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Independent Living Programmes for Improving Outcomes for Young People Leaving the Care System

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Colophon

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Review: Independent living programmes for improving outcomes for young people leaving the care system

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Dates

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Contribution of reviewers

CD, PM, and KU contributed to the writing and revision of the protocol. The search strategy was developed with Jo Abbott, TSC of the Cochrane DPLPG.

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What's new

This review is co-registered with the Cochrane Collaboration. The Methods section of this review has been revised in accordance with feedback from Campbell Collaboration peer reviewers.

Kristen Underhill joined as a third reviewer in November 2005.

Dates

Date review re-formatted: //

Date new studies sought but none found: //

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Text of review

Synopsis

This review aimed to evaluate the effectiveness of independent living programmes (ILPs), a widespread and varied group of programmes intended to improve outcomes for foster care (looked-after) youth leaving the care system. There is evidence that of the many thousands of young people who are discharged from care each year, a sizeable number lack the life skills or resources necessary to succeed independently. Compared to the general population, these young adults face much higher rates of homelessness, unemployment, dependency on public assistance, physical and mental health problems, and involvement with the criminal justice system. ILPs, which incorporate independent living skills training, personal development, and educational and vocational support, are one strategy to improve these outcomes.

So as to incorporate only the highest-quality evidence, this review was limited to randomised and quasi-randomised controlled trials that assessed the effectiveness of ILPs for young people leaving the care system. Outcomes of interest included educational attainment, employment, health, housing, and other relevant life skills outcomes.

After an exhaustive search, no study was found that met our criteria. The primary reason for excluding studies was the lack of a randomised or quasi-randomised design. Eighteen studies utilising nonrandom comparisons, one-group longitudinal designs, or qualitative methodology were identified and are detailed in the table of excluded studies. The results of these studies generally favoured ILP participants for the outcomes of interest; however, their weak methodology makes it difficult to draw any firm or reliable inferences for policy and practice. On the whole, adverse effects were rarely observed.

This review is severely limited by the methodological quality of the evidence base for ILPs. Further research incorporating randomised designs is both feasible and necessary.

Abstract

Background

Independent living programmes (ILPs) are designed to provide young people leaving care with skills that will limit their disadvantage and aid in their successful transition into adulthood. Programmes focus on personal development, independent living skills, education, and vocational support.

Objectives

To assess the effectiveness of independent living programmes for young people leaving the care system.

Search strategy

The following electronic databases were searched: Cochrane Register of Controlled Trials (CENTRAL) (Issue 3, 2005); MEDLINE (1966 to June 2005); EMBASE (1980 to June 2005); CINAHL (1982 to June 2005); PsycINFO (1887 to June 2005); Sociological Abstracts (1952 - June 2005); Applied Social Science Index and Abstracts (ASSIA) (1987- June 2005) and Dissertation Abstracts (to June 2005). All bibliographies were cross-referenced, and experts were contacted for unpublished or ongoing studies.

Selection criteria

Randomised or quasi-randomised controlled trials comparing ILPs to standard care, another intervention, no intervention, or a wait-list control, for young people leaving care systems at their country's statutory age of discharge.

Data collection & analysis

2196 citations were identified and screened independently by two reviewers. Full text versions were obtained for 54 papers. None met the review's inclusion criteria.

Main results

No study was found that met the inclusion criteria of the review. Eighteen studies using nonrandomised or noncomparative designs were found, which generally reported favourable outcomes for ILP participants; however, reliable inferences cannot be drawn from these studies due to their use of weak methodology.

Reviewers' conclusions

Results from randomised controlled trials show no evidence of the effectiveness of ILPs in improving or impairing outcomes for young people discharged from care. Further research into ILPs using randomised controlled designs is needed.

Background

The Child Welfare System

It is widely agreed that good parenting consists of providing a safe, secure and stable environment in which children can develop to their full potential ([Smith 2001](#)). However, not all parents are able to offer such secure and stable environments for their children, and the state may intervene for these children through the legal system. Sometimes this entails removing children from their parents' care and placing them in public care, with the state assuming overall responsibility for their upkeep. As "corporate parent," the state aims to provide for these children's education, health, social interaction, safety, and other needs that are traditionally fulfilled by the family. While in public care, children are usually placed in foster care or residential care.

Prevalence and Experiences of Children in Public Care

Each year a large number of children enter public care systems around the world. There were 523,000 children in public care in the United States in 2003 ([CTD 2005](#)), 61,100 children in public care in England in 2004 ([DfES 2004](#)), over 4,500 children in public care in Wales in 2004 ([NAW 2005](#)), over 12,000 children in public care in Scotland in 2005 ([SENS 2005](#)), and 21,735 children in out-of-home care in Australia in 2004 ([AIHW 2005](#)). In the United States, public (foster) care placement types include homes of nonfamily members, homes of family members, group homes or institutions, pre-adoptive homes, and "other" placements: in 2003, the distribution of youth among these placements was 46%, 23%, 19%, 5%, and 7% respectively ([NCCANI 2005](#)). In England,

public care placement types include foster family assignments, children homes, placement with parents, adoption, and "other": in 2005, the distribution of youth among these placements was 68%, 11%, 9%, 5%, and 5% respectively ([DfES 2005](#)).

Children in public care systems come from diverse backgrounds with different cultures, ethnicities, needs, abilities and pre-care histories ([Biehal 1995](#)). Most enter public care because they have suffered or are likely to have suffered maltreatment ([DOH 1991](#)); they are also more likely to come from multiply disadvantaged backgrounds ([Bebbington 1989](#)). Once children are in public care, their deleterious experiences do not necessarily end; many have to deal with the long-term effects of the abuse and neglect they experienced before entering care ([Meltzer 2003](#)), and some may have further negative experiences whilst in public care. Children in public care are more likely to be diagnosed with emotional or behavioural problems ([Meltzer 2003](#)), to experience unstable care placements ([Biehal 1992](#)), and to face accompanying difficulties at school ([Jackson 1998](#), [OFSTED 1995](#)) than children living in private households. A 2003 survey by England's Office for National Statistics reported that 45 percent of children aged 5-17 years in public care had been diagnosed with a mental disorder ([Meltzer 2003](#)). Several studies have also catalogued the poor educational attainment of young people living in and leaving the care system ([Barth 1990](#), [Cheung 1994](#), [Courtney 1998](#), [Festinger 1983](#), [Garnett 1992](#), [Jackson 1994](#)). The difficulties that these children experience at school not only lessen their educational attainments but, more importantly, also deprive them of potentially protective factors necessary to counter the adverse effects of unpleasant experiences during childhood ([Rutter 1990](#)).

Young People Leaving Care

Every year about 20,000 American and 6,000-8,000 English young people leave their respective public care systems ([CLA 2006](#), [DfES 2002](#), [DfES 2005](#), [USGAO 1999](#)). A significant number of young people leaving public care are disadvantaged and ill-prepared for adult life ([Barth 1990](#), [Cheung 1994](#), [Courtney 1998](#), [Festinger 1983](#), [Garnett 1992](#)). The families of young people leaving care are often unable to offer the sustained and substantial support that would benefit the youths' transition from adolescence to adulthood. As a result, many young people leave care with little social, emotional or financial support from their families as compared to their peers in the general population; they also typically make the transition to independence earlier ([Cashmore 1996](#), [Courtney 1996](#), [Morrow 1996](#)). Notably, approximately 50% of the youth leaving care annually in England are aged 16-17 years, while youth in the general population are estimated to leave home at age 22 ([DOH 1999](#)). However, the age of young people leaving care varies worldwide.

Studies indicate that a significant proportion of young people leaving care do not possess the life skills or resources necessary to succeed independently. Upon leaving care they are more likely than youth in the general population to be homeless, unemployed, and/or dependent on public assistance; they are also more likely to experience physical and mental health problems, engage in risky health behaviours, and become involved with the criminal justice system ([Barth 1990](#), [Cook 1994](#), [Courtney 2001](#), [Courtney 2005](#), [Festinger 1983](#), [Fowler 1996](#), [Mauders 1999](#)).

In recognition of the difficulties facing young people leaving care, policies have been enacted to help prepare them for adulthood. These include the John H. Chafee Foster Care Independence Program of 1999 in the US ([NRCYD 2004](#); [Barth 2004](#)) and the Children (Leaving Care) Act of 2000 in the UK ([DOH 2001](#)).

Independent Living Programmes

Independent living programmes (ILPs) are designed to provide young people leaving care with skills that will limit their disadvantage and aid in their successful transition into adulthood. ILPs recognize that leaving care is a process, not an event, and that it requires social support and life skills preparation. These programmes are not intended to replace the supportive role played by a family, but instead aim to provide care leavers with skills that will help them succeed despite the absence of family support. In the main, ILPs utilise social skills training techniques, which incorporate instruction, modelling, roleplays and feedback. These training techniques have been used effectively to teach skills acquisition and improve youth performance in both clinical and non-clinical settings ([Spence 1995](#)).

ILPs focus on both personal development skills and independent living skills. Personal development skills may include communication, decision making, conflict resolution, and anger management. Independent living skills include career exploration, job and interview skills, money management, household management, accessing housing, seeking legal assistance, and utilising community resources ([Cook 1994](#), [USGAO 1999](#)). ILPs can also provide educational and vocational support. Some authors have advocated that ILPs include interpersonal and relationship training as well ([Courtney 1996](#), [Propp 2003](#)), although these skills are not consistently incorporated into existing programmes.

ILPs are frequently conducted in group formats with individual support (i.e., mentoring) provided on a one-to-one basis ([Biehal 1995](#), [Meston 1988](#)). Many ILPs provide supervised living conditions under which young people can practise the skills they have learnt ([Mauzerall 1983](#)), and they occur in diverse settings such as community centres, group homes, transition placements, and supervised practice placements ([Biehal 1995](#), [Meston 1988](#)). ILPs may also be delivered to young people living in independent tenancies. The content, setting, and delivery of ILPs may vary depending on a country's culture, legislation, or policy context, as well as the age at which youth leave care.

Notwithstanding the wide use of independent living programmes, their effectiveness is unknown ([USGAO 1999](#)) and the extent to which the acquisition of independent living skills by young people leaving care is associated with easier transition to independent and self sufficient living remains uncertain. Some evidence suggests that such programmes may be successful in improving outcomes such as education, employment, housing, health and life skills for young people leaving care ([Loman 2000](#), [Mallon 1998](#), [Scannapieco 1995](#), [Biehal 1995](#)), but this evidence is based on narrative reviews, non-systematic searches, and non-experimental studies.

This review aims systematically to determine the effectiveness of these independent

living programmes in increasing the life chances of young people leaving care. Knowing the effectiveness of such programmes is important given the numerous challenges associated with living in and leaving public care.

Objectives

To assess the effectiveness of independent living programmes for young people leaving the care system.

Criteria for considering studies for this review

Types of studies

Randomised and quasi-randomised controlled studies (i.e., where allocation is by date of birth, alternate numbers, case number, day of the week, or month of the year) were eligible for inclusion. Since this review aimed to synthesise the evidence from study designs least prone to bias, quasi-experimental studies were not included. However, all studies evaluating ILPs which were identified by the search were described in the Table of Excluded Studies, regardless of study design.

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, study design will be included in the data extraction and explored as a possible source of heterogeneity.

Included studies had to compare an independent living programme to a control group. The control group could be a 'standard/usual care', another intervention (e.g. mentoring alone), no intervention, or a waiting list.

Types of participants

Young people leaving the care system at their respective country's statutory ages of discharge from the care system.

Types of interventions

Independent living programmes (as described above), containing the provision of training and/or support in the acquisition of personal development.

Programmes specifically targeted at young people with special needs such as those with physical or learning disabilities, teenage parents, young offenders, and those in psychiatric institutions were excluded.

Types of outcome measures

Studies were only included if they were explicitly targeted at improving at least one of the following:

Educational attainment (example, high school diploma, national vocational diploma, higher education)

Employment (example, full time employment, unemployment rates, income levels)

Health status (example, teenage pregnancy/fatherhood rates, drug use, mental health)

Housing (example, homeless, own accommodation, or living with family)

Life skills including behaviour outcomes (examples: coping skills; financial skills and knowledge; knowledge of state benefits systems; accessing community resources; dependence on public assistance; involvement with the criminal justice system)

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, these outcomes will be treated as entirely separate constructs in all analyses. For example, if a study reports on educational attainment and health status, these two outcomes will be entered into separate analyses. If a study reports two separate measures for the same outcome (e.g., percentage experiencing homelessness and percentage living in their own accommodation), each of the outcomes will be analysed separately (e.g., all studies reporting on homelessness will be grouped for one analysis, and all studies reporting on the percentage of participants living in their own accommodation will be grouped in a separate analysis).

Some possible outcomes of ILPs such as housing and employment can be assessed immediately after intervention. Other outcomes such as higher education attainment, health status, holding on to employment and housing, and behaviour outcomes need to be assessed over longer time periods. Should relevant studies be identified in the future, outcomes will therefore be assessed as short term (immediately after intervention) and long-term (12 months after intervention) to determine whether immediate outcomes can be sustained.

The data sources used to assess outcomes included agency records and self reports using psychometrically sound and validated scales of assessment. Should relevant studies be identified in the future, we will investigate the method of outcome assessment as a source of heterogeneity and possible bias. Political influences such as government targets and the high mobility of care leavers may affect the reliability of agency records as a source of outcome measurement.

Search strategy for identification of studies

The following electronic databases were searched:

Cochrane Register of Controlled Trials (CENTRAL) (Issue 3, 2005)
MEDLINE (1966 to June 2005)
EMBASE (1980 to June 2005)
CINAHL (1982 to June 2005)
PsycINFO (1887 to June 2005)
Sociological Abstracts (1952 - June 2005)
Applied Social Science Index and Abstracts (ASSIA) (1987- June 2005)
Dissertation Abstracts (to June 2005)

Further identification of studies was attempted through cross-referencing bibliographies of all relevant studies and reviews discovered in the search. Experts and authors identified by the search were contacted for information on unknown published and unpublished studies, as well as ongoing studies and other suggested contacts. The following journals were hand-searched for relevant articles: Children and Youth Services Review, Research in Social Work Practice. Forward searches were also conducted. The following search terms were used in finding the relevant studies for inclusion in the review. These terms were adjusted as necessary to suit the indices of individual databases.

FOSTER HOME CARE OR

foster* OR

(care home*) OR

(institution* near care*) OR

(social near care) OR

(children* near home*) OR

((child* near home*) near care) OR

(substitute near parent*) OR

(substitute near care) OR

(home near placement*) OR

(residential near care) OR

(child* near care) OR

(home care) OR

(welfare care) OR

AND

ADOLESCENT OR

(child* or adolescen* or youth* or teen*) OR

((young next person) or (young next people))

AND

AFTERCARE OR

Leaving OR

(after* near care) OR

(look* near after*) OR

support* OR

aftercare* OR

(independent living)OR

((independent near live*) or (independent near living))

No language restrictions or geographical restrictions were applied.

Updated versions of this review will incorporate the term "independence training unit" into the search strategy. Additional searches will be run in Social Work Abstracts (which overlaps with the sources covered in the existing strategy), and hand-searching of *Child Welfare* and *Social Work Research* will be conducted.

Methods of the review

No study was identified that met the inclusion criteria for this review. The following paragraphs document the methods used for selecting trials and the proposed analytical approach that will be used if relevant studies are identified in future updates.

Selection of trials

Titles and abstracts of studies yielded by the searches were checked by CD and PM

independently (i.e., without conferencing) to determine their eligibility for inclusion in the review. If either reviewer considered a study to be potentially relevant, a full copy of the text was obtained by CD. Once retrieved, the studies' methodological quality and eligibility for the review was assessed by CD and PM independently. Where there was uncertainty or disagreement between the two reviewers regarding the eligibility of a study, this was resolved by discussion. Where discussions were inconclusive, the review's editorial base was contacted to resolve the dispute. To avoid the possibility of investigator bias, effect sizes were not computed or considered until after the eligibility of a study had been established.

Quality assessment

No study was found that met the review's inclusion criteria, so quality assessment was not conducted for this version of the review. Should relevant studies be identified in the future, two authors working independently will critically assess the methodological quality of studies against a set of criteria that considers their degree of allocation concealment, follow up, intention-to-treat, and blinding of assessors. Quality categories will be assigned to each criterion. For example, allocation of concealment will be assessed, as illustrated in the Cochrane Collaboration Handbook ([Alderson 2005](#)) as follows:

(A)Indicates adequate allocation concealment; e.g. by telephone randomisation or sealed envelopes.

(B)Indicates uncertainty about the adequacy of allocation concealment; e.g. where method of concealment is not reported

(C)Indicates allocation was inadequately concealed; e.g. open random number lists or quasi-randomisation such as alternation, day of the week, case number.

Since studies using quasi-randomisation methods (e.g., assignment by coin flip, case record number, date of birth) will be included, evidence of baseline differences and attempts made to control for them will be examined. Evidence of baseline differences will not necessarily lead to exclusion. If a quasi-randomised study does not control for baseline differences, authors will be contacted for additional data regarding the allocation sequence and the possible effects of baseline differences. The review group's editorial base will be contacted where reviewers are uncertain whether to include such studies.

Given the nature of the intervention, it is unlikely that providers and participants in the intervention can be blinded; hence this will not be used as a quality criterion. Should relevant studies be identified in the future, information about blinding will be coded and investigated as a possible source of heterogeneity and bias.

Additional information regarding methodological quality will be sought from primary study authors as necessary. Uncertainty and disagreements will be discussed among the review authors. If no consensus can be reached, disagreements regarding methodological quality will be brought to the review's editorial base.

Data management

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, data extraction will be done independently by CD and PM with the aid of a pilot tested extraction form. Differences in coding will be resolved by discussion and referral to the review group's editorial base. Information will be extracted on the following: participants' characteristics at baseline (including ethnicity, age, geographical location, gender, and pre-care experiences), study design and methods, specific details of the intervention delivered (features and duration), outcomes, outcome measurement (e.g., agency records, self-report), implementation fidelity, cost-effectiveness, and participant satisfaction. The extracted data will be shown in a Table of Included Studies. Information about how effect sizes are extracted from the primary studies will be coded. We plan to calculate effect sizes from means and standard deviations reported in the studies; however, where this is impossible, we will seek statistical guidance from the review's editorial base and code the statistical methods used.

Incomplete data and attrition

Missing data may consist of statistical data (e.g., standard deviations for means), or raw follow-up data for participants who dropped out of a study. No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, the study authors will be contacted in cases of missing data. Attrition will be explored as a possible source of heterogeneity and bias.

Measures of treatment effect

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, any meta-analysis will be conducted according to the following methods. For dichotomous outcome data, log odds ratios with 95% confidence intervals will be calculated. Continuous data will be analysed if means and standard deviations are available and the data are not skewed. For continuous data that must have values greater than 0 (e.g., number of arrests), we will define skewed data as that for which the mean is less than the sum of two standard deviations ([Altman 1996](#), [Alderson 2005](#)). Where they are reported in the primary studies, we will also inspect histograms, scatterplots, and summary statistics for evidence of skew. If any test or inspection suggests that data are likely to be skewed, authors will be contacted for more information, log transformed data, or the raw data. Where the same outcomes are measured in different ways, standardised mean differences will be calculated and compared across studies. Where outcomes are measured in the same way, weighted mean differences will be calculated.

Assessment of heterogeneity

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, any meta-analysis will be conducted according to the following methods. Heterogeneity will be assessed using the chi square test of heterogeneity, visual inspection of the graph, and the I2 statistic ([Higgins 2002](#)). The I2 statistic will determine the percentage of variability that is due to heterogeneity rather than sampling error, where a value greater

than 50% suggests moderate heterogeneity. If any of these methods indicates heterogeneity, we will investigate possible explanations, including clinical and methodological characteristics. Even when tests for heterogeneity are non-significant, we plan to conduct subgroup analyses and explore other potential moderators.

Data syntheses

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, any meta-analysis will be conducted according to the following methods. Both fixed effects and random effects models will be considered in conducting the analyses. The random effects model will be used where there is indication of heterogeneity and the source of such heterogeneity cannot be explained. The random effects model will also be used for analyses incorporating small numbers of studies, for which tests of heterogeneity may be underpowered. Where there is no source of heterogeneity beyond differences in the observed covariates, we will conduct both fixed effects and random effects analyses and investigate differences between the two procedures. The value of meta-analysis will be strongly considered if there is substantial clinical or methodological heterogeneity.

Sensitivity analyses

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, any meta-analysis will be conducted according to the following methods. Sensitivity analyses will be conducted to assess the impact of the quality of included studies on the outcome of the review. The quality criteria used in the analyses will be the method of allocation concealment and intention-to-treat.

Subgroup analyses

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future, subgroup analyses will be conducted according to the following methods. Regardless of heterogeneity tests, subgroup analyses will be performed to explore the differential impact of covariates such as gender, ethnicity, and care placement history (i.e., foster care vs. residential care). These covariates are often associated with differential outcomes for young people leaving care ([Barn 2005](#), [Biehal 1995](#), [Courtney 2005](#)).

- o Boys vs. girls
- o Majority vs. minority ethnicities
- o Foster care vs. residential placement histories

If the literature search suggests that there are strong theoretical reasons to search for moderators, additional subgroup analyses may also be appropriate regardless of heterogeneity tests.

Assessment of bias

No study was found that met the review's inclusion criteria, so meta-analysis was not possible in this version of the review. Should relevant studies be identified in the future,

funnel plots (effect size against standard error) will be drawn if a sufficient number of studies are found. Additional analyses to detect bias will include the trim and fill technique ([Duval 2000](#)) and the planned Egger regression approach with a weight-function model. Asymmetry can be due to publication bias, but it can also be due to clinical and methodological heterogeneity. In the event that a relationship is found, these sources of heterogeneity will also be examined as possible explanations ([Egger 1997](#)).

Description of studies

In all, 2196 citations were identified. After a thorough screening process, 54 articles were retrieved in full for scrutiny, but none met the inclusion criteria for the review. Studies were excluded from the review mainly because they were not randomised or quasi-randomised controlled trials.

Methodological quality of included studies

No study was found that met the inclusion criteria of the review.

Results

No study was found that met the inclusion criteria of the review. The search yielded eighteen studies that used nonrandomised, one-group longitudinal, and qualitative designs to evaluate ILPs. These studies are cited in the table of excluded studies; where the primary references were unavailable after extensive searching and repeated attempts to contact the authors, study data were extracted from secondary sources. Besides a lack of randomisation, these studies faced a number of methodological limitations, such as the use of small sample sizes, the presence of baseline differences, substantial variation in ILP design, inadequate information regarding effect sizes and confidence intervals, and inadequate reporting on implementation fidelity. Collectively, these studies appeared to show that some ILPs may improve educational, employment-related, and housing-related outcomes for young people leaving the care system. The strength of this evidence, however, is insufficient to draw conclusions for policy or practice.

Discussion

Considering that the review intended to assess the effectiveness of ILPs, studies that used a randomised controlled design would have provided the most reliable evidence. Yet, no randomised or quasi-randomised controlled study was found, meaning that no study could be included in this review.

In the absence of randomised or quasi-randomised controlled studies, studies utilising other designs were found. Where control groups were used, these evaluations generally reported better outcomes for participants who took part in an ILP prior to discharge than for controls. This trend was consistent across most of the outcomes of interest to this review, including educational attainment, housing, and employment. However, reliable inferences cannot be drawn from nonrandomised studies due to their use of weak methodology.

Reviewers' conclusions

Implications for practice

Results from this review show no firm evidence from randomised controlled studies regarding the effectiveness of ILPs in improving outcomes for young people discharged from care. Given the methodological weakness of available studies, it is difficult to make definite conclusions for practice at this time.

Implications for research

There is the need for further research into ILPs using randomised controlled designs. Studies that randomise participants among intervention conditions can investigate questions of effectiveness and harm most thoroughly. It is important to acknowledge that randomisation may be difficult in settings where policies mandate ILP services for care leavers, such as the UK context after the Children (Leaving Care) Act of 2000; however, in settings where randomisation is possible, RCTs will provide the clearest evidence of effectiveness. Future research should also take into account the weaknesses identified in the available evidence and incorporate larger sample sizes, report more details regarding implementation fidelity, and measure outcomes over longer follow up periods. Additional studies or moderator analyses should address the effectiveness of ILPs among care leavers with different care placements, such as family placements or group homes. The theoretical assumptions of ILPs also require investigation, since it is unclear whether (and how) independent living skills can compensate for a relative lack of family support. The results of new studies can then be compared to the current evidence to establish a more accurate appraisal of effectiveness. Without more rigorous research, the evidence base cannot provide reliable answers to practitioners and policymakers regarding the role of independent living programmes for youth leaving care.

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Potential conflict of interest

None known.

Characteristics of excluded studies

Study	Reason for exclusion
Abatena 1996	<p>Not a randomised or quasi-randomised controlled trial. Original paper could not be obtained. Abstracted from USGAO 1999. Study design unclear; involved assessment 3 months after leaving care. Location: Nevada n=26 ILP participants Reported findings: "Most respondents" believed that the ILP helped prepare them for independent living "to some extent," (including finding housing, cooking meals, budgeting money, and utilising community resources), but 53% were not satisfied with the ILP services.</p>
Austin 1995	<p>Not a randomised or quasi-randomised controlled trial. Original paper could not be obtained. Abstracted from Barth 2004. Study design: Cross-sectional survey at time of ILP completion. Location: Pennsylvania n=278 youth receiving ILP services between 1988 and 1991 ("start-up stage"), and 255 youth receiving ILP services between 1992 and 1994 ("fine-tuning stage"). Reported outcomes: Little difference in highest level of education completed by the end of ILP services. Youth in later cohort less likely to drop out of school for both secondary education and post-high-school education (although differences for post-high-school education were minor). Other outcomes not available.</p>
Baker 2000	<p>Not a randomised or quasi-randomised controlled trial. Study design: Cross-sectional survey after discharge from care for some outcomes; one-group survey after discharge from care for other outcomes. Location: New York City n=155 young men recruited into Work Appreciation for Youth (WAY) scholarship programme during each of ten years, and 76 young men eligible for WAY scholarship programme in years 1-6, but discharged before participating. Reported Findings: Not all outcome data available. A subset of intervention youth in cohorts 1-6 who had spent at least 2yrs in the</p>

	<p>programme were interviewed for assessment. 80% of these participants were working at follow-up (2-11 years after leaving the programme), and 80% were in school or had graduated from high school at age 21. Among all WAY Scholarship youth, those who participated in at least 2 years of the programme reported nonsignificantly lower adult criminality rates than comparison youth (5% vs. 15%) and significantly lower rates than those who remained in the programme less than two years (35%).</p>
Biehal 1995	<p>Not a randomised or quasi-randomised controlled trial. Study design: Cross-sectional assessment 18-24m after leaving care. Location: 3 local authorities in England n=30 young people who were assigned a key worker and received aftercare services, and 23 young people who did not. Reported Findings: Specific data were not available, but findings appeared to favour programme participants for housing and life skills outcomes.</p>
Christenson 2003	<p>Not a randomised or quasi-randomised controlled trial. Study design: Cross-sectional assessment, unclear how much time elapsed after leaving care. Location: Idaho n=164 youth who left care after the Chafee programme began (2000-2002), and 78 youth who left care before the Chafee programme began (1996-1998). Reported Findings: On average, findings favoured pre-Chafee participants for attaining high school or General Education Development (GED) qualifications (65% of pre-Chafee participants vs. 42% of Chafee participants) and for being employed at follow-up (65% vs. 23%). However, findings favoured Chafee participants for homelessness (13% for Chafee participants vs. 17% for pre-Chafee participants), pregnancy and childbearing rates at follow-up (33% vs. 35%) and for dependency on or use of social services (62% vs. 85%).</p>
Cook 1991	<p>Not a randomised or quasi-randomised controlled trial. Study design: One-group survey 2.5 to 4 years after discharge from care. Location: Eight US states n=810 youth; Comparisons made between youth who reported having received independent living services (n=680) and youth who did not (n=130). Comparisons also made between youth who reported having received independent living services in 5 core subject areas (n=45) and youth who had not (n=765). Reported findings: No significant effects were found for "any skills training" as opposed to "no skills training" for maintaining a job for over 1 year, living without cost to the community, completing high school, accessing health care, avoiding early parenting, or general satisfaction. When "skills training" was defined as receiving training in all of 5 skill areas (budgeting, obtaining credit, consumer skills, education, and employment), this training was significantly correlated with a higher</p>

	likelihood of maintaining a job for more than 1 year, living without cost to the community, accessing health care, and general satisfaction.
Harding 1993	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Original paper could not be obtained. Abstracted from Lemon 2005.</p> <p>Study design: Cross-sectional survey, unclear how much time had elapsed since leaving care.</p> <p>Location: Texas</p> <p>n=30 ILP participants, 29 nonparticipants</p> <p>Reported findings: ILP participants significantly more likely than nonparticipants to complete job corps vocational training. ILP participants moved significantly fewer times than nonparticipants.</p>
Lemon 2005	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Study design: Cross-sectional survey several years after discharge from care (unclear how much time had elapsed on average since leaving care).</p> <p>Location: California</p> <p>n=81 ILP participants and 133 nonparticipants attending a state university.</p> <p>Reported Findings: Significantly favoured non-ILP participants for having a job immediately after discharge from care (58.4% of ILP participants vs. 73.8% of nonparticipants). Nonsignificantly favoured ILP participants for ever having been without a place to sleep (16% vs. 23%), for ever having had a problem with the law (12.3% vs. 15.9%), and for sometimes being unable to access health care (52.5% vs. 57.9%). Fewer ILP participants than nonparticipants had ever received mental health care since discharge from foster care (31.3% vs. 33.9%).</p>
Lindsey 1999	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Study design: Cross-sectional survey 1-3 years after discharge from care.</p> <p>Location: North Carolina</p> <p>n=44 ILP participants (received services in addition to the required initial ILP assessment) and 32 nonparticipants (received initial assessment only).</p> <p>Reported Findings: Significantly favoured ILP participants over nonparticipants for having independent living arrangements (68% vs 41%) and for paying all housing expenses while living with others (25% vs 0%). Nonsignificantly favoured ILP participants for meeting part or all of their living expenses (55% vs 38%). No significant difference in having experienced homelessness since discharge. Significantly favoured ILP participants for having completed a technical/vocational programme or some college (21% vs 0%) and for current enrollment in college (16% vs 0%). Nonsignificantly favoured ILP participants for having completed high school or GED (37% vs 18%). Favoured ILP participants for being employed part or full time (59% vs 44%). No significant differences in wages. ILP participants utilised housing, Aid to Families with Dependent Children (AFDC), Women Infants and Children (WIC), and emergency assistance at a higher rate than nonparticipants. Favoured ILP participants over nonparticipants for ever having had difficulty paying bills (5% vs</p>

	25%).
Mallon 1998	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Study design: One group longitudinal. Pre-test at intake, post-test at time of discharge from programme, and follow-up between December 1994 and June 1995 (all had been discharged for varying lengths of time).</p> <p>Location: New York City</p> <p>n=46 youth enrolled in ILP between 1987 and 1994.</p> <p>Reported Findings: 74% of participants had received either high school or GED diplomas, including 17% with post-secondary education. 72% were employed full-time at completion of the programme, increasing to 78% at follow-up. 68% of participants were living alone, in shared housing, and in furnished rooms when they were discharged from care; this increased to 77% at follow-up. One participant (2% of sample) was dependent on public assistance at time of discharge, and two (4%) were receiving welfare benefits at time of follow-up.</p>
McMillen 1997	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Study design: Focus groups with ILP participants who had been discharged from care an average of 2.11 years.</p> <p>Location: Missouri</p> <p>n=25 former ILP participants</p> <p>Reported Findings: Participants perceived skills training to be beneficial, particularly financial skills, and reported positive reactions to the programme's stipends and subsidies. Participants also valued programme staff for emotional support and knowledge of resources.</p>
Moore 1988	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Original paper could not be obtained. Abstracted from USGAO 1999.</p> <p>Study design: One-group survey of youth currently receiving ILP or aftercare services.</p> <p>Location: Wayne County, Michigan</p> <p>n=61 youth participating in an ILP or receiving aftercare services</p> <p>Reported findings: Over 80% indicated that their quality of life improved after receiving independent living services. Participants considered housing and health care services most beneficial, while employment services were least effective.</p>
Nebraska 1994	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Original paper could not be obtained. Abstracted from Lindsey 1999.</p> <p>Study design: One-group survey 1 year after discharge from care.</p> <p>Location: Nebraska</p> <p>n=58 ILP participants</p> <p>Reported findings: At follow-up, 85% had attained a high school degree or GED (including 100% of respondents over age 20), 53% had some college or vocational training, 64% were employed, 57% were living independently, and 18% were receiving one or more types of public assistance. 65% had received some help in preparing for independent living; the majority reported having felt prepared for independent living at</p>

	discharge.
Pecora 2003	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Study design: One-group assessment of case records and individual interviews after discharge from care. Logistic regression analyses to determine role of independent living training in high school completion and "success" in adulthood. Interviews took place an average of 10 years after participants left care. Response rate was 68% (3.4% of original sample were in prison, 0.7% were in psychiatric institutions, 3.9% were deceased, 24% did not respond).</p> <p>Location: Participants had received care through Casey programmes in AZ, CA, HI, ID, LA, MT, ND, OK, OR, SD, TX, WA, WY.</p> <p>n=1,609 Casey program alumni served by any of the 23 Casey Field offices in operation in 1998. Participants fulfilled 3 conditions: (1) had been served by Casey Family Programs offices 1966-1988, (2) had been placed with a Casey foster family for 12m or more, and (3) had been discharged from foster care at least 12m previously.</p> <p>Reported findings: 55 variables were put into stepwise multiple regression to discover predictors of success as an adult. "Success" was based on years of education, household income, physical health, mental health, and relationship satisfaction. "Life Skills / Independent Living Preparation" was one of 9 variables that predicted success. "Life Skills / Independent Living Preparation" was measured by asking participants for "retrospective ratings of life skills readiness" overall and on 16 specific skills (e.g. food purchasing, money management). This does not specifically denote participation in an ILP - it indicates how well-prepared participants remembered feeling when they left care.</p> <p>Additional logistic regression analyses identified which variables predicted high school completion. According to the resulting prediction model, participants receiving independent living training ONCE as opposed to NEVER were 1.9 times more likely to complete high school. Participants who received independent living training INTERMITTENTLY as opposed to NEVER were 1.8 times more likely to complete high school. Participants who received EXTENSIVE independent living training as opposed to NEVER receiving training were 2.8 times more likely to complete high school. Fewer than 35% of the entire sample had received any independent living training. In the interview, this was described as "independent living training groups or workshops." Again, it is unclear whether this denotes participation in an ILP as defined in this review.</p>
Scannapieco 1995	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Study design: Cross-sectional assessment of case records after discharge from care. Unclear how much time elapsed between discharge and follow-up. No data available after case closure.</p> <p>Location: Baltimore County, MD</p>

	<p>n=44 youth who had been in foster care for at least 6m and who had been involved in an ILP between 1988 and 1993, and n=46 youth who had been eligible for ILP services, but had not participated.</p> <p>Reported Findings: Significantly favoured ILP participants over nonparticipants for having completed high school (50% vs 13%), living on their own (36% vs 4%), being employed (52% vs 26%), and being self-supporting (48% vs 17%) at case closure.</p>
Shippensburg 1993	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Original paper could not be obtained. Abstracted from Lindsey 1999, Barth 2004, and Lemon et al 2005.</p> <p>Study design: Cross-sectional survey 1 year after discharge from care.</p> <p>Location: Pennsylvania</p> <p>n=unclear number of youth who had participated in an ILP (Lindsey and Ahmed 1999 report that this group numbered 32, while Lemon et al 2005 suggest that it was 51. The response rate to the mailed survey was 24%). This group was compared to an unclear number of youth who had not participated in an ILP (Linsey and Ahmed count this group at 24, while Lemon et al suggest that the sample size was not indicated. The response rate for this group was 41%).</p> <p>Reported findings: One year after discharge, results favoured nonparticipants for completing a high school degree (79% of nonparticipants vs 59% of ILP participants) and for the likelihood of receiving one or more types of public assistance (29% of nonparticipants vs 38% of ILP participants). However, results favoured ILP participants for living independently (50% of ILP participants vs 17% of nonparticipants, p=.01) and being employed full- or part-time (50% of ILP participants vs 37% of nonparticipants). Results also suggested that ILP participants were also more likely to participate in social organisations.</p>
Simmons 1990	<p>Not a randomised or quasi-randomised controlled trial.</p> <p>Original paper could not be obtained. Abstracted from USGAO 1999.</p> <p>May be the same as Harding 1993.</p> <p>Study design unclear.</p> <p>Location: Harris County, Texas</p> <p>n unclear.</p> <p>Reported findings: ILP participants gained full-time employment earlier and were more likely to complete high school or a GED at a younger age than nonparticipants.</p>
Waldinger 1994	<p>Comparison group did not meet inclusion criteria. Not a randomised or quasi-randomised controlled trial. Outcomes were not assessed after discharge from care.</p> <p>Study design: Cross-sectional comparison of youth currently enrolled in two different ILPs. Involved case record assessment and surveys.</p> <p>Location: Los Angeles County, CA</p> <p>n=unclear numbers of youth currently involved in the Integrated Services</p>

Pilot (ISP programme, with access to CILS services), youth currently involved in the Categorical Independent Living Services model (CILS), and youth currently not receiving CILS services.

Reported findings: In first comparison, 289 youth receiving CILS services were compared to 65 youth who did not. No outcomes of interest were presented. In second comparison, an unclear number of youth in ISP programme were compared to an unclear number of youth in the CILS programme. Youth in the ISP programme were more likely to perceive their social workers as "instrumental" in preparing them for leaving care. No significant group differences were reported for the percentage of youth currently employed, the percentage who felt "ready to make it on their own," or mean numbers of people "available to help."

Characteristics of ongoing studies

Study	Trial name or title	Participants	Interventions	Outcomes	Starting date	Contact information
Courtney 2005	Midwest Evaluation of the Adult Functioning of Former Foster Youth	n=736 Young people aged 17-18yrs leaving the care system in three US states (Illinois, Iowa, and Wisconsin).	ILPs in each of the three states. Structure of care and provision of ILP services varied across the states. Not all of the participants actually participated in an ILP.	Education, employment, physical and mental health, substance abuse, sexual behaviour, receipt of independent living services, delinquency, contact with criminal justice system.	May 2002	Mark E. Courtney, +1 (773) 256-5162. courtney-mark@chmail.spc.uchicago.edu Chapin Hall Center For Children, 1313 East 60th Street, Chicago, Illinois 60637

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Notes

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