UCL

Research Report

Long-term outcomes for care leavers who became parents and experiences of their children

Evidence on the intergenerational transmission of disadvantage in two British cohort studies

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CENTRE FOR LONGITUDINAL STUDIES

Contents

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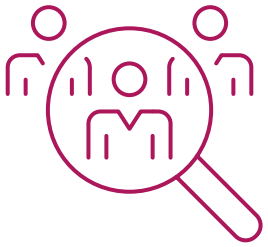
Chapter 1:
Introduction & background



Aims and objectives

Across Europe (including the UK) about 1% of children (nearly 1 million) spend time under the guardianship of the state in out-of-home care (OHC) in any given year. The experience of OHC, often characterised by psycho-social deprivation and inconsistent caregiving, can be considered as a distinct type of traumatic experience (Yang et al., 2018) referring to adverse childhood experiences that occurred before placement as well as the separation from the mother. There is persistent evidence to show that the experience of OHC, including the experiences prior to entering OHC, are associated with problematic post-16 transitions and poor adult outcomes regarding education, employment, income, housing, health and wellbeing (Cameron et al., 2018; Dregan et al., 2011a; Dregan et al., 2011b; Sariaslan et al., 2022; Viner & Taylor, 2005). There is however scarce evidence on what happens to the children of care leavers, i.e., on the intergenerational transmission of disadvantage. This study is one of the first to examine the experiences of care leavers who became parents and the intergenerational impact on their children's development. Using information from two nationally representative longitudinal studies: the 1970 British Cohort Study (BCS70) and the 2000/2 Millennium Cohort Study (MCS), the aims of the study were threefold: to examine a) the socioeconomic resources available to care-experienced parents; b) outcomes for their children from the very early years to post-16 transitions and into adulthood (BCS70 only); and c) potential protective factors and processes supporting effective functioning among care-experienced parents and their children.

Going beyond the information available from administrative data, the two longitudinal datasets offered a unique opportunity to provide a detailed profile of care-experienced families and the development of their children up to age 17 in a current cohort (MCS) as well outcomes by age 46 and beyond (BCS70). The rich contextual information available in the datasets allowed us to take into account a wide range of family socioeconomic circumstances and individual characteristics to help isolate the specific impact of care experience over and above other potential confounding factors, such as socioeconomic and individual-level resources, for both parents and their children. We examined the how and the why of intergenerational processes, and identified 'what works', highlighting connections between parents' and children's strengths and wellbeing across a range of domains. For the parents this included indicators of educational attainment, employment, housing, family circumstances, health and wellbeing, and the adjustment of their children was assessed regarding their cognitive and behavioural development, experiences at school, GCSE attainment and post-16 transitions, social adjustment, crime, health behaviours, physical and emotional wellbeing. For BCS70 we also investigated education and employment outcomes at age 26 (to address the question of whether to extend personal advisor support to care leavers up to age 25) and at ages 46 and 50 to examine the potential long shadow of care experience.

Importantly, the research has identified key factors that limit the intergenerational transmission of disadvantage and promote positive adaptation, and thus can inform how the Government can better deliver against its 2013 Care Leaver Strategy to support people leaving care to become independent and to improve the life chances of their children.

Where are the gaps in evidence

There is persistent evidence documenting the adjustment problems for care-experienced adults across different domains such as education, employment, health and wellbeing outcomes, including findings from large nationally representative cohort data, such as the UK 1958 and 1970 birth cohorts following care leavers into early (e.g. Cameron et al., 2018; Dregan & Gulliford, 2012; Dregan et al., 2011a; Dregan et al., 2011b; Power et al., 2002; Buchanan et al., 2000) and later adulthood (Parsons & Schoon, 2022; Xie et al., 2022). Moreover, recent Nuffield Foundation funded research used longitudinal administrative data to examine a range of outcomes for care-experienced adults in mid-life (e.g. Murray et al., 2020a; Murray et al., 2020b; Sacker et al., 2022a; Sacker et al., 2022b). However, very little is known about the developmental outcomes of the children of care leavers. There is some evidence to suggest that compared to the general population care-experienced adults are more likely to become parents at a young age (Roberts et al., 2017; Svoboda et al., 2012; Knight et al., 2006) and relatively high proportions have their own children removed to care, although the majority do not (Centre for Social Justice, 2015; Roberts et al., 2019). To address the knowledge gaps, the current study followed the lives of parents with OHC experience into the adult years and examined the intergenerational transmission of disadvantage associated with OHC experience to the second generation. In addition, we identified potential protective factors available to care-experienced adults who became parents that enable them and their children to escape from the vicious cycle of disadvantage.

In particular, we addressed three central research questions (RQ):

RQ1) What are the social and economic resources available to mothers who had out-of-home care (OHC) experience as children?

To gain a comprehensive understanding of the resources available to care-experienced parents we take into account a range of indicators, including markers of socioeconomic status (parental education levels, social status, employment, income, housing and home ownership), area disadvantage, as well as indicators of parental physical and mental-health and wellbeing, available social support networks and parenting behaviour. Based on previous research, we expected that care-experienced parents and their children have fewer socioeconomic resources than non-care experienced families. There is however less evidence on the level of family psycho-social resources. We find that mothers who experienced OHC in their childhood indeed have poorer socioeconomic and psycho-social resources available to them in adulthood. Even after controlling for age, ethnicity and qualification levels key differences that remained are regarding their education, being part of a workless family, receipt of state benefits and experience of poverty. They were also more likely to live in rented, damp housing and to be dissatisfied with the area where they live and to have no peace and quiet when at home. More had also experienced a partner using force on them, to have poorer physical and mental health and to be dissatisfied with their life in general. However, many differences regarding their pregnancy, childbirth and parenting experiences were no longer significant, this included breastfeeding, setting regular meal- and bedtimes for their child and recreational drug use. Moreover, not all care leavers failed to achieve, and we identified a considerable number of care leavers who demonstrated effective functioning, i.e., they obtained relevant qualifications, were in gainful employment and not dependent on state benefits. More detailed findings are reported in Chapter 3, as well as Chapters 7 and 10.

RQ2) To what extent does maternal OHC experience impact on their children's development?

In assessing the developmental outcomes among children of OHC experienced parents (compared to no OHC experienced parents), we are guided by the Outcome Framework of the Children Social Care Services (CSCS) (La Valle et al., 2019), including indicators of key physical, cognitive, social and emotional developmental milestones between 9 months and 17 years (MCS); and the children's educational participation and attainment in education (i.e. preschool experiences, attainment up to GCSE [key stages 1-4], and initial post-16 transitions). For BCS70 we additionally compare education and economic activity outcomes at age 26 (early adulthood) and age 46 (mid-adulthood). This analysis enabled us to assess the long intergenerational shadow of OHC experience. There was no previous evidence to guide our assumptions, yet following the assumption of cumulative risk we expected that children growing up with OHC experienced parents are at a greater risk of showing lower levels of educational attainment than

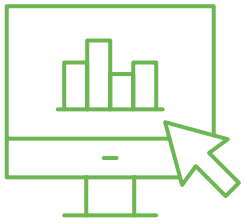
children growing up with non-care experienced parents. However, not all children are affected in the same way, and some show better levels of adjustment than would be expected, i.e., they show resilience in the face of adversity. Findings are reported in Chapters 4 to 8.

In summary, we find strong evidence of intergenerational transmission of OHC trauma in MCS. After controlling for disadvantages in family socioeconomic status (SES), the children of care leavers do as well as other teenagers educationally – including GCSE attainment and in their post-16 transitions – but mental health scars remain very evident. In the early years differences in child cognitive and emotional adjustment by mother OHC experience were fully accounted for by SES differences, though this did not extend to externalising symptoms. Alarmingly there is an increased risk for mental health problems at age 17, in particular regarding depression, self-harm and suicide. More research is urgently needed to understand these processes. Among the 1970 cohort, we find evidence of resilience among the adult children of care leavers in terms of mental health outcomes by age 50, gaining qualifications into mid-adulthood and not being as disadvantaged in the labour market in comparison to their peers with direct OHC experience in their own childhood or adolescence. There are thus also potential maturation processes to be explored.

RQ3) Focusing on OHC experienced families, we ask what are the factors and processes that promote positive development among children of OHC experienced mothers?

Positive adjustment is assessed using attainment of key developmental milestones, including engagement in education and psycho-social adaptation. We were not looking for outstanding achievements but for the children who are 'doing ok', i.e., who are achieving within a normative range (Masten, 2014). The identification of potential protective factors was informed by the developmental assets approach (Scales, 1999), which emphasises the vital role of resources and strengths available to 'at-risk' populations (e.g., effective parenting, use of pre-school provision, social support and participation), instead of focusing on deficits (i.e., lack of socioeconomic resources or family instability). In the early years differences in parenting styles mattered for child externalising behaviour problems, and resilience among care leaver mothers is associated with having had a stable foster care placement, gaining higher qualification levels, better housing and higher levels of employment. In turn, children of resilient mothers were more likely to achieve good grades in their GCSE examinations, in fact they were as likely as their peers in the general population to do so, although they also reported concerning mental health problems. Findings are reported in Chapter 4 and 9.

Chapter 2:
Data and Methods



This research has used two of Britain's longitudinal birth cohort studies, the 1970 British Cohort Study and the 2000/02 Millennium Cohort Study, which enabled us to assess generalisability of findings across different socio-historical contexts.

The 1970 British Cohort Study (BCS70)

The 1970 British Cohort Study (BCS70) follows the lives of more than 17,000 people born in England, Scotland and Wales in one week of 1970 (Elliott & Shepherd, 2006). Since the birth survey there have been nine further waves of data collection at ages 5, 10, 16, 26, 30, 34, 38, 42 and 46-48 when 8,581 cohort members took part.

The Millennium Cohort Study (MCS)

The Millennium Cohort Study (MCS) is a multi-purpose ongoing longitudinal study of approximately 19,000 babies born to families living in the UK between September 2000 and January 2002 (Plewis, 2007; Connelly & Platt, 2014; Joshi & Fitzsimons, 2016). Data have been collected when the children were aged around 9 months, 3, 5, 7, 11, 14 and 17 when 10,625 families participated.

Over the cohort members' lives in both studies, a wide range of information has been collected on their health, physical, educational and social development, and socioeconomic circumstances among other factors dependent upon age at data collection. A summary of the information collected is provided in Table 1. Further details on BCS70 is available here, and for MCS here. Both studies have established data sharing processes. All anonymised datasets with corresponding documentation for BCS70 (SN 200001) and MCS (SN 2000031) are available to download through the UK Data Service.

Table 2.1: Summary of information collected in the studies over the lifecourse

Birth	School years	Adult
Household composition	Household composition	Household composition
Parental social class	Parental social class	Employment
Obstetric history	Parental employment	Social class
Smoking in pregnancy	Financial circumstances	Income
Pregnancy (problems, antenatal care)	Housing	Housing
Labour (length, pain relief, problems)	Health	Health (including biomarkers)
Birthweight, length	Cognitive tests	Well-being and mental health
	Emotions and behaviour	Health-related behaviour
	School	Training and qualifications
	Views and expectations	Cognitive tests
	Attainment	Views and expectations

Capturing out-of-home care experience

BCS70

The parent/guardian (mostly the mother) of the cohort member was asked about any out-of-home care (OHC) she experienced in her own childhood in the age 5 survey. The parent/guardian was also asked about whether the cohort member (i.e., their child) had been in care in interviews carried out at age 5, 10 and 16. Moreover, the cohort members themselves were asked about their own OHC experience retrospectively at age 30. See Figure 2.1 for the specific question wording over time.

MCS

Experience of parental out-of-home care (OHC) was identified with two questions included in the parent interview when the child was aged nine months (wave 1) and at age three years (wave 2) for new respondents. The questions and response options are detailed in Figure 2.2. The question was put to both the main and partner respondent (if present in the household), thus uniquely capturing the OHC experience of both mothers and fathers. Parents who had spent time in a children's home run by either a local authority or voluntary society or with foster parents, were coded as having been in out-of-home care.

Figure 2.1: OHC experience in BCS70

Cohort member mother (1975 – age 5)

Did the mother herself, as far as she can remember, ever spend more than a short time away from her parents as a child?

- Yes – fostered / in care
- Yes – other reason
- No
- Not known

Cohort member (1975 – age 5)

Has the child ever been in any of the following situations?

- Foster parents' home
- Assessment centre
- Family group home
- Children's home

Cohort member (1980 – age 10)

Has the child ever been in care (voluntary or statutory), now or in the past?

- Yes – in care now
- Yes – in care in past
- No, never been in care
- Not known

Cohort member (1986 – age 16)

Has the teenager ever been subject to any of the following orders:

- Residential care
- Place of safety order

Cohort member (2000 – age 30)

Can I just check before the age of 17 did you spend any time living in any of these places?

- Yes, in local authority children's home
- Yes, with local authority foster parents
- Yes, in voluntary society children's home
- Yes, with voluntary society foster parents
- No

Figure 2.2: OHC experience in MCS

Cohort member parent (2000 – age 9 months; 2003 – age 3 years)

Before the age of 17 did you spend any time living away from both of your parents?
If YES, Where did you mainly live during this time?

- Local authority children's home
- Voluntary society children's home
- Children's home - not sure which type
- Local authority foster parents
- Voluntary society foster parents
- Foster parents - not sure which type
- Boarding school
- Living with relatives
- Prison / Young Offenders Institute / Borstal
- Some other place

Analytic samples

BCS70

Our analytic sample comprises the n=12,740 cohort members for whom we have information on both their mothers' OHC experience (collected in the age 5 survey) and their own OHC experience (collected in surveys at age 5, 10, 16 and 30). In total, 430 (3.4%) mothers reported being in care as a child and 610 (4.8%) cohort members had OHC experience before age 17. Within this sample, 48 cohort members and their mothers both had OHC experiences. Following sensitivity analyses whereby we ran the analysis including these 48 cohort members in the different OHC groups, they were included in the sample of cohort members with OHC experience on the basis that direct OHC experience would hold more challenges than indirect (maternal) OHC experience, reducing the number of mothers with OHC experience to 382. OHC experienced mothers were of a similar age to other mothers when the cohort child was born (mean age 25.9 years), with ages ranging from 16-46. These mothers were born between 1924 and 1954, and therefore had experience of care systems and policies covering the 1920s-1970.

It is important to note here, that although more likely than children of mothers with no OHC experience, the majority of children with a mother with OHC experience do not end up in care themselves: 11% compared to 3%. Historic data suggests that among those born in 1970 about 3.6% entered out-of-home care (McGrath-Lone et al., 2016), although the reporting in our data gives 4.8% of cohort members ever having been in OHC.

Since the funding for this research project was awarded in 2019, we have experienced the Covid-19 pandemic, which both interrupted planned data collection when the cohort members were age 50, but also generated new data via online surveys. For this project we drew on the data collected during the Covid-19 pandemic, which reduced the sample detailed above, but gave us the opportunity to map the experiences of our sample of OHC experienced mothers and their children during a global pandemic. Further details on sample sizes are provided in Appendix A2.1.

MCS

Of the 18,552 families who first took part in wave 1 or the 692 new families introduced at wave 2, 456 (2.4%) cohort members had an OHC experienced parent: 304 mothers; 142 fathers; and 10 had both mothers and fathers with OHC experience. Unfortunately, MCS provides no comprehensive information about whether the cohort members themselves experienced OHC. At each wave of data collection, we can identify whether a cohort member is living with a foster parent (n=23), and at age 17 the cohort member was asked about their own OHC experience (n=39) (See Appendix A2.2 for question details). Combining information from these sources gave a sample of n=56 of MCS cohort members with OHC experience. Given the small number of cohort members with direct OHC experience this research is (largely) focused on the children of mothers with OHC experience. We do not include fathers with OHC experience as a separate analytic group here (See Appendix A2.3 for further details). Mothers with OHC experience are, on average, younger than other mothers in the study; with an age range of 15-45 at the birth of the cohort child (mean age 25.6 compared to 28.4). They themselves were

born between 1955 and 1985 and had experience of care systems and policies covering the 1950s-2000. The care-experienced mothers in MCS are broadly split 50:50 between experience of foster-care and children's homes, with 30% having spent 5-years+ in care (15% 10+ years) and 25% less than 12 months OHC experience.

Our main analytic sample was restricted to 18,810 families where the birth mother was the main respondent and provided information on her OHC experience and ethnicity. For the families who took part at wave 1 and wave 2, these were further restricted to the main respondent being the birth mother at both time-points. Of the 18,810 birth mothers in the analytic sample, 305 (1.6%) mothers had OHC experienced before they were 17. However, as for BCS70, the analytic sample varied dependent upon the research question and further details are provided in Appendix A2.4.

Analytic strategy

Adopting a developmental-contextual life course approach (Schoon, 2006; Schoon et al., 2021), our analysis considered the development of OHC experienced mothers and their children within multiple interlinked levels of influence. First, we assessed the economic and psycho-social resources available to mothers by OHC experience. Second, we examined whether children of mothers with OHC experience differ in their cognitive, educational and psycho-social adjustment compared to those whose mother had no OHC experience. More specifically, we assessed the role of maternal OHC experience as predictor of later outcomes over and above a range of socioeconomic and psycho-social resource factors at the family level to identify whether it is the parental experience of OHC per se or the associated potential risk factors that are detrimental to the cognitive, educational and psycho-social adjustment of the children of care leavers. Third, we investigated the role of a child's own characteristics and earlier cognitive, educational and behavioural assessment as predictors of later attainment and psycho-social outcomes for children of care leavers and a general population sample.

Although the sample of OHC experienced mothers and their children in both studies are only a small proportion of the overall analytic samples, the sample sizes are sufficient to conduct meaningful analysis of relevant patterns in the data. For example, a power analysis of mean scores in hyperactivity in MCS suggests that to obtain a true difference between two mean scores of 1.59 and 2.09 with an overall standard deviation of 1.57 when one group is just 3% the size of the other group, the required sample sizes are n=80 (OHC experience) and n=2659 (no OHC experience). Moreover, using multiple imputation and sample weights (MCS) it is possible to approximate the original distribution within each of the cohorts.

When examining raw associations between OHC experience and other characteristics, we highlight differences that are significant (unlikely to have occurred by chance) at the 5% level ($p<.05$); for more complex multivariate analyses we specify different levels of significance ($p<.001$; $p<.01$; $p<.05$). When exploring differences within the n=305 OHC experienced mothers in MCS, we additionally include significance at the 10% level ($p<.1$).

Multiple Imputation

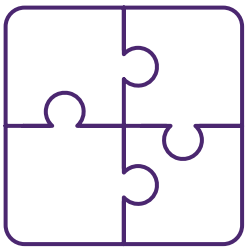
As in all longitudinal studies, both cohorts have experienced attrition over time. In BCS70, amongst our analytic sample (n=12,740), 54% took part in 2016 (55% of those with no OHC experience; 48% of those whose parent/guardian experienced OHC; 42% of cohort members with OHC experience). In MCS, among the main analytic sample (n=18,810) the response rate in 2017 among OHC experienced families was 47%, compared to 55% of other families. Given the potential for biases arising due to differential sample attrition among those with OHC experience in their family, we used Multiple Imputation (MI) to deal with attrition and item non-response to restore sample representativeness, adopting a chained equations approach (White, Royston & Wood, 2011) under the assumption of 'missing at random' (MAR). To maximise the plausibility of the MAR assumption the most important predictors of missing data are included in our models (e.g., disadvantaged socioeconomic background in childhood, poor mental health and lower cognitive ability in early life) to further reduce bias and retain power (see Silverwood et al., 2021; Mostafa et al., 2021; Mostafa & Wiggins, 2015). All reported analyses are averaged across 20 or 25 replicated data sets based upon Rubin's Rule for the efficiency of estimation under a reported degree of missingness across the whole data of around 0.20 or 0.25 (Little & Rubin, 2014).

Strengths and limitations

A key strength of this research lies in its use of the 1970 British Cohort Study and the Millennium Cohort Study, large population-based and representative prospective longitudinal studies. Both studies included a retrospective question on parents' OHC experience during their own childhood, which has provided a unique opportunity to examine the adult lives of care leavers and the lives of their children in a (relatively) large sample of OHC experienced individuals who became parents. In BCS70 we can also report on the direct experience of care leavers themselves. This approach enabled us to assess the long-shadow of OHC experience into the adult years and the intergenerational transmission of associated disadvantage.

MCS has a design that ensured adequate representation of disadvantaged groups and families from British minority ethnic backgrounds however, we must also acknowledge that we do not know how many people with care-experience did not agree to take part in the study and therefore our sample of OHC experienced mothers may already be relatively well adjusted and functional compared to all those with OHC experience. In BCS70, as the question on parent OHC experience was included in the first follow-up survey when the children were age 5, we do not know how many mothers with OHC experience did not participate in the study after being interviewed at the birth of their child in 1970. Our sample might thus not comprise all the most vulnerable mothers with OHC experience, yet it enables crucial insights into intergenerational transmission of disadvantage associated with OHC and what works in our sample of care leavers and their children. Given that the data are derived from an observational longitudinal study, bias due to unmeasured confounding cannot be ruled out. As in any longitudinal survey, missing data due to attrition are unavoidable. Nonetheless, we (largely) employed multiple imputation and included the most important predictors of missing data in our models to maximise the plausibility of the missing at random assumption and restore sample representativeness. However, bias due to a non-ignorable missing data or unmeasured environmental influences and experiences before entering care cannot be ruled out. Moreover, as we are using secondary data for our analysis we are limited to the available measures.

Chapter 3:
The social and economic resources available to mothers with OHC experience during their own childhood



In this chapter we first examine the social and economic resources available to mothers who had OHC experience as children and assess how much they differed from other mothers, before profiling the characteristics of our sample of fathers by OHC experience.

The findings were published as a working paper (Parsons et al., 2021) and a briefing paper.

Overview

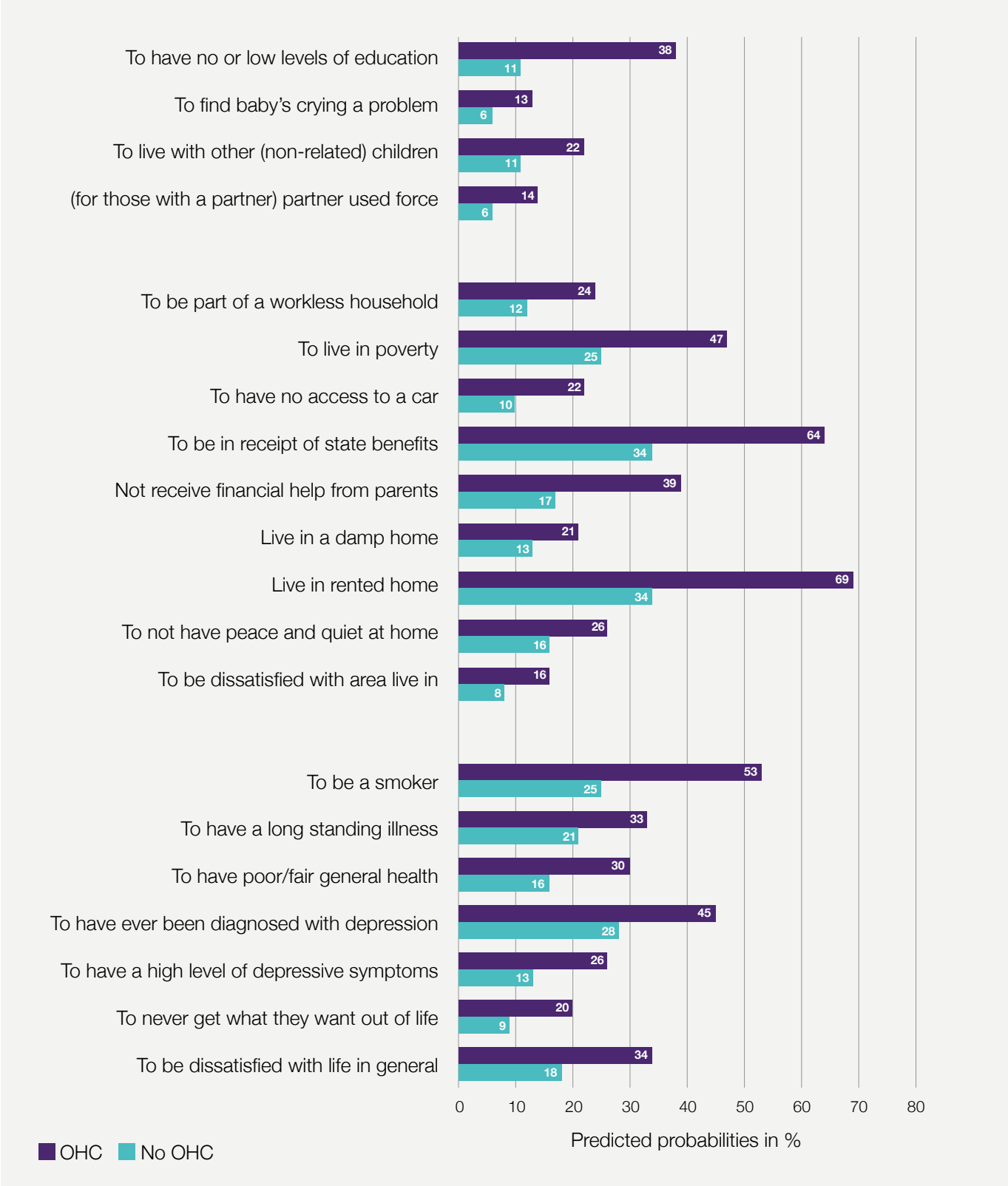
OHC experienced women often experience heightened vulnerability when they themselves enter motherhood, as they have (by definition) experienced disrupted parental attachments during their own childhood, have (probably) less family support to draw on, and may also face difficulties in resolving issues from their own childhood as they now see it through the lens of having their own child (Dregan & Gulliford, 2012; Maxwell et al., 2011; Pryce & Samuels, 2010).

Based on previous research (e.g., Botchway et al., 2014) we expected OHC experienced mothers to have fewer socioeconomic resources than non OHC experienced mothers. There is however less evidence on the level of psycho-social resources, for example their health, wellbeing, or parenting practices. The analysis addressed six of the seven key areas of concern identified in the 2013 Care Leaver Strategy (HM Government, 2013) – education, employment, finance, health, housing and on-going support – to help inform strategies for integrated service delivery to assist agencies working with care leavers and families who are struggling across domains. In this initial work we do not examine the interaction mothers have had with the justice system but we account for their children's experience with the justice system (see Chapter 8). By using multipurpose longitudinal data we are able to address all other areas in comprehensive detail going far beyond information that is available when relying on administrative data only.

We profiled 1) the **demographic characteristics and family status** of care leavers at the birth of their child (the cohort child), including information on age at birth of the cohort child, ethnicity, education and qualifications, marital status, wider family support), 2) experiences during **pregnancy and childbirth outcomes** (e.g., antenatal care, gestation, birthweight), 3) socioeconomic status indicators split into **employment and financial situation** (e.g., own employment status, workless household, receipt of state benefits, poverty status), 4) **housing conditions, home and local environment** (e.g., rented housing, overcrowding, damp in the home, satisfaction with home and local area), 5) **parenting style and early indicators of the mother-child relationship** (e.g., family rules, regular bed- and meal-times, use of child-care, home learning environment, maternal attachment), and 6) **health, health**

behaviours and general wellbeing (e.g., general health, longstanding illnesses, smoking behaviour, use of alcohol and recreational drugs, self-esteem, locus of control, general satisfaction with life).

Figure 3.1: Circumstances and characteristics of mothers with OHC experience. They were more likely:



Analytic strategy

We first described the relationship between maternal OHC experience and a range of measures within each of the six outcome domains, before regressing each measure on OHC experience, adjusting for the mother's ethnicity, age at the birth of the cohort child, and highest achieved qualification. We ran logit models for the majority binary outcomes and OLS models for continuous outcomes. For ease of interpretation (Mood, 2010; Breen et al., 2018), we report predicted probabilities from the regression models adjusted for the three confounders: age, ethnicity, and highest level of attained qualification. (See Appendix A3.1. and A3.2 for the full set of descriptive and regression results.)

Findings

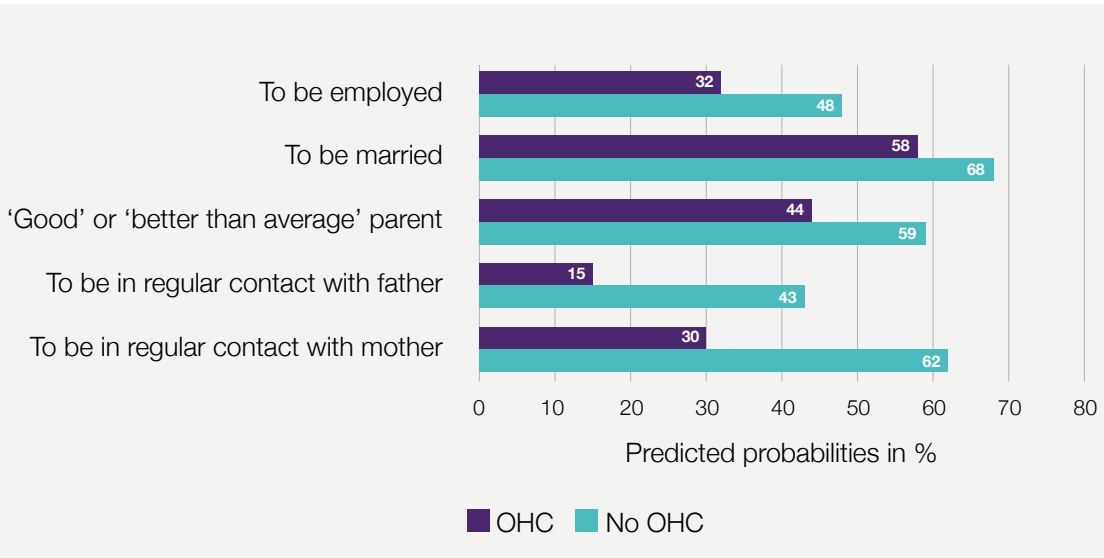
We find that mothers who experienced OHC in their childhood have poorer socioeconomic and psycho-social resources available to them in adulthood. However, when their age, ethnicity and qualification levels are taken into account, many differences regarding their pregnancy, childbirth and parenting experiences were no longer significant. Key differences and similarities that remained of concern are summarised in Figure 3.1 and 3.2. In Figure 3.1 we can see that compared to mothers with no OHC experience, mothers with OHC experience were more likely to have low levels of education, to be part of a workless family, to be in receipt of state benefits and to be in poverty. They were also more likely to live in rented, damp housing and to be dissatisfied with the area where they live and to have no peace and quiet when at home. More had also experienced a partner using force on them, to have poorer physical and mental health and to be dissatisfied with their life in general.

In Figure 3.2 we see that fewer mothers with OHC experience were employed, married, viewed themselves as a 'good' or 'better than average' parent or to be in regular contact with either their mother or father, which reinforces why they were more likely to not receive any financial help from their parents.

There were however no significant differences by OHC experience regarding a range of other circumstances and characteristics:

- use of recreational drugs and frequent consumption of alcohol
- living in an overcrowded home
- living in a disorganised home
- establishing family rules
- having regular bedtime or regular mealtime for the cohort child
- being a younger or teenage mother
- to have had an unplanned pregnancy that the mother was unhappy about
- to attend antenatal classes
- to have a low birthweight baby
- not breastfeeding

Figure 3.2: Circumstances and characteristics of mothers with OHC experience. They were more likely:



The findings suggest that while OHC experienced mothers did not necessarily perceive themselves to be a 'good' parent, they showed all the behaviours necessary to provide a safe, stable and caring family environment for their children.

Key messages

This profile of mothers by OHC experience has added to previous evidence and confirmed that female care leavers who become mothers experience disadvantage in a myriad of ways during their child's earliest years. These disadvantages are highly likely to negatively impact the future development of their children, thereby perpetuating the intergenerational transmission of disadvantage associated with OHC.

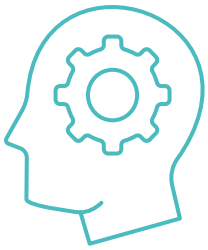
The fact that many mothers with OHC experience have not completed their basic education and left school with low levels of qualifications, is a key area policy can address. There should be support for life-long education, enabling young people with care experience, and young mothers who had left school early due to their traumatic experiences at home, to return to education, to acquire appropriate qualification, and facilitate their efforts for up and reskilling. Research has shown that some care leavers return to education and gain qualifications later on in adulthood (Brady & Gilligan, 2019; Harrison, 2019; Sacker et al., 2020a), which is something we also found among the care leavers and children of care-leaves in the 1970 cohort (see Chapter 6).

The provision of adequate housing to young mothers with OHC experience is also a vital support structure that must be put into place. The wider stresses associated with socioeconomic disadvantage and poor housing conditions are clear to see among these OHC experienced mothers, who are more likely to live in a noisy, wrought, damp home where abuse (characterised here by use of force by a partner) is more likely to be reported.

Another concern is the poor maternal mental health which can have lasting consequences for their own future outcomes across domains, and for their children's psycho-social and cognitive development, strengthening the case for better mental health support to be provided to young people in care, after they exit care, and long into their adulthood. The evaluation of the government initiative to better assess the mental health needs of children in care is welcomed, in particular the need for assessments to be consistently implemented and properly resourced if the wellbeing of the children is to be improved (DfE, 2021). However, the pandemic has highlighted the imbalance between demand and provision of mental health care, with estimates placing 1.6 million people on waiting lists for mental health services (NHS Confederation, 2021; Newlove-Delgado, 2021), suggesting that more needs to be done to address mental health care needs particularly for potential vulnerable populations.

In summary, to effectively support care leavers to become independent there needs to be an integrated service delivery, addressing the multiple challenges of care leavers coming of age. There needs to be support for participation in education, employment, provision of secure and adequate housing, and importantly also access to mental health care services. The findings clearly support the call to extent service provision to care leavers and their families beyond age 18 or 21 into the adult years.

Chapter 4:
The impact of maternal care experience on her children's early cognitive and behavioural development



In this chapter we compare cognitive and behavioural adjustment at age 3 of children with OHC and non-OHC mothers. In addition, we examine the role of economic and psychosocial resource factors in mediating any association between maternal OHC experience and children's adjustment.

The findings have been published as a working paper (Fitzsimons et al., 2023) and submitted to an academic journal.

Background

Our focus here is on the early years, specifically the inter-related domains of early cognitive, language and socio-emotional/behavioural development, each a key building block for later adjustment. See Box 4.1 for details of the assessments.

There is extensive evidence that socio-inequalities emerge from the moment of birth and indeed before – including variations in birthweight (e.g., Weightman et al., 2012) and breastfeeding (Fitzsimons & Vera-Hernandez, 2022; Kelly & Watt, 2005). These inequalities persist throughout childhood and adolescence and are manifest in subsequent levels of socio-emotional and behavioural adjustment (Deighton et al., 2019; Reiss, 2013; Hansen & Joshi, 2007; 2008; Dex & Joshi, 2004), cognitive and language development (Cattan et al., 2022; Sullivan et al., 2013; Parsons et al., 2011; Feinstein, 2003) – with major repercussions for a wide range of longer term educational and life outcomes (Cattan et al., 2022; Schoon et al., 2021). Several early childhood interventions targeted towards children at high socioeconomic risk show sustained effects, enabling at-risk children to achieve socially important outcomes years, even decades later (García et al., 2021). In particular, there is strong evidence regarding early parenting programmes (see Jeong et al., 2021 for a review), a key policy lever with much potential and a key area of focus for care leavers whose own formative experiences as children may have been especially challenging.

There is however no prior evidence on the early experiences of children of care leavers. The experience of OHC by definition includes the exposure to inconsistent caregiving and separation from the parent(s), which are likely to shape the interactions of care leavers with their own children, alongside the role of economic and material resources (Cooper & Stewart, 2013) and parental physical and mental health and wellbeing (Goodman & Gotlib, 1999). To gain a comprehensive understanding of the predictors of adjustment among children of care leavers, we thus include a wide range of indicators of socioeconomic family background, parenting style, health and wellbeing as covariates in our analyses, in addition to the marker for maternal OHC experience. These measures have been associated with early childhood cognitive and

Box 4.1: Indicators of child adjustment at age 3

BAS Naming Vocabulary

The British Ability Scales Second Edition (BAS II) is a battery of individually administered tests of cognitive abilities and educational achievement, published by the NFER-NELSON Publishing Company Ltd (Elliott, 1996)[1]. The Naming Vocabulary assessment is part of The Early Years Battery that is generally administered to pre-school children under 6 years of age. It assesses expressive language and knowledge of names. The child was shown a series of pictures presented in the stimulus booklet and asked to say what it was, e.g., a picture of a shoe, chair or pair of scissors. The BAS includes 36 pictures of increasing difficulty level. The number of items a child answers is dependent on his / her progress and performance. Children completed different items as they progress through the assessment based on their performance, thus their raw scores cannot be compared directly and are therefore converted to an ability score, which reflects both the raw score and the difficulty of the items administered.

Early socio-emotional and behavioural adjustment

Behaviour and emotions have been assessed from parent reports on the Strengths and Difficulties Questionnaire [SDQ] at child age 3 to 17, and from the cohort child themselves at age 17. The SDQ is widely validated cross-nationally and cross-culturally for use in non-clinical settings (see Goodman 1997, 2001). The SDQ includes 25 measures comprising five scales of five items each. For each negative attribute, the parent is asked to say whether it is 'not true' (0), 'somewhat true' (1) or 'certainly true' (2) about their child's behaviour, with scores reversed for positive attributes. For this analysis we use the four sub-scales – emotional symptoms, peer relationship problems, conduct problems, hyperactivity/inattention from parent reports at age 3. We combine emotional with peer problems to represent 'internalising' symptoms (social and emotional adjustment) and conduct with hyperactivity problems to represent 'externalising' symptoms (behaviour) (Goodman et al., 2010).

behavioural outcomes in the literature and are taken from the MCS surveys when cohort members were age 9 months or three years. (See Appendix A4.1.)

Analytic strategy

We first describe the association between maternal out-of-home care experience and the three child outcomes at age 3 (Figure 4.1) and a range of child and family background characteristics and parenting measures (Table A4.1). All three outcome measures are standardised. For each outcome measure we then run a series of six ordinary least squares (OLS) regression models given our outcomes are continuous measures. We first regress each outcome measure on mother OHC experience (model 1), and then adjust for different sets of characteristics to show how the direct relationship between mother OHC experience and behaviour problems or cognitive scores changes once the inter-related family socioeconomic, parent or individual characteristics are taken into account (see Appendix A4.2). In summary:

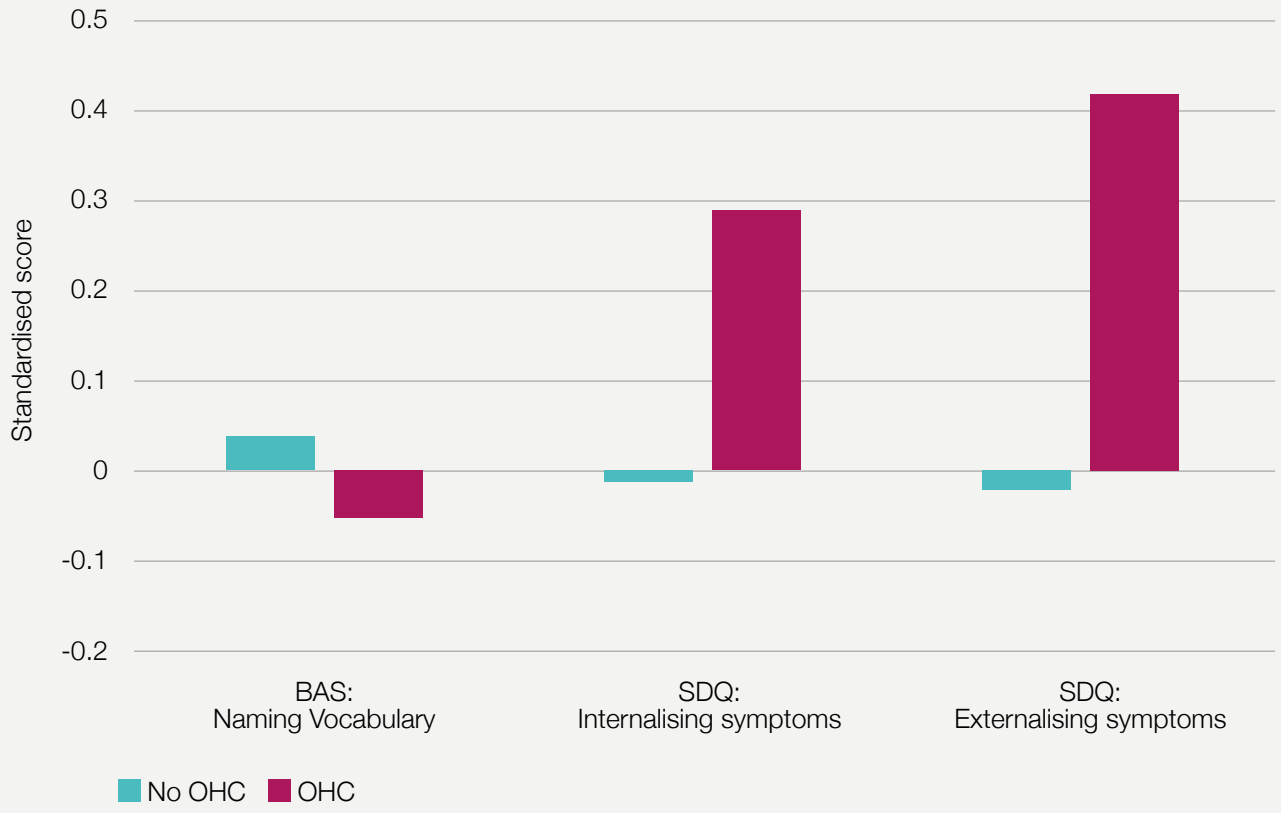
- Model 1: Mother OHC experience
- Model 2: Model 1 + Child and family demographics (sex, age, ethnicity, family status, age of mother at birth of child, language spoken in the home)
- Model 3: Model 1 + SES characteristics (parental education, employment, tenure, overcrowded home, damp on the home)
- Model 4: Model 1 + Parenting behaviours (breastfeeding duration, parenting competence, home-learning environment, parent-child interactions measured with the Pianta scale indicating conflict and warmth)
- Model 5: Model 1 + Mother health and wellbeing (general health, mental wellbeing, current smoker)
- Model 6: Model 1 + all characteristics

[1] The BAS II has since been updated to BAS3. For further details see Elliott & Smith, 2011; 2013.

Findings

Figure 4.1 shows that compared to children whose mother has no OHC experience, children of mothers with OHC experience have higher internalising and externalising scores and a lower vocabulary score at age 3. Differences are most notable for externalising symptoms and least for vocabulary, although all differences are significant at p<.05. Additional analyses that made use of parental reports of their child's behaviour problems over time showed that compared to their peers in the general population, the average mean scores for children of care leavers on all four SDQ scales remained higher at each age point between ages 3– 17. However, it is also important to note that the majority of children of care leavers were not identified as having high levels of behaviour problems in the early years (for more information see Chapter 7 and Appendix A7.2). Results are also published in Parsons et al., 2022b).

Figure 4.1: Child standardised outcome scores [means] by maternal OHC experience



Regression results

Figures 4.2 – 4.4 show the OLS coefficients with 95% confidence intervals. If the lines do not cross 0 (the vertical black line), this means the association between maternal OHC and their child's scores are statistically significant and unlikely to have occurred by chance.

Cognitive skills: BAS Naming Vocabulary

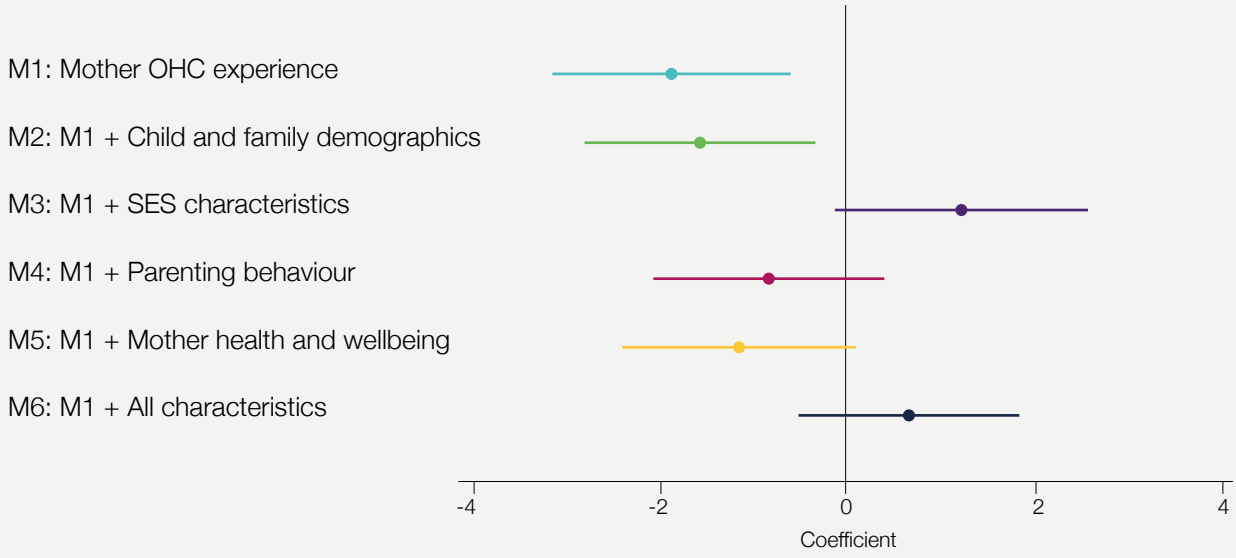
Figure 4.2 shows that maternal OHC experience has a significant association with naming vocabulary scores which remained when child and family demographic measures were included in the modelling (model 2), but that the association with naming vocabulary scores was attenuated when socioeconomic conditions (model 3), parenting behaviour (model 4) or mother's health and wellbeing (model 5) were taken into account.

Internalising and Externalising symptoms

Mother OHC experience has a significant association with both internalising and externalising symptoms, which remained when family demographic measures were included in the modelling. As shown in Figure 4.3, the association with internalising symptoms was attenuated when family socioeconomic conditions (model 3) and parenting behaviour (model 4) were accounted for, but the association with externalising symptoms (Figure 4.4) was only fully attenuated when all of the demographic, socioeconomic conditions, aspects of parenting, including the parent-child relationship and the mother's health and wellbeing were included (model 6).

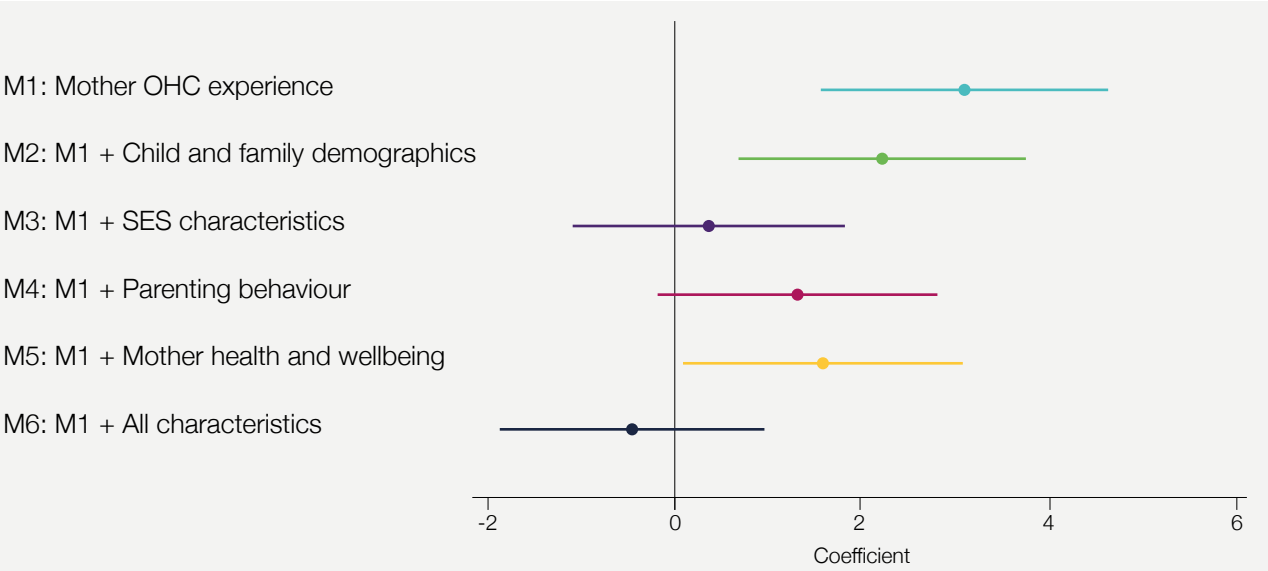
For further discussion on the other characteristics and circumstances included in the modelling that are significantly associated with the outcomes in the final models see Appendix A4.3.

Figure 4.2: Association between maternal OHC experience and BAS Naming Vocabulary scores: OLS coefficients [95% CIs] from model 1 to model 6



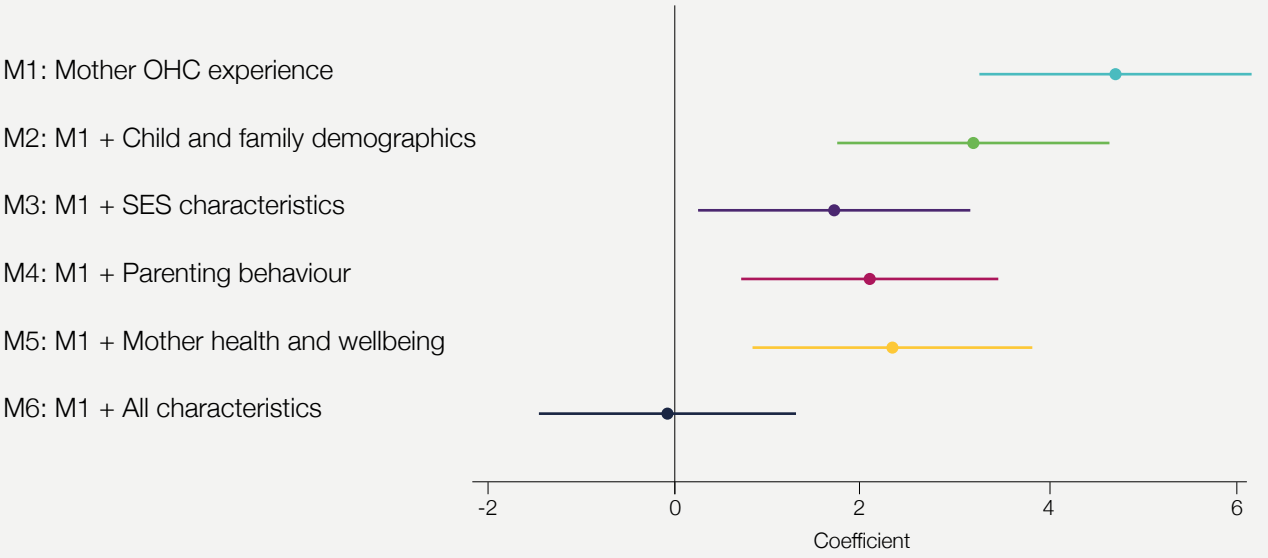
Note: reference category: Mother no OHC experience

Figure 4.3: Association between maternal OHC experience and SDQ internalising symptoms: OLS coefficients [95% CIs] from model 1 to model 6



Note: reference category: Mother no OHC experience

Figure 4.4: Association between maternal OHC experience and SDQ externalising symptoms: OLS coefficients [95% CIs] from model 1 to model 6



Note: reference category: Mother no OHC experience

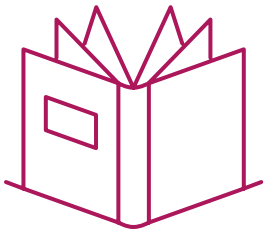
Key messages

In this study we have found that children whose mothers experienced OHC do less well in terms of their early cognitive, socio-emotional and behavioural development than children whose mother had not been in care. However, we find that when differences in family socioeconomic characteristics or parenting behaviour are taken into account, the association between maternal OHC experience and a child's vocabulary acquisition and internalising behaviour symptoms are completely attenuated. The association of maternal OHC experience with a child's vocabulary is also reduced to chance when maternal health and wellbeing are included in the modelling. For externalising behaviour symptoms, the association with maternal OHC status persists until we take into account all family and individual characteristics in the final model. We conclude that parenting behaviour and the parent-child relationship are important for mediating the association between maternal OHC and both vocabulary acquisition and internalising symptoms, but that the association with externalising behaviour symptoms is more complex.

There is a long history of work across different fields showing that parenting plays a vital role in all aspects of children's formative development, and our findings underscore the fact that certain aspects of parenting behaviour (e.g. breastfeeding) and early parent-child relationships (feelings of closeness or conflict) vary across OHC and non-OHC mothers, and that these observed differences can play a significant role in their child's behavioural development.

It should be noted that behavioural problems are relatively common among young children (Campbell et al., 2000), yet untreated externalizing behaviour problems are associated with a wide range of negative later outcomes for children and adolescents – e.g., cognitive and academic progress through the school years (Washbrook et al., 2013; Barbaresi et al., 2007), together with educational attainment, (un)employment, wages and income (Egan et al., 2015; Goodman et al., 2011; Palloni, 2006; Healey et al., 2004; Feinstein, 2000). Given that effective parenting practices are crucial for reducing internalising behavioural symptoms and increasing vocabulary acquisition among children of care leavers, the findings point to the need to support parents to develop effective tools and practices specifically in this sphere of early development (Jeong et al., 2021; McKee et al., 2008; O'Connor, 2002).

Chapter 5:
The impact of parental OHC experience on their children's educational progression



The key objective of this chapter is to provide evidence of the intergenerational transmission of educational disadvantage that is passed from parents with OHC experience to their children, by assessing to what extent their children differ from other children across a range of educational outcomes.

We focus on the MCS cohort living in England and examine cognitive and education outcomes and progression from age 3 to 16, comparing children by parental OHC experience, before focusing on the post-16 transitions and aspirations of the whole cohort, including indicators of being in education, employment and training (EET). The findings have been published as a working paper (Parsons et al., 2022a) and in a peer reviewed journal (Parsons et al., 2023).

Background

There is increasing interest among researchers and policy makers of how to improve the educational attainment of care leavers (Brännström et al., 2020; Jackson & Cameron, 2012; Mannay et al., 2017; HCEC, 2022), yet today's care leavers continue to achieve lower grades in public examinations at age 16, together with enduring stigma and low expectations held by both educators and social care professionals (Mannay et al., 2017; Roberts, 2021). In 2021 just 7.2% of looked-after children achieved the grade 5 'good pass' threshold in English and mathematics GCSEs, compared to 40.1% of non-looked-after children, and they are more likely to have been refused admission to 'good' or 'outstanding' Ofsted rated schools (HCEC, 2022). Regarding higher education, only 13% of care leavers progressed to higher education by age 19 in 2019/20, compared to 45% of all other pupils (DfE, 2022b). Despite the continued concerns about the life chances of care leavers, there is little knowledge about the educational experiences of the children of care leavers, and the potential intergenerational transmission of educational disadvantage.

Here we examine a) whether the educational progression of children of parents with OHC experience differs compared to those whose parents have no OHC experience; b) whether the association is with parental OHC experience or the additional associated potential psycho-social risk factors that are detrimental to the educational attainment of their children; and c) the role of early school readiness assessments as predictors of later attainment for children of care leavers and a general population sample.

Analytic strategy

Given the differences in national education systems in the UK, this section focuses on families living in England (See Appendix A2.2 for further details). In our analysis we differentiated between the OHC experience itself (which encompasses the experiences prior to entering OHC), socioeconomic status, housing and area

Box 5.1: Education outcome measures by age 3, 5 and 16

Bracken School Readiness

At age three MCS cohort members completed the Bracken School Readiness Assessment-Revised (BSRA-R), one component of the Bracken Basic Concept Scale-Revised (Bracken, 1998). The BSRA-R is used as a screening instrument to assess the 'readiness' of a child for formal education by testing their knowledge and understanding of basic concepts. The assessment consists of 85 items across five basic concept sub-tests: Colours (10); Letters (15); Numbers/Counting (18); Size/Comparisons (22); and Shapes (20). All items are summed to produce a total score which is age standardised. The age standardised score is also used to place cohort members into a five-category 'Normative Classification' variable which ranges from 'very advanced' 'advanced' 'average' 'delayed' and 'very delayed'. Here we compare children who are 'delayed' (combining delayed or very delayed) against those who are 'school ready' (combining average, advanced or very advanced). In our sample, 14% of children are classified as 'delayed', which is the same percentage as the overall UK MCS age three sample who completed the assessment. (See Connelly (2013).

Early Years Foundation Stage (EYFS) profile

The Early Years Foundation Stage (EYFS) is the standard set for education, teaching, learning and care of 0 to 5-year-olds in England. It was first introduced as the Foundation Stage Profile (FSP) in 2000 (Qualifications and Curriculum Authority, 2003), and became part of the 2006 Childcare Act and must be followed by all Ofsted registered settings and childminders. All teachers of children at school in England complete an Early Years Foundation Stage (EYFS) profile in the final term of reception year in primary school. The EYFS is currently an assessment of the child's outcomes in relation to 17 early learning goal (ELG) descriptors across six areas of learning: personal, social, and emotional development; communication, language, and literacy; mathematical development; knowledge and understanding of the world; physical development; and creative development. Children are defined as having reached a Good Level of Development (GLD) at the end of the EYFS if they have achieved at least the expected level for the ELGs in the prime areas of learning and the specific areas of mathematics and literacy. Each ELG has a score range of 0-9, with a scorer of 6 or higher indicating a child has reached the expected level in a specific ELG (Early Years Foundation Stage Profile 2022 Handbook, DfE 2022d). When the MCS children completed the EYFS (then FSP) there were 13 assessment scales, giving a score range of 0-117. Here we compare children who were assessed at 'below the expected level' (0-77) against those who were 'at or above the expected level' (78-117). In our sample, 28% of children were assessed as being 'below the expected level' which again matches the age 5 sample of MCS children living in England.

GCSE attainment

At the end of Year 11 at age 15 or 16, teenagers at school in England sit their GCSE public examinations. One of the ways in which a school is judged is by the proportion of students who get five or more 'good grade' GCSE exam passes including English language and Maths. Reforms to GCSEs were introduced in 2015, with the first cohorts taking the new exams in 2017 and 2018. GCSEs grades now range from 1 to 9, with a Grade 4 being considered by the Government as the 'standard' pass rate for pupils. Prior to this, GCSE grades ranged from A*-G, with an A*-C grade representing the expected national standard, with a Grade C and Grade 4 being broadly equivalent (Greening, 2017). Since 2014 students who did not gain at least a Grade C or Grade 4 in English language or maths have needed to continue studying the subjects and to re-sit the examination (Lupton et al., 2021), although a Grade 5 is considered a 'strong' pass and is now the target grade (DfE 2022c). The MCS teenagers sat their GCSEs in 2017 and reported their grades when interviewed in 2018. In our sample, 61% achieved 5+ grade 4 or higher GCSEs; 72% achieved a good pass in English language and 71% in maths. This compares favourably with DfE figures which show that 7 in 10 students taking GCSEs in England at the end of Year 11 achieved a grade 4-9 in English language (69.9%, 70.2%) or Maths (70.7%, 71.0%) in 2017 and 2018 respectively (Ofqual, 2018).

disadvantage, family status, and parent health during the first year of a child's life. Here we include families where either the mother or father had OHC experience to maximise our sample size.

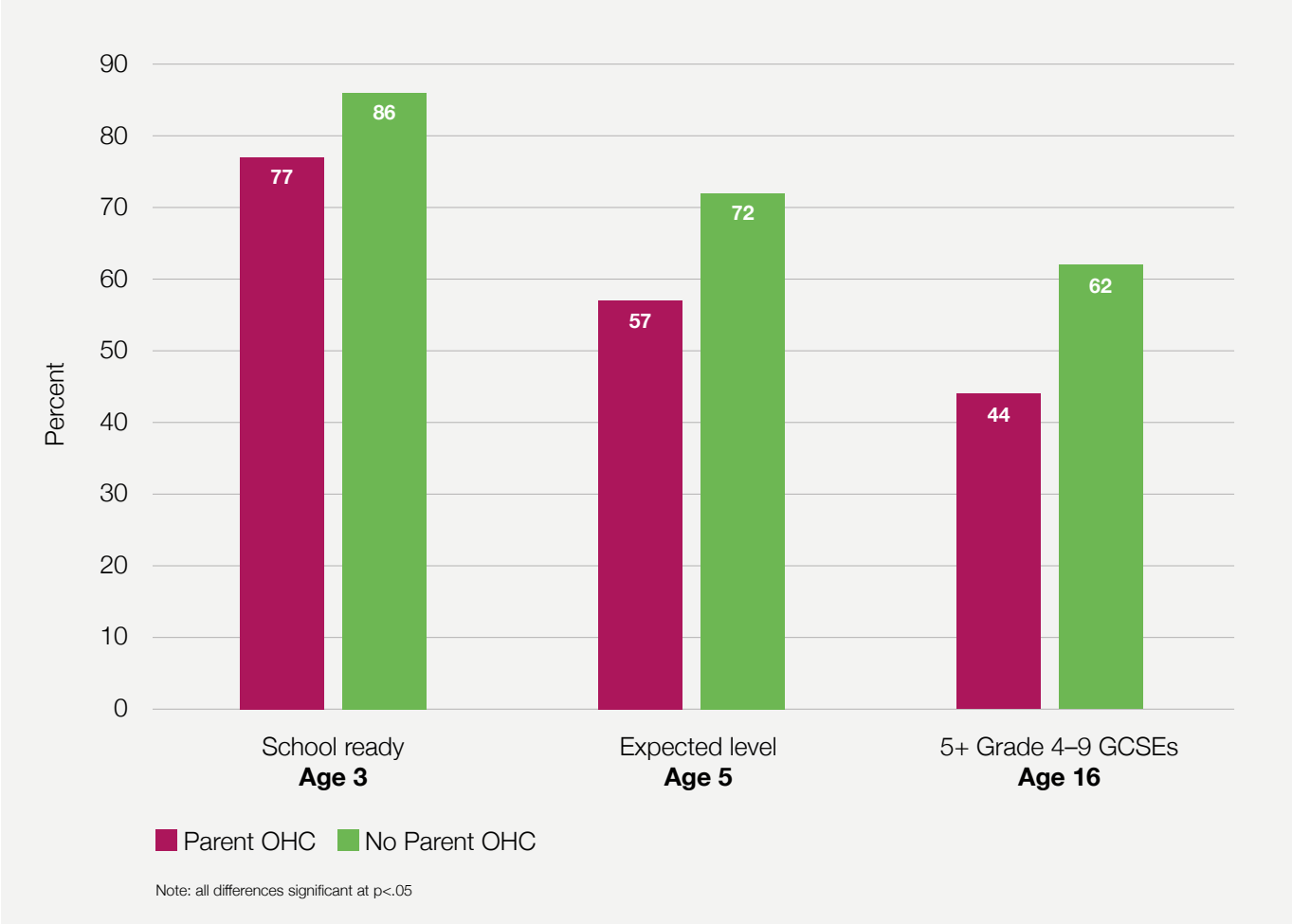
Regarding later educational outcomes of the children of care leavers, we considered crucial benchmarks of educational attainment at the start of primary education, based on the direct assessment of 'school-readiness' at age 3 and teacher ratings of the Early Years Foundation Stage (EYFS) at age 5. We also assess inequalities at the completion of secondary education based on the attainment of 5+ grade 4 or higher General Certificate of Secondary Education (GCSE) examination passes at age 16 and if early indicators of school readiness predicted reaching this academic milestone (See Box 5.1). We first show the raw differences in the three education outcomes, before running a series of logistic regression analyses to show if these differences are attenuated after controlling for a wide range of socioeconomic status, housing and area disadvantage, family status, and maternal health measures that are available in the data and related to poor education outcomes and parental OHC experience (see Appendix A5.1 for full regression results).

Results

Educational attainment of children of care leavers compared to their peers during the pre-school years (3), at school entrance (5) and the end of secondary education early years (16)

Figure 5.1 shows that the majority of all children were 'school ready' at age 3, were adjudged to be performing 'at or above the expected level' at age 5 and went on to attain the threshold of 5+ grade 4 or higher GCSEs at age 16 including English language and maths. However, at each stage of educational transition, significantly fewer children with a parent with OHC experience had reached the threshold compared to children with a parent with no OHC experience. Whilst we can see that the raw attainment gap increased from 9% at age 3 to 18% at age 16, it is nonetheless, also important to note that the majority of

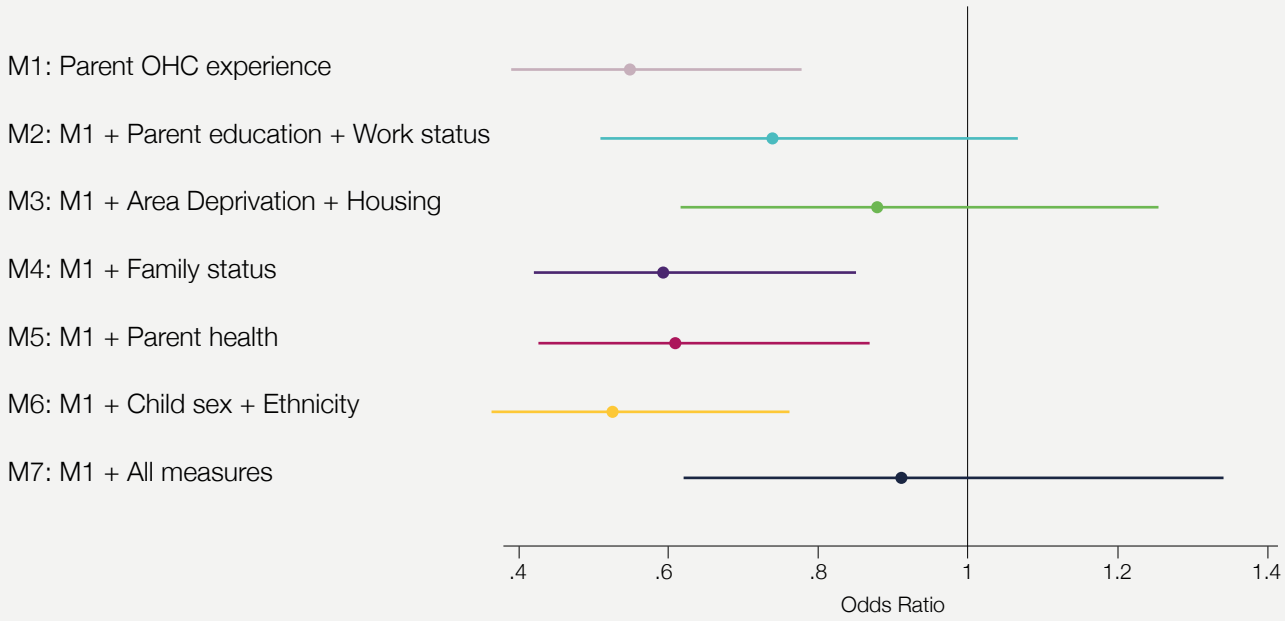
Figure 5.1: % of children assessed at the expected threshold of achievement at age 3, 5 and 16 by parent OHC experience



children of care leavers were identified as school ready at age 3 and age 5, and nearly half achieved 5+ grade 4 or higher GCSE passes.

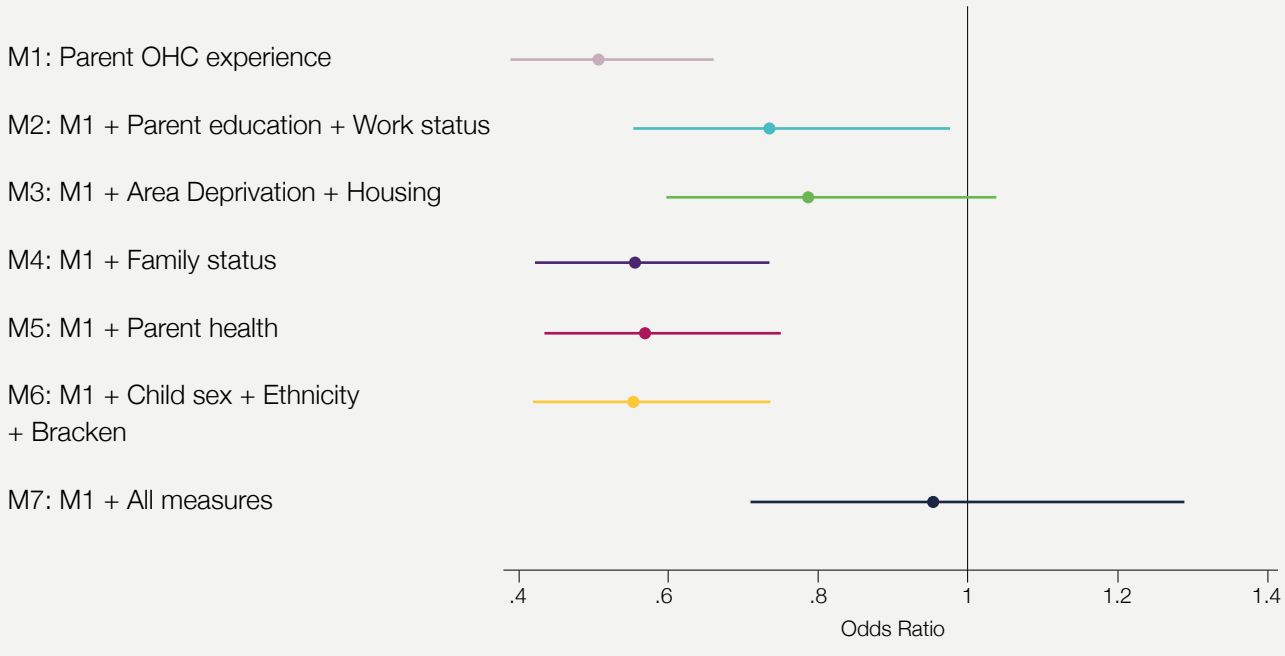
Figure 5.2-Figure 5.4 show how these associations are attenuated after controlling for a wide range of family background and individual characteristics in a series of logistic regression models. The figures show Odds Ratios with 95% confidence intervals. If the lines do not cross 1 (the vertical black line), association between parental OHC and their child being below the expected standard in the three education outcome measures are significant, e.g. it is very unlikely that the findings have occurred by chance.

Figure 5.2: Odds Ratios for being 'School Ready' in Bracken assessment at age 3



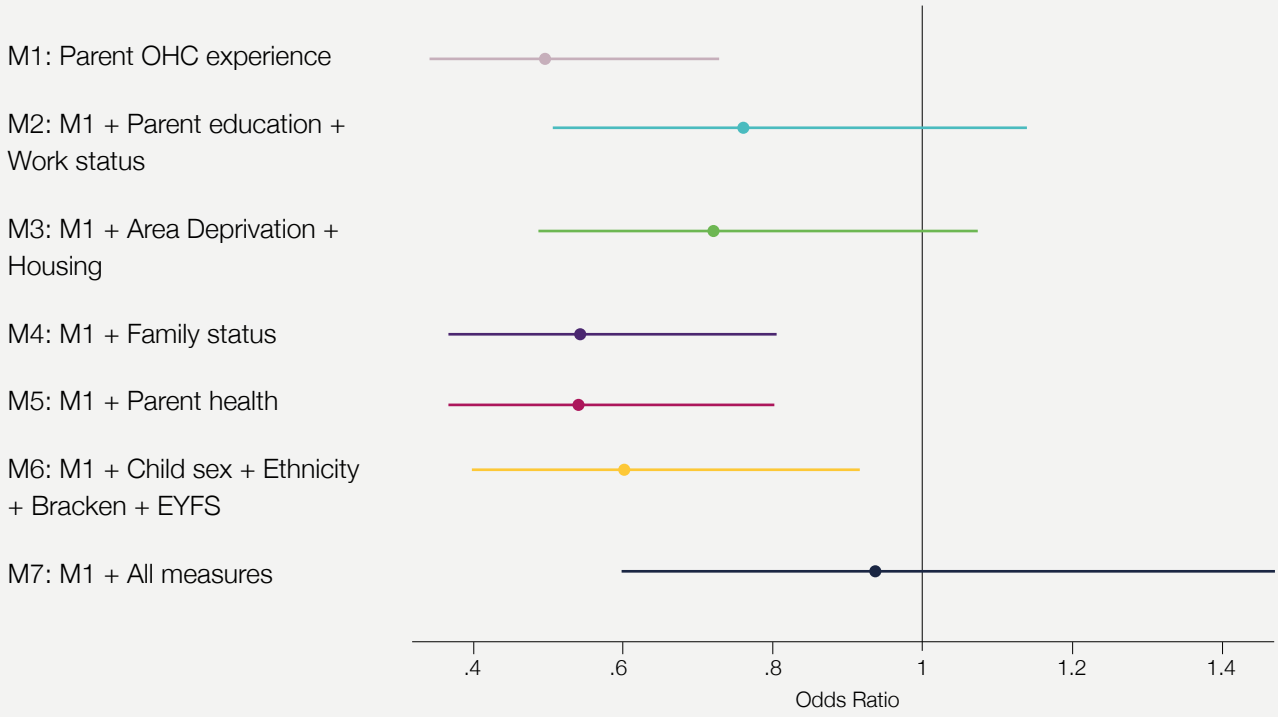
Note: reference category: no parent OHC experience

Figure 5.3: Odds Ratios for being at/above expected level in EYFS at age 5



Note: reference category: no parent OHC experience

Figure 5.4: Odds Ratios for gaining 5+ GCSEs Grade 4-9 (inc. Maths and English) at age 16



Note: reference category: no parent OHC experience

Although parental OHC experience is associated with lower educational attainment, once parental education and employment status (M2) or area deprivation and housing conditions (M3) in a child's early years are taken into account, the negative association is completely attenuated.

When examining the aspirations of the children of care leavers for the future, we find that in comparison to their peers, teenagers with a mother who had OHC experience reported, on average, lower expectations of going to university. Yet, after adjusting for the teenager's individual and family background characteristics, teenagers of mothers with OHC experience showed similar expectations for higher education participation as their peers.

It is thus not parental OHC experience per se, but the additional psycho-social risk factors experienced by care leavers that limit the educational progression of their children. The findings thus point towards the corrosive role of cumulative socioeconomic disadvantage in undermining the educational attainment of children of care leavers. In addition, there is evidence of resilience, with children ready to learn at age 3 and at the start of formal education being more likely to also perform well at later educational assessments (i.e., the GCSE exams at age 16), independent of parental OHC experience and early psycho-social family adversity. This applies to both children of care leavers and a general population sample, suggesting that early school readiness assessments are powerful predictors of subsequent educational attainment (see also Atkinson et al., 2022; Panter & Bracken, 2009; Treadaway, 2019).

Post-16 transitions: Being in Education, Employment or Training (EET) at age 17

When examining the direct association between maternal OHC experience and the post-16 transitions of their teenage children, Table 5.1 shows that in comparison to their peers, teenagers whose mother had OHC experience were as likely to be in education, employment or training (EET) when interviewed, and were as likely to want to be in a professional occupation by age 30.

Importantly, we were able to show that after adjusting for the teenager's individual and family background characteristics, teenagers of mothers with OHC experience were not significantly less likely to be in EET or to hold professional occupation aspirations (see Appendix A5.2 for full regressions results).

Table 5.1: Being in EET and university and occupation aspirations by mother OHC experience

	Mother No OHC	Mother OHC
	Proportion	**Proportion**
In education, employment or training (at interview)	0.93	0.91
In education or training (at interview)	0.90	0.86
Don't know what job want to do	0.10	0.07
Want to have a professional or managerial occupation	0.38	0.30
N(100%)=	***18,505***	***305***

Note: Bold indicates differences significant at p<.05

Key messages

The research described here provides evidence of intergenerational transmission of educational disadvantage and pinpoint crucial risk factors, such as family social status and housing conditions, that show independent effects over and above the experience of parental OHC. Interventions aiming to support the educational attainment of the children of care leavers, should address the housing needs of care leavers and enable a smooth transition into the labour market. Addressing this basic need appears to be vital in breaking the vicious cycle, enabling the children of care leavers to achieve academically.

Looking into post-16 experiences, we found that the children of care leavers demonstrate resilience and optimism for their future, as they have similar education and occupational aspirations as their peers and are as likely as their peers to be in education or training by age 18.

Chapter 6:

The impact of maternal OHC experience on their children's education and employment outcomes into mid-adulthood

To examine the longer-term outcomes of OHC experience, we turn to the 1970 cohort and examine education and employment outcomes in early- (age 26) and mid- (age 46) adulthood by OHC experience.

Previous studies following care leavers into their adult years suggest that disadvantages regarding low educational attainment, inconsistent labour market attachment and low income persist (Achdut et al., 2022; Cameron et al., 2018; Sacker et al, 2022a; Sacker et al., 2022b; Viner & Taylor, 2005; Xie et al., 2021). There is however little evidence on the intergenerational transmission of socioeconomic adversity into the second generation. Addressing this knowledge gap, we used BCS70 to compare educational attainment and economic activities between age 16 to 42 years across three groups: those with no OHC experience in their family (no OHC0); those with a mother who had OHC experience in her childhood (indirect OHC1); and those who had OHC experience in their own childhoods (direct OHC2). We also made full use of the longitudinal economic activity data by mapping the proportions of men and women who spent the most months of each year in employment, education or training (EET) over a 30-year period up to age 46, the last round of data collection before the Covid-19 pandemic disruption. Findings are currently written up as a working paper (Parsons & Schoon, 2023) and submitted to an academic journal.

Background

Entering gainful employment and reaching financial independence is a crucial developmental task, in particular for individuals ageing out of the care system. Apart from the persistent evidence that shows many care leavers attain fewer qualifications in public examinations at age 16 than their same aged peers (Sebba & Luke, 2019; Teyhan et al., 2019; DfE, 2020; Berridge et al., 2020; Brännström et al., 2020), they also have lower educational attainment in adulthood (Cameron et al., 2018; Forsman, 2020) and encounter more problematic post-16 transitions with higher proportions not being in EET (DfE, 2022a) for longer periods (Harrison, 2023) compared to their peers, and in establishing themselves in the labour market (Courtney et al., 2011; Österberg et al., 2016). Accordingly, there has been an increased interest among both researchers and policy makers to improve employment outcomes for care leavers.

It is, however, important to recognise the heterogeneity of experiences among care leavers. Not all care leavers fail to achieve. There is persistent evidence of resilience, demonstrated by effective functioning of care leavers

in adulthood (Brännström et al., 2017; Shpiegel et al., 2022; Stein, 2006). Furthermore, although care leavers tend to have lower higher education participation rates (Harrison, 2017) as many as two thirds re-engage with some sort of further education opportunity post-16 (Harrison, 2023). As highlighted in Chapter 5, this study also found evidence of resilience in the MCS as teenagers of mothers with OHC experience were as likely as teenagers with a mother with no OHC experience to be in employment, education or training (EET) when interviewed at age 17 and to aspire to having a professional occupation. In this chapter we examine the longer-term outcomes into mid adulthood.

Analytic strategy

To assess the impact of OHC experience on the economic activities of care leavers and the children of care leavers, we first show the direct associations between OHC experience and outcomes at age 26 and 46 before concentrating on time spent in EET between 1987 – 2016. We graph the proportion of men and women in EET in each year to see whether EET disadvantages associated with OHC experience are persistent over time. According to the assumption of long-term scarring effects, we expect more problems regarding participation in EET over time indicating the intergenerational transmission of disadvantage. Alternatively, according to the assumption of recovery we would expect that any participation penalty to diminish with the passing of time.

Given the highly skewed distribution in our outcome measure (see Appendix A6.1), we used quantile regression methods to compare differences in the total number of months spent in EET between ages 17 and 46 by OHC experience thereby increasing the power to detect differences in the upper and lower tails. We condition on several key family socioeconomic background and individual characteristics that are associated with both OHC experience and education and labour market disadvantage. These include socioeconomic resources such as mother highest qualification level, housing tenure, overcrowding in the home, cohort member in receipt of free school meals when at school, as well as individual-level factors such as ethnicity, general health, standardised reading and maths (age 10) and mental wellbeing score assessed by the malaise scale (Rutter et al., 1970; Rodgers et al., 1999) and 5+ 'good grade' exam passes (age 16) (see Appendix A6.2 for details). This enables us to identify how far EET disadvantages are driven by social origins and/or lack of individual-level resources (including qualifications), thereby helping to establish any independent association of OHC experience on labour market participation and identify potential levers for policy intervention. We estimated a series of four quantile regression models for months spent in EET and their association with OHC experience. The model specifications are:

- Model 1: OHC experience
- Model 2: Model 1 + family socioeconomic background (mother highest qualification level, housing tenure, overcrowding in the home, cohort member in receipt of free school meals when at school)
- Model 3: Model 1 + individual characteristics (ethnicity, general health, standardised reading and maths (age 10), GCSE attainment and mental health)
- Model 4: Model 1 + family socioeconomic background & individual characteristics

We compare differences at the 0.25, 0.50, and 0.75 centiles of the EET participation distributions for men and women separately. (See Appendix A6.3 for the complete regression results.)

Findings

Early adulthood (age 26)

Table 6.1 differentiates between cohort members with no OHC experience (no OHC0), those whose mother was in care (indirect OHC1), and those with direct OHC experience (direct OHC2). We see that by age 26, more than 4 in 10 men with indirect or direct OHC experience and women with direct OHC experience had either no or only low level (NVQ1) qualifications compared to around a third of men and women with no OHC experience (32% and 28% respectively). Additionally, fewer men with indirect (12%) and fewer men and women with direct OHC experience (7% and 12% respectively) had gained a degree [or equivalent] or higher. However, women with indirect OHC experience were as likely as their peers with no OHC experience to have achieved a degree level qualification (19%). In terms of economic activity status at age 26, Table 6.1 shows that a lower proportion of men and women with indirect or direct OHC experience were employed compared to those with no OHC experience, with those with direct OHC experience being the most disadvantaged. For men the proportions were 80%, 74% and 64%; for women, 72%, 62% and 50%.

Table 6.1: Highest Qualification & Economic Activity Status at age 26 by OHC status (%)

	Men			Women		
	No OHC	Indirect OHC	Direct OHC	No OHC	Indirect OHC	Direct OHC
Highest Qualification						
No/NVQ1	32	**46**	**48**	28	34	**43**
NVQ2	33	34	32	38	36	34
NVQ3	14	**8**	12	14	11	11
NVQ4+	20	**12**	**7**	20	19	**12**
Economic Activity						
Employed	80	74	**64**	70	62	**50**
Edu/Train	9	11	14	8	9	13
Unem	7	11	12	6	7	12
Home-Care	1	0	3	10	15	14
Sick/Other	3	4	7	6	8	11
N(100%)	***6,078***	***190***	***336***	***5,670***	***192***	***274***

Note: Bold indicates differences significant at p<.05

Table 6.2: Highest Qualification & Economic Activity Status at age 46 by OHC status (%)

	Men			Women		
	No OHC	Indirect OHC	Direct OHC	No OHC	Indirect OHC	Direct OHC
Highest Qualification						
No/NVQ1	23	**37**	**45**	22	29	**38**
NVQ2	24	28	24	25	23	24
NVQ3	20	16	17	18	18	16
NVQ4+	32	**20**	**15**	35	30	**22**
Economic Activity						
Employed	86	80	**71**	78	74	**65**
Edu/Train	4	6	8	6	6	7
Unem	5	6	8	5	7	8
Home-Care	1	2	2	5	5	7
Sick/Other	4	6	**10**	6	7	**11**
N(100%)	***6,078***	***190***	***336***	***5,670***	***192***	***274***

Note: Bold indicates differences significant at p<.05

Middle adulthood (age 46)

Table 6.2 shows that by age 46, many men and women in all three OHC groups had attained higher level qualifications than they had at age 26. However, those with no or low-level qualifications were the least likely to have moved up the qualification ladder. Among men, although lower than their peers with no OHC experience, it is very encouraging to see that 20% with indirect OHC experience and 15% with direct OHC experience had a degree level [or higher] qualification by age 46; among women, levels increased to 22% with direct OHC experience and to 30% with indirect OHC experience which again compares favourably to the 35% among their no OHC experienced peers.

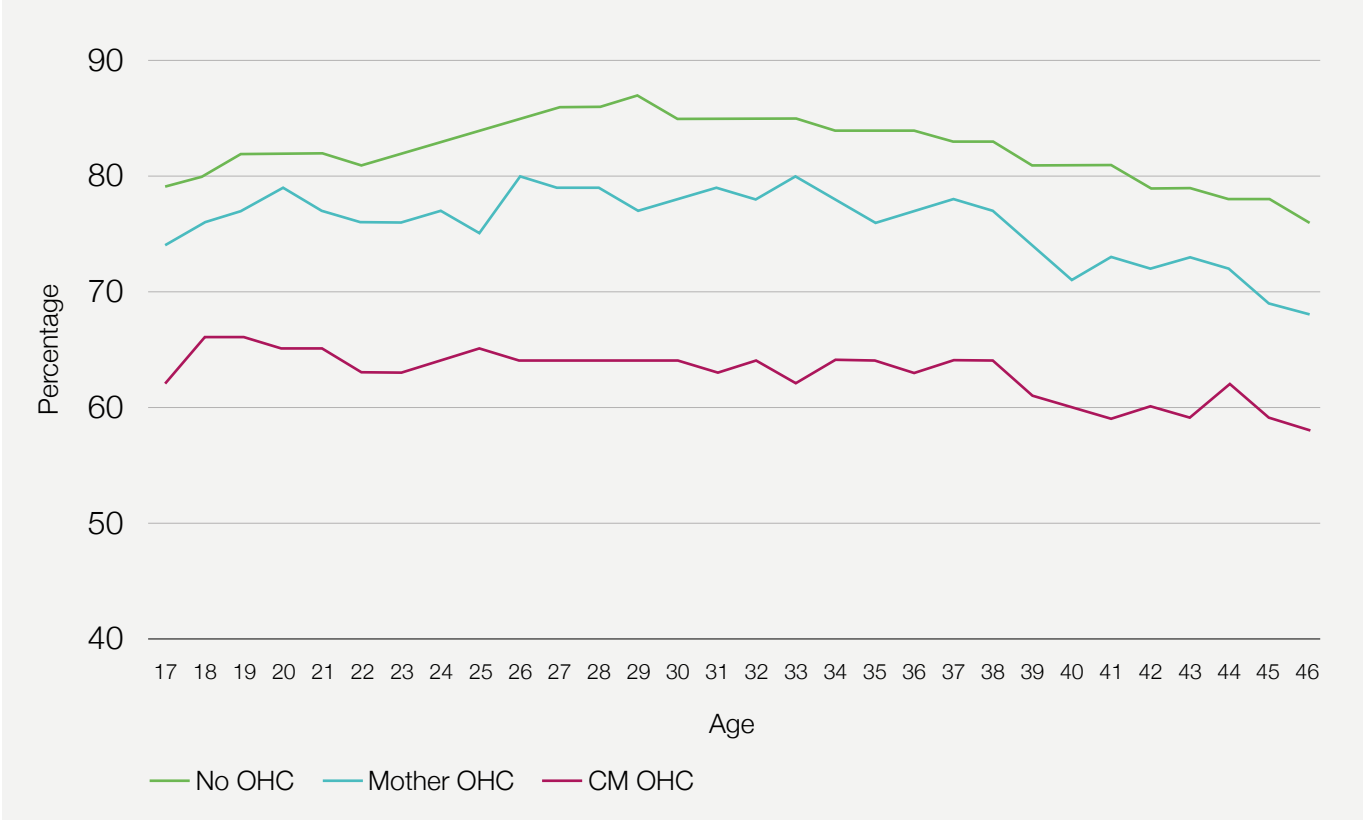
Economic activity disadvantage is highest among men and women with direct OHC experience, although fewer men and women with indirect OHC experience are also in employment, education or training compared to those with no OHC experience. Among men, the percentage with no OHC experience in employment is 86%, 80% among those with indirect OHC experience and 71% for those with direct OHC experience. Among women the comparable figures are 78%, 74% and 65% respectively.

Time in EET over 30 years: 1987 – 2016

At two age-points twenty years apart, we have seen that men and women with indirect or direct OHC experience continue to be disadvantaged in the labour market by age 46. We expand this picture by making full use of the economic activity history data to construct what each cohort member spent most time doing in any one year[2] between 1987 and 2016 inclusive. We show the percentage of men (Figure 6.1) and women (Figure 6.2) in EET in each year by OHC status and then calculate the total number of months spent in EET out of the maximum 360 months available over the 30-year period.

Figures 6.1 and 6.2 show that the economic activity levels for men and women with both indirect and direct OHC experience are lower in each year between 1987 to 2016 than for men and women without OHC experience. The 'gaps' in the percentage spending most time in EET in each year start early and persist at a fairly consistent level over time, most notably for men and women with direct OHC experience compared to those with indirect or no OHC experience. Yet, notably the majority of care leavers and children of care leavers are economically active from completing compulsory education age to mid adulthood.

Figure 6.1: Percentage of men in EET in each year 1987 – 2016 by OHC experience



[2] Employment status can differ within an individual year. The status attributed to an individual cohort member was decided by the highest number of months spent in one category in any one year. If an equal number of months had been spent in EET or NEET, an EET status was recorded.

Figure 6.2: Percentage of women in EET in each year 1987 – 2016 by OHC experience

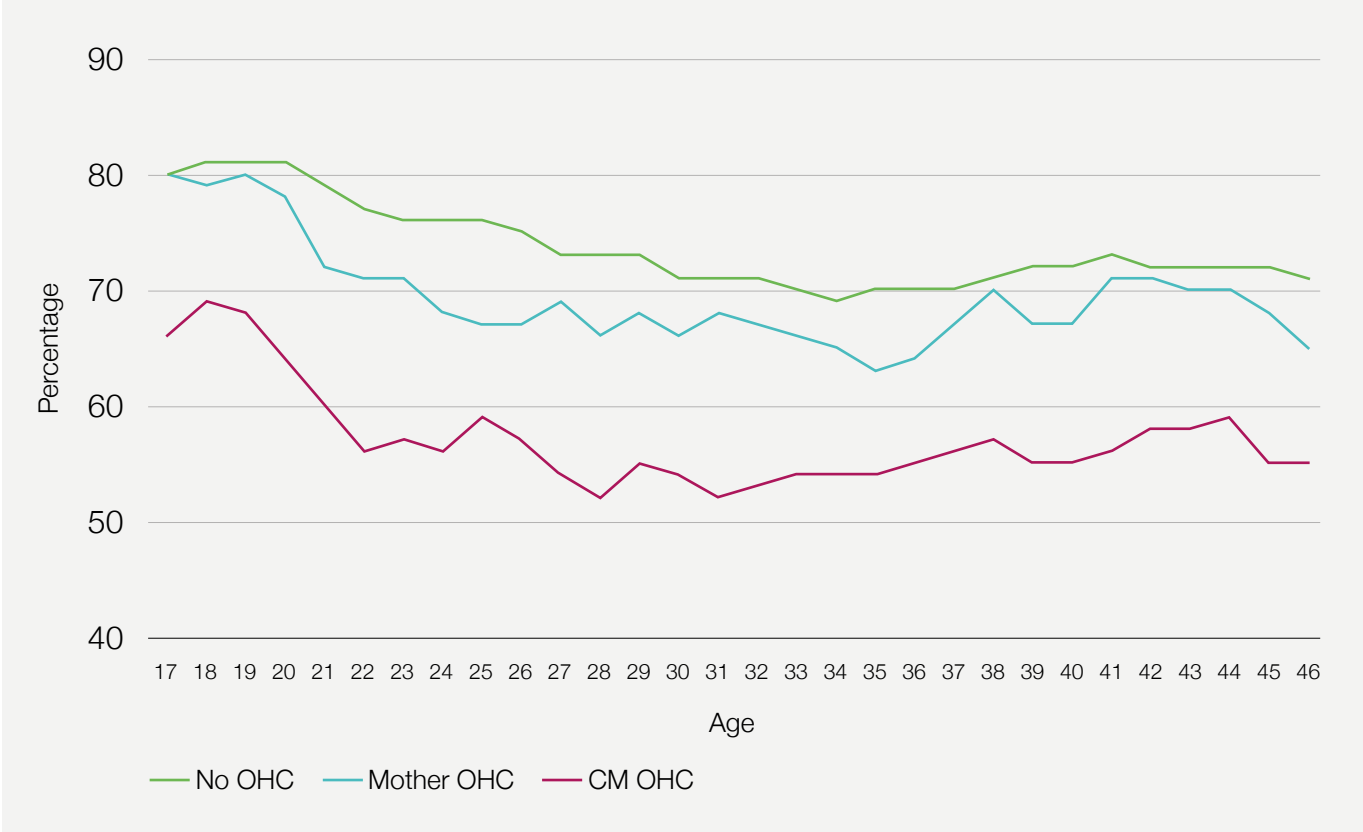


Table 6.3 shows the months spent in EET by OHC experience for men and women separately and across the time in EET distribution. It is apparent that time spent in EET declines across OHC groups, and that this is the case for both men and women. Looking over the 30-year period, men with no OHC experience had spent on average, 323 months out of the available 360 months in EET, compared to 307 months for men with indirect OHC experience and 274 months for men with direct OHC experience. Women had spent less time than men in EET in all three OHC groups, but very similar differences between groups were observed as for men. On average, women with no OHC experience spent 288 months in EET, reducing to 273 for those with indirect OHC experience and further to 242 months for those with direct OHC experience.

Put more explicitly, between ages 16 to 46 men and women with direct OHC experience spent around four years less time in EET (49 and 46 months respectively) than those with no OHC experience. Men and women with indirect OHC experience spend in excess of one year less time in EET (16 and 15 months respectively). Differences were most apparent at the bottom end of the distribution (P25) and closest at the top end (P75), particularly between no OHC and indirect OHC groups.

Table 6.3: Mean months in EET across percentiles by OHC experience and sex

	Men					Women				
	Mean	SD	P25	P50	P75	Mean	SD	P25	P50	P75
No OHC	323	56.7	312	347	360	288	78.5	246	314	349
Indirect OHC	307	67.9	284	335	358	273	86.8	226	300	346
Direct OHC	274	91.6	235	303	348	242	95.2	169	260	327
Total	321	60.3	308	346	360	285	80.2	242	312	349

Regression analyses

To enable us to see how far EET disadvantages are driven by social origins and/or the level of personal resources, we control for the individual and family socioeconomic background characteristics that are associated with both OHC experience and education and labour market disadvantage (Model 4) detailed earlier. Figure 6.3 shows the independent association between direct and indirect OHC experience and time spent in EET between ages 17 and 46, relative to no OHC experience, at the quartiles of the EET distribution.

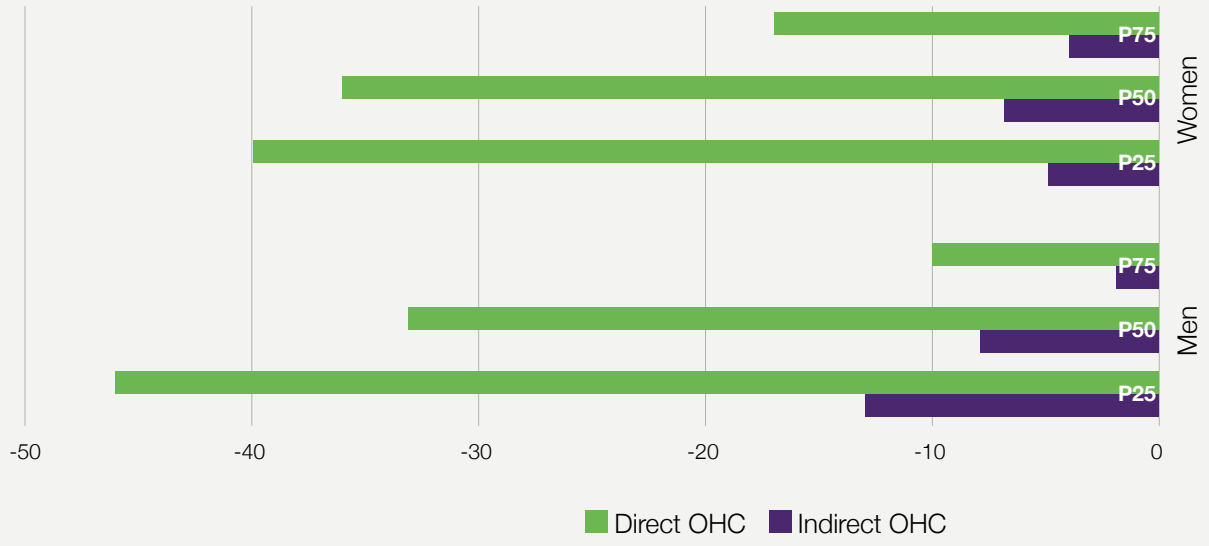
Among men, those at the bottom quartile (P25) of the EET distribution who had direct OHC experience spend 46 months less time in EET than those who had no OHC experience. For men in the middle of the employment distribution (P50) months lost reduces to 33 and 10 months at the 75th percentile of the EET months distribution. For men with indirect OHC experience, differences in time spent in EET relative to men with no OHC experience are much smaller but remain significantly lower among those at the bottom (13 months) and middle quartile (8 months) of the EET distribution. For men at the 75th percentile, the difference remains at a non-significant two months.

For women, a very similar pattern among those with direct OHC experience is observed across the distribution as we found for men (P25 40 months; P50 36 months; P75 17 months). However, for women with indirect OHC experience we see evidence of resilience as months spent in EET are not significantly lower than for women with no OHC experience across the EET distribution (P25 5 months; P50 7 months; P75 4 months).

In terms of differences between men and women with indirect and direct OHC experience, we also found these to be statistically significantly different from one another in all models across the EET distribution for both men and women.

These findings add to the growing body of evidence confirming the long shadow of direct OHC experience during childhood, which can persist into the fifth decade of life. While the direct experience of OHC is a strong marker for disadvantaged outcomes into mid-adulthood, including time spent in EET over 30 years, there is also evidence to suggest that in particular women with indirect OHC experience are doing as well as their peers regarding education and economic participation in mid-adulthood. However, the intergenerational transmission of disadvantage associated with the trauma of care experience remains apparent for men with indirect OHC experience in mid-adulthood and for those at the lower end of the EET distribution.

Figure 6.3: Fewer month spend in EET between ages 17 to 46 by OHC experience



Note: Reference group No OHC experience

Key messages

Equipping young people with the resources and skills to manage life after leaving care is a long-term process and requires equally long term policy commitment and support. The findings based on a cohort born in 1970 support recent research on care leavers which has highlighted the continued disadvantage care leavers experience in terms of academic attainment (DfE, 2020; House of Commons Education Committee, 2022) and participation in further or higher education (Harrison, 2023). Current participation rates among 18-19 year old teenagers in England is now over 40% (DfE, 2022b), although this remains far lower among care leavers (DfE, 2022b; Harrison, 2017; 2023). Given the importance of education participation and attainment for success in the labour market, this research highlights the need for governments to better address the educational needs of children in state care (House of Commons Education Committee, 2022) to improve their chances of transitioning into stable employment within the labour market and minimise the lifetime of labour market disadvantage observed here – for both care leavers and their children. Supporting the findings of Harrison (2023), we have also shown evidence of resilience in that many adults, including those with indirect and direct OHC experience, continue to gain qualifications into mid-adulthood. Thus, policies that support the return to education at later ages should be encouraged and directed specifically towards disadvantaged families, including those with OHC experience.

Chapter 7:
The impact of maternal OHC experience on their children's mental health and wellbeing

This chapter firstly describes the mean problem behaviour scores across the four SDQ scales from age 3 to 17 before reporting on a range of mental health indicators for the MCS teenagers at age 17 and how they differ by maternal OHC experience.

The findings are reported in a working paper (Parsons et al., 2022b) and are currently being prepared for publication in an academic journal.

Background

Research has shown that individuals who spend time in OHC are at a higher risk of poorer mental and physical health (Murray et al., 2020; Martin et al., 2014). However, outside of this research programme, there has been very few studies that followed the lives of the children of care leavers into adolescence when most mental health problems arise, including worrisome increases in mental distress, psychiatric disorders, and suicide-related outcomes, particularly among young women (Twenge et al., 2019; Calling et al., 2017; Keyes et al., 2014). Previous research has documented the intergenerational effects of traumatic experiences in various populations, including the offspring of Holocaust survivors (Shrira et al., 2011; Danieli et al., 2016), those exposed to armed conflict and genocide (Bezo & Maggi, 2015; Dekel & Goldblatt, 2008) and childhood abuse (Felitti et al., 1998). Negative effects can include greater vulnerability to stress and a range of psychiatric symptoms (Danieli et al., 2016; Lehrner & Yehuda, 2018; Zhukova, 2020). The experience of OHC, often characterised by prior and continued socioeconomic and psycho-social deprivation as well as inconsistent caregiving, can be considered as a distinct type of traumatic experience (Yang et al., 2018). In this study, we ask 1) are children of care leavers at greater risk of mental health problems than their peers without parental OHC experience; 2) how do these health inequalities develop over time (from childhood to late adolescence and beyond); 3) can any differences in mental health be explained by family socioeconomic resources and individual characteristics.

Analytic strategy

We first report on the parent reports of behaviour problems in their children across the four SDQ problem scales from age 3 – 17, before examining a range of psycho-social adjustment outcomes at age 17 (reports by teenagers themselves), comparing experiences by maternal OHC experience for the whole cohort. Given the differences in psycho-social adjustment and the stark differences that we found in the socioeconomic circumstances between no OHC and OHC experienced mothers first identified in Chapter 3, we next concentrated on comparisons within a socially disadvantaged sample to help 'level the playing field', given the increased stress and anxiety that can accompany economic disadvantage (McElroy et al.,

2023). (See Appendix A7.1 for full details of the covariates included in the different analyses.) See Box 7.1 for details of the outcome measures.

Findings

Figure 7.1 shows the mean (parent reported) scores in the four problem behaviour SDQ scales for cohort children from age 3 – 17 by mother OHC experience.

Whilst it is important to note that the majority of children of care leavers were identified as not having behaviour problems in the early years, their mean scores do remain persistently higher than children whose mother had no OHC experience at all age points. Of particular concern is the 'spike' in emotional and peer problems we observe at age 14 for all teenagers. These patterns apply to both males and females (see Appendix A7.2).

Box 7.1: Key outcomes measures

Childhood Behaviour Adjustment

The cohort members themselves completed the Strengths and Difficulties Questionnaire [SDQ] for the first time at age 17, prior to this it was completed by their parent/main carer, as detailed in Chapter 4 (see Box 4.1). We make use of the four problem subscales – emotional symptoms, peer relationship problems, conduct problems, hyperactivity/inattention – showing mean scores for parent reported problems from age 3 – 17, and cohort member reported scores at age 17 dichotomised at recommended cut-off scores to indicate no problems (0), problems (1). A score of 7+ indicates emotional or hyperactivity problems; 6+ peer problems; and 5+ conduct problems (Youth In Mind, 2016).

Psychological Distress

At age 17 the cohort member completed the widely used Kessler scale K6 (Kessler et al., 2003), a screening instrument for non-specific distress and is an abbreviated version of the K10. Each question pertains to an emotional state and response choices are based on five-point Likert-type scale ranging from 0 (none of the time) to 4 (all of the time). The K6 has a score range of 0-24, with higher scores indicating that the teenager is experiencing higher levels of distress. For K6, cut-off points differentiate between moderate (5+) and severe (13+) levels of distress. In our analysis we use the 13+ cut-off, 0-12 (0) 13+ (1).

Experience of depression and anxiety

Three questions captured the formal diagnosis and treated of depression or serious anxiety:

- Has a doctor ever told you that you suffer from depression or serious anxiety?
- Are you currently being treated for depression or serious anxiety?
- Have you ever received treatment for depression or serious anxiety?

Answers were coded as No (0) Yes (1). 'Yes' responses for currently or ever treated for depression or serious anxiety were combined.

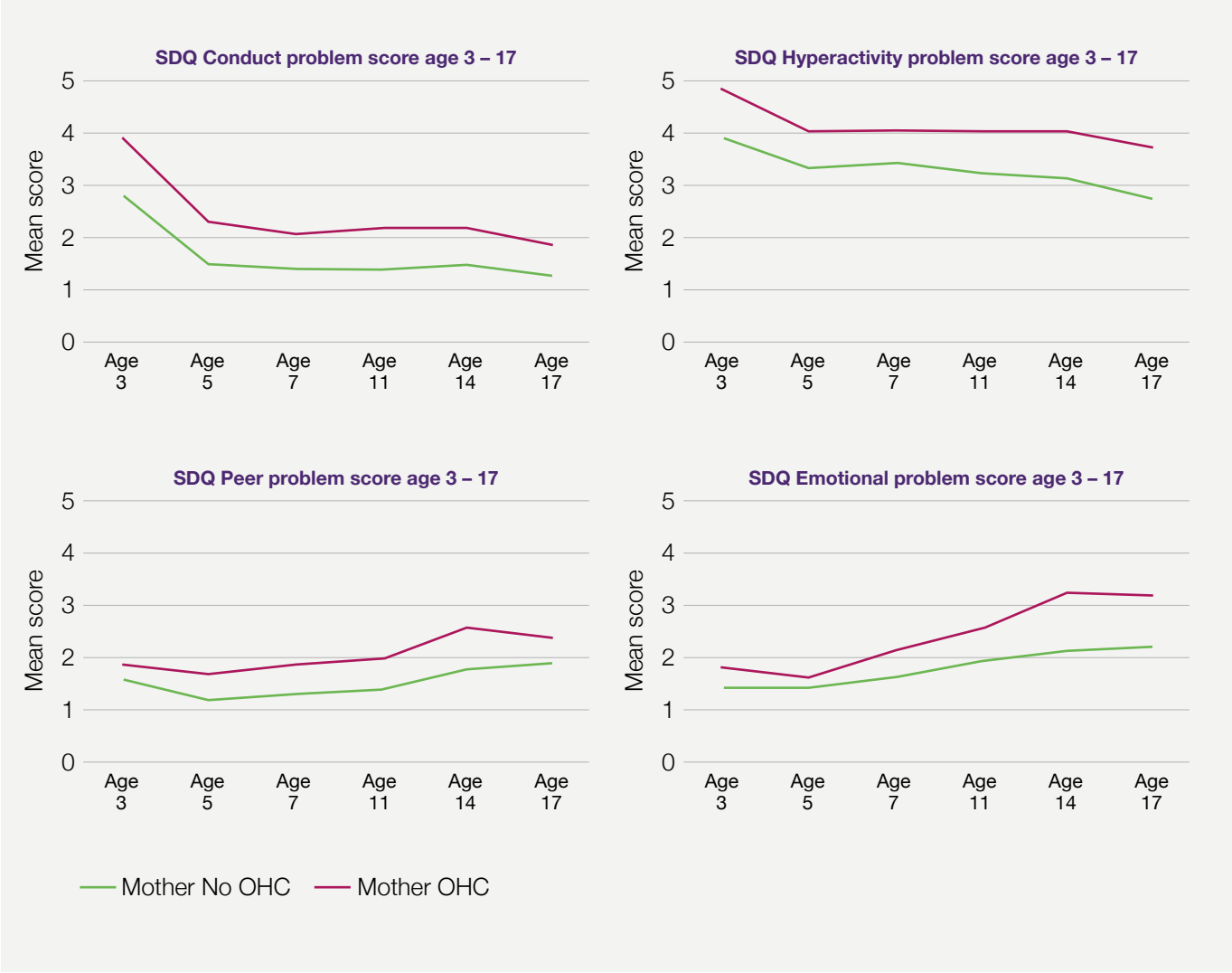
Self-Harm

The experience of self-harm was captured by asking teenagers whether they had 'During the last year, have you hurt yourself on purpose in any of the following ways?' Six behaviours were included: Cut or stabbed yourself; Burned yourself; Bruised or pinched yourself; Taken an overdose of tablets; Pulled out your hair; Hurt yourself some other way. Answers were coded No (0) and Yes (1) and summed to produce a scale ranging 0-6, which was also dichotomised to reflect No self-harm (0) Any self-harm (1).

Suicide

The question on suicide was 'Have you ever hurt yourself on purpose in an attempt to end your life? Answers were coded No (0), Yes (1)

Figure 7.1: Mean scores in SDQ problem scales from age 3 - 17



Given this concerning picture and the rise in adolescent mental health problems among adolescents more generally in recent times (Gagne et al., 2022; Patalay & Gage, 2019), we now examine self-reported mental health of the children of care leavers at age 17. Table 7.1 shows the direct associations between maternal OHC experience and the different indicators of mental health described in Box 7.1 for their teenage children. The findings suggest that compared to their peers without maternal OHC experience, teenagers of mothers with OHC experience self-report higher levels of conduct and hyperactivity behaviour problems (SDQ) and symptoms of depression and more have been told by a doctor that they have depression and have received treatment for depression. They are also more likely to have self-harmed and attempted suicide.

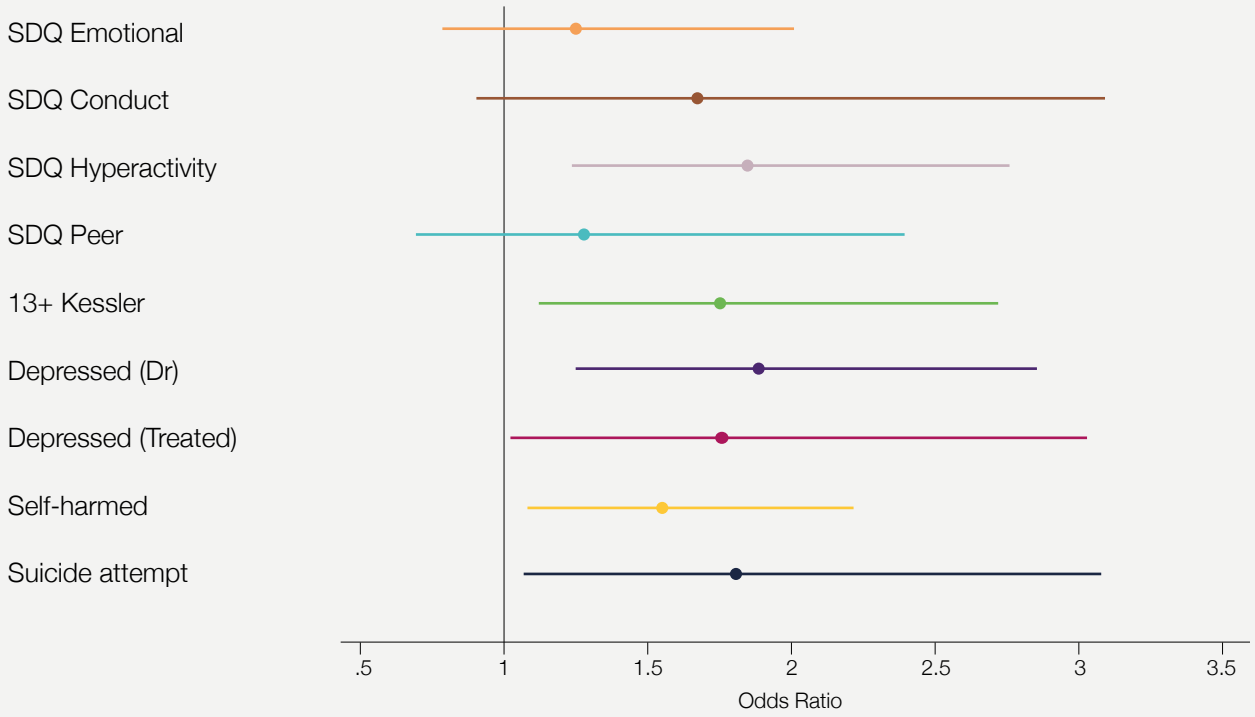
Figure 7.2 gives the Odds Ratios from the logistic regression modelling and shows that emotional, conduct and peer problems reported by the teenagers can be explained by taking into account the teenager's individual and family background characteristics. However, compared to their peers, teenagers with a mother with OHC experience remained more likely to self-report hyperactivity behaviour problems and a higher number of depressive symptoms on the Kessler K6 scale, self-harm and attempted suicide. They were also more likely to have been told by a doctor that they have depression and have received treatment for depression (See Appendix A7.3 for the full regression results).

Table 7.1: Teenage behaviour and mental health problems including self-harm and suicide attempts by mother OHC experience

	Mother No OHC	Mother OHC
	Proportion	Proportion
SDQ Emotional problems	0.13	0.18
SDQ Conduct problems	0.05	**0.11**
SDQ Hyperactivity problems	0.15	**0.27**
SDQ Peer problems	0.04	0.08
Kessler (high levels of depressive symptoms: 13+)	0.16	**0.27**
Told by a doctor that they have depression/anxiety	0.10	**0.21**
Currently/ever treated for depression/anxiety	0.02	**0.06**
Self-harmed: any	0.26	**0.38**
Attempted suicide	0.07	**0.16**
N(100%)	*18,505*	*305*

Note: Bold indicates differences significant: p<.05

Figure 7.2: Adjusted Odds Ratios for teenagers of mothers with OHC experience



Note: reference category: mother no OHC experience

Focus on the children of socioeconomic disadvantaged mothers

Although the above analysis controlled for socioeconomic background characteristics, we also specifically examined whether children of mothers with OHC experience are at a greater risk of mental health problems than children growing up in socioeconomically disadvantaged families without OHC experience. These findings have been published as a briefing paper.

In Chapter 3 we saw the biggest 'gaps' in socioeconomic resources of mothers with OHC experience were regarding educational attainment, receipt of state benefits, experience of income poverty and living in rented housing. We created a summary score across these four measures to assess cumulative disadvantage experienced by OHC mothers. Figure 7.3 illustrates that the majority of mothers with OHC experience (70%) are faced with 'deep risk' as indicated by 3+ risk factors (n=219), compared to 26% of mothers without OHC experience (n=5,765)[2]. Table A7.4a in the Appendix compares the sample of mothers with and without OHC who encountered three or four of the socioeconomic disadvantages detailed above.

Table 7.2 shows the unadjusted predicted probabilities of teenage children of mothers with and without OHC experience within the socioeconomic disadvantaged sample across the same nine outcomes previously examined. We see that in comparison to teenagers of socioeconomically disadvantaged mothers without OHC, those of mothers with OHC experience report higher levels of mental health problems, particularly for measures capturing depression, hyperactivity and conduct problems, but also for self-harm and attempted suicide. The findings suggest potential processes of intergenerational transmission of trauma associated with maternal OHC experience, which are not fully accounted for by socioeconomic resources.

Do characteristics of the child account for mental health disparities?

Within this sample of socioeconomically disadvantaged teenagers we find that fewer teenagers of a mother with OHC experience were from a British Minority Ethnic group, similar proportions were female and had attained five or more 'good' GCSCEs Grade 4-9 including English language and maths, and they had the same mean age. (See Table A7.4b for details.) We next ran a series of logistic regressions for each outcome within the socioeconomic disadvantaged sample additionally

Figure 7.3: Accumulation of SES disadvantage

[2] Note: sample size varies across imputed datasets: Mother No OHC n=5748-5779; Mother OHC n=215-225.

controlling for the teenager's sex, age, ethnic minority status and performance in public examinations at age 16, and found that these indicators accounted for the higher levels of conduct problems, self-harm and being treated for depression among the teenagers of mothers with OHC experience, but not for hyperactivity, high number of depressive symptoms (Kessler), depression as diagnosed by a medical doctor, and attempted suicide.

Can maternal mental distress account for the high levels of mental health problems among children of care leavers at age 17?

Chapter 3 highlighted the increased levels of depressive symptoms among mothers with OHC experience, with 48% reporting high levels of mental distress on the Kessler K6 scale (Kessler et al., 2003) compared to 26% of mothers with no OHC experience. Within our sample of socioeconomic disadvantaged mothers, we find 48% of OHC experienced mothers reporting high levels of mental distress, as did 38% of mothers with no OHC experience. We therefore included maternal mental distress as a control in a final set of models within the socioeconomic disadvantaged sample, to see if this drives the association between maternal OHC experience and mental health problems among their teenage children. Figure 7.4 shows that the increased odds of a high level of distress (Kessler) among the teenaged children are now (just) attenuated to chance levels by the inclusion of their mother's experience of distress. However, the associations between maternal OHC experience and hyperactivity, depression diagnosed by a medical doctor and attempted suicide remain significant, suggesting that maternal mental distress does not fully account for the mental health problems of their children.

Key messages

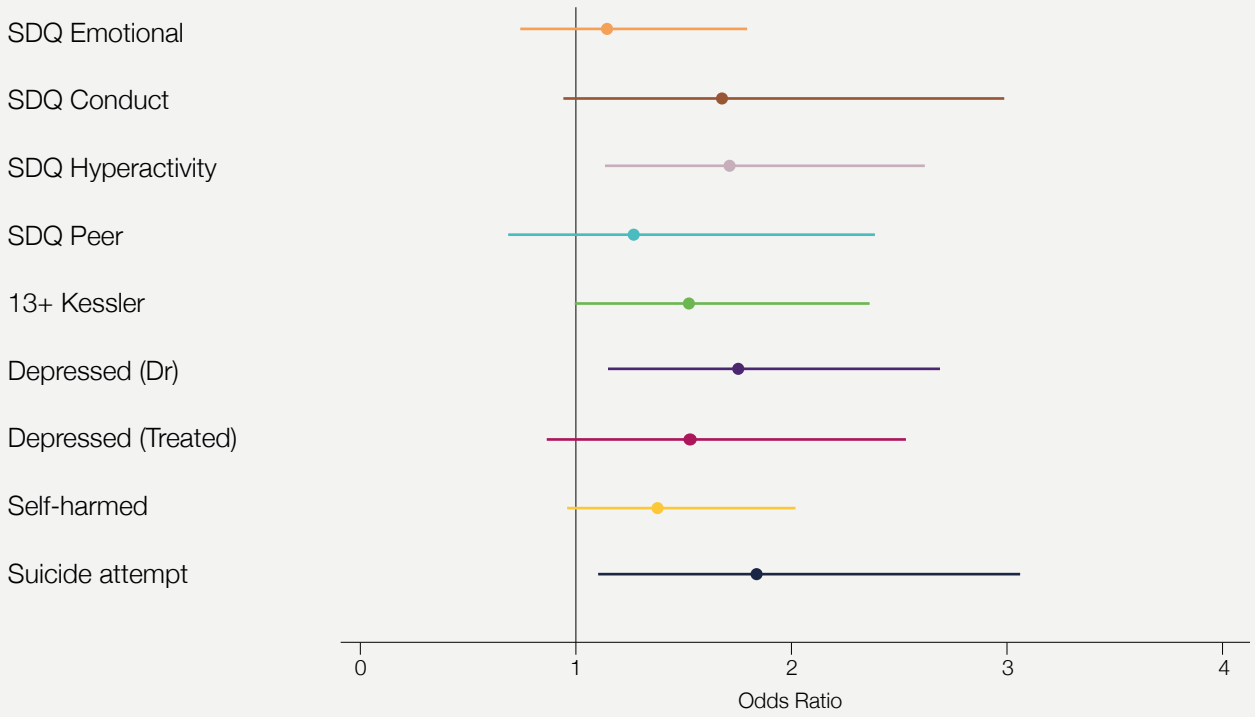
Our research based on the MCS cohort shows that maternal care-experience is associated with greater psycho-social adjustment problems of their teenage children. We find that teenage children of care leavers are at a greater risk of mental health problems than other teenagers and that these differences remain when controlling for a wide range of other socioeconomic risk factors, and after restricting the analyses to socioeconomically disadvantaged families. Even after accounting for the children's own characteristics and

Table 7.2: Mental health outcomes at age 17 for children of socioeconomically disadvantaged mothers with and without OHC experience: unadjusted predicted probabilities

	Socioeconomically disadvantaged (3+risk factors)	
	Mother No OHC	**Mother OHC**
	Proportion	**Proportion**
SDQ Emotional problems	.13	.17
SDQ Conduct problems	.07	.13**
SDQ Hyperactivity problems	.16	.26***
SDQ Peer problems	.06	.09
Kessler (high levels of depression: 13+)	.17	.25*
Told by a doctor have depression/anxiety	.11	.22****
Treated for depression/anxiety	.04	.07**
Self-harmed: any	.27	.37**
Attempted suicide	.09	.19***
N(100%)	***5,765***	***219***

Note: * p<.1 ** p<.05 *** p<.01 **** p<.001

Figure 7.4: Mental health outcomes for disadvantaged teenagers: adjusted odds ratios for teenagers with a mother with OHC experience [inc. child characteristics and mother mental distress]



Note: reference category: mother no OHC experience

their mother's mental distress, the teenagers of mothers with OHC experience still reported higher levels of hyperactivity, depression diagnosed by a medical doctor and attempted suicide. Thus, neither socioeconomic disadvantage, nor teenage characteristics nor maternal mental distress can fully explain mental health problems of the teenage children of care leavers. Future analysis should examine other potential processes that might explain this association, such as secondary traumatisation (as reflected in experiences of over-identification with parents or reduced self-esteem), family dynamics, own experiences of abuse or discrimination, or social learning.

In conclusion, special attention must be paid to the emotional scars associated with OHC experience which can transmit to the next generation. Every effort should be made to minimise the factors that contribute to the need for a child having to go into care, including conditions of physical, emotional and medical neglect and abuse or abandonment. Moreover, when a child is placed into care, the state should ensure that the best support is provided to them during their time in OHC, when they exit OHC, and during their transition to adult life.

The importance of extending support to care leavers and their families into the adult years, was highlighted by additional analyses into the mental wellbeing of adult care leavers and adult children of care leavers in the 1970 cohort. The findings are published in an academic journal (Parsons & Schoon, 2022) and summarized in Appendix A7.5. After adjusting for a range of family and individual characteristics in a number of multivariate logistics regressions, we found that compared to those with no OHC experience (OHC0), cohort members who directly experienced OHC (OHC2) are more likely to score high on the Malaise scale which assesses symptoms of depression, are more than twice as likely to report poor mental health both pre- and during the pandemic and to report feelings of loneliness. Moreover, they are more than three times as likely to not feel in control over what happens to them. However, although the adult children of mothers with OHC experience also had poorer mental health pre-pandemic, we found evidence of resilience as no other differences were significant at the $p<.05$ level.

Chapter 8:

The impact of maternal OHC experience on their children's development of risky behaviours and contact with the police

Children in care and care-experienced young adults are consistently over-represented in the criminal justice system (Kennedy, 2013; McMahon & Fields, 2015; Crawford et al., 2018; Yoon et al., 2018; ONS, 2022), are vulnerable to exploitation (Hallett, 2016) and have a higher incidence of substance misuse (Tarren-Sweeney & Vetere, 2013).

Research also shows that girls who have been in care have sexual relations at an earlier age and have a greater risk of teenage pregnancy and teenage motherhood compared to girls who had not spent any time in the care system (Roberts et al., 2017; Svoboda, et al., 2012; Knight, et al., 2006). Do we find similar adjustment problems among the teenaged children of care leavers? In this chapter we examine aspects of risky behaviour, experience of being a victim of crime and contact with the police also drawing on evidence from the 1970 cohort. The MCS findings are reported in a working paper (Parsons et al., 2022b).

Evidence from MCS

For the younger MCS cohort we examine outcomes at age 17 by maternal OHC experience, focusing on **health behaviours** (e.g., [underage] smoking, use of alcohol and recreational drugs), **relationships and sexual activity** (e.g., had a boy/girlfriend, had sex, had unprotected sex, been/made someone pregnant), **misconduct and experience of crime** (being a victim of misconduct/crime, contact with the police). We report direct associations and then how these associations are attenuated by controlling for key individual and family background characteristics.

Evidence from BCS70

For the 1970 cohort we report on ever and current illegal drug use and any contact they had with the police by the time they were age 30. We again draw comparisons across the three OHC groups: those with no OHC experience in their family (no OHC0), those whose mother was in care (indirect OHC1), and those with direct OHC experience (direct OHC2).

Table 8.1: Teenage smoking, alcohol and drug taking by mother OHC experience (MCS)

	Mother No OHC	Mother OHC
	Proportion	Proportion
Ever smoked	0.54	**0.70**
Currently smokes daily	0.09	**0.17**
Age first smoked: <15	0.23	**0.34**
Ever vaped	0.55	**0.70**
Currently vapes daily	0.04	0.05
Ever had alcohol	0.86	0.85
Age first had alcohol: <15	0.39	0.43
Ever taken drugs	0.42	**0.55**
Currently takes drugs	0.14	0.19
Ever taken cannabis	0.39	**0.53**
Ever taken cocaine	0.08	0.09
Ever taken ecstasy	0.11	0.10
Ever taken ketamine	0.05	0.03
N(100%)	*18,505*	*305*

Note: Bold indicates differences significant: p<.05

Findings

Health behaviours: smoking, alcohol use and recreational drug use

Table 8.1 shows the direct association between indicators of the teenager's health behaviours and maternal OHC experience without controls. The findings suggest that a higher proportion of teenagers of mothers with OHC experience have ever smoked, started smoking when they were younger than age 15, are current smokers and have vaped. In terms of illegal drug use, higher proportions of teenagers of mothers with OHC experience had taken drugs but were not more likely to be a current user. The increased proportion of those ever having taken drugs refers to cannabis use and not to the use of harder drugs such as cocaine, ecstasy or ketamine. However, it is important to note that early cannabis use has been associated with a decline in psychological development and worsening mental health (Volkow, 2016; Cooper & Williams, 2018), together with being thought as a 'gateway drug' to the use of harder drugs (Williams, 2020), although conflicting evidence exists on this (e.g. Jorgensen & Wells, 2022). In terms of alcohol consumption, more than 8 in 10 of all teenagers had tried alcohol with around 4 in 10 having their first alcoholic drink before age 15, but there were no differences by mother OHC experience.

After taking into account the teenager's individual (sex, age, ethnic minority, GCSE attainment) and family background (maternal education, language spoken in the home, workless household, renting, area disadvantage) characteristics, all significant associations were attenuated with the exception of the teenager ever smoking and taking drugs, specifically cannabis. (See Table A8.1a and A8.1b for full regression results).

To assess generalisability of findings, we also examined the proportion reporting to have ever taken drugs in the older 1970 cohort by the time they were 30. There were no marked differences between cohort members with no OHC experience or with a mother with OHC experience. However, harder drug use (e.g., ecstasy, amphetamines) was more prevalent among those

Table 8.2: Relationships and sexual activity by mother OHC experience (MCS)

	Mother No OHC	Mother OHC
	Proportion	Proportion
Boy or girlfriend: yes	0.35	**0.46**
Had sex: yes	0.44	**0.58**
Age first had sex: <16	0.34	**0.43**
Had unprotected sex: yes	0.17	0.24
Experienced a pregnancy: yes	0.02	0.06
N(100%)	*18,505*	*305*

Note: Bold indicates differences significant: p<.05

with direct OHC experience in their own childhood or adolescence, with unadjusted associations being in the margins of significance (See Table A8.2 for details.)

Relationships and sexual activity

Table 8.2 shows the direct association between maternal OHC experience and indicators of the teenager's romantic and sexual activity without controls. The findings suggest that in comparison to their peers, teenagers with a mother with OHC experience were more likely to have had a boy- or girlfriend and to have had sex, including underage sex, but they were no more likely to have engaged in unprotected sex or to have either been or made someone pregnant. However, all of these significant associations were reduced to chance when the teenager's individual and family background characteristics were adjusted for. (See Table A8.3 for full regression results).

Experience of crime and contact with the police

Table 8.3 shows the direct association between maternal OHC experience and indicators of the teenager's involvement in crime and contact with the police without controls. The findings suggest that compared to their peers, teenagers of mothers with OHC experience were no more likely to report being a victim of crime, however, they were more likely to have been verbally insulted in a public space. Turning to contact with the police, teenagers with a mother with OHC experience had a higher incidence of being stopped and questioned and were significantly more likely to have been formally cautioned. Just 1% of all teenagers had been arrested. When the teenager's individual and family background characteristics were adjusted for, the significant associations between maternal OHC and the teenager being verbally insulted in a public space and being cautioned by the police remained – a teenager had twice the odds of being cautioned than if their mothers had no OHC experience. (See Table A8.4 and A8.5 for full regression results).

Drawing on the 1970 cohort we are again able to assess generalisability of findings across different socio-historical periods. We examined contact with the police as reported by the cohort members by the time they were 30. There were no marked differences between cohort members with no OHC experience (OHC0) and those whose mother had OHC experience (OHC1). However, having ever had contact with the police – being moved on, stopped and questioned, let off with a warning, been arrested and taken to a police station, formally cautioned, or found guilty by a court – was more prevalent among those with direct OHC experience in their own childhood or adolescence (OHC2) (See Table A8.2 for details).

Table 8.3: Victim of misconduct or crime and police contact by mother OHC experience (MCS)

	Mother No OHC	Mother OHC
	Proportion	Proportion
Victim of misconduct/crime: any	0.63	0.69
Victim of misconduct/crime: someone insulted you	0.41	**0.52**
Victim of misconduct/crime: spread gossip	0.40	0.42
Victim of misconduct/crime: been physically attacked	0.19	0.23
Victim of misconduct/crime: hit you	0.02	0.02
Victim of misconduct/crime: stolen from you	0.08	0.13
Victim of misconduct/crime: harrassed you	0.16	0.20
Victim of misconduct/crime: sent pictures	0.06	0.11
Victim of misconduct/crime: unwelcome sex attention	0.13	0.14
Victim of misconduct/crime: assaulted you	0.02	0.02
Police contact: stopped and questioned	0.26	0.34
Police contact: cautioned	0.09	**0.23**
Police contact: arrested	0.01	0.01
N(100%)	*18,505*	*305*

Note: Bold indicates differences significant: p<.05

Key messages

Existing research (detailed earlier in the Chapter) has highlighted the over-representation of care leavers in the criminal justice system. This finding is confirmed for care leavers in the 1970 cohort, who experienced a greater risk of police contact including arrests and being found guilty of a crime in court. We do however not find increased police contact among the adult children of mothers with OHC experience in BCS70 at age 30. Among the teenage children of mothers with OHC experience in MCS however, we find an increased risk of being cautioned by the police as well as substance use (smoking and cannabis use), and being verbally insulted even after controlling for individual and family background characteristics. However, there was not a higher risk of a pregnancy being reported by the teenage daughters of mothers with OHC experience in the MCS cohort.

Our findings thus suggest that while in BCS70 the adult children of mothers with OHC experience at age 30 are not at an increased risk of having had contact with the police, this might be different for teenage children of mothers with OHC experience. There might be underlying maturation processes with the risk for engagement with the justice system decreasing over time. It has to be kept in mind though that the question was about having ever been in contact with the police, not current contact, and the findings could reflect that people tend to not remember or misreport negative events that occurred earlier in their life when asked retrospectively. However, based on the data there is justifiable reasons to worry about the psycho-social adjustment of children of care leavers today - especially in the light of the increased risk for contact with the police, substance use and experiencing verbal insults among the younger generation, as well as the raised mental health problems that we have described in Chapter 7.

Chapter 9:
The factors and processes that promote positive adjustment among mothers with OHC experience and their children

Here we draw on the sample of MCS mothers with OHC experience to assess heterogeneity in adjustment after leaving care, the role of care experience in predicting differences in adjustment, and associated consequences for the second generation, their children.

Findings have been submitted to an academic journal.

Background

The transition to adulthood is a most challenging period for young people, in particular for those with OHC experience. It has been argued that care leavers experience a more accelerated and compressed transition to adult roles (Stein, 2006). Key developmental milestones, such as completing education, entering the labour market, establishing caring relationships, and the move into independent living are often completed at a faster pace compared to young people in the general population (Gypen et al., 2017; Stein, 2006). Moreover, care leavers are expected to undertake their journey to adulthood, from restricted to full citizenship, far younger and in far less time than their peers (Lister, 1998; Stein, 2005). The discussion of adult adjustment of care leavers is dominated by the assumption of negative outcomes, in particular regarding low education, problematic post-16 transitions, employment, income, housing, health and wellbeing (Cameron et al., 2018; Dregan et al., 2011a; Dregan et al., 2011b; Sariaslan et al., 2022; Viner & Taylor, 2005). However, not all care leavers show negative outcomes as they age-out of the child welfare system. There is increasing evidence to suggest heterogeneity in experience, as some care leavers succeed to beat the odds and lead reasonable well-adjusted lives as adults, demonstrating resilience in the face of adversity (Daining & DePanfilis, 2007; Lou et al., 2018; Nunez et al., 2022; Shpiegel, 2016; Zabern & Bouteyre, 2018), including some evidence from large scale data (Brännström et al., 2017; Shpiegel & Ocasio, 2015; Shpiegel et al., 2020; Shpiegel et al., 2022). And as we have shown in this research, many children of care leavers do not fail to achieve, suggesting that there is considerable discontinuity in the experience of intergenerational transmission of disadvantage.

Asking if we can identify distinct groups of care leavers with children who show relative positive adjustment to the demands of adult life we adopted a person-centred approach to identify distinct subgroups of care leavers who became mothers. Positive adjustment in the context of significant adversity or trauma is defined not by outstanding achievements, but in meeting key developmental tasks (Luthar et al., 2000; Masten,

2018), such as completing full-time education with a qualification enabling a smooth transition to the labour market, establishing a committed relationship, finding an appropriate place to live, and being emotionally stable. We thus adopted a multi-dimensional conceptualisation of resilience, to consider adjustment across different domains including education, employment, housing, and mental health indicators. Previous studies that have applied person-centred approaches to study heterogeneity in the experiences of care leavers (Brännström et al., 2017; Courtney et al., 2012; Keller et al., 2007; Miller et al., 2017; Shpiegel et al., 2020; Shpiegel & Ocasio, 2015; Yates & Grey, 2012), as well as care leavers who became parents (Eastman & Putnam-Hornstein, 2019). Shpiegel et al. (2020) identified different groups of care leavers who demonstrated effective adjustment across multiple domains, those who did well in distinct domains (such as education or health), or who showed adjustment problems across domains. However, this evidence is mostly based on data from specific community samples, youth leaving foster care or young mothers up to the age of 24 and not from national representative samples including those with different types of OHC experience. There is also no prior evidence on how variations in adjustment among care leavers affect their children of care leavers coming of age. This is the evidence gap that we address here.

Analytic strategy

The analytic sample comprises of the n=305 MCS mothers who reported to have experienced OHC before the age of 17 and their children at age 17. We examine a) heterogeneity in the adjustment of care leavers who became mothers (G1) using latent class analysis (LCA), a data-reduction technique similar to factor analysis (Vermunt & Magidson, 2003); b) whether different adjustment patterns in G1 are predicted by the type and duration of care; and c) the associations between different adjustment patterns of care leavers who became mothers (G1) and adjustment of their children (G2) at age 17. When examining child outcomes, we focus on education and mental health and use regression analysis and run separate models to show a) the unadjusted relationship with mother OHC sub-groups and b) how this association changes when controlling for the teenager's sex, age and ethnicity (adjusted models). We adjust for sex as girls perform better than boys in GCSE attainment (Smithers, 2014; DfE, 2022c) and exhibit more depressive and emotional wellbeing problems (Patalay & Fitzsimons, 2018). We adjust for ethnicity of the child which can be different from that of the mother (e.g., mixed ethnic background). For ease of interpretation, we report predicted probabilities from both the unadjusted and adjusted logistic models (Mood, 2010; Breen et al., 2018). Given the relatively small overall sample size (n=305), we additionally report difference in outcomes occurring by chance at the 10% level of significance (p<.1).

Findings

Adjustment of care leavers with children (G1)

We ran a latent class analysis (LCA) across a range of adjustment indicators measured in the very early years of their child's life (age 9 months and 3 years) such as educational attainment, employment, finance, housing, physical and mental health and identified three distinct groups of care-experienced mothers (See Table A9.1 for LCA model fit statistics). The three groups included 27% of mothers who reported relatively positive adult adjustment across multiple domains (resilient mothers); a group comprising mainly impoverished mothers (39%) in receipt of state benefits, who lived in a workless household, in rented accommodation and in deprived areas; and a group of impoverished and distressed mothers (34%) with adjustment problems across multiple domains including socioeconomic problems as well as relatively high levels of mental health problems who are experiencing more chaotic home lives (See Table A9.2).

Notably, the adjustment of the resilient group exceeded in some respects even that of the general population sample. For example, among the resilient group just 5% lived in a workless household, 21% had no or low-level qualifications and 23% had never breastfed their child. Comparable figures in the general population sample without OHC experience were 18%, 23% and 29% respectively. However, the resilient group had higher levels of diagnosed depression or anxiety (40% versus 29%), suggesting long-term scarring of the early traumatic experience.

Predicting resilience of care leavers by the type and duration of their care experience

Table 9.1 suggests that membership in the resilient mothers' group compared to impoverished mothers is associated with having been in foster care instead of residential home care and tendentially had experienced a longer placement (5+ years) compared to other

Table 9.1: Predictors of group membership: Type and duration of OHC experience (proportions: [90% CIs])

	Overall OHC	Resilient Mothers	Impoverished Mothers	Distressed Mothers
Type and duration of OHC experience				
Care home	.45 [.40,.50]	.34 [.24,.43]	**.52** [.44,.61]	.48 [.39,.58]
Foster care	.55 [.50,.60]	.66 [.57,.76]	**.48** [.39,.56]	.52 [.44,.61]
Duration: < 1 year	.26 [.21,.31]	.28 [.17,.38]	.28 [.20,.36]	.23 [.14,.32]
Duration: >1 <5 years	.45 [.40,.51]	.37 [.27,.48]	.48 [.39,.57]	.51 [.42,.59]
Duration: 5+ years	.28 [.24,.33]	.35 [.25,.45]	.24 [.18,.30]	.26 [.19,.34]
N	***305***	***83***	***119***	***103***

Note: Bold indicates significantly different (p<1) from resilient mothers

mothers. Running a multinomial logistic regression analysis showed that impoverished single mothers and distressed mothers were both significantly less likely (p<.1) than resilient mothers to have been in foster care when placement length was also accounted for (see Table A9.3).

Adjustment of children of mothers with OHC experience (G2)

We have shown (Chapter 5) that fewer children of care leavers achieved 5+ 'good grade' GCSE exam passes including English language and Maths or aspired to go to university – although these differences could be explained by the socioeconomic resources available to their parents. Are there any differences in the children's educational and psycho-social adjustment by the level of their mother's adjustment? Table 9.2 shows the results of a multivariate logistic regression analysis, using the 'resilient mother' group as the reference group. The findings suggest that the children of resilient mothers with OHC experience were more likely than their peers with impoverished (and tendentially also distressed) mothers to achieve 5+ grade 4-9 GCSEs. More than half of the children of resilient mothers' report having 5+ good GCSE passes (54%) and expect to go to university (52%), putting them more or less on par with their peers in the general population sample.

Regarding their mental health outcomes, there were however no significant differences between the teenagers by maternal OHC experience. The teenage children of resilient care leaver mothers report similar levels of mental health problems and distress as the children of impoverished and distressed care leaver mothers. Thus, the adjustment in one domain (educational attainment) does not necessarily spill over into other domains, highlighting the need to adopt a multi-dimensional conceptualisation of resilience. Moreover, it has to be kept in mind that the group of resilient mothers also showed relative high levels of diagnosed depression and anxiety, pointing to the intergenerational transmission of emotional trauma.

Table 9.2: Intergenerational transmission of disadvantage: outcomes at age 17 by mother OHC (margins: [90% CIs])

	Model 1 Unadjusted margins			Model 2 Adjusted margins		
	Resilient Mothers	Impoverished Mothers	Distressed Mothers	Resilient Mothers	Impoverished Mothers	Distressed Mothers
Five+ good grade GCSE	0.54 [.41,.66]	**0.30** [.20,.40]	**0.29** [.18,.41]	0.53 [.40,.66]	**0.29** [.19,.39]	0.29 [.17,.42]
How likely go to university: 0-100%	51.57 [43.35,59.79]	45.49 [37.13,53.85]	39.34 [29.52,49.15]	50.89 [43.07,58.72]	45.24 [36.99,53.49]	40.26 [30.46,50.05]
13+ Kessler: CM	0.30 [.19,.41]	0.26 [.17,.36]	0.26 [.14,.38]	0.30 [.18,.41]	0.26 [.16,.35]	0.25 [.13,.37]
Diagnosed depression	0.20 [.10,.30]	0.21 [.13,.30]	0.22 [.12,.32]	0.19 [.09,.29]	0.20 [.12,.29]	0.21 [.11,.31]
Currently/ever treated for depression	0.11 [.05,.18]	0.07 [.02,.12]	0.06 [.02,.10]	0.11 [.05,.18]	0.07 [.02,.11]	0.06 [.02,.10]
Self-harmed: any	0.43 [.31,.55]	0.36 [.26,.46]	0.36 [.24,.47]	0.43 [.31,.55]	0.36 [.25,.47]	0.34 [.23,.46]
Attempted suicide	0.14 [.05,.22]	0.17 [.08,.26]	0.18 [.08,.28]	0.13 [.05,.21]	0.16 [.07,.26]	0.17 [.07,.27]
N(100%)	***83***	***119***	***103***	***83***	***119***	***103***

Note: Bold indicates predicted probabilities significantly different (p<.1) from resilient mothers

Key messages

The findings reported here highlight the importance of considering multiple dimensions of adjustment, to provide a more comprehensive understanding of the multiple challenges facing care leavers and their children. Even where effective adjustment is apparent in one domain of life (such as regarding educational attainment), it might not be reflected in other domains. It is in particular the psycho-social adjustment of the children of care leavers that is of concern. The potential traumatic experiences of mothers with OHC experience can cast a long shadow and affect not only the adjustment of the care leavers themselves, but also that of their children, particularly their mental health.

However, care leavers are not a homogeneous group, and the experiences before and during placement into OHC do not necessarily have to be traumatic.

We identified resilience among care leavers who became mothers, and about a third of mothers with OHC experience report effective functioning across domains. Resilience was predicted by the type of care they experienced in their childhood, emphasising the importance of providing high quality, stable placements within a family context (Courtney, 2007; Dregan & Gulliford, 2012; Stein, 2006; Yates & Grey, 2012) as well as extending the support to care leavers into the adult years (Courtney et al., 2020), enabling them to integrate into society through institutional support structures facilitating education participation (and life-long learning), employment, and housing. Most crucially, there is a vital need for effective health care provision, including interventions addressing mental health issues and the emotional needs of both care leavers and their children.

Chapter 10: Conclusions and recommendations

Conclusions

This study has highlighted the multiple challenges facing care leavers and their children. Our findings provide robust support for the call to grant protected characteristic status for care experience in order to help eliminate the disadvantages, stigma and prejudice often encountered by care-experienced young adults and their families (Mannay et al., 2017; Roberts, 2021). This extremely vulnerable group of parents and children should be – and have a right to be – better cared for, so that they can improve their own and their children's future outcomes.

The findings provide first evidence on the multifaceted intergenerational transmission of disadvantage associated with OHC, showing that OHC experience not only affects the adjustment of care leavers, but also that of their children. In line with other research (e.g. Murray et al., 2020a; Sacker et al., 2020a), the findings highlight the importance of high quality and stable care provision within a family context, and the need for integrated service provision to address the complex needs of care leavers, especially those with children, before problems start to escalate and to prevent the vicious cycle of intergenerational transmitted inequality.

In their childhood care leavers have faced higher levels of parental instability. We have shown in the MCS that care leavers who became mothers who in their own childhood had encountered stable care in a foster family were more likely to show effective functioning in their adult years. This in turn was beneficial for their children, emphasising the importance of providing high quality, stable placements within a family context for children in care (Courtney, 2007; Dregan & Gulliford, 2012; Stein, 2006; Yates & Grey, 2012; MacAlister, 2022).

Our research has also shown that mothers with OHC experience are less likely than other mothers to be in contact with their own mother or to receive any help from a parent during their child's early years. Given the centrality of childhood experiences of parenting to one's own parenting behaviours (Van Ijzendoorn, 1992), it is not surprising that OHC mothers struggle with their perceived parenting competence in their child's early years, underscoring the importance of supporting them during this potentially vulnerable time. Yet, although mothers with care experience are less likely to perceive themselves as a 'good' mother, they showed all the behaviours necessary to provide a safe, stable and caring family environment for their children. They thus might need more reassurance and confirmation of being a 'good enough' mother.

A major hindrance for care leavers to function effectively is their previous experience of inconsistent care provision, as well as the disadvantaging living conditions they encountered both in their family of origin and their own adult lives. Moreover, the fact that many mothers with OHC experience, who grew up under the guardianship of the state, have not completed their basic education and left school with low levels of qualifications, is a key area policy can address. A key characteristic that differentiated our sample of resilient mothers from other OHC experienced mothers was that far more of the resilient mothers had gained qualifications and were part of a working household. Support for education and employment are thus crucial measures, also facilitating the educational attainment and transition into employment among their own children. Enabling care leavers to participate in education and to gain relevant qualifications is a key leverage to improve their lives and that of their children.

This also includes support for second changes, for lifelong learning and return to education in later life. In support of previous studies (e.g., Brady & Gilligan, 2019; Harrison, 2019; Harrison, 2023), we have also shown that many adults, including those with indirect and direct OHC experience, continue to gain qualifications into mid-adulthood. Given the crucial importance of education attainment for successful participation in the labour market, addressing the educational needs of children in state care can only improve their chances of transitioning into stable employment within the labour market and minimise the lifetime of labour market disadvantage observed here among the men and women in the 1970 cohort – for both themselves and their children.

Encouragingly, when looking into post-16 transitions, we found in MCS that the children of mothers with OHC experience demonstrated resilience and optimism for their future, as they have similar education and occupational aspirations and are as likely as their peers to be in education or training by age 18. Hopes and expectations for the future are an important motor that can drive disadvantaged individuals to persist and succeed. Crucially, support for education should not only focus on the completion of education in adolescence and young adulthood, but on encouraging lifelong learning and upskilling.

However, our findings suggest that adjustment in one domain is not necessarily reflected in positive adjustment across other domains, highlighting the importance of considering multiple dimensions of adjustment to gain a more comprehensive understanding of the challenges facing care leavers and their children. Research based on the younger MCS cohort illustrates the long shadow that maternal OHC experience can cast on the psycho-social adjustment of their teenage children. While the children of mothers with OHC experience did ok regarding their educational attainment and progression, we found a greater risk across a range of mental health problems compared to teenagers whose mothers had no OHC experience. Even when restricting the analyses to socioeconomically disadvantaged families and accounting for their own characteristics and their mother's mental distress, the teenagers of mothers with OHC experience still reported higher levels of hyperactivity, depression diagnosed by a medical doctor and more had attempted suicide. Neither socioeconomic disadvantage, teenage characteristics or maternal mental distress can fully explain the mental health problems of the teenage children of care leavers. Indeed, the high rates of poor mental health persisted in the teenage children of resilient OHC experienced mothers.

The evidence gathered from the 1970 cohort during a major health pandemic confirms existing evidence that mental health inequalities associated with OHC can continue into midlife and underlines the case of extending the support to care leavers into the adult years (Parsons & Schoon, 2022). However, in BCS70 there was also encouraging evidence of discontinuity in experience, as the mental health of grown-up children of care leavers appeared to be less affected during the Covid-19 pandemic than those with direct OHC experience and emerged to be relatively well adjusted by age 50 (see Appendix A7.6). Although the findings could also point to potential ceiling effects.

Regarding anti-social and risky behaviours previous research had highlighted the over-representation of care leavers in the criminal justice system (Kennedy, 2013; McMahon & Fields, 2015; Crawford et al., 2018; Yoon et al., 2018; ONS, 2022) and recent figures for children born in England in 1999, show that those with OHC experience were nine times more likely to have received a youth justice caution or conviction compared to their non OHC experienced peers: 26% to 3% (Hunter et al., 2023). In our study this over-representation was confirmed for care leavers in the 1970 cohort where we found an increased risk of police contact including arrests and being found guilty of a crime in court by age 30 among the care leavers – but not among the adult children of mothers with OHC experience. There was thus no evidence that the risk of getting into contact with the justice system is transmitted across generations for this older cohort by age 46. However, in the younger MCS cohort, we find that the children of mothers with OHC experience show a higher risk for substance misuse, being a victim of crime and being cautioned by the police, illustrating the continued disadvantage of OHC experience into the 2nd generation. MCS teenagers of mothers with OHC experience were more likely to use cannabis, to have been verbally insulted and cautioned by the police, However, in contrast to research based on care leavers

themselves (Roberts et al., 2017; Svoboda, et al., 2012; Knight, et al., 2006), the reporting of a pregnancy was not higher among teenage girls of mothers with OHC experience in the MCS cohort. Further research when later data becomes available will help to establish these findings and provide evidence on whether adjustment problems during adolescence continue into early adulthood, or whether there is evidence of maturation processes, of moving away or desisting from anti-social or risky behaviours.

Generally, the assumption of negative outcomes dominates the discussion regarding adult adjustment of care leavers, yet not all care leavers show negative outcomes as they age-out of the child welfare system. There is increasing evidence to suggest heterogeneity in experience, as some care leavers succeed to beat the odds and lead reasonable well-adjusted lives as adults, demonstrating resilience in the face of adversity. Moreover, as we have shown here, a considerable proportion of the children of care leavers achieve to the same level as their peers without OHC experience, suggesting that there is considerable discontinuity in the experience of OHC and the intergenerational transmission of associated disadvantage.

Policy recommendations

In 2013 the UK Government published the Care Leaver Strategy (HM Government, 2013) identifying key areas where today's care leavers needed better, more joined up and on-going support: education, employment, finance, health, housing, and access to the justice system. This, together with the 'Putting Children First' and 'Keep on Caring' initiatives form the foundation of current policy to address the disadvantages care leavers experience across domains (DfE, 2016; HM Government, 2016). Support for care leavers needs to provide an enduring safety net, including the extension of the eligibility for state support up to age 21 years (Courtney et al., 2020) and beyond. Each nation in the UK has a slightly different definition of a looked after child and follows its own legislation, policy and guidance. A child stops being looked after by the state when they are adopted, return home or turn 18. However local authorities in all the nations of the UK are required to support children leaving care at 18 until they are at least 21 (which may involve them continuing to live with their foster family).

Apart from raising the educational attainment of children in care, relevant measures to better address the education experiences of children in state care (House of Commons Education Committee, 2022), include improving their educational provision, and extending statutory support beyond age 16 to enable care leavers to do well at all stages of education, including the participation in life-long learning and return to education at later ages. Effective measures need to be in place to enable young people with care experience, and young mothers who had left school early due to their traumatic experiences at home, to return to education, to acquire appropriate qualification, and facilitate their efforts for up- and reskilling.

The provision of adequate housing to care leavers and young mothers with OHC experience is another vital support structure that must be put into place. Without appropriate or secure housing, the competences of parents are challenged, affecting parental health and wellbeing as well as their children's healthy development. The wider stresses associated with socioeconomic disadvantage and poor housing conditions were clear to see among the OHC experienced mothers in MCS, who were more likely to live in a noisy, wrought, damp home where abuse (characterised here by use of force by a partner) is more likely to be reported. Add this toxic mix to prior experience of the care system, it is not surprising that poor physical and mental health and high levels of diagnosed depression exist among these care-experienced mothers.

The high levels of poor mental health among care leavers and children of care leavers clearly highlight the need to pay special attention to the emotional scars associated with OHC experience which can transmit to the next generation. The evaluation of the government initiative to better assess the mental health needs of children in care is welcomed, in particular the need for assessments to be consistently implemented and properly resourced if the wellbeing of the children is to be improved (DfE, 2021). Not withstanding, every effort should be made to minimise the factors that contribute to the need for a child having to go into care, including conditions of physical, emotional and medical neglect and abuse or abandonment. The mental wellbeing of care leavers and children of care leavers is an area of research that urgently needs further attention if we are

to uncover the protective factors that will help minimise the impact that poor mental health can have across all domains of life including economic activity, social participation and support, good parenting practices.

Regarding other initiatives in support of care leavers, we also highlight the Basic Income Pilot that was launched in Wales in 2022 (Welsh Government, 2022). The pilot is offering a degree of financial security to care leavers, in recognition of the fact that care experienced people are disproportionately disadvantaged compared to their peers. Eligible care leavers will receive £1,280 (after tax) every month to spend on food, clothing and other things they may need and will receive this money for two years following their 18th birthday. Furthermore, the Scottish Government have announced an extension of 1140 free hours of early learning and childcare eligibility to two-year-olds with a care experienced parent. Eligibility for all looked after/care experienced children aged two or older has always been a feature of the policy, but children of care experienced parents were more recently made eligible (Scottish Government, 2021). There are thus a number of relevant measures being tested, that hopefully serve to provide a more effective and lasting scaffolding for care leavers and their children.

Overall, our study has highlighted the complex needs and challenges faced by care leavers and their children and provided a better understanding of the factors and processes linking parental OHC experience to different dimensions of psycho-social adjustment in the second generation. Although the mothers with OHC experience in this research experienced care systems and policies covering the mid-latter half of the 20th century, the findings reported here are just as pertinent for stopping the intergenerational transmission of disadvantage among more recent care leavers and their (future) children. Future research should aim to examine the processes enabling those with OHC experience and their children to overcome the psycho-social scarring, to improve their mental health and escape the vicious cycle to lead a satisfactory and rewarding life after a problematic childhood.

Project Outputs

Journal articles (published)

Parsons, S. & Schoon, I. (2022). Does the trauma associated with out-of-home care transmit across generations? Evidence from the 1970 British Cohort Study during a major health pandemic. *BMJ Open*;**12**:e056736. (AP1)

Parsons, S., Fitzsimons, E. & Schoon, I. (2023). Intergenerational transmission of educational disadvantage: Education progression of children of care leavers compared to a general population sample, *British Educational Research Journal*, 00:1–25. (AP2)

Journal articles (submitted)

Fitzsimons, E., Parsons, S. & Schoon, I. The relationship between maternal care experience and early child development: Evidence from the UK. *Longitudinal and Lifecourse Studies*.

Schoon, I. & Parsons, S. Transgenerational Transmission of Trauma. Variations in the Experiences of Care Leavers who Became Mothers and Adjustment of their Children. *Developmental Psychology*.

Journal articles (in preparation)

Schoon, I. & Parsons, S. The mental health of children of mothers who experienced out-of-home care: Evidence from the UK Millennium Cohort Study

Working papers (published)

Parsons, S. & Schoon, I. (2021). Descriptive profile of mothers by their experience of out-of-home care in childhood: evidence from the UK Millennium Cohort Study. Quantitative Social Science Working Paper No. 21-34. (WP1)

Parsons, S. Fitzsimons, E. & Schoon, I. (2022a). Intergenerational transmission of educational disadvantage: Educational progression of children of care leavers compared to other children in a general population sample. CLS Working Paper 2022/7. London: UCL Centre for Longitudinal Studies. (WP2)

Parsons, S., Schoon, I. & Fitzsimons, E. (2022b). Evidence from the UK Millennium Cohort Study. Teenage children of mothers who experienced out-of-home care: How are they doing? Quantitative Social Science Working Paper No. 22-08. (WP3)

Fitzsimons, E., Parsons, S. & Schoon, I. (2023). The relationship between maternal care experience and early child development: Evidence from the UK. CLS Working Paper 2023/2. London: UCL Centre for Longitudinal Studies. (WP4)

Parsons, S. & Schoon, I. (2023). Care leavers and children of care-leavers: employment, education and training (EET) disadvantages over the lifecourse. Working Paper 2023/3. London: UCL Centre for Longitudinal Studies. (WP5)

Briefing papers (published)

Resources available to mothers who experienced out-of-home care in childhood – Evidence from the UK Millennium Cohort Study (17 March 2022) (BP1)

Mental health of at-risk teenagers: Evidence from children of care leavers and those from socially disadvantaged families in the Millennium Cohort Study (26 June 2023) (BP2)

Briefing papers (in preparation)

EET outcomes

Risky behaviours and police contact

Poster

A project poster was designed for display at the Society for Longitudinal & Lifecourse Studies (SLLS) conference in 2021, but not used as the conference was online due to the Covid-19 pandemic. The poster was added to the project webpage at CLS and sent on to Nuffield. Available here.

Blogs (published)

Does educational disadvantage persist among children of care leavers? (6 September 2022)

Blogs (in preparation)

Mental health of teenage children of care leavers

EET disadvantages over the lifecourse

Invited Talks

Schoon, I. *Supporting Care Leavers and their Families: An Intergenerational Perspective*. Keynote presentation at the BPS Division of Educational and Child Psychologists conference, Nottingham 12-13th January 2023.

Conference presentations

Parsons, S. (2021). *Care Leavers and their children during a major Pandemic*. Presentation at the Society for Longitudinal & Lifecourse Studies (SLLS), International Online Conference, 20 – 22 September 2021.

Schoon, I. *Intergenerational Transmission of Trauma: Children of Care Leavers at Age 50.* Presentation at International Society for the Study of Behavioral Development Conference, Rhodes, Greece 19 – 23 June 2022.

Parsons, S. *Care leavers and their children: Intergenerational transmission of educational disadvantage*. Presentation at British Education Research Association (BERA) Conference, Liverpool 5 – 6 September 2022.

Schoon, I. *Educational progression of children of care leavers compared to other children in a general population sample*. Presentation at the Society for Longitudinal & Lifecourse Studies (SLLS) Conference, Cleveland, USA 23 – 25 October 2022.

Schoon, I. (2023). *Supporting care leavers and their families: An intergenerational perspective.* Presentation at the British Psychological Society DECP Conference in Nottingham, 12-13 January 2023.

Parsons, S. *Care Leavers and their Children: An intergenerational perspective*. Presentation at the REES Centre, online 28 March 2023.

Parsons, S. *Intergenerational Transmission of Trauma: Psychosocial adjustment of the teenage children of care leaver mothers*. Presentation at the UCL Centre for Longitudinal Studies 'Children of the Noughties' Conference, London 12 – 13 July 2023.

Parsons, S. *Intergenerational Transmission of Disadvantage: Educational and Psycho-social Challenges facing the children of care leavers*. Presentation at British Education Research Association (BERA) Conference, Birmingham 12 – 14 September 2023.

Parsons, S. *Intergenerational Transmission of Trauma: Psychosocial adjustment of the children of care leavers at age 17*. Presentation at the Society for Longitudinal & Lifecourse Studies (SLLS) Conference, Munich, Germany 9 – 11 October 2023.

Capacity building

Parsons, S. (& Henderson, M.) *Exploring Social Work, Social Care and Young Carers in Longitudinal Cohort Studies*. Presentation at Children's Social Care Research and Development Centre (CASCADE), School of Social Sciences, Cardiff University, 22 September 2021.

Parsons, S., Schoon, I., Fitzsimons, E. UCL Masters students gained 'real life' research experience under the Voluntary Research Scheme (VRS), March – July 2021; March – July 2022.

Schoon, I. *Supporting Care Leavers and their Children: An Intergenerational Perspective*. Presentation to students at the IoE Doctorate in Educational Psychology Seminar, 22 June 2023.

Parsons, S. (& Henderson, M.). *Out-of-Home-Care in the British Cohort Studies: measurement, research and access*. Webinar exploring the opportunities for OHC research using British cohort studies and showcasing project findings, online 20 September 2023.

Evidence submissions

WP1 and BP1 were sent to members of the all-party parliamentary group (APPG) for Looked After Children and Care Leavers. Although the call for evidence closed in July 2021, the work of the Spotlight Inquiry continued into 2022. The final report is available here.

WP1 was submitted to the House of Lords Select Committee on the Children and Families Act 2014. The call for evidence is now closed and the report was published December 2022 (available here).

WP2 was circulated to the UK Parliament's Education Committee who published a report on the educational poverty of children in residential care in 2022 (available here).

Other dissemination activities

WP1 and WP2 sent to DfE colleagues following introduction by Advisory Board Member (May 2022; December 2022). DfE contacts: Donna Brown, Head of Strategy and Engagement; Daniel Foster, Head of Kinship & Alternatives to Care Policy; Shazia Hussain, Head of review team of the Independent Review of Children's Social Care.

WP1 and WP2 sent to Tim Leunig, Chief Scientific Adviser at the Department for Education, previously in the Treasury department

Knowledge gaining activities

APPG for Looked After Children and Care Leavers. Presentations to reflect on the findings of their final report and the ambitions of the Independent Review of Children's Social Care report to reset children's social care system, online 19 October 2022.

Assisting care leavers: the role and value of extended care. Presentation by Professor Philip Mendes on Australia's experiences of implementing extended care throughout Australia, OECD online conference, 15 November 2022.

The Supporting the Education of Children in Care Conference, online conference, Government Events, 7 December 2022.

Meeting with Yvonne Francis and colleagues, Educational Psychologist Leicester City Council, 17 February 2023.

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