	-0.18 [-0.25, -0.12]	Very small	$p < 0.05$

D.3 Education

Table D.3 Quantitative results from included studies – education

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[15]	Stat. sig. of result
Transition support services						
YVLifeSet (Courtney, Valentine, et al., 2019)	RCT	High school diploma	Cohen's *d*	0.06	Very small	p < 0.05
		GED	Cohen's *d*	-0.30	Small	N.S.
		Participate in vocational training	Cohen's *d*	0.10	Very small	N.S.
		Enrolled in 2-year college	Cohen's *d*	0.05	Very small	N.S.
		Enrolled in 4-year college	Cohen's *d*	-0.2	Small	N.S.
Better Futures (Geenen et al., 2015)	RCT	High school graduation	Hedges' *g*	0.17 [-0.61, 0.94]	Very small	Not reported
		College attendance	Hedges' *g*	0.98 [-0.22, 2.17]	Large	Not reported
TAKE CHARGE (L. E. Powers et al., 2012)	RCT	High school graduation	Hedges' *g*	0.53 [-0.05, 1.12]	Medium	Not reported
		College attendance	Hedges' *g*	0.42 [-0.20, 1.05]	Small	Not reported
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	RCT	High school diploma/GED	Hedges' *g*	0.07 [-0.25, 0.41]	Small	N.S.
		Attended college	Hedges' *g*	-0.34 [-0.67, -0.01]	Small	N.S.
		College persistence	Cohen's *d*	0.39	Small	p < 0.05
Evaluation of the Life Skills Training Program: Los Angeles County (Greeson, Garcia, Kim, Thompson, et al., 2015)	RCT	High school diploma/GED	Hedges' *g*	0.02 [-0.19, 0.24]	Very small	N.S.
		Attended college	Hedges' *g*	-0.15 [-0.36, 0.59]	Very small	N.S.
Independent Living – Employment Services Program, Kern County, California (Zinn & Courtney, 2017)	RCT	High school diploma/GED	Hedges' *g*	-0.02 [-0.32, 0.28]	Very small	N.S.
		Attended college	Hedges' *g*	0.18 [-0.23, 0.59]	Very small	N.S.
Early Start to Emancipation Preparation Tutoring Program: Los Angeles County (Courtney et al., 2008a)	RCT	High school diploma/GED	Hedges' *g*	-0.12 [-0.49, 0.23]	Very small	N.S.

[15] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8).

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[15]	Stat. sig. of result
Independent Living Services (Y. Kim et al., 2019)	QED	High school completion	Cohen's *d*	0.05	Very small	N.S.
		Post-secondary education	Cohen's *d*	0.04	Very small	N.S.
Independent Living Services: Budgeting and Financial Education Services (Nadon, 2020)	QED	Use of financial aid for education	Cohen's *d*	0.178 [0.17, 0.19]	Very small	$p < 0.05$
		Current education enrolment (high school, GED, vocational or college)	Cohen's *d*	0.16 [0.15, 0.18]	Very small	N.S.
Independent Living Services: Post-secondary education services (Nadon, 2020)	QED	Use of financial aid for education	Cohen's *d*	0.20 [0.18, 0.21]	Very small	$p < 0.05$
		Current education enrolment (high school, GED, vocational or college)	Cohen's *d*	0.18 [0.17, 0.20]	Very small	$p < 0.05$
Extended care policies						
Midwest Evaluation of the Adult Functioning of Former Foster Youth (Courtney & Hook, 2017)	QED	Educational attainment (high school completion or one year of college or more	Cohen's *d*	0.19	Very small	$p < 0.05$
		College enrolment by 21	Cohen's *d*	0.19	Very small	$p < 0.05$
		College enrolment by 29/30	Cohen's *d*	0.17	Very small	N.S.
		Two semester college persistence	Cohen's *d*	0.18	Very small	N.S.
		Two-/four-Year Degree completion by Age 29/30	Cohen's *d*	0.16	Very small	N.S.

D.4 Economic or employment

Table D.4 Quantitative results from included studies – economic or employment

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[16]	Stat. sig. of result
Transition support services						
YVLifeSet (Courtney, Valentine, et al., 2019)	RCT	Earnings (average)	Cohen's *d*	0.12	Very small	$p < 0.05$
		Ever employed	Cohen's *d*	0.1	Very small	N.S.
		Full time employment	Cohen's *d*	0.01	Very small	N.S.
		Part time employment	Cohen's *d*	0.12	Very small	N.S.

[16] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8).

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[16]	Stat. sig. of result
Better Futures (Geenen et al., 2015)	RCT	Employed at follow-up (12 months or more)	Hedges' *g*	0.04 [-0.13, 0.97]	Very small	$p < 0.05$
TAKE CHARGE (L. E. Powers et al., 2012)	RCT	Employed at follow-up (12 months or more)	Hedges' *g*	0.42 [-0.54, 0.62]	Small	N.S.
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	RCT	Employed at any time during prior 12 months	Cohen's *d*	0.02	Very small	N.S.
		Currently employed	Hedges' *g*	-0.09 [-0.41, 0.24]	Very small	N.S.
		Earnings in past 12 months	Hedges' *g*	0.04 [-0.26, 0.33]	Very small	N.S.
		Net worth	Hedges' *g*	-0.05 [-0.35, 0.24]	Very small	N.S.
		Received financial assistance	Hedges' *g*	0.25 [-0.75, 1.25]	Small	N.S.
Evaluation of the Life Skills Training Program: Los Angeles County (Greeson, Garcia, Kim, Thompson, et al., 2015)	RCT	Currently employed	Hedges' *g*	-0.10 [-0.31, 0.12]	Very small	N.S.
		Earnings in past 12 months	Hedges' *g*	-0.08 [-0.27, 0.11]	Very small	N.S.
		Net worth	Hedges' *g*	0.09 [-0.10, 0.28]	Very small	N.S.
		Received financial assistance	Hedges' *g*	-0.23 [-0.45, -0.02]	Small	N.S.
Independent Living – Employment Services Program, Kern County, California (Zinn & Courtney, 2017)	RCT	Currently employed	Hedges' *g*	0.03 [-0.25, 0.31]	Very small	N.S.
		Earnings of over $1,000 in the past 12 months	Hedges' *g*	-0.13 [-0.37, 0.11]	Very small	N.S.
		Net worth	Hedges' *g*	0.09 [-0.15, 0.33]	Very small	N.S.
		Received financial assistance	Hedges' *g*	0.08 [-0.19, 0.36]	Very small	N.S.
Independent Living Services (Y. Kim et al., 2019)	QED	FT employment at age 21	Cohen's *d*	0.05	Very small	$p < 0.05$
Independent Living Services: Budgeting and Financial Education Services (Nadon, 2020)	QED	Current part time employment	Cohen's *d*	0.175 [0.16, 0.19]	Very small	N.S.
Independent Living Services: Post-secondary education services (Nadon, 2020)	QED	Current part time employment	Cohen's *d*	0.182 [0.17, 0.19]	Very small	$p < 0.05$
Extended care policies						
Extended Care in Washington State (Miller et al., 2020a)	QED	Any earnings, aged 18-21	Cohen's *d*	0.28 [0.20, 0.35]	Small	$p < 0.05$

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[16]	Stat. sig. of result
		Any earnings, aged 21-23	Cohen's *d*	0.37 [0.28, 0.45]	Small	$p < 0.05$
		Wages, aged 18-21	Cohen's *d*	0.19 [0.13, 0.25]	Very small	$p < 0.05$
		Wages, aged 21-23	Cohen's *d*	0.30 [0.23, 0.37]	Small	$p < 0.05$
		Any Supplemental Nutrition Assistance Program, aged 18-21	Cohen's *d*	-0.61 [-0.69, -0.54]	Medium	$p < 0.05$
		Any Supplemental Nutrition Assistance Program, aged 21-23	Cohen's *d*	-0.24 [-0.32, -0.16]	Small	$p < 0.05$
		Average months SNAP per year, aged 18-21	Cohen's *d*	-0.53 [-0.59, -0.46]	Medium	$p < 0.05$
		Average months SNAP per year, aged 21-23	Cohen's *d*	-0.19 [-0.26, -0.12]	Small	$p < 0.05$
		Any Temporary Assistance to Needy Families, aged 18-21	Cohen's *d*	-0.55 [-0.65, -0.45]	Medium	$p < 0.05$
		Any Temporary Assistance to Needy Families, aged 21-23	Cohen's *d*	-0.51 [-0.65, -0.38]	Medium	$p < 0.05$
		Average months TANF per year, aged 18-21	Cohen's *d*	-0.00 [-0.06, 0.06]	Very small	$p < 0.05$
		Average months TANF per year, aged 21-23	Cohen's *d*	-0.23 [-0.30, -0.17]	Small	$p < 0.05$

D.5 Exposure to violence from others or conduct of violence toward others

Table D.5 Quantitative results from included studies – exposure to violence

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[17]	Stat. sig. of result
Transition support services						
YVLifeSet (Courtney, Valentine, et al., 2019)	RCT	Robbed or assaulted (in last year)	Cohen's *d*	0.01	Very small	N.S.
		In a violent relationship (in last year)	Cohen's *d*	-0.16	Very small	$p < 0.05$
		Spent at least 1 night in jail/prison (in last year)	Cohen's *d*	-0.05	Very small	N.S.

[17] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8).

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[17]	Stat. sig. of result
		Arrested (in last year)	Cohen's *d*	-0.4	Small	N.S.
		Convicted of crime (in last year)	Cohen's *d*	0.07	Very small	N.S.
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	RCT	One or more delinquent acts	Hedges' *g*	-0.13 [-0.46, 0.19]	Very small	N.S.
Evaluation of the Life Skills Training Program: Los Angeles County (Greeson, Garcia, Kim, Thompson, et al., 2015)	RCT	One or more delinquent acts	Hedges' *g*	0.10 [-0.13, 0.33]	Very small	N.S.
Independent Living – Employment Services Program, Kern County, California (Zinn & Courtney, 2017)	RCT	One or more delinquent acts	Hedges' *g*	0.03 [-0.24, 0.30]	Very small	N.S.
Extended care policies						
Midwest Evaluation of the Adult Functioning of Former Foster Youth (Courtney & Hook, 2017)	QED	General arrest in period between age 18-19 – Female	Cohen's *d*	-0.51 [-0.73, -0.28]	Medium	$p < 0.05$
		General arrest in period between age 18-19 – Male	Cohen's *d*	-0.32 [-0.53, -0.11]	Small	$p < 0.05$
		Violent arrest in period between age 18-19 – Female	Cohen's *d*	-0.22 [-0.44, -0.00]	Small	$p < 0.05$
		Violent arrest in period between age 18-19 – Male	Cohen's *d*	-0.20 [-0.41, 0.01]	Small	$p < 0.05$
		Involvement with the legal system (arrested) – Female	Cohen's *d*	-0.18	Very small	$p < 0.05$
		Involvement with the legal system (arrested) – Male	Cohen's *d*	-0.11	Very small	N.S.
		Involvement with the legal system (incarcerated) – Female	Cohen's *d*	-0.16	Very small	N.S.
		Involvement with the legal system (incarcerated) – Male	Cohen's *d*	-0.08	Very small	N.S.
		Involvement with the legal system (convicted) – Female	Cohen's *d*	-0.15	Very small	N.S.
		Involvement with the legal system (convicted) – Male	Cohen's *d*	-0.01	Very small	N.S.
		Criminal behaviour (violent crimes) – Female	Cohen's *d*	-0.01	Very small	N.S.
		Criminal behaviour (violent crimes) – Male	Cohen's *d*	0.06	Very small	N.S.
		Criminal behaviour (property crimes) – Female	Cohen's *d*	0.00	Very small	N.S.

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[17]	Stat. sig. of result
		Criminal behaviour (property crimes) – Male	Cohen's *d*	-0.13	Very small	N.S.
		Criminal behaviour (drug crimes) – Female	Cohen's *d*	-0.08	Very small	N.S.
		Criminal behaviour (drug crimes) – Male	Cohen's *d*	-0.11	Very small	N.S.
		Criminal behaviour (any crimes) – Female	Cohen's *d*	0.09	Very small	N.S.
		Criminal behaviour (any crimes) – Male	Cohen's *d*	0.04	Very small	N.S.
Extended Care in Washington State (Miller et al., 2020a)	QED	Convictions, aged 18-21	Cohen's *d*	-0.56 [-0.65, -0.47]	Medium	$p < 0.05$
		Convictions, aged 21-23	Cohen's *d*	-0.44 [-0.55, -0.34]	Small	$p < 0.05$
		Child reported to child protective services	Cohen's *d*	-0.61 [-0.75, -0.46]	Medium	$p < 0.05$
		Child in foster care	Cohen's *d*	-1.03 [-1.35, -0.70]	Large	$p < 0.05$

D.6 Risky behaviour

Table D.6 Quantitative results from included studies – risky behaviour

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[18]	Stat. sig. of result
Transition support services						
iHeLP (Braciszewski, Tzilos Wernette, Moore, Bock, et al., 2018)	RCT	Reported percent days abstinent	Cohen's *d*	0.46 [-0.26, 1.18]	Small	$p < 0.05$
YVLifeSet (Courtney, Valentine, et al., 2019)	RCT	Days of binge drinking in last month	Cohen's *d*	0.07	Very small	N.S.
		Used illegal drugs (in last year)	Cohen's *d*	-0.03	Very small	N.S.
		Did not use condom in last sexual encounter	Cohen's *d*	-0.8	Large	N.S.

[18] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8).

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[18]	Stat. sig. of result
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	RCT	Became pregnant (female)	Hedges' *g*	-0.15 [-0.50, 0.20]	Very small	N.S.
		Got someone pregnant (male)	Cohen's *d*	0.59	Medium	p > 0.05
Evaluation of the Life Skills Training Program: Los Angeles County (Greeson, Garcia, Kim, Thompson, et al., 2015)	RCT	Became pregnant (female)	Hedges' *g*	0.04 [-0.27, 0.34]	Very small	N.S.
Independent Living – Employment Services Program, Kern County, California (Zinn & Courtney, 2017)	RCT	Became pregnant (female)	Hedges' *g*	0.32 [-0.11, 0.74]	Small	N.S.
NYNY III (Lim et al., 2017)	QED	Diagnosed STI cases	Cohen's *d*	-0.23 [-0.37, 0.08]	Small	Not reported

D.7 Supportive relationships

Table D.7 Quantitative results from included studies – supportive relationships

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[19]	Stat. sig. of result
YVLifeSet (Courtney, Valentine, et al., 2019)	RCT	Score on social support scale	Cohen's *d*	0.05	Very small	N.S.
		Very close to an adult	Cohen's *d*	0.03	Very small	N.S.
Better Futures (Geenen et al., 2015)	RCT	Quality of life scale	Cohen's *d*	0.66	Medium	p < 0.05
TAKE CHARGE (L. E. Powers et al., 2012)	RCT	Quality of life scale	Cohen's *d*	0.81	Large	p < 0.05
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	RCT	Social support	Cohen's *d*	0.57 [-1.45, 2.58]	Medium	N.S.

[19] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8).

D.8 Life skills

Table D.8 Quantitative results from included studies – life skills

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[20]	Stat. sig. of result
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	RCT	Perceived overall preparedness	Hedges' *g*	0.04 [-0.25, 0.33]	Very small	N.S.
		Perceived job-related preparedness	Hedges' *g*	-0.16 [-0.45, -0.13]	Very small	N.S.
		Possession of any financial accounts	Hedges' *g*	0.16 [-0.20, - 0.53]	Very small	N.S.
		Possession of social security number	Hedges' *g*	0.37 [-0.58, 1.32]	Small	N.S.
		Possession of birth certificate	Hedges' *g*	0.50 [-0.05, 1.05]	Medium	N.S.
		Possession of driver's licence	Hedges' *g*	0.51 [0.18, 0.84]	Small	$p < 0.05$
Evaluation of the Life Skills Training Program: Los Angeles County (Greeson, Garcia, Kim, Thompson, et al., 2015)	RCT	Perceived overall preparedness	Hedges' *g*	0.00 [-0.19, 0.19]	Very small	N.S.
		Perceived job-related preparedness	Hedges' *g*	-0.00 [-0.19, 0.19]	Very small	N.S.
		Possession of any financial accounts	Hedges' *g*	-0.11 [-0.33, 0.33]	Very small	N.S.
		Possession of social security number	Hedges' *g*	0.03 [-0.39, 0.45]	Very small	N.S.
		Possession of birth certificate	Hedges' *g*	0.15 [-0.17, 0.47]	Very small	N.S.
		Possession of driver's licence	Hedges' *g*	0.10 [-0.33, 0.12]	Very small	N.S.
Independent Living – Employment Services Program, Kern County, California (Zinn & Courtney, 2017)	RCT	Perceived overall preparedness	Hedges' *g*	-0.07 [-0.32, 0.17]	Very small	N.S.
		Perceived job-related preparedness	Hedges' *g*	-0.03 [-0.45, 0.21]	Very small	N.S.
		Possession of any financial accounts	Hedges' *g*	0.05 [-0.23, 0.33]	Very small	N.S.
		Possession of social security number	Hedges' *g*	-0.03 [-0.36, 0.29]	Very small	N.S.

[20] This classification of ES magnitude follows Cohen's (1988) suggested benchmarks of small (d = 0.2), medium (d = 0.5), and large (d = 0.8).

Study & reference	Study design	Outcome measure	Effect size type	Effect size (95% CI)	Magnitude of ES[20]	Stat. sig. of result
		Possession of birth certificate	Hedges' *g*	0.10 [-0.23, 0.43]	Very small	N.S.
		Possession of driver's license	Hedges' *g*	-0.10 [-0.44, 0.26]	Very small	N.S.

APPENDIX E: META-ANALYSIS INCLUSION ASSESSMENT

Table E.1 Summary of assessment of outcomes for quantitative synthesis

Common outcome domain	Was the same study design used?	Are the interventions sufficiently similar?	Are the outcome measures comparable?	Are the populations similar?	Can the effect size be pooled?	Were outcomes measured at a comparable time?
Coaching and peer support services (n=2)						
Economic or employment	✓ Yes, two studies are RCTs	✓ Yes, the interventions are very similar	✓ Yes, the outcome, employment at follow up, is the same	✓ The populations vary, but are sufficiently similar	✓ Yes, the ES can be pooled	✓ Yes, time is comparable
Education	✓ Yes, two studies are RCTs	✓ Yes, the interventions are very similar	✓ Yes, the outcome, high school gradution, is the same	✓ The populations vary, but are sufficiently similar	✓ Yes, the ES can be pooled	✓ Yes, time is comparable
			✓ Yes, the outcome, post-secondary education participation, is the same	✓ The populations vary, but are sufficiently similar	✓ Yes, the ES can be pooled	✓ Yes, time is comparable

Common outcome domain	Was the same study design used?	Are the interventions sufficiently similar?	Are the outcome measures comparable?	Are the populations similar?	Can the effect size be pooled?	Were outcomes measured at a comparable time?
Supportive relationships	✓ Yes, two studies are RCTs	✓ Yes, the interventions are very similar	✓ Yes, the same quality of life scale is used in both studies	✓ The populations vary, but are sufficiently similar	✓ Yes, the ES can be pooled	✗ No, it is unclear when the outcome in one study is measured
Extended care (n=2)						
Homelessness	✓ Yes, two studies are QED	✓ Yes, the policies are very similar	✓ Yes, the outcome, homelessness, is the same across two studies	✓ Yes, the populations are sufficiently similar	✗ No, the authors of one study used a different reference category	
Independent living programmes (n=7)						
Homelessness	✓ Yes, three studies are RCTs	✓ Yes, the programmes are sufficiently similar	✓ Yes, the outcome, homelessness, is the same across three studies	✓ Yes, the populations are sufficiently similar	✓ Yes, the ES can be pooled	✓ Yes, the timing of measurement is the same
			✓ Yes, the outcome, # of residential moves, is the same across three studies	✓ Yes, the populations are sufficiently similar	✓ Yes, sufficient information exists to calculate an ES that can be pooled	✓ Yes, the timing of measurement is the same
	✓ Yes, two studies are QEDs	✗ No, two studies examine different subcategories of an intervention				

Common outcome domain	Was the same study design used?	Are the interventions sufficiently similar?	Are the outcome measures comparable?	Are the populations similar?	Can the effect size be pooled?	Were outcomes measured at a comparable time?
Education	Yes, four studies are RCTs	Yes, the programmes are sufficiently similar	Yes, the outcome, high school diploma or GED, is the same across four studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, attended college, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
	Yes, three studies are QEDs	No, two studies examine different subcategories of an intervention				
Economic or employment	Yes, three studies are RCTs	Yes, the programmes are sufficiently similar	Yes, the outcome, currently employed, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, earnings in past 12 months, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, net worth, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, received financial assistance (college), is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same

Common outcome domain	Was the same study design used?	Are the interventions sufficiently similar?	Are the outcome measures comparable?	Are the populations similar?	Can the effect size be pooled?	Were outcomes measured at a comparable time?
	Yes, two studies are QEDs	No, two studies examine different subcategories of an intervention				
Exposure to violence from others or conduct of violence toward others	Yes, three studies are RCTs	Yes, the programmes are sufficiently similar	Yes, the outcome, one or more delinquent acts, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
Risky behaviour	Yes, three studies are RCTs	Yes, the programmes are sufficiently similar	Yes, the outcome, pregnancy, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
Life skills	Yes, three studies are RCTs	Yes, the programmes are sufficiently similar	Yes, the outcome, perceived overall preparedness, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, perceived job-related preparedness, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, possession of any financial accounts, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same

Common outcome domain	Was the same study design used?	Are the interventions sufficiently similar?	Are the outcome measures comparable?	Are the populations similar?	Can the effect size be pooled?	Were outcomes measured at a comparable time?
			Yes, the outcome, possession of social security number, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, possession of birth certificate, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
			Yes, the outcome, possession of driver's license, is the same across three studies	Yes, the populations are sufficiently similar	Yes, the ES can be pooled	Yes, the timing of measurement is the same
Intensive support services (n=2)						
Homelessness	No, one study was an RCT and one was a QED					

APPENDIX F: DETAILED RISK OF BIAS AND GRADE ASSESSMENTS FOR INCLUDED STUDIES

F.1 Risk of bias assessments for randomised studies

Table F.1 Detailed RoB2 assessment results for randomised studies

Study	Risk of bias arising from the randomisation process	Risk of bias due to deviations from the intended interventions	Missing outcome data	Risk of bias in measurement of the outcome	Risk of bias in selection of the reported result	Overall risk of bias
iHeLP (Braciszewski, Tzilos Wernette, Moore, Bock, et al., 2018)	Low	Some concerns	Low	Some concerns	Some concerns	Some concerns
YVLifeSet (Courtney, Valentine, et al., 2019)	Low	Some concerns	Low	Low	Some concerns	Some concerns
Massachusetts Adolescent Outreach Program for Youths in Intensive Foster Care (Greeson, Garcia, Kim, & Courtney, 2015)	Low	Some concerns	Low	Low	Some concerns	Some concerns
Evaluation of the Life Skills Training Program: Los Angeles County (Greeson, Garcia, Kim, Thompson, et al., 2015)	High	Some concerns	Low	Low	Some concerns	High
Independent Living – Employment Services Program, Kern County, California (Zinn & Courtney, 2017)	High	Some concerns	Low	Low	Some concerns	High
Early Start to Emancipation Preparation Tutoring Program: Los Angeles County (Courtney et al., 2008a)	Low	Some concerns	Low	Low	Some concerns	Some concerns
Better Futures (Geenen et al., 2015)	Low	Low	Low	Low	Some concerns	Some concerns
TAKE CHARGE (L. E. Powers et al., 2012)	Some concerns	Some concerns	Low	Low	Some concerns	Some concerns

F.2 Risk of bias assessments for non-randomised studies

Table F.2 ROBINS-I assessment results for non-randomised studies reporting outcomes in the homelessness domain

Study	Bias due to confounding	Bias in the selection of participants into the study	Bias in the classification of interventions	Bias due to derivations from intended interventions	Bias due to missing data	Bias in measurement of outcomes	Bias in selection of reported result	Overall bias
Independent living services								
NYNY III (Lim et al., 2017)	Serious	Low	Low	Low	Low	Low	Low	Serious
Premier's Youth Initiative (D. Taylor et al., 2020)	Low	Moderate	Low	Low	Low	Low	No information	Moderate
Independent Living Services (Y. Kim et al., 2019)	Serious	Low	Low	Low	Low	Low	Low	Serious
Post-secondary education services (Nadon, 2020)	Moderate	Low	Moderate	Low	Low	Serious	Moderate	Serious
Budgeting and Financial Education Services (Nadon, 2020)	Moderate	Low	Moderate	Low	Low	Serious	Moderate	Serious
ICare2CHECK (Beal et al., 2020)	Serious	Low	Low	Low	Low	Low	Low	Serious
Extended care								
Midwest Evaluation of the Adult Functioning of Former Foster Youth (Dworsky, Napolitano, et al., 2013)	Serious	Low	Low	Low	Low	Low	Low	Serious
Midwest Evaluation of the Adult Functioning of Former Foster Youth (J. S. Lee et al., 2012)	Serious	Low	Low	Low	Low	Low	Low	Serious
Midwest Evaluation of the Adult Functioning of Former Foster Youth (J. S. Lee et al., 2014)	Serious	Low	Low	Low	Low	Low	Low	Serious
Midwest Evaluation of the Adult Functioning of Former Foster Youth (Courtney & Hook, 2017)	Moderate	Low	Low	Moderate	Low	Low	Low	Moderate

Study	Bias due to confounding	Bias in the selection of participants into the study	Bias in the classification of interventions	Bias due to derivations from intended interventions	Bias due to missing data	Bias in measurement of outcomes	Bias in selection of reported result	Overall bias
Midwest Evaluation of the Adult Functioning of Former Foster Youth (Okpych & Courtney, 2020)	 Low	 Low	 Low	 Moderate	 Low	 Low	 Low	 Moderate
Extended Care in Washington State (Miller et al., 2020a)	 Low	 Low	 Low	 Moderate	 Low	 Low	 Low	 Moderate

F.3 Detailed GRADE assessments

Table F.3 Detailed GRADE assessments for Independent living programmes

	Evidence can be downgraded					Evidence can be upgraded		
Outcomes	Risk of bias	Imprecision	Inconsistency	Indirectness	Publication bias	Large magnitude of effect	Dose response gradient	Effect of plausible residual confounding
Homelessness								
Homelessness	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Number of residential moves	The proportion of information from studies at high risk of bias (n=1) out of the total (n=2) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=2) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Education								
High school graduation	The proportion of information from studies at high risk of bias (n=2) out of the total (n=4) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=4) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating

	Evidence can be downgraded					Evidence can be upgraded		
Outcomes	Risk of bias	Imprecision	Inconsistency	Indirectness	Publication bias	Large magnitude of effect	Dose response gradient	Effect of plausible residual confounding
College attendance	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Employment								
Currently employed (at end of study)	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Net worth (at end of study)	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Earnings in 12 months prior to end of study	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating

	Evidence can be downgraded					Evidence can be upgraded		
Outcomes	Risk of bias	Imprecision	Inconsistency	Indirectness	Publication bias	Large magnitude of effect	Dose response gradient	Effect of plausible residual confounding
	weaken confidence in the results, **downgrade 2 levels**	no effect, **downgrade 1 level**						
Receipt of any financial assistance during study	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Exposure to violence from others or conduct of violence toward others								
Committed one or more delinquent acts during study period	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Risky behaviour								
Pregnancy during study period	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Life skills								

	Evidence can be downgraded					Evidence can be upgraded		
Outcomes	Risk of bias	Imprecision	Inconsistency	Indirectness	Publication bias	Large magnitude of effect	Dose response gradient	Effect of plausible residual confounding
Overall preparedness score	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Job-related preparedness score	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Possession of any financial accounts	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Possession of a social security number	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating

	Evidence can be downgraded					Evidence can be upgraded		
Outcomes	Risk of bias	Imprecision	Inconsistency	Indirectness	Publication bias	Large magnitude of effect	Dose response gradient	Effect of plausible residual confounding
Possession of a birth certificate	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with wide confidence intervals that span the line of no effect, **downgrade 1 level**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Possession of a driver's licence	The proportion of information from studies at high risk of bias (n=2) out of the total (n=3) studies included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 2 levels**	Estimate comes from a small number of included studies (n=3) with confidence intervals that span the line of no effect, **downgrade 1 level**	Some evidence of inconsistency in heterogeneity, **downgrade 1 level**	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating

Table F.3 Detailed GRADE assessments for coaching and peer support programmes

	Evidence can be downgraded					Evidence can be upgraded		
Outcomes	Risk of bias	Imprecision	Inconsistency	Indirectness	Publication bias	Large magnitude of effect	Dose response gradient	Effect of plausible residual confounding
Education								

	Evidence can be downgraded					Evidence can be upgraded		
Outcomes	Risk of bias	Imprecision	Inconsistency	Indirectness	Publication bias	Large magnitude of effect	Dose response gradient	Effect of plausible residual confounding
High school graduation	The proportion of information from studies with some concerns (n=2) included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 1 level**	Estimate comes from a small number of included studies (n=2), with small sample sizes and wide confidence intervals that span the line of no effect, **downgrade 2 levels**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Post-secondary education	The proportion of information from studies with some concerns (n=2) included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 1 level**	Estimate comes from a small number of included studies (n=2), with small sample sizes and wide confidence intervals that span the line of no effect, **downgrade 2 levels**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating
Employment								
Employed at greater than 12-months follow up	The proportion of information from studies with some concerns (n=2) included in the meta-analysis is sufficient to affect the interpretation of results and weaken confidence in the results, **downgrade 1 level**	Estimate comes from a small number of included studies (n=2), with small sample sizes and wide confidence intervals that span the line of no effect, **downgrade 2 levels**	No evidence of inconsistency, no change to rating	No evidence of indirectness, no change to rating	No evidence of publication bias observed, no change to rating	No large magnitude or effect observed, no change to rating	No dose response gradient observed, no change to rating	Not applicable for RCT, no change to rating

APPENDIX G: PUBLICATION BIAS ASSESSMENT RESULTS

G.1 Egger's test of the intercept

Table G.1 Results of Egger's test

Domain	Outcome	Study type	Egger's test estimate (95% CI)	Stat. sig. of result
Homelessness	Homelessness	Independent living programmes	-0.28 [-1.07, 0.51]	N.S.
	Number of residential moves during study	Independent living programmes	N/A (< 2 studies)	
Education	High school graduation	Independent living programmes	-0.973 [-3.61, 1.66]	N.S.
		Coaching and peer support	N/A (< 2 studies)	
	College attendance	Independent living programmes	N/A (< 2 studies)	
		Coaching and peer support	N/A (< 2 studies)	
Economic or employment	Currently employed	Independent living programmes	0.925 [-3.52, 5.38]	N.S.
	Employment	Coaching and peer support	N/A (< 2 studies)	
	Earnings	Independent living programmes	1.738 [-3.07, 6.55]	N.S.
	Net worth	Independent living programmes	-2.465 [-5.64, 0.71]	N.S.
	Financial assistance	Independent living programmes	1.402 [-2.68, 5.48]	N.S.
Exposure to violence from others or conduct of violence toward others	One or more delinquent acts	Independent living programmes	-4.518 [-6.33, -2.68]	N.S.
Risky behaviour	Pregnancy	Independent living programmes	4.007 [-7.30, 15.31]	N.S.
Life skills	Overall preparedness	Independent living programmes	0.319 [-3.92 - 4.56]	N.S.
	Job-related preparedness	Independent living programmes	-2.942 [-5.11, -0.77]	N.S.
	Possession of any financial accounts	Independent living programmes	3.719 [2.40, 5.04]	N.S.
	Possession of social security number	Independent living programmes	1.278 [1.27, 1.29]	N.S.
	Possession of birth certificate	Independent living programmes	3.118 [1.44, 4.79]	N.S.
	Possession of driver's licence	Independent living programmes	4.762 [-10.12, 19.64]	N.S.

Figure G.1 Funnel plot for ILP: Homelessness during study

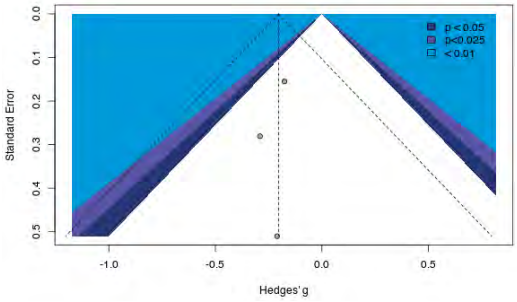


Figure G.2 Funnel plot for ILP: Number of residential moves during study

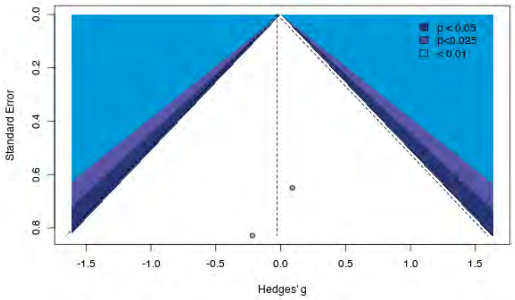


Figure G.3 Funnel plot for Better Futures: High school graduation

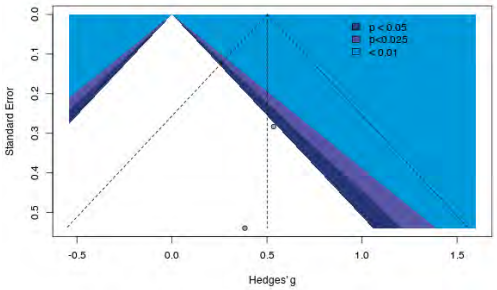


Figure G.4 Funnel plot for ILP: High school graduation

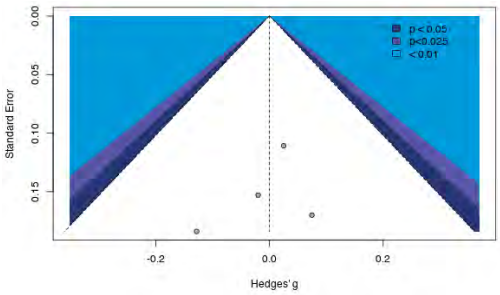


Figure G.5 Funnel plot for Better Futures: Post-secondary education

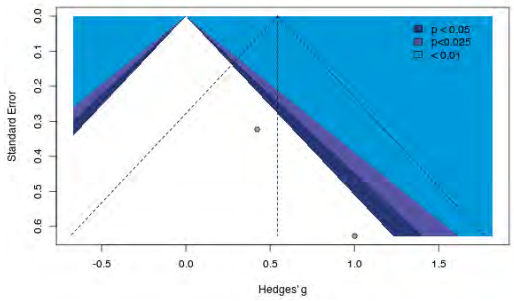


Figure G.6 Funnel plot for ILP: College attendance

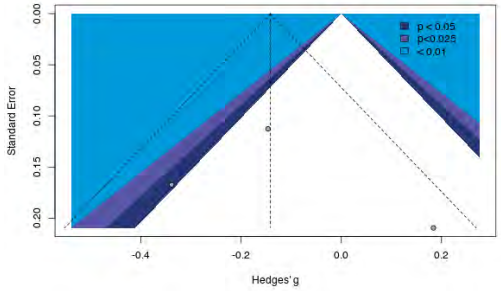


Figure G.7 Funnel plot for Better Futures: Employment

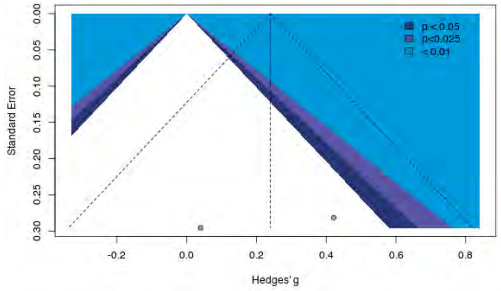


Figure G.8 Funnel plot for ILP: Employment

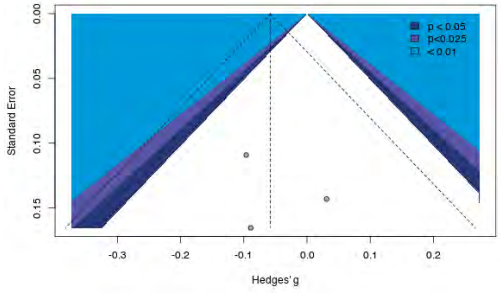


Figure G.9 Funnel plot for ILP: Earnings

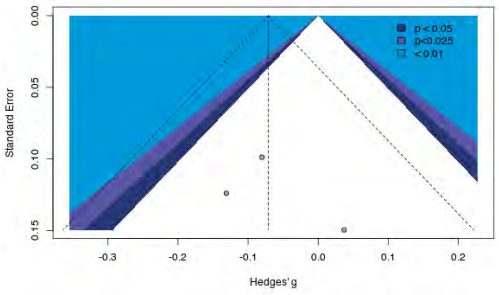


Figure G.10 Funnel plot for ILP: Net worth

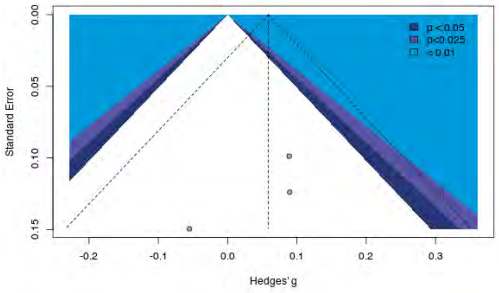


Figure G.11 Funnel plot for ILP: Earnings in last 12 months

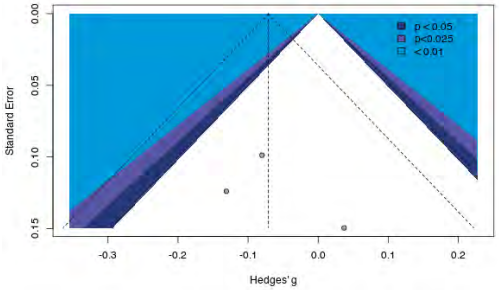


Figure G.12 Funnel plot for ILP: One or more delinquent acts

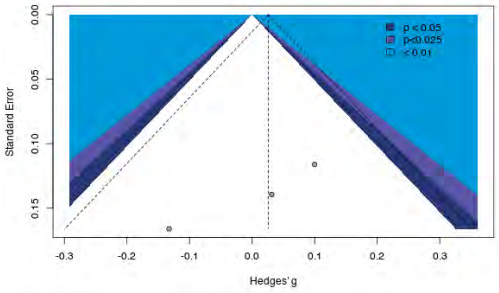


Figure G.13 Funnel plot for ILP: Pregnancy

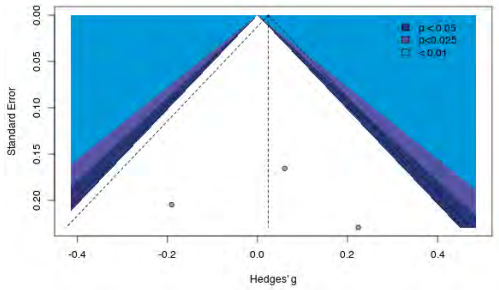


Figure G.14 Funnel plot for ILP: Preparedness (overall)

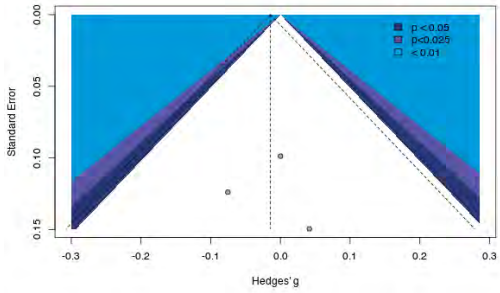


Figure G.15 Funnel plot for ILP: Preparedness (job-related)

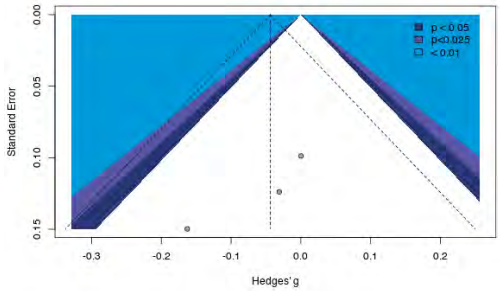


Figure G.16 Funnel plot for ILP: Possession of bank account

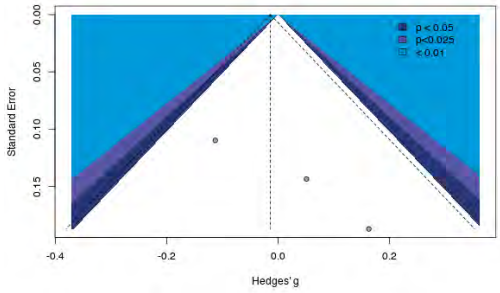


Figure G.17 Funnel plot for ILP: Possession of social security number

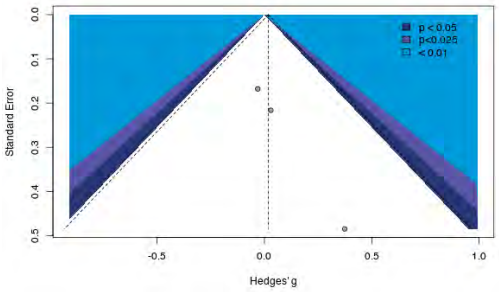


Figure G.18 Funnel plot for ILP: Possession of driver's licence

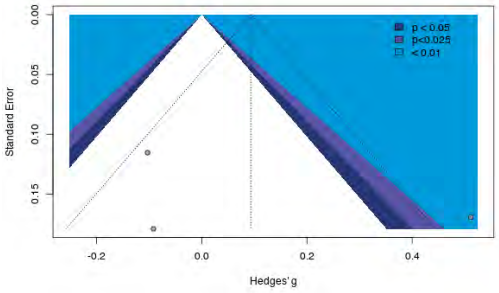
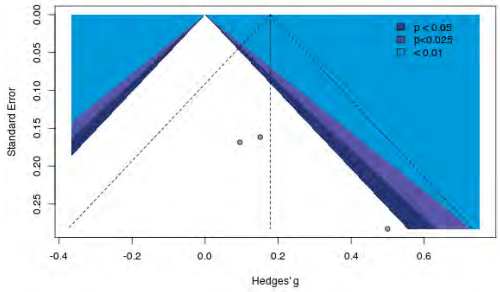


Figure G.19 Funnel plot for ILP: Possession of birth certificate



APPENDIX H: PRISMA-S CHECKLIST

Table H.1 PRISMA-S Checklist

Section/Topic	Item #	Checklist Item	Location reference
Information source & methods			
Database name	1	Name each individual database searched, stating the platform for each.	See Table 2.2
Multi-database searching	2	If databases were searched simultaneously on a single platform, state the name of the platform, listing all of the databases searched	Not applicable
Study registries	3	List any study registries searched	Not applicable
Online resources and browsing	4	Describe any online or print source purposefully searched or browsed (e.g. tables of contents, print conference proceedings, websites), and how this was done	See section 2.4.2
Citation searching	5	Indicate whether cited references or citing references were examined, and describe any methods used for locating cited/citing references (e.g. browsing reference lists, using a citation index, setting up email alerts for references citing included studies).	See section 2.4.4
Contacts	6	Indicate whether additional studies or data were sought by contacting authors, experts, manufacturers or others.	See section 2.4.3
Other methods	7	Describe any additional information sources or search methods used.	See section 2.4.5
Search strategies			
Full search strategies	8	Include the search strategies for each database and information source, copied and pasted exactly as run.	See Appendix A
Limits and restrictions	9	Specify that no limits were used, or describe any limits or restrictions applied to a search (e.g. date or time period, language, study design) and provide justification for their use.	See section 2.4.1
Search filters	10	Indicate whether published search filters were used (as originally designed or modified), and if so, cite the filter(s) used.	Not applicable
Prior work	11	Indicate when search strategies from other literature reviews were adapted or reused for a substantive part or all of the search, citing the previous review(s)	See section 2.4.1
Updates	12	Report the methods used to update the search(es) (e.g. rerunning searches, email alerts).	Not applicable
Dates of searches	13	For each search strategy, provide the date when the last search occurred.	See Table 2.2
Peer Review			
Peer review	14	Describe any search peer review process.	Not applicable
Managing Records			
Total records	15	Document the total number of records identified from each database and other information sources.	See Appendix A

Deduplication	16	Describe the processes and any software used to deduplicate records from multiple database searches and other information sources.	See section 2.5.1

APPENDIX I: DATA EXTRACTION TEMPLATE

Table I.1 Quantitative data extraction template with example

Study Reference #	Intervention/Study	Sample size	Treatment (N)	Control (N)	Outcome category	Outcome detail	Result report type	Reported result (treatment)	Reported result (comparison)	Reported SE (treatment)	Reported SE (comparison)	Reported SD (treatment effect or treatment)	Reported SD (control)	Report ES type	Reported ES	Reported ES 95 per cent CI (lower)	Reported ES 95 per cent CI (upper)	Stat. sig (p value)	Transformation required	Other information required for transformation
Add internal study identifier	Insert name of study	Add size of sample	Add number in treatment group	Add number in control group	Select outcome category from drop-down list	Provide detail on outcome being measured	How is the result reported	Result for treatment group	Result for comparis on group	Standard error for treatment group	Standard error for comparison group	Standard deviation for treatment	Standard deviation for control	Type of effect size reported	Effect size	Lower bound of 95% CI of effect size	Upper bound of 95% CI of effect size	Stat. sig. of reported result (*p* value	Does the result need to be transformed into an ES?	Any other information required to transform into ES
Example [21]																				
14A_Zinn_ ILS_US	ILS (Employment) – Kern County, CA	262	140	122	Homeless-ness	Homeless during study period	Per cent of recipients with outcome (ITT)	5.7 per cent	9.3 per cent					Cohen's *d*	-0.1	Not reported	Not reported	0.301	No	

[21] An outcome is included on each row

What Works for Children's Social Care

Centre for Evidence and Implementation

info@whatworks-csc.org.uk
@whatworksCSC
whatworks-csc.org.uk