Appendix

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

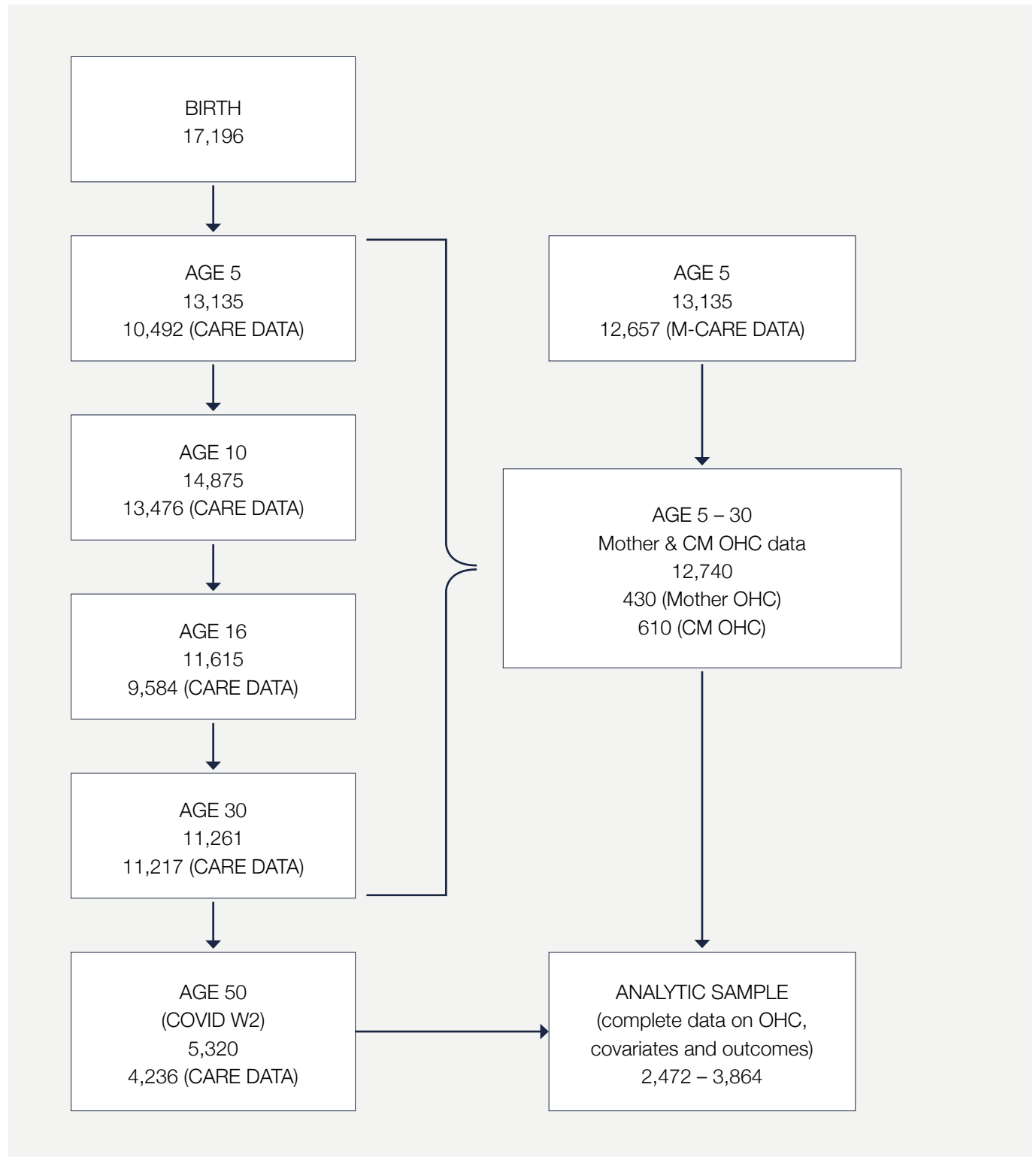Sam Parsons | Ingrid Schoon | Emla Fitzsimons
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Nuffield Foundation

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Contents

Appendix A2

Appendix A2.1: BCS70: COVID-19 sample size

Flow of study members through phases of data collection and the analytic sample

```
┌─────────────────────┐
│       BIRTH         │
│      17,196         │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐         ┌─────────────────────┐
│       AGE 5         │         │       AGE 5         │
│      13,135         │         │      13,135         │
│  10,492 (CARE DATA) │         │ 12,657 (M-CARE DATA)│
└─────────────────────┘         └─────────────────────┘
          │                                │
          ▼                                ▼
┌─────────────────────┐         ┌─────────────────────┐
│       AGE 10        │         │     AGE 5 – 30      │
│      14,875         │         │  Mother & CM OHC    │
│  13,476 (CARE DATA) │         │       data          │
└─────────────────────┘         │      12,740         │
          │                     │   430 (Mother OHC)  │
          ▼                     │    610 (CM OHC)     │
┌─────────────────────┐         └─────────────────────┘
│       AGE 16        │                    │
│      11,615         │                    │
│   9,584 (CARE DATA) │                    │
└─────────────────────┘                    │
          │                                │
          ▼                                │
┌─────────────────────┐                    │
│       AGE 30        │                    │
│      11,261         │                    │
│  11,217 (CARE DATA) │                    │
└─────────────────────┘                    │
          │                                ▼
          ▼                     ┌─────────────────────┐
┌─────────────────────┐         │   ANALYTIC SAMPLE   │
│       AGE 50        │         │ (complete data on   │
│     (COVID W2)      │────────▶│ OHC, covariates and │
│      5,320          │         │     outcomes)       │
│  4,236 (CARE DATA)  │         │   2,472 – 3,864     │
└─────────────────────┘         └─────────────────────┘
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Appendix A2.2: Out-of-home care (OHC) experience question to cohort child

Q. Can I just check, since you were (age at last interview) have you lived in any of the places on this card away from your parents?

1. Local authority children's home
2. Local authority foster parents
3. Voluntary society children's home
4. Voluntary society foster parents
5. Living with relatives
6. Prison/Young Offenders Institute/Borstal
7. Some other place (PLEASE SPECIFY)
8. Children's home- not sure which type
9. Foster parents - not sure which type
10. No, none of these places

Appendix A2.3: Fathers with OHC experience

Historically in UK longitudinal studies, information on the child and parent has been obtained overwhelmingly from the child's mother. In the MCS surveys, information has been obtained from both the mother and father, when present in the household. In the first MCS survey when the cohort child was age 9-months, 82.4% of interviews were with families where the parents were both biological parents, 17.1% with single mothers, 0.5% other families/respondents. The 'main respondent' interview was overwhelmingly completed by the child's biological mother (99.8%). The 'partner' interview was overwhelmingly completed by the child's biological father (99.6%). However, as nearly 1 in 5 (17.1%) main respondents were single mothers, we only have information on the father if they were part of a two-parent household. Table A2.3a shows that fathers with OHC experience are more disadvantaged compared to fathers with no OHC experience across a range of socioeconomic and psychosocial outcomes – in a very

similar way as we found when profiling mothers by OHC experience in Chapter 3. However, as the partner interview is much shorter than the main respondent interview, we could not provide such a detailed picture of their lives. In terms of early child outcomes, when comparing outcomes within our sample of fathers, children of fathers with OHC experience also had higher behaviour problems and lower cognitive scores as we found when comparing child outcomes by mother OHC experience in Chapter 4. However, when we compared child outcomes by no parent OHC experience, mother OHC experience or father OHC experience, the raw associations showed that negative child outcomes were overwhelmingly associated with mother OHC experience (Table A2.3b). We felt the data on mothers provided a much richer and 'true' account of how OHC experience touched their own and the life of their children as we only know about fathers with OHC experience in a two-parent intact family.

Table A2.3a: Descriptive characteristics by father OHC experience

	Father			Father	
	No OHC	OHC		No OHC	OHC
Characteristics			**Child Outcomes age 3 (means)**		
Age at CM birth (mean)	32.2	30.9	SDQ: Emotional	1.3	1.7
BME	14	11	SDQ: Conduct	2.7	**3.3**
Only English lang spoken	89	98	SDQ: Hyperactivity	3.8	**4.8**
No qualifications	11	**28**	SDQ: Peer	1.5	1.7
Degree+	35	**18**			
Rented home	29	**63**	BAS: Naming Vocabulary	73.9	**69.5**
Workless household	7	**33**	Bracken School Readiness	56.5	56.6
Overcrowded home	25	**47**	Bracken: Delayed (%)	14.1	**27.3**
Fair/poor health	13	**37**			
Longstanding illness	7	**24**			
Malaise (9 mths) (mean)	1.3	**2.1**			
Kessler (3) (mean)	3.0	**3.7**			
Smoker	33	**65**			
N(100%)	*15,496*	*140*		*15,496*	*140*

Note: Bold indicates probabilities significantly different by OHC experience at p<.05

Table A2.3b: OLS regressions unadjusted coefficients (ref: no parent OHC)

Child Outcomes	Mother OHC	Father OHC
SDQ: Emotional (3)	.44**	.21
SDQ: Conduct (3)	1.00***	.40^
SDQ: Hyperactivity (3)	.77***	.78**
SDQ: Peer (3)	.36**	.12
BAS: Naming Vocabulary (3)	-2.9*	-3.4^
Bracken School Readiness (3)	-.38***	.20

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

Appendix A2.4: MCS sample living in England

Of the 18,552 families who first took part in sweep 1 across the UK, our analytic sample comprises the families who lived in England (n=11,533) and the main or partner respondent had provided information on their own OHC experience and the sex and ethnicity of the cohort child (n=11,514). In this sample, we identified n=287 cohort members with a care-experienced parent. As in all longitudinal studies, MCS suffers attrition over time, and at age 17 the response rate for the whole UK sample was 57%. In our analytic sample of families living in England, at age 17 we have information for n=138 (48%) children with a parent who had OHC experience compared to n=6091 (54%) with a parent who had no OHC experience.

Appendix A3

Appendix A3.1: Unadjusted proportions by mother OHC experience

Table A3.1a: Demographic characteristics and family status: unadjusted proportions

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S12 White	0.88	0.86-0.90	0.88	0.83-0.94
S12 Mixed	0.01	0.01-0.01	**0.05**	0.02-0.08
S12 Indian	0.02	0.01-0.03	**0.00**	0.00-0.01
S12 Pakistani/Bangladeshi	0.04	0.03-0.06	**0.01**	0.00-0.02
S12 Black / Black British	0.03	0.02-0.04	0.05	0.01-0.09
S12 Only English spoken	0.89	0.88-0.91	**0.96**	0.93-0.99
S12 No quals	0.13	0.11-0.14	**0.38**	0.32-0.44
S12 NVQ1	0.11	0.10-0.11	0.16	0.11-0.21
S12 NVQ2	0.30	0.28-0.31	0.25	0.20-0.31
S12 NVQ3	0.14	0.14-0.15	**0.08**	0.04-0.12
S12 NVQ4+	0.33	0.30-0.35	**0.13**	0.07-0.18
S12 Probs read storybook	0.06	0.05-0.08	0.11	0.07-0.16
S12 Probs reading forms	0.06	0.05-0.07	**0.17**	0.12-0.22
S12 Probs counting change	0.03	0.02-0.04	0.07	0.04-0.10
S1 Single	0.15	0.14-0.16	**0.32**	0.26-0.39
S1 Cohab	0.25	0.24-0.26	**0.36**	0.29-0.43
S1 Married	0.60	0.59-0.62	**0.32**	0.25-0.38
S2 Single	0.16	0.15-0.17	**0.30**	0.24-0.37
S2 Cohab	0.19	0.18-0.20	**0.33**	0.26-0.40
S2 Married	0.65	0.64-0.67	**0.36**	0.30-0.43
S1-S2: Change in marital status	0.16	0.16-0.17	**0.29**	0.22-0.37
S1 Partner used force	0.04	0.03-0.04	0.08	0.03-0.12
S1 Don't want to answer	0.02	0.02-0.03	**0.08**	0.04-0.13
S1 Partner used force/not answer	0.06	0.06-0.07	**0.16**	0.10-0.22
S2 Partner used force	0.04	0.04-0.05	**0.12**	0.059-0.20
S2 Don't want to answer	0.03	0.02-0.03	0.06	0.01-0.10
S2 Partner used force/not answer	0.07	0.07-0.08	**0.18**	0.10-0.27
S2 Mum: every day	0.20	0.19-0.21	**0.09**	0.05-0.13
S2 Mum: every week	0.41	0.39-0.43	**0.29**	0.22-0.36
S2 Mum: every day/week	0.61	0.59-0.63	**0.38**	0.30-0.46
S2 Mum: every/few months	0.23	0.21-0.24	0.30	0.23-0.37

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S2 Mum: year/never	0.08	0.07-0.09	**0.20**	0.15-0.26
S2 Mum: dead	0.08	0.08-0.09	0.11	0.06-0.16
S2 Dad: every day	0.11	0.10-0.11	**0.04**	0.01-0.07
S2 Dad: every week	0.33	0.31-0.34	**0.15**	0.10-0.21
S2 Dad: every day/week	0.43	0.42-0.45	**0.19**	0.13-0.25
S2 Dad: every/few months	0.25	0.24-0.26	0.22	0.15-0.28
S2 Dad: year/never	0.13	0.13-0.14	**0.33**	0.26-0.40
S2 Dad: dead	0.18	0.17-0.19	0.27	0.19-0.34
S1 Support network (mean)	12.38	12.32-12.43	**10.75**	10.32-11.18

Note: Bold indicates proportions significantly different by OHC experience at p<.05

Table A3.1b: Pregnancy and Childbirth: unadjusted proportions

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S12 Age at CM birth (mean)	28.81	28.57-29.04	**25.39**	24.56-26.22
S12 Teenage mother	0.08	0.07-0.08	**0.19**	0.15-0.24
S1 No sibling(s)	0.42	0.41-0.43	0.34	0.28-0.41
S1 Biological sibling(s)	0.45	0.44-0.46	**0.36**	0.29-0.42
S1 Other sibling(s)	0.13	0.12-0.13	**0.30**	0.24-0.36
S2 No sibling(s)	0.25	0.24-0.26	0.21	0.15-0.27
S2 Biological sibling(s)	0.62	0.61-0.63	**0.48**	0.41-0.56
S2 Other sibling(s)	0.13	0.12-0.14	**0.31**	0.25-0.37
S1 Unplanned pregnancy	0.43	0.41-0.44	**0.62**	0.55-0.69
S1 Unhappy when pregnant	0.10	0.09-0.11	**0.19**	0.13-0.24
S1 Not receive antenatal care	0.03	0.03-0.04	0.04	0.01-0.06
S1 Not attend antenatal classes	0.63	0.62-0.65	**0.74**	0.68-0.80
S12 Birthweight [kg] (mean)	3.36	3.35-3.37	**3.21**	3.15-3.28
S12 low birthweight [<2.5kg]	0.07	0.06-0.07	**0.12**	0.08-0.17
S12 Gestation [days] (mean)	275.60	275.30-275.90	274.21	272.36-276.06
S12 Never breastfed	0.29	0.27-0.31	**0.41**	0.34-0.48
S12 Breastfed 1 month	0.23	0.22-0.24	0.27	0.22-0.33
S12 Breastfed 2-3 months	0.14	0.13-0.15	0.13	0.09-0.17
S12 Breastfed >3 months	0.34	0.32-036	**0.18**	0.13-0.24

Note: Bold indicates proportions significantly different by OHC experience at p<.05

Table A3.1c: Employment and Financial Situation: unadjusted proportions

	No OHC Experience		OHC Experience	
	Proportion / 95% CIs		**Proportion / 95% CIs**	
S1 Employed	0.49	0.48-0.51	**0.23**	0.17-0.29
S1 Workless household	0.18	0.17-0.19	**0.50**	0.43-0.58
S1 No access to a car	0.15	0.14-0.16	**0.47**	0.40-0.55
S1 Receiving state benefits	0.37	0.35-0.39	**0.78**	0.72-0.85
S1 In poverty	0.30	0.29-0.32	**0.68**	0.61-0.75
S2 Employed	0.52	0.51-0.54	**0.28**	0.21-0.34
S2 Workless household	0.16	0.15-0.18	**0.46**	0.39-0.53
S2 In poverty	0.29	0.27-0.31	**0.67**	0.60-0.75
S2 Make regular savings	0.47	0.46-0.49	**0.37**	0.30-0.44
S2 No financial help parents	0.18	0.17-0.19	**0.40**	0.32-0.47

Note: Bold indicates proportions significantly different by care experience at p<.05

Table A3.1d: Housing conditions, home and local environment: unadjusted proportions

	No OHC Experience		OHC Experience	
	Proportion / 95% CIs		**Proportion / 95% CIs**	
S1 Rent home	0.38	0.36-0.39	**0.82**	0.76-0.88
S1 Overcrowded home (1+)	0.25	0.23-0.26	**0.40**	0.33-0.47
S1 Home damp	0.13	0.12-0.14	**0.28**	0.22-0.34
S1 Homeless since had child	0.01	0.01-0.01	0.04	0.01-0.06
S1 Poor quality area scale	13.94	13.81-14.08	**15.67**	15.15-16.20
S1 No places children play safely	0.35	0.33-0.38	**0.51**	0.43-0.58
S2 Home damp	0.14	0.13-0.15	**0.29**	0.23-0.36
S2 Dissatisfied home	0.10	0.09-0.11	**0.25**	0.19-0.32
S2 Dissatisfied area	0.09	0.09-0.10	**0.26**	0.19-0.32
S2 Disorganised home	0.13	0.12-0.14	**0.22**	0.16-0.28
S2 Can't hear self think at home	0.17	0.16-0.18	**0.35**	0.27-0.42
S2 Not calm atmosphere at home	0.12	0.11-0.12	0.18	0.12-0.24

Note: Bold indicates proportions significantly different by OHC experience at p<.05

Table A3.1e: Parenting style and early indicators of the mother-child relationship: unadjusted proportions

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S1 Baby crying a problem	0.07	0.06-0.07	**0.15**	0.10-0.19
S1 Parenting beliefs scale (mean)	21.60	21.55-21.64	21.24	20.95-21.52
S1 Rosenberg Self-Esteem (mean)	11.60	11.55-11.65	**10.55**	10.22-10.88
S2 Parent comp: have trouble	0.03	0.03-0.04	0.06	0.02-0.09
S2 Parent comp: average	0.38	0.37-0.39	**0.54**	0.46-0.61
S2 Parent comp: better/good	0.59	0.58-0.60	**0.41**	0.33-0.49
S2 Pianta - closeness scale (mean)	33.35	33.30-33.41	**32.24**	31.78-32.70
S2 Child-Parent Relation Scale (mean)	63.95	63.79-64.11	**60.54**	59.38-61.70
S2 Straus's Conflict Tactics Scale (mean)	20.40	20.28-20.52	**21.55**	20.72-22.38
S2 Home learning environment (mean)	25.70	25.45-25.96	24.69	23.57-25.82
S2 Never/s'times reg bedtime	0.20	0.19-0.21	**0.30**	0.24-0.37
S2 Never/s'times reg mealtime	0.09	0.08-0.09	0.10	0.05-0.15
S2 Family has lots of rules	0.31	0.29-0.32	0.29	0.22-0.36
S2 Family not many rules	0.42	0.41-0.44	0.48	0.41-0.55
S2 Rules amount varies	0.27	0.25-0.29	0.23	0.16-0.30
S2 Rules strictly enforced	0.48	0.47-0.49	0.50	0.43-0.58
S2 Rules not strictly enforced	0.25	0.23-0.26	0.25	0.19-0.31
S2 Rules - varies if enforced	0.27	0.26-0.29	0.25	0.17-0.32
S1 Not heard of Sure Start	0.73	0.71-0.75	0.67	0.60-0.74
S1 Heard, not used Sure Start	0.22	0.21-0.24	0.27	0.21-0.32
S1 Heard, used Sure Start	0.05	0.04-0.05	0.06	0.03-0.09
S1 Heard of Early Steps	0.05	0.04-0.05	0.06	0.03-0.09
S1 Used formal childcare	0.23	0.21-0.24	**0.12**	0.07-0.17
S2 Used formal childcare	0.70	0.69-0.72	**0.60**	0.52-0.67
S1 Used non-parental childcare	0.50	0.49-0.51	**0.27**	0.22-0.33
S2 Used non-parental childcare	0.76	0.75-0.77	**0.64**	0.58-0.71
S1 Used any childcare	0.59	0.58-0.61	**0.34**	0.28-0.40
S2 Used any childcare	0.78	0.77-0.80	**0.68**	0.61-0.74

Note: Bold indicates proportions significantly different by OHC experience at p<.05

Table A3.1f: Health, health behaviours and general wellbeing: unadjusted proportions

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S1 Never smoked	0.52	0.50-0.53	**0.17**	0.12-0.22
S1 Ex-smoker	0.20	0.19-0.21	**0.13**	0.08-0.18
S1 Smoker	0.22	0.21-0.23	**0.47**	0.39-0.55
S1 Smoker when pregnant	0.07	0.06-0.08	**0.23**	0.17-0.28
S2 Used recreational drugs	0.05	0.05-0.06	**0.11**	0.06-0.16
S2 Never drink alcohol	0.19	0.17-0.21	0.28	0.21-0.34
S2 Alcohol <1x month	0.19	0.18-0.20	0.23	0.17-0.30
S2 Alcohol 1-2x month	0.18	0.17-0.19	0.15	0.10-0.21
S2 Alcohol 1-2x week	0.26	0.25-0.27	0.26	0.19-0.33
S2 Alcohol 3+ days a week	0.17	0.16-0.19	**0.08**	0.03-0.12
S1 Poor/fair general health	0.16	0.16-0.17	**0.36**	0.30-0.42
S2 Poor/fair general health	0.18	0.17-0.19	**0.38**	0.30-0.45
S1 LSI	0.12	0.11-0.13	0.15	0.10-0.19
S1 LSI - limiting	0.09	0.09-0.10	**0.18**	0.13-0.23
S2 LSI	0.21	0.20-0.22	**0.36**	0.29-0.42
S1 High Malaise score	0.14	0.13-0.14	**0.31**	0.25-0.38
S2 High Kessler score	0.26	0.25-0.27	**0.48**	0.41-0.55
S2 Past diagnosed depression	0.21	0.20-0.22	**0.33**	0.26-0.39
S2 Current diagnosed depression	0.08	0.07-0.09	**0.20**	0.14-0.25
S12 Never get what want life	0.10	0.09-0.11	**0.29**	0.22-0.35
S12 Whatever do no effect life	0.09	0.09-0.10	**0.23**	0.18-0.27
S12 Problems running own life	0.06	0.05-0.06	**0.17**	0.12-0.21
S1 Low satisfaction with life	0.19	0.18-0.20	**0.43**	0.36-0.50
S2 Low satisfaction with life	0.19	0.18-0.20	**0.39**	0.31-0.47

Note: Bold indicates proportions significantly different by OHC experience at p<.05

Appendix A3.2: Predicted probabilities from regression analyses by mother OHC experience

Table A3.2a: Demographic characteristics and family status: predicted probabilities from regression analyses

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S12 No quals	0.11	0.11-0.12	**0.33**	0.27-0.39
S12 NVQ4+	0.30	0.29-0.32	**0.15**	0.09-0.21
S1 Single	0.10	0.10-0.11	0.13	0.09-0.17
S1 Married	0.63	0.62=0.64	0.53	0.44-0.63
S2 Single	0.13	0.12-0.14	0.14	0.10-0.18
S2 Married	0.68	0.67-0.70	**0.58**	0.49-0.66
S1-S2: Change in marital status	0.15	0.14-0.16	0.20	0.14-0.26
S1 Partner used force/not answer	0.06	0.05-0.06	**0.13**	0.08-0.18
S2 Partner used force/not answer	0.07	0.06-0.07	0.14	0.07-0.21
S1 Support network (mean)	12.37	12.33-12.42	**11.12**	10.71-11.53
S2 Mum: every day/weekly	0.62	0.61-0.64	**0.30**	0.23-0.37
S2 Mum: year/never	0.08	0.07-0.09	**0.20**	0.15-0.26
S2 Dad: every day/weekly	0.43	0.41-0.44	**0.15**	0.10-0.21
S2 Dad: year/never	0.13	0.12-0.13	**0.28**	0.22-0.35

Note: Bold indicates probabilities significantly different by OHC experience at p<.05

Table A3.2b: Pregnancy and Childbirth: predicted probabilities from regression analyses

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S12 Teenage mother	0.04	0.04-0.05	0.07	0.05-0.09
S1 No sibling(s)	0.41	0.39-0.42	**0.29**	0.22-0.35
S1 Biological sibling(s)	0.45	0.44-0.46	0.41	0.33-0.49
S1 Other sibling(s)	0.10	0.10-0.11	**0.22**	0.17-0.27
S2 No sibling(s)	0.23	0.23-0.24	0.17	0.12-0.22
S2 Biological sibling(s)	0.62	0.61-0.63	0.56	0.48-0.63
S2 Other sibling(s)	0.11	0.11-0.12	**0.22**	0.17-0.28
S1 Unplanned pregnancy	0.42	0.41-0.43	0.48	0.40-0.57
S1 Unhappy when pregnant	0.09	0.09-0.10	0.12	0.08-0.16
S1 Not attend antenatal classes	0.65	0.64-0.66	0.69	0.61-0.76
S12 Low birthweight [<2.5kg]	0.07	0.06-0.07	0.10	0.06-0.14
S12 Never breastfed	0.26	0.24-0.27	0.24	0.18-0.30
S12 Breastfed >3 months	0.31	0.29-0.32	0.25	0.18-0.33

Note: Bold indicates probabilities significantly different by OHC experience at p<.05

Table A3.2c: Employment and Financial Situation: predicted probabilities from regression analyses

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S1 Employed	0.48	0.46-0.49	**0.32**	0.25-0.39
S1 Workless household	0.12	0.11-0.13	**0.24**	0.17-0.30
S1 No access to a car	0.10	0.09-0.11	**0.22**	0.17-0.28
S1 Receiving state benefits	0.34	0.32-0.36	**0.64**	0.55-0.73
S1 In poverty	0.25	0.24-0.27	**0.47**	0.39-0.56
S2 Employed	0.51	0.50-0.53	**0.38**	0.30-0.45
S2 Workless household	0.11	0.11-0.12	**0.21**	0.15-0.27
S2 No access to a car	0.09	0.08-0.10	**0.17**	0.12-0.22
S2 In poverty	0.24	0.22-0.25	**0.47**	0.38-0.57
S2 Make regular savings	0.47	0.46-0.48	0.47	0.39-0.56
S2 No financial help parents	0.17	0.16-0.18	**0.39**	0.31-0.47

Note: Bold indicates probabilities significantly different by OHC experience at p<.05

Table A3.2d: Housing conditions, home and local environment: predicted probabilities from regression analyses

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S1 Rent home	0.34	0.32-0.36	**0.69**	0.60-0.78
S1 Overcrowded home (1+)	0.23	0.21-0.24	0.30	0.23-0.36
S1 Home damp	0.13	0.12-0.14	**0.21**	0.16-0.27
S1 Poor quality area scale	13.95	13.83-14.08	**14.97**	14.48-15.46
S1 No places children play safely	0.35	0.33-0.37	0.41	0.34-0.48
S2 Home damp	0.14	0.13-0.15	0.23	0.17-0.29
S2 Dissatisfied home	0.09	0.08-0.10	0.17	0.11-0.22
S2 Dissatisfied area	0.08	0.08-0.09	0.16	0.12-0.21
S2 Disorganised home	0.13	0.12-0.13	0.17	0.12-0.22
S2 Can't hear self think at home	0.16	0.15-0.17	**0.26**	0.19-0.32
S2 Not calm atmosphere at home	0.11	0.11-0.12	0.16	0.10-0.21

Note: Bold indicates probabilities significantly different by OHC experience at p<.05

Table A3.2e: Parenting style and early indicators of the mother-child relationship: predicted probabilities from regression analyses

	No OHC Experience Proportion / 95% CIs		OHC Experience Proportion / 95% CIs	
S1 Baby crying a problem	0.06	0.06-0.07	**0.13**	0.08-0.17
S1 Parenting beliefs (mean)	21.59	21.55-21.63	21.52	21.24-21.80
S1 Rosenberg Self-Esteem (mean)	11.60	11.55-11.64	**10.78**	10.46-11.11
S2 Parent comp: have trouble	0.03	0.03-0.03	0.04	0.01-0.07
S2 Parent comp: better/good	0.59	0.58-0.60	**0.44**	0.36-0.53
S2 Pianta - closeness scale (mean)	33.35	33.30-33.39	**32.66**	32.22-33.11
S2 Child-Parent Relation Scale (mean)	63.93	63.79-64.07	**61.67**	60.53-62.81
S2 Straus's Conflict Tactics Scale (mean)	20.40	20.28-20.51	**21.42**	20.58-22.27
S2 Never's/s'times reg bedtime	0.19	0.18-0.20	0.23	0.17-0.29
S1 Used any childcare	0.60	0.58-0.61	**0.41**	0.34-0.48
S2 Used any childcare	0.80	0.79-0.81	0.78	0.73-0.83

Note: Bold indicates probabilities significantly different by OHC experience at p<.05

Table A3.2f: Health, health behaviours and general wellbeing: predicted probabilities from regression analyses

	No OHC Experience		OHC Experience	
	Proportion / 95% CIs		Proportion / 95% CIs	
S1 Never smoked	0.53	0.52-0.54	**0.24**	0.17-0.31
S1 Smoker when pregnant	0.05	0.05-0.06	**0.10**	0.07-0.14
S2 Used recreational drugs	0.05	0.04-0.05	0.07	0.04-0.11
S2 Alcohol 3+ days a week	0.13	0.12-0.14	0.09	0.04-0.15
S1 Poor/fair general health	0.16	0.15-0.17	**0.30**	0.25-0.36
S2 Poor/fair general health	0.17	0.16-0.18	**0.30**	0.23-0.37
S1 LSI	0.21	0.20-0.22	0.31	0.25-0.38
S1 LSI - limiting	0.09	0.09-0.10	**0.16**	0.11-0.20
S2 LSI	0.21	0.20-0.22	**0.33**	0.27-0.40
S1 High Malaise score	0.13	0.13-0.14	**0.26**	0.21-0.32
S2 High Kessler score	0.25	0.24-0.26	**0.42**	0.34-0.49
S2 Ever diagnosed depression	0.28	0.27-0.29	**0.45**	0.37-0.52
S2 Current diagnosed depression	0.08	0.07-0.08	**0.15**	0.11-0.20
S12 Never get what want life	0.09	0.09-0.10	**0.20**	0.15-0.25
S12 Whatever do no effect life	0.08	0.08-0.09	**0.14**	0.10-0.17
S12 Problems running own life	0.05	0.04-0.05	**0.11**	0.08-0.14
S1 Low satisfaction with life	0.18	0.18-0.19	**0.34**	0.28-0.41
S2 Low satisfaction with life	0.18	0.17-0.19	**0.31**	0.24-0.38

Note: Bold indicates probabilities significantly different by OHC experience at p<.05

Appendix A4

Appendix A4.1

Table A4.1: Family characteristics, parenting styles and health and wellbeing by maternal OHC experience: proportions [95% CIs]

Child & Family Demographics (9 months)	No OHC	OHC
CM ethnicity: British Minority Ethnic	.13 [.11,.16]	.13 [.08,.19]
CM sex: female	.49 [.48,.50]	.48 [.41,.54]
CM age at interview: years (mean)	3.1 [3.1,3.1]	3.2 [3.1,3.4]
Single parent	.15 [.14,.16]	**.32** [.25,.38]
Age Mother at CM birth: years (mean)	28.8 [28.6,29.0]	25.4 [24.6,26.3]
English and/or only other language spoken at home	.11 [.09,.13]	.04 [.01,.07]
SES Characteristics (9 months)		
Parent no or NVQ1 level qualifications	.24 [.22,.25]	**.53** [.46,.60]
Workless household	.18 [.17,.19]	**.49** [.42,.56]
Rented housing	.38 [.36,.40]	**.81** [.75,.87]
Overcrowded home	.25 [.24,.26]	**.40** [.33,.47]
Damp home	.13 [.12,.14]	**.28** [.22,.34]

Parenting Behaviour (9 months or 3 years)	No OHC	OHC
CM breastfed > 3 months (9 months)	.33 [.31,.35]	**.17** [.12,.23]
Pianta: parent-child high conflict score (3 years)	.12 [.12,.14]	**.23** [.17,.29]
Pianta: parent-child low closeness score (3 years)	.10 [.09,.11]	**.23** [.17,.30]
Poor home learning environment (3 years)	.14 [.13,.15]	.17 [.12,.23]
Mother feels she is a below average parent (3 years)	.06 [.06,.07]	.09 [.05,.13]
Mother feels she is an above average parent (3 years)	.60 [.59,.61]	**.44** [.36,.51]
Mother Health & Wellbeing (9 months or 3 years)		
Mother poor/fair general health (9 months)	.17 [.16,.18]	**.36** [.29,.42]
Mother psychological distress (Kessler): mean [0-24] (3 years)	3.4 [3.3,3.4]	**5.6** [4.9,6.2]
Mother severe psychological distress (Kessler): 13+ (3 years)	.03 [.02,.03]	**.09** [.05,.13]
Mother a current smoker (9 months)	.28 [.27,.30]	**.68** [.62,.75]
N(100%)	*18,774*	*308*

Note: Bold indicates proportions significantly different by OHC experience at p<.05

Appendix A4.2: OLS regression results

Table A4.2a: OLS regression results: BAS Naming Vocabulary score

	M1	M2	M3	M4	M5	M6
Mother OHC	-0.19**	-0.16*	0.12	-0.08	-0.12	0.07
	(0.07)	(0.06)	(0.07)	(0.06)	(0.06)	(0.06)
CM ethnicity: BME		-0.43***				-0.36***
		(0.04)				(0.03)
CM sex: female		0.23***				0.21***
		(0.02)				(0.02)
Single parent		-0.23***				0.06
		(0.03)				(0.03)
Age Mother at CM birth		0.02***				0.00*
		(0.00)				(0.00)
English and/or other language spoken at home		-0.74***				-0.61***
		(0.04)				(0.04)
Parent no or NVQ1 level qualifications			-0.45***			-0.29***
			(0.03)			(0.02)
Workless household			-0.21***			-0.23***
			(0.03)			(0.03)
Rented housing			-0.15***			-0.11***
			(0.02)			(0.02)
Overcrowded home			-0.28***			-0.14***
			(0.03)			(0.02)
Damp home			-0.03			0.00
			(0.03)			(0.02)
CM breastfed >3 months				0.12***		0.09***
				(0.02)		(0.02)
Pianta: parent-child high conflict score				-0.09**		-0.05
				(0.03)		(0.03)
Pianta: parent-child low closeness score				-0.46***		-0.29***
				(0.04)		(0.04)
Poor home learning environment				-0.43***		-0.24***
				(0.04)		(0.02)
Mother feels she is a below average parent				-0.13**		0.00
				(0.05)		(0.04)
Mother feels she is an above average parent				-0.01		0.04*
				(0.02)		(0.02)

	M1	M2	M3	M4	M5	M6
Mother poor/fair general health					-0.20*** (0.02)	-0.03 (0.02)
Mother poor mental wellbeing (Kessler)					-0.18** (0.06)	-0.00 (0.05)
Mother current smoker					-0.06* (0.03)	0.02 (0.02)
_cons	0.12*** (0.02)	-0.92*** (0.06)	0.39*** (0.02)	0.21*** (0.02)	0.18*** (0.02)	-0.47*** (0.06)
R²	.00	.17	.12	.07	.01	.24
N	18,810	18,810	18,810	18,810	18,810	18,810

Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Table A4.2b: OLS regression results: Internalising behaviour problems

	M1	M2	M3	M4	M5	M6
Mother OHC	0.32*** (0.08)	0.23** (0.08)	0.04 (0.08)	0.13 (0.08)	0.16* (0.08)	-0.04 (0.07)
CM ethnicity: BME		0.21*** (0.03)				0.18*** (0.03)
CM sex: female		-0.09*** (0.02)				-0.06*** (0.02)
CM age at interview		-0.01 (0.01)				-0.01 (0.01)
Single parent		0.21*** (0.03)				-0.05 (0.03)
Age Mother at CM birth		-0.02*** (0.00)				-0.01*** (0.00)
English and/or other language spoken at home		0.32*** (0.04)				0.25*** (0.04)
Parent no or NVQ1 level qualifications			0.32*** (0.03)			0.19*** (0.02)
Workless household			0.19*** (0.03)			0.14*** (0.03)
Rented housing			0.20*** (0.02)			0.09** (0.03)
Overcrowded home			0.08*** (0.02)			0.03 (0.02)
Damp home			0.12*** (0.03)			0.08** (0.03)
CM breastfed >3 months				-0.18*** (0.02)		-0.11*** (0.02)
Pianta: parent-child high conflict score				0.52*** (0.03)		0.45*** (0.03)
Pianta: parent-child low closeness score				0.54*** (0.04)		0.43*** (0.04)
Poor home learning environment				0.19*** (0.03)		0.09*** (0.02)
Mother feels she is a below average parent				0.15*** (0.04)		0.04 (0.04)

	M1	M2	M3	M4	M5	M6
Mother feels she is an above average parent				-0.11*** (0.02)		-0.12*** (0.02)
Mother poor/fair general health					0.26*** (0.03)	0.11*** (0.03)
Mother poor mental wellbeing (Kessler)					0.66*** (0.07)	0.37*** (0.06)
Mother current smoker					0.17*** (0.02)	0.02 (0.02)
_cons	-0.07*** (0.01)	0.54*** (0.06)	-0.30*** (0.01)	-0.11*** (0.02)	-0.18*** (0.02)	0.05 (0.06)
R^2	.00	.06	.07	.11	.04	.17
N	18,810	18,810	18,810	18,810	18,810	18,810

Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A4.2c: OLS regression results: Externalising behaviour problems

	M1	M2	M3	M4	M5	M6
Mother OHC	0.47*** (0.08)	0.32*** (0.07)	0.17* (0.07)	0.21** (0.07)	0.23** (0.08)	-0.01 (0.07)
CM ethnicity: BME		0.03 (0.03)				0.02 (0.03)
CM sex: female		-0.21*** (0.02)				-0.18*** (0.02)
CM age at interview		-0.03** (0.01)				-0.03*** (0.01)
Single parent		0.28*** (0.03)				0.01 (0.03)
Age Mother at CM birth		-0.03*** (0.00)				-0.02*** (0.00)
English and/or other language spoken at home		0.10* (0.04)				0.05 (0.04)
Parent no or NVQ1 level qualifications			0.30*** (0.02)			0.18*** (0.02)
Workless household			0.18*** (0.03)			0.07* (0.03)
Rented housing			0.31*** (0.02)			0.12*** (0.02)
Overcrowded home			0.02 (0.02)			0.04 (0.02)
Damp home			0.09*** (0.03)			0.03 (0.02)
CM breastfed >3 months				-0.29*** (0.02)		-0.15*** (0.02)
Pianta: parent-child high conflict score				1.04*** (0.03)		0.96*** (0.03)
Pianta: parent-child low closeness score				0.46*** (0.03)		0.35*** (0.03)
Poor home learning environment				0.20*** (0.02)		0.13*** (0.02)
Mother feels she is a below average parent				0.08 (0.04)		-0.00 (0.04)

	M1	M2	M3	M4	M5	M6
Mother feels she is an above average parent				-0.24*** (0.02)		-0.23*** (0.02)
Mother poor/fair general health					0.30*** (0.02)	0.13*** (0.02)
Mother poor mental wellbeing (Kessler)					0.59*** (0.06)	0.17*** (0.05)
Mother current smoker					0.36*** (0.02)	0.11*** (0.02)
_cons	-0.05*** (0.01)	1.05*** (0.06)	-0.29*** (0.01)	-0.03 (0.02)	-0.22*** (0.01)	0.42*** (0.06)
R^2	.00	.08	.09	.24	.06	.30
N	18,810	18,810	18,810	18,810	18,810	18,810

Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix A4.3: Discussion on other characteristics associated with early child adjustment

Although some caution is needed in interpreting the coefficients in the final models which include all the covariates (model 6) as some measures will be influenced by others along the causal pathway, we see that having British minority ethnic (BME) status or living in a house were an additional language to English is only or also spoken are associated with increased internalising symptoms and reduced performance scores in the cognitive assessment. Being a girl is associated with fewer behaviour problems and higher cognitive scores; being younger when the age 3 interviews took place is associated with higher externalising behaviour problems. Maternal age is also associated with all three outcomes, with children's behaviour and emotional problems higher for younger mothers, cognitive scores higher for older mothers.

Having parents with no or only low-level qualifications and living in rented housing are also associated with lower cognitive scores, and higher externalising and internalising symptoms. Being part of a workless household is associated with all outcomes except for externalising symptoms, and overcrowded housing conditions are negatively correlated with cognitive performance. Damp housing is associated with higher internalising symptoms.

In terms of parenting, viewing yourself as an above average parent and breastfeeding for more than three months is protective against behaviour symptoms and is associated with higher cognitive scores, whereas having a poor home learning environment and not having a close parent-child relationship are all associated with lower cognition, and with higher internalising and externalising symptoms, at age 3. Having high levels of conflict in the parent-child relationship is also associated with increased internalising and externalising symptoms.

A child's behaviour is also negatively influenced if their mother has poor mental health; if she reported poor or fair general health or smoked a child has an increased risk of externalising behaviour problems and having a lower school readiness score. A mother's poor or fair general health is also associated with increased internalising symptoms.

Appendix A5

Appendix A5.1: Education progression regression results

Table A5.1a: Odds Ratios for being 'School Ready' in Bracken assessment at age 3

	M1 Parent OHC	M2 +SES	M3 +Housing	M4 +FS	M5 +Health	M6 +Sex/Eth	M7 +All
Parent OHC	0.55*** (0.10)	0.74 (0.14)	0.88 (0.16)	0.59** (0.11)	0.61** (0.11)	0.53*** (0.10)	0.91 (0.18)
Workless household		0.48*** (0.04)					0.57*** (0.06)
Parent Highest qual							
NVQ1		0.27*** (0.03)					0.36*** (0.04)
NVQ2		0.37*** (0.04)					0.45*** (0.05)
NVQ3		0.53*** (0.06)					0.61*** (0.07)
Eng +/or other lang		0.32*** (0.03)					0.60*** (0.08)
IMD bottom 2 dec			0.45*** (0.05)				0.69*** (0.06)
Rented home			0.51*** (0.04)				0.73*** (0.06)
Overcrowded home			0.58*** (0.05)				0.72*** (0.06)
Damp home			0.86 (0.08)				0.90 (0.09)
Teenage mother				0.72** (0.08)			0.99 (0.11)
Single parent				0.47*** (0.04)			1.17 (0.13)
Poor general health					0.65*** (0.06)		0.86 (0.08)

Table continued on next page

	M1 Parent OHC	M2 +SES	M3 +Housing	M4 +FS	M5 +Health	M6 +Sex/Eth	M7 +All
Poor mental health					0.79* (0.07)		0.99 (0.10)
Female child						1.69*** (0.11)	1.76*** (0.12)
BME						0.30*** (0.03)	0.57*** (0.07)
R²	.00	.10	.08	.02	.01	.05	.13
N	*11,514*	*11,514*	*11,514*	*11,514*	*11,514*	*11,514*	*11,514*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Table A5.1b: Odds Ratios for being At/above expected level in EYFS at age 5

	M1 Parent OHC	M2 +SES	M3 +Housing	M4 +FS	M5 +Health	M6 +Sex/Eth/ Edu	M7 +All
Parent OHC	0.51*** (0.07)	0.73* (0.11)	0.79 (0.11)	0.56*** (0.08)	0.57*** (0.08)	0.56*** (0.08)	0.96 (0.14)
Workless household		0.53*** (0.04)					0.76** (0.08)
Parent Highest qual							
NVQ1		0.25*** (0.02)					0.39*** (0.03)
NVQ2		0.41*** (0.03)					0.54*** (0.04)
NVQ3		0.52*** (0.04)					0.62*** (0.06)
Eng +/or other lang		0.65*** (0.06)					1.03 (0.12)
IMD bottom 2 dec			0.59*** (0.05)				0.83* (0.07)
Rented home			0.42*** (0.03)				0.62*** (0.04)
Overcrowded home			0.67*** (0.04)				0.77*** (0.05)
Damp home			0.98 (0.07)				1.06 (0.08)
Teenage mother				0.56*** (0.05)			0.86 (0.09)
Single parent				0.48*** (0.04)			1.14 (0.11)
Poor general health					0.57*** (0.04)		0.72*** (0.05)
Poor mental health					0.79** (0.06)		0.97 (0.07)

	M1 Parent OHC	M2 +SES	M3 +Housing	M4 +FS	M5 +Health	M6 +Sex/Eth/Edu	M7 +All
Female child						1.60*** (0.08)	1.74*** (0.09)
BME						0.70*** (0.06)	0.88 (0.08)
'School Ready'						4.63*** (0.34)	3.23*** (0.26)
R^2	.00	.08	.07	.02	.01	.08	.14
N	11,514	11,514	11,514	11,514	11,514	11,514	11,514

Exponentiated coefficients; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A5.1c: Odds Ratios for gaining 5+ GCSEs Grade 4-9 (inc. Maths & English) at 16

	M1 Parent OHC	M2 +SES	M3 +Housing	M4 +FS	M5 +Health	M6 +Sex/Eth/Edu	M7 +All
Parent OHC	0.50*** (0.09)	0.76 (0.15)	0.72 (0.14)	0.54** (0.11)	0.54** (0.11)	0.60* (0.12)	0.94 (0.21)
Workless household		0.54*** (0.04)					0.75** (0.08)
Parent Highest qual							
NVQ1		0.26*** (0.02)					0.41*** (0.04)
NVQ2		0.41*** (0.03)					0.55*** (0.04)
NVQ3		0.55*** (0.04)					0.67*** (0.06)
Eng +/or other lang		1.48*** (0.12)					1.62*** (0.20)
IMD bottom 2 dec			0.67*** (0.05)				0.83* (0.06)
Rented home			0.43*** (0.03)				0.69*** (0.06)
Overcrowded home			0.88 (0.06)				0.95 (0.07)
Damp home			0.97 (0.08)				1.00 (0.09)
Teenage mother				0.55*** (0.06)			0.97 (0.12)
Single parent				0.47*** (0.04)			1.12 (0.13)
Poor general health					0.67*** (0.05)		0.86 (0.07)
Poor mental health					0.80** (0.07)		0.94 (0.09)

	M1 Parent OHC	M2 +SES	M3 +Housing	M4 +FS	M5 +Health	M6 +Sex/Eth/ Edu	M7 +All
Female child						1.30*** (0.08)	1.39*** (0.09)
BME						1.47*** (0.12)	1.34* (0.15)
'School Ready'						1.98*** (0.17)	1.57*** (0.14)
Exp. level EYFS						3.61*** (0.22)	2.80*** (0.17))
R²	.00	.07	.05	.02	.01	.09	.13
N	*11,514*	*11,514*	*11,514*	*11,514*	*11,514*	*11,514*	*11,514*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Appendix A5.2: Post-16 education regression results

Table A5.2a: OLS Regression results: % likelihood of going to university [unstandardised coefficients]

	Unadjusted	Adjusted
Mother OHC	-9.08*	2.08
	(3.95)	(3.79)
Teenage Characteristics		
Female		6.09***
		(0.61)
BME		9.46***
		(1.28)
Age		-1.36
		(1.11)
5+ grade 4-9 GCSEs		22.69***
		(0.84)
Family SES		
Workless household		-0.69
		(1.22)
Mother NVQ2+ quals		7.43***
		(0.82)
English +/or other language spoken		11.46***
		(1.47)
Rented home		-6.07***
		(0.86)
Live in deprived area		-1.69*
		(0.82)
_cons	54.48***	56.12**
	(0.78)	(19.37)
N	*18,810*	*18,810*

Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.00

Table A5.2b: Logistic Regression results: GCSE attainment, in Education, Training or Employment, occupation aspirations by mother OHC experience [Odds Ratios]

	5+ Grade 4-9 GCSEs	In EET	In Edu or Training	Don't know Occupation	Prof/Man Occupation
Mother OHC	0.80	1.18	1.13	0.80	0.91
	(0.16)	(0.37)	(0.29)	(0.32)	(0.23)
Teenage Characteristics					
Female	1.34***	0.83*	0.91	0.94	1.13*
	(0.06)	(0.07)	(0.06)	(0.07)	(0.06)
BME	1.33**	1.23	1.39*	1.46*	1.20
	(0.12)	(0.22)	(0.21)	(0.23)	(0.12)
Age	1.06	0.49***	0.47***	0.84	0.91
	(0.08)	(0.07)	(0.06)	(0.11)	(0.08)
5+ grade 4-9 GCSEs		2.21***	2.14***	1.50***	1.76***
		(0.27)	(0.22)	(0.14)	(0.11)
Family SES					
Workless household	0.65***	0.79*	0.81	0.97	1.00
	(0.05)	(0.09)	(0.09)	(0.11)	(0.09)
Mother NVQ2+ quals	1.94***	1.08	1.13	1.12	1.19**
	(0.12)	(0.11)	(0.11)	(0.13)	(0.08)
English +/or other language spoken	1.51***	1.33	1.37	1.23	1.32*
	(0.15)	(0.26)	(0.24)	(0.20)	(0.14)
Rented home	0.51***	0.64***	0.59***	0.79*	0.85*
	(0.03)	(0.07)	(0.05)	(0.07)	(0.06)
Live in deprived area	0.78***	0.95	0.94	0.88	0.92
	(0.05)	(0.09)	(0.08)	(0.08)	(0.06)
N	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Appendix A6

Appendix A6.1: Skewed distribution of EET Variable

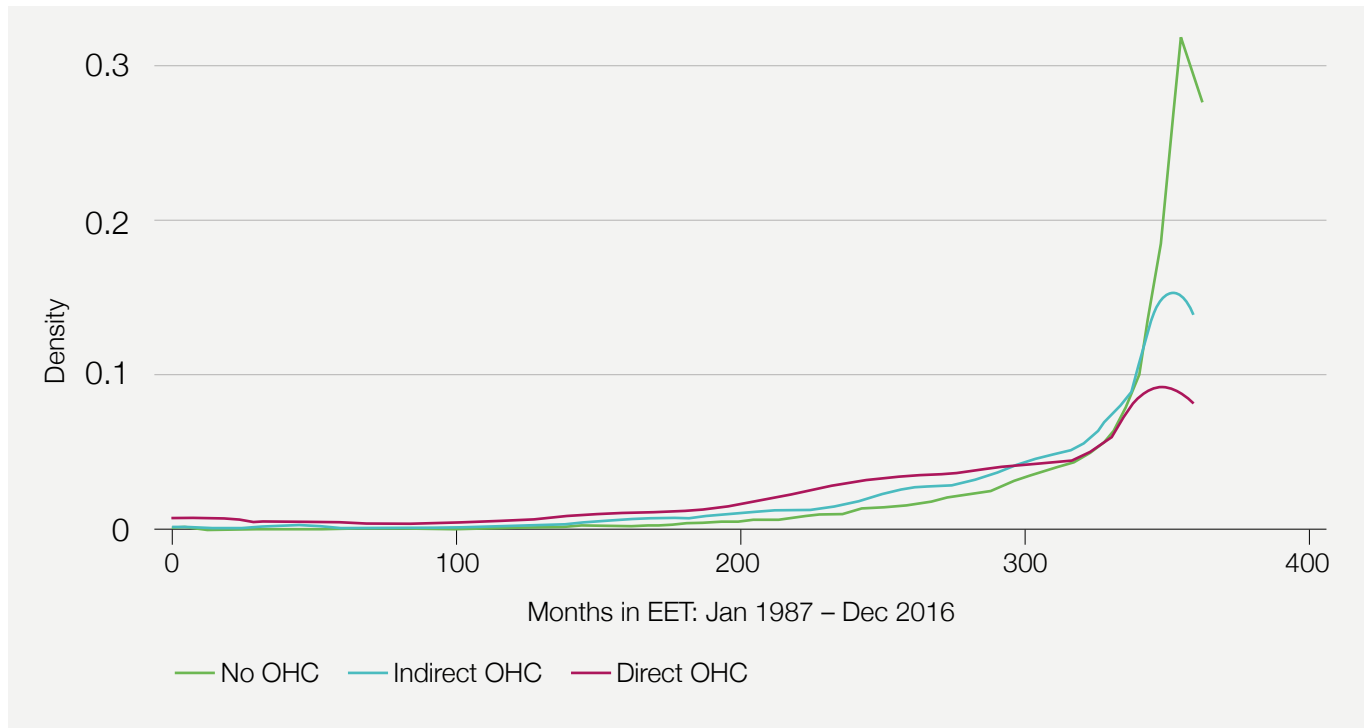**Figure A6.1a: Kdensity Plots for men: time in EET by OHC experience**
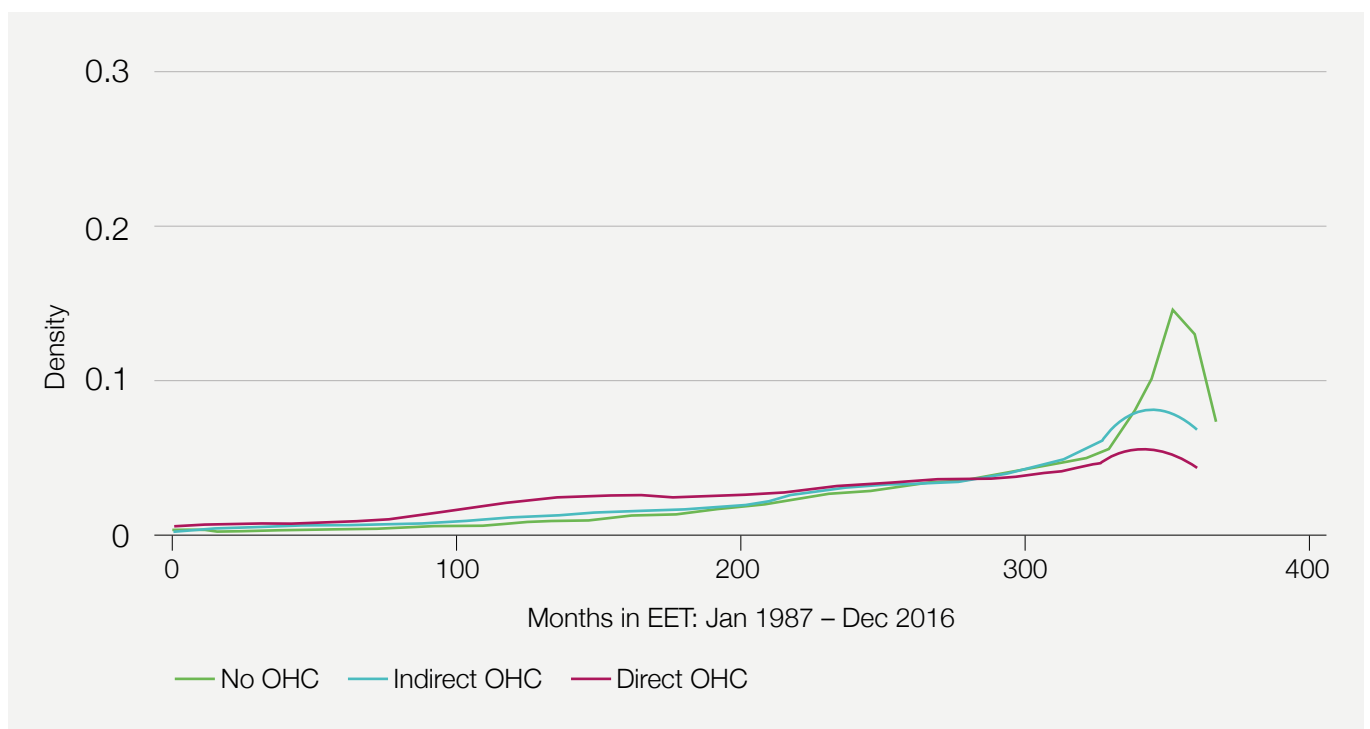

Figure A6.1b: Kdensity Plots for women: time in EET by OHC experience

Appendix A6.2: Covariates included in EET modelling by OHC status

Table A6.2: Selected family background and individual characteristics by OHC experience

	Men			Women		
	No OHC	**Indirect OHC**	**Direct OHC**	**No OHC**	**Indirect OHC**	**Direct OHC**
Family Background						
Mother NVQ2+ quals	.29	**.19**	**.20**	.29	**.18**	**.21**
Rented home	.43	**.58**	**.68**	.42	.49	**.65**
Overcrowded home	.39	**.52**	**.57**	.38	.44	**.51**
Free school meals	.14	**.24**	**.39**	.14	**.23**	**.32**
Individual Characteristics						
British Minority Ethnic	.03	.05	.05	.03	.05	**.08**
Poor health (10)	.29	.36	**.45**	.25	.33	**.40**
Std Reading score (10) (mean)	-.03	**-.35**	**-.60**	.10	-.08	**-.42**
Std Maths score (10) (mean)	.09	**-.25**	**-.48**	-.01	**-.21**	**-.58**
5+ NVQ2 (equiv) exam passes[1]	.19	**.12**	**.09**	.20	.20	**.12**
Std Malaise (16) (mean)	-.20	-.06	.04	.19	.33	.42
N(100%)	*6,078*	*190*	*336*	*5,670*	*192*	*274*

[1] this includes O Level passes grade A-C, CSE passes grade 1 and Scottish equivalents

Note: Bold indicates differences significant p<.05

Appendix A6.3: EET quantile regression results

Table A6.3: Months spent in EET between 17 and 46 by OHC experience

	Men				
Ref cat: No OHC		**Model 1**	**Model 2**	**Model 3**	**Model 4**
P25	Indirect OHC	-27.75* (10.9)	-18.60[1] (10.0)	-18.53[1] (10.7)	-12.74 (9.8)
	Direct OHC	-76.35*** (8.0)	-57.55*** (8.7)	-56.36*** (8.7)	-46.30*** (9.3)
P50	Indirect OHC	-12.95** (3.7)	-9.90* (4.3)	-9.55* (4.5)	-7.52[1] (4.4)
	Direct OHC	-45.35*** (4.5)	-36.4*** (5.1)	-37.68*** (5.0)	-32.51*** (5.0)
P75	Indirect OHC	-2.25 (1.9)	-2.00 (2.0)	-2.23 (2.2)	-2.00 (2.1)
	Direct OHC	-11.95*** (1.1)	-9.85*** (1.9)	-11.82*** (1.4)	-9.85*** (1.9)
	N (100%)	*6,604*	*6,604*	*6,604*	*6,604*

	Women				
Ref cat: No OHC		**Model 1**	**Model 2**	**Model 3**	**Model 4**
P25	Indirect OHC	-19.30 (12.9)	-11.55 (12.7)	-8.95 (12.7)	-4.5 (11.9)
	Direct OHC	-76.20*** (11.1)	-52.77*** (10.2)	-46.84*** (10.1)	-40.10*** (11.2)
P50	Indirect OHC	-14.65 (9.6)	-8.55 (9.3)	-8.42 (8.3)	-6.85 (8.6)
	Direct OHC	-56.05*** (8.3)	-44.55*** (8.9)	-38.08*** (7.6)	-35.79*** (7.9)
P75	Indirect OHC	-4.35 (3.0)	-5.03 (3.9)	-2.66 (3.7)	-3.62 (4.07)
	Direct OHC	-23.82*** (3.8)	-19.73*** (5.0)	-19.72*** (4.4)	-16.63** (4.7)
	N (100%)	*6,136*	*6,136*	*6,136*	*6,136*

Notes: P25, P50, and P75 = percentile distribution. Ref Cat = No OHC experience. Standard error in parentheses.

Significance: ***p<0.001 **p<0.01 *p<0.05 [1] p<0.1

Appendix A7

Appendix A7.1: Covariates used in regression analysis

Table A7.1: Covariates used in regression analysis: teenager's individual and family background characteristics by mother OHC experience

	Mother No OHC Proportion	Mother OHC Proportion
Individual Characteristics		
Female	0.48	0.49
BME	0.13	0.13
Age (mean)	17.2	17.2
Gained 5+ grade 4-9 GCSEs (or equivalent)	0.59	**0.37**
Family SES		
Workless household	0.18	**0.50**
Mother NVQ2 or higher qualifications	0.77	**0.46**
English +/or only Other Language spoken	0.11	**0.04**
Rented housing	0.38	**0.82**
Live in bottom two deciles of area deprivation	0.25	**0.49**
N(100%)=	*18,505*	*305*

Note: Bold indicates probabilities significantly different by care experience at p<.05

Appendix 7.2: Mean scores in SDQ problem scales from age 3 – 17 by sex

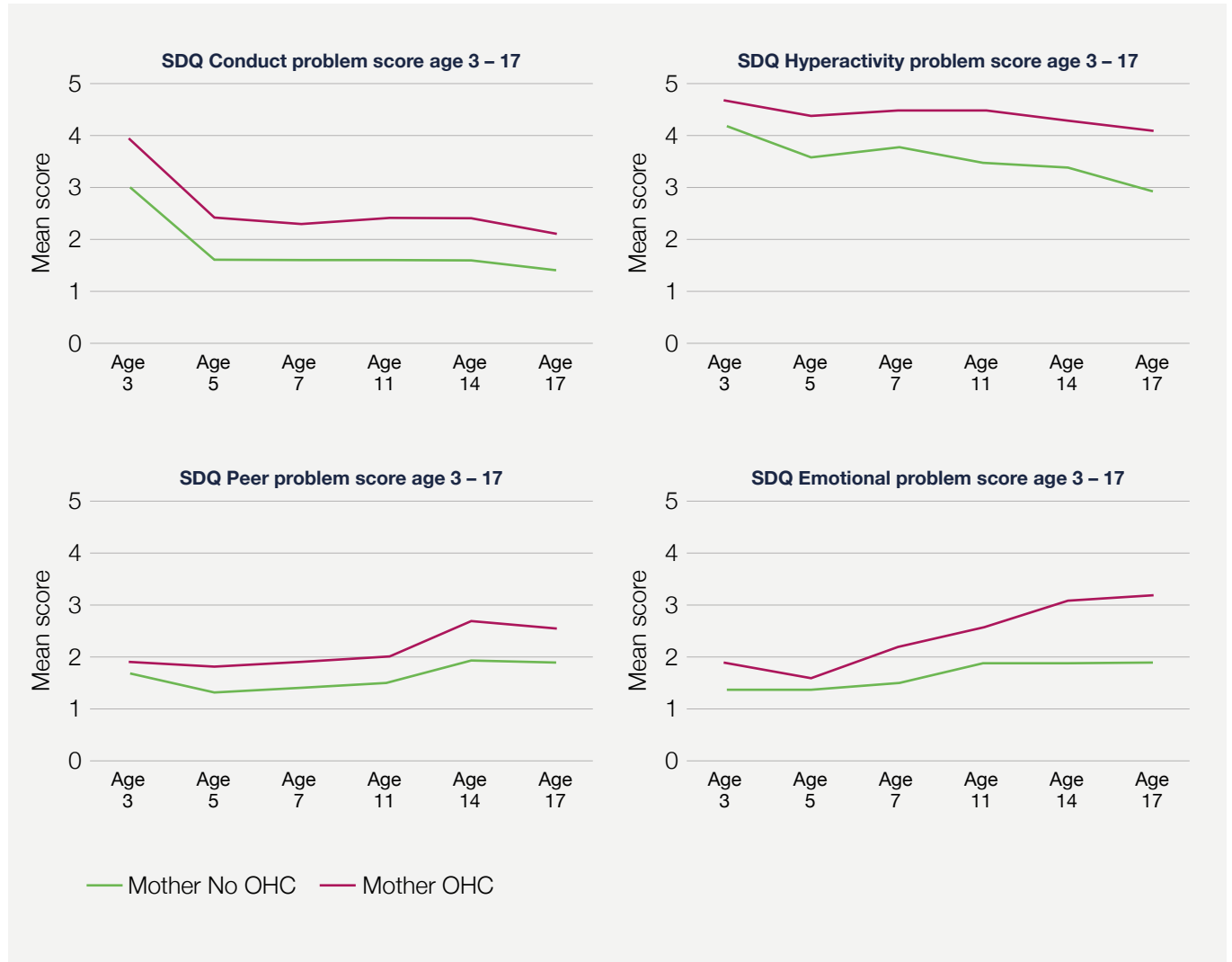**Figure A7.2a: Mean scores for boys in SDQ problem scales from age 3 – 17**

Figure A7.2b: Mean scores for girls in SDQ problem scales from age 3 – 17

Appendix A7.3: Mental health regression results

Table A7.3: Logistic Regression results: Mental health outcomes at age 17 by mother OHC experience [Odds Ratios]

	SDQ Emotional	SDQ Conduct	SDQ Hyper	SDQ Peer	13+ Kessler	Told Depressed	Treated Depression	Self-harmed	Suicide attempt
Mother OHC	1.28	1.66	1.86**	1.31	1.80**	1.94**	2.42**	1.57*	1.85*
	(0.30)	(0.51)	(0.37)	(0.40)	(0.39)	(0.41)	(0.68)	(0.28)	(0.49)
Female	2.20***	0.79*	0.88	1.30*	1.72***	1.74***	3.19***	1.41***	1.72***
	(0.16)	(0.08)	(0.06)	(0.14)	(0.10)	(0.12)	(0.39)	(0.08)	(0.15)
BME	0.65**	1.07	0.69**	0.91	0.84	0.62**	0.47**	0.74**	0.79
	(0.10)	(0.17)	(0.09)	(0.19)	(0.10)	(0.09)	(0.13)	(0.08)	(0.12)
Age	0.98	0.97	0.93	0.99	0.98	1.11	0.90	0.94	1.03
	(0.09)	(0.14)	(0.08)	(0.16)	(0.08)	(0.11)	(0.14)	(0.08)	(0.13)
5+ grade 4-9 GCSEs	1.06	0.59***	0.68***	0.65***	0.93	0.75***	0.81	0.91	0.68***
	(0.07)	(0.06)	(0.05)	(0.08)	(0.06)	(0.06)	(0.10)	(0.05)	(0.06)
Family SES									
Workless household	0.97	1.07	0.94	1.05	1.07	0.95	0.69	1.05	1.31*
	(0.12)	(0.14)	(0.09)	(0.15)	(0.11)	(0.09)	(0.14)	(0.09)	(0.16)
Mother NVQ2+ quals	0.95	0.89	1.03	0.93	1.04	0.96	0.91	1.08	1.03
	(0.08)	(0.11)	(0.09)	(0.11)	(0.08)	(0.09)	(0.14)	(0.07)	(0.10)
English +/or other lang spoken	0.71*	0.75	0.82	0.57*	0.86	0.69*	0.49*	0.85	0.71
	(0.11)	(0.14)	(0.11)	(0.13)	(0.11)	(0.12)	(0.17)	(0.09)	(0.14)
Rented home	1.20*	1.44**	1.19*	1.95***	1.26**	1.38**	1.11	1.26***	1.53***
	(0.10)	(0.18)	(0.09)	(0.25)	(0.09)	(0.13)	(0.17)	(0.08)	(0.17)
Live in deprived area	1.00	1.03	0.98	1.08	1.02	1.06	1.26	0.97	0.97
	(0.08)	(0.13)	(0.08)	(0.13)	(0.07)	(0.09)	(0.16)	(0.07)	(0.10)
N	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Appendix A7.4: Socioeconomic disadvantage by mother OHC experience

Table A7.4a: Socioeconomic disadvantage by mother OHC experience

| | Socioeconomically disadvantaged (3+risk factors) | |
	Mother No OHC	Mother OHC
No or NVQ 1 level qualifications	.61	.71
Receipt of State Benefits	.94	.97
In Poverty (<60% median income)	.94	.94
Rented Housing	.93	.99
N(100%)	*5,765*	*219*

Table A7.4b: Characteristics of teenagers within socioeconomically disadvantaged sample by mother OHC experience

| | Socioeconomically disadvantaged (3+risk factors) | |
	Mother No OHC	Mother OHC
British Minority Ethnic group	.22	.13
Female	.49	.47
Mean age	17.2	17.2
5+ Grade 4-9 GCSEs [inc. English language and maths]	.37	.30
N(100%)	*5,765*	*219*

Appendix A7.5: The mental health of adult care leavers and the adult children of care leavers during a global health pandemic

Here we use the 1970 cohort to examine the mental health of adults during the heart of the Covid-19 pandemic, when they had just turned 50. We examine how experiences differ by OHC experience, comparing those with no OHC experience (OHC0), indirect [parental] OHC experience (OHC1) and direct OHC experience (OHC2) during their own childhood or adolescence. We make use of information from the second of three online surveys completed by cohort members during the first year of the Covid-19 pandemic (Brown et al., 2021). (For further details of the surveys content and response rates see here.)

Background

The onset of the COVID-19 pandemic brought about a rise in mental health problems, feelings of loneliness and isolation (Niedzwiedz et al., 2021; Pierce et al., 2020). In the UK, the introduction of 'lockdown measures' prohibited individuals to leave their home without a reasonable excuse, banning public gatherings, and demanding 'social distancing' (LI & Wang, 2020; Saltzman, et al., 2020). This situation has been hard for everyone, but possibly particularly so for individuals with experience of OHC, given it can be considered as a distinct type of traumatic experience including for example feelings of abandonment and difficulties with social relationships (Sigal et al., 2003). These feelings might especially come to the fore during the current COVID-19 crisis. With 50-year follow up data we compare experiences of those who directly experienced care themselves (OHC1), children of care leaver mothers (OHC2) and the general population with no care experience (OHC0) across a number of outcomes, thus identifying who is most at risk of psycho-social adjustment problems in mid adulthood coinciding with a major health pandemic.

Analytic strategy

All adult outcomes are self-reported during the 2020 COVID-19 wave 2 survey, which was carried out in September-October 2020. Response rates to the COVID-19 surveys were much lower than in 'usual' waves of data collection, and our sample size of cohort members who reported OHC experience was reduced to 4,236 (see Appendix A2.1 for details of the flow of study members into the analytic sample). We employed multivariate logistic regression techniques to estimate the relationship between OHC experience and indicators of adult health and wellbeing, first reporting the unadjusted associations (model 1) and then adjusting for a range of individual and socioeconomic control variables assessed during childhood and their current circumstances. Specifically, effect estimates were adjusted for sex (model 2); other socioeconomic covariates assessed during childhood [ethnicity, birthweight, mother's education and family status] (model 3); current circumstances [occupation class, highest qualification, employment status, living arrangements] (model 4); and a fully adjusted model including all covariates (model 5).

Key measures

The mental health and wellbeing related outcomes comprised the assessment of depression, self-reported mental health, social contact, loneliness, and feeling in control. All outcome measures were dichotomised. Box A7.5 provides a detailed description of the outcomes.

Box A7.5: Outcome measures

Measure	Question wording	Binary
Malaise inventory (9-items) The questions measure levels of psychological distress, or depression. (for further details see Rutter et al., 1970).	• Do you feel tired most of the time? • Do you often feel miserable or depressed? • Do you often get worried about things? • Do you often get in a violent rage? • Do you often suddenly become scared for no good reason? • Are you easily upset or irritated? • Are you constantly keyed up and jittery? • Does every little thing get on your nerves and wear you out? • Does your heart often race like mad?	Each question coded No=0 Yes = 1 Total score: 0-9 0-3 = 0 >3 = 1 'high malaise score'
Pre-Pandemic Mental Health (1 item)	In the 3 months before the Coronavirus outbreak in March, in general would you say your mental health was... 5-point scale: excellent: – very good – good – fair – poor	Excellent/good = 0 Fair/Poor = 1
Mental Health (1 item)	Thinking about now, in general would you say your mental health is… 5-point scale: excellent – very good – good – fair – poor	Excellent/good = 0 Fair/Poor = 1
Lack of control (2 items)	Which of these statements is more true for you? • I usually have a free choice and control over my life • Whatever I do has no real effect on wha happens to me	Free choice = 0 No effect = 1
Loneliness (1 item)	• How often do you feel lonely? 3-point scale: hardly ever – some of the time – often	Hardly ever = 0 Some/often = 1
Social contact (5 items)	The next few questions are about the contact you have had with people you do not live with in the last seven days. • On how many days did you meet up in person with any of your family or friends who do not live with you? • On how many days did you talk to family or friends you do not live with via phone or video calls? • On how many days did you keep in contact with family or friends you do not live with by email or text or other electronic messaging? • On how many days did you take part in an online community activity, e.g. an online community group, online chat group, street or neighbourhood social media group? • On how many days did you give help to people outside of your household affected by Coronavirus or the current restrictions? 5-point scale: every day – 4-6 days – 2-3 days – 1 day – never	Reverse coded: high score = high levels social contact Total score: 5-25 Mean 12.9 sd 3.6 9-25 = 0 <9 = 1 'low social contact'

Findings

Table A7.5 gives the full regression results from the unadjusted model (Model 1) to the fully adjusted model (Model 5) and shows that the negative association between direct OHC experience and mental health are attenuated by inclusion of sex, childhood controls and current circumstances but remain significant. The fully adjusted model (Model 5) shows 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, more than twice as likely to report poor mental health both pre- and during the pandemic and to report feelings of loneliness, and are more than three times as likely to not feel in control over what happens to them. The association of care experience with low levels of social contact was only borderline significant. Interestingly, among OHC2, the association with low level social contact became significant after controlling for childhood family background and current living situations, suggesting a significant role of non-care related influences

Turning to those with indirect OHC experience (OHC1), they are more than twice as likely to report poor mental health pre-pandemic than OHC0, but there were no significant differences regarding the other indicators at the 95% level, although the associations with social contact and feelings of loneliness were significant at the 90% level.

Confirming previous findings (Murray et al., 2020a; Martin et al., 2020; Forsman, 2020; Dregan & Guillford, 2012; Viner & Taylor, 2005; Xie et al., 2021; Osterberg et al., 2016), we show that the experience of OHC is associated with poor mental health in mid adulthood. However, we find little evidence to support the assumption of intergenerational transmission of trauma, except regarding poor adult mental health before the pandemic among children of mothers with OHC experience (OHC1). While the direct experience of OHC2 is a significant risk factor for adjustment problems in later life, there is less evidence regarding adverse psycho-social adult outcomes in the 2nd generation, i.e., the children of care leaver mothers (OHC1).

The findings lend support to the assumption of both continuity and discontinuity of the trauma associated with the experience of OHC. While a relative high proportion of cohort members with direct experience of OHC (OHC2) and to a lesser extent, those whose mother experienced OHC (OHC1) report poor mental health in mid adulthood, many of the 2nd generation care leavers seem to be reasonably well adjusted as adults, even during a major pandemic. There is thus a considerable degree of resilience, in particular among the adult children of care leaver mothers. Although the findings suggest that the pandemic is not associated with a marked increase in mental health problems among care leavers, it did bring to the fore feelings of loneliness and not being in control of one's life among those with direct experience of care (OHC2), suggesting that key mechanisms for social integration and wellbeing are being affected (Saltzman et al., 2020).

Key messages

The findings from the 1970 provides support to existing evidence of developmental continuity of childhood disadvantage for care leavers into middle age (e.g., Xie, et al., 2021; Brännström, et al., 2017) and underline the case for extending the support to care leavers into the adult years, enabling them to integrate into society through employment and by establishing committed social and emotional relationships. However, there is also encouraging evidence as the grown-up children of care leavers (OHC1) appear to be less affected than those with direct OHC experience (OHC2) providing evidence of resilience in the second generation, as the children of care leavers appearing to be relatively well adjusted by age 50 and during a major health pandemic.

Overall, the research has highlighted the need for more research to better understand the factors and processes linking OHC experience to the psycho-social adjustment in the 2nd generation, and what enables those with OHC experience and their children to escape the vicious cycle and to lead a satisfactory and rewarding life after a problematic childhood.

Table A7.5: Mental Health and general wellbeing outcomes (odds ratios; Ref Cat: OHC0)

	High Malaise	PP Poor Mental Health	Poor Mental Health	No Control	Feel Lonely Sometimes/ Often	Low level Social Contact
M1: Unadjusted						
CM Mother OHC	1.46	2.53**	1.11	1.41	1.78	2.47
(OHC1)	[0.65,3.30]	[1.38,4.63]	[0.59,2.08]	[0.55,3.60]	[0.94,3.38]	[0.92,6.65]
CM OHC	2.41*	3.17***	2.18**	3.77***	2.72*	2.29
(OHC2)	[1.08,5.38]	[1.67,6.04]	[1.23,3.84]	[1.75,8.12]	[1.16,6.39]	[0.99,5.32]
R^2	0.01	0.01	0.00	0.01	0.01	0.01
M2: M1 + Sex						
CM Mother OHC	1.54	2.48**	1.08	1.44	1.83	2.41
(OHC1)	[0.64,3.66]	[1.35,4.56]	[0.58,2.02]	[0.56,3.68]	[0.94,3.56]	[0.91,6.39]
CM OHC	2.36*	3.22***	2.23**	3.71***	2.67*	2.49
(OHC2)	[1.11,5.06]	[1.69,6.15]	[1.26,3.96]	[1.75,7.90]	[1.20,5.95]	[1.00,6.24]
R^2	0.02	0.01	0.01	0.01	0.01	0.04
M3: M2 + Childhood Characteristics						
CM Mother OHC	1.45	2.40**	1.10	1.30	1.74	2.34
(OHC1)	[0.61,3.42]	[1.31,4.41]	[0.58,2.07]	[0.49,3.42]	[0.89,3.37]	[0.89,6.14]
CM OHC	2.19*	3.07***	2.36**	2.81*	2.47*	2.65*
(OHC2)	[1.04,4.58]	[1.62,5.80]	[1.31,4.27]	[1.26,6.25]	[1.18,5.17]	[1.08,6.51]
R^2	0.04	0.02	0.01	0.02	0.02	0.04
M4: M2 + Current Situation						
CM Mother OHC	2.43*	2.52**	1.98*	1.41	1.73	2.22
(OHC1)	[1.19,4.98]	[1.41,4.49]	[1.09,3.57]	[0.56,3.56]	[0.98,3.05]	[0.97,5.07]
CM OHC	1.52	2.55**	1.11	2.85**	2.12	2.63*
(OHC2)	[0.71,3.27]	[1.40,4.64]	[0.60,2.07]	[1.37,5.92]	[0.94,4.76]	[1.16,5.95]
R^2	0.04	0.07	0.03	0.06	0.05	0.03
M5: Fully adjusted						
CM Mother OHC	1.50	2.52**	1.11	1.38	1.69	2.15
(OHC1)	[0.68,3.35]	[1.37,4.64]	[0.59,2.08]	[0.54,3.54]	[0.94,3.04]	[0.96,4.84]
CM OHC	2.18*	2.62**	2.23**	2.29*	1.91	3.46**
(OHC2)	[1.09,4.36]	[1.45,4.72]	[1.24,4.02]	[1.05,5.02]	[0.91,4.05]	[1.55,7.71]
R^2	0.06	0.07	0.04	0.06	0.06	0.08
N	*3,795*	*2,487*	*2,486*	*2,472*	*3,807*	*3,805*

Note: OHC = Out-of-home care; CM = cohort member; PP = pre-pandemic. There were five stages to the modelling strategy: Model 1: OHC experience; Model 2: Model 1 + sex; Model 3: Model 2 + birth characteristics [ethnicity, birthweight, mother's education and family status]; Model 4: Model 2 + current circumstances [occupation class, highest qualification, employment status, living arrangements]; Model 5: Model 3 + 4 [sex + birth characteristics + current circumstances].

Exponentiated coefficients; 95% confidence intervals in brackets; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Appendix A8

Table A8.1a: Logistic Regression results: smoking and alcohol consumption [Odds Ratios]

	Ever Smoked	Smokes Daily	Smoked <15	Ever Vaped	Vapes Daily	Ever Alcohol	Alcohol <15
Mother OHC	1.59*	1.50	1.34	1.49	1.08	0.98	1.17
	(0.34)	(0.36)	(0.25)	(0.31)	(0.41)	(0.30)	(0.19)
Teenage Characteristics							
Female	1.06	1.08	1.00	0.86***	0.56***	1.09	1.06
	(0.05)	(0.08)	(0.05)	(0.04)	(0.06)	(0.07)	(0.04)
BME	0.49***	0.43***	0.78**	0.67***	0.66	0.31***	0.76**
	(0.04)	(0.08)	(0.07)	(0.05)	(0.16)	(0.03)	(0.06)
Age	1.51***	1.29*	1.10	1.28**	1.22	1.95***	0.82**
	(0.11)	(0.13)	(0.09)	(0.09)	(0.16)	(0.20)	(0.06)
5+ grade 4-9 GCSEs	0.67***	0.50***	0.74***	0.74***	0.68***	1.11	1.02
	(0.03)	(0.05)	(0.04)	(0.04)	(0.07)	(0.08)	(0.05)
Family SES							
Workless household	1.24**	1.22	1.13	1.01	0.93	0.84*	1.05
	(0.08)	(0.12)	(0.08)	(0.08)	(0.15)	(0.07)	(0.07)
Mother NVQ2+ quals	0.93	0.94	0.91	0.86*	0.99	1.36***	1.07
	(0.06)	(0.09)	(0.07)	(0.05)	(0.14)	(0.10)	(0.06)
English +/or other lang spoken	0.69***	0.66*	0.80	0.75***	0.60	0.27***	0.70***
	(0.06)	(0.14)	(0.09)	(0.06)	(0.17)	(0.03)	(0.07)
Rented home	1.26***	1.45***	1.21**	1.27***	1.16	1.12	1.01
	(0.07)	(0.14)	(0.08)	(0.08)	(0.17)	(0.09)	(0.06)
Live in deprived area	0.98	1.02	1.03	1.06	1.17	0.79**	0.92
	(0.05)	(0.09)	(0.07)	(0.05)	(0.15)	(0.06)	(0.05)
N	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Table A8.1b: Logistic Regression results: drug consumption [Odds Ratios]

	Ever taken drugs	Now take drugs	Ever Cannabis	Ever Cocaine	Ever Ecstasy	Ever Ketamine
Mother OHC	1.55*	1.64*	1.65**	0.93	0.91	0.64
	(0.28)	(0.38)	(0.31)	(0.35)	(0.27)	(0.37)
Teenage Characteristics						
Female	0.84***	0.75***	0.85**	0.79**	0.79**	0.71**
	(0.04)	(0.05)	(0.04)	(0.07)	(0.06)	(0.07)
Ethnic minority	0.81*	0.97	0.84*	0.63*	0.61*	0.57*
	(0.07)	(0.12)	(0.07)	(0.12)	(0.12)	(0.14)
Age	1.50***	1.19*	1.44***	1.85***	1.72***	1.54**
	(0.11)	(0.10)	(0.11)	(0.25)	(0.20)	(0.24)
5+ grade 4-9 GCSEs	0.87*	0.96	0.90*	0.71***	0.86*	0.90
	(0.05)	(0.06)	(0.05)	(0.07)	(0.07)	(0.10)
Family SES						
Workless household	1.12	0.97	1.12	1.04	0.97	0.99
	(0.07)	(0.09)	(0.08)	(0.13)	(0.11)	(0.17)
Mother NVQ2+ quals	1.13	1.44***	1.16*	1.12	1.14	1.28
	(0.07)	(0.12)	(0.07)	(0.14)	(0.11)	(0.18)
English +/or other lang spoken	0.69***	0.62**	0.66***	0.82	1.00	0.97
	(0.07)	(0.09)	(0.07)	(0.19)	(0.18)	(0.25)
Rented home	1.16	1.08	1.15*	1.16	1.10	1.07
	(0.08)	(0.08)	(0.08)	(0.13)	(0.12)	(0.15)
Live in deprived area	1.00	0.96	1.00	0.98	1.00	0.95
	(0.06)	(0.08)	(0.06)	(0.10)	(0.11)	(0.14)
N	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Table A8.2: 1970 cohort at 30: drugs and police contact

	prop	lower CI	Upper CI	prop	lower CI	Upper CI	prop	lower CI	Upper CI
Age 30: Ever been..									
...moved on by police?	0.19	0.18	0.20	0.16	0.11	0.20	**0.29**	0.24	0.34
...stopped & questioned by police?	0.41	0.40	0.42	0.43	0.36	0.49	**0.47**	0.42	0.52
...let off with warning?	0.29	0.28	0.30	0.30	0.25	0.36	**0.36**	0.31	0.41
...arrested & taken to station?	0.17	0.16	0.18	0.20	0.15	0.25	**0.31**	0.27	0.36
...formally cautioned at station?	0.14	0.13	0.15	**0.20**	0.15	0.25	**0.29**	0.24	0.34
...found guilty by a court?	0.13	0.12	0.13	**0.18**	0.13	0.22	**0.29**	0.24	0.34
Age 30: Have you ever...									
...tried cannabis	0.50	0.49	0.52	0.56	0.50	0.62	0.56	0.51	0.61
...tried ecstasy	0.15	0.15	0.16	0.16	0.11	0.20	**0.21**	0.16	0.25
...tried LSD?	0.14	0.13	0.14	0.13	0.09	0.17	**0.21**	0.17	0.25
...tried amyl nitrate?	0.20	0.19	0.21	0.18	0.13	0.22	**0.26**	0.21	0.31
...tried magic mushrooms?	0.14	0.13	0.15	0.11	0.07	0.15	0.18	0.14	0.22
...tried cocaine?	0.13	0.13	0.14	0.13	0.09	0.17	0.17	0.13	0.21
...tried temazepan?	0.05	0.05	0.06	0.07	0.04	0.10	0.08	0.05	0.11
...tried ketamine?	0.02	0.02	0.03	0.01	0.00	0.03	0.04	0.02	0.05
...tried crack?	0.02	0.01	0.02	0.03	0.01	0.05	**0.04**	0.02	0.06
...tried heroin?	0.02	0.01	0.02	0.04	0.01	0.06	**0.04**	0.02	0.06
...tried methadone?	0.01	0.01	0.01	0.01	0.00	0.02	0.02	0.00	0.03
...tried amphetamines?	0.22	0.21	0.23	0.24	0.19	0.29	**0.28**	0.23	0.33

Note: Bold indicates probabilities significantly different from no OHC experience at p<.05

Table A8.3: Logistic Regression results: relationships and sexual engagement [Odds Ratios]

	Had a Boy/ Girlfriend	Had Sex	Had Sex <16	Unprotected Sex	Been/Made Pregnant
Mother OHC	1.34	1.50	1.13	1.39	1.63
	(0.28)	(0.31)	(0.21)	(0.30)	(0.58)
Teenage Characteristics					
Female	1.30***	1.10*	0.99	1.06	1.15
	(0.06)	(0.05)	(0.04)	(0.06)	(0.18)
BME	0.55***	0.49***	0.67***	0.56***	0.68
	(0.06)	(0.04)	(0.07)	(0.08)	(0.24)
Age	1.30***	1.83***	1.44***	1.58***	1.81**
	(0.09)	(0.12)	(0.10)	(0.14)	(0.39)
5+ grade 4-9 GCSEs	0.96	0.85***	0.78***	0.88*	0.60**
	(0.05)	(0.04)	(0.04)	(0.05)	(0.09)
Family SES					
Workless household	1.11	1.10	1.12	0.98	1.51*
	(0.09)	(0.08)	(0.08)	(0.09)	(0.30)
Mother NVQ2+ quals	0.90	0.99	0.90	1.13	0.94
	(0.06)	(0.06)	(0.05)	(0.08)	(0.15)
English +/or other lang spoken	0.67***	0.44***	0.64***	0.48***	0.21**
	(0.08)	(0.06)	(0.07)	(0.08)	(0.12)
Rented home	1.24**	1.28***	1.33***	1.25**	2.15***
	(0.09)	(0.08)	(0.08)	(0.09)	(0.47)
Live in deprived area	1.08	1.04	0.97	1.08	0.97
	(0.06)	(0.06)	(0.05)	(0.07)	(0.16)
N	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*

Exponentiated coefficients; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A8.4: Logistic Regression results: victim of misconduct and crime [Odds Ratios]

	Insulted	Spread Gossip	Been Physical	Hit	Stolen	Harrassed	Sent Pictures	Unwelcome sex attn	Assaulted
Mother OHC	1.47*	1.14	1.15	0.99	1.57	1.15	1.76*	1.26	1.67
	(0.27)	(0.22)	(0.25)	(0.50)	(0.45)	(0.30)	(0.50)	(0.32)	(0.81)
Teenage Characteristics									
Female	0.86**	1.39***	0.66***	0.40***	0.94	1.34***	1.32***	2.17***	4.68***
	(0.04)	(0.06)	(0.04)	(0.07)	(0.08)	(0.08)	(0.10)	(0.15)	(0.85)
BME	0.76**	0.70***	0.72*	0.75	0.90	0.83	0.89	0.96	0.61
	(0.07)	(0.06)	(0.09)	(0.17)	(0.17)	(0.10)	(0.17)	(0.12)	(0.19)
Age	1.03	1.12	0.97	0.83	1.11	1.13	1.03	1.16	1.06
	(0.07)	(0.07)	(0.08)	(0.16)	(0.14)	(0.11)	(0.13)	(0.11)	(0.23)
5+ grade 4-9 GCSEs	1.10	1.24***	0.85**	0.79	0.94	0.92	1.11	1.32**	1.08
	(0.06)	(0.06)	(0.05)	(0.12)	(0.08)	(0.06)	(0.11)	(0.11)	(0.15)
Family SES									
Workless household	1.01	1.02	1.18	0.94	1.06	1.07	1.18	1.00	1.10
	(0.07)	(0.07)	(0.10)	(0.18)	(0.13)	(0.09)	(0.16)	(0.11)	(0.23)
Mother NVQ2+ quals	1.10	1.18**	1.05	1.10	0.97	1.00	1.13	1.40**	1.79**
	(0.07)	(0.07)	(0.07)	(0.19)	(0.10)	(0.08)	(0.13)	(0.15)	(0.37)
English +/or other lang spoken	0.68***	0.89	1.03	1.53	0.86	0.80	0.75	0.93	1.14
	(0.07)	(0.08)	(0.15)	(0.38)	(0.16)	(0.11)	(0.16)	(0.14)	(0.34)
Rented home	1.20**	1.10	1.07	1.44*	1.15	1.20*	1.08	1.04	0.78
	(0.08)	(0.06)	(0.09)	(0.26)	(0.12)	(0.09)	(0.12)	(0.08)	(0.13)
Live in deprived area	1.05	0.92	0.95	1.14	1.04	0.98	0.95	0.99	1.00
	(0.06)	(0.05)	(0.06)	(0.17)	(0.11)	(0.07)	(0.11)	(0.09)	(0.17)
N	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*	*18,810*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Table A8.5: Logistic Regression results: contact with police [Odds Ratios]

	Stopped & Questioned	Cautioned	Arrested
Mother OHC	1.02	1.99*	0.96
	(0.21)	(0.58)	(0.55)
Teenage Characteristics			
Female	0.70***	0.77**	0.60*
	(0.04)	(0.06)	(0.14)
BME	0.73**	0.84	0.98
	(0.08)	(0.14)	(0.37)
Age	1.43***	1.06	0.45*
	(0.11)	(0.12)	(0.14)
5+ grade 4-9 GCSEs	0.61***	0.50***	0.31***
	(0.04)	(0.05)	(0.09)
Family SES			
Workless household	1.41***	1.46**	1.50
	(0.11)	(0.17)	(0.42)
Mother NVQ2+ quals	0.91	0.88	0.90
	(0.06)	(0.09)	(0.20)
English +/or other lang spoken	0.78	0.70	0.83
	(0.11)	(0.13)	(0.31)
Rented home	1.18*	1.18	1.74*
	(0.08)	(0.13)	(0.48)
Live in deprived area	1.12	1.03	0.96
	(0.08)	(0.10)	(0.24)
N	*18,810*	*18,810*	*18,810*

Exponentiated coefficients; Standard errors in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Appendix A9

Appendix A9: Latent Class Analysis

Table A9.1: Selection of number of classes for the parents' generation (G1) – Indicators of Model Fit

No. of classes	Log-Likelihood	Model's free parameters	AIC	S-BIC	Entropy	A-LRT p-value for K-1 classes
2	-3969.425	24	8048.851	8079.034	0.86	0.0000
3	-3897.858	28	7961.716	8007.266	0.76	0.0853
4	-3855.022	28	7932.045	7992.961	0.79	0.6828
5	-3816.374	28	7910.747	7987.030	0.80	0.6646

Note: AIC = the Akaike Information Criterion; S-BIC = sample-adjusted Bayesian Information Criterion; A-LRT = adjusted Lo-Mendel-Rubin likelihood ratio test.

Table A9.2: Conditional response probabilities by Latent class for G1

Class	Class: Response probabilities		
	Resilient Mothers	Impoverished Single Mothers	Distressed Mothers
No or low qualifications	.21	.72	.66
White ethnicity	.82	.83	.95
Only English spoken	.88	.93	1.00
Teenage mother	.05	.36	.12
Single mother	.02	.66	.21
Has older children	.67	.43	.89
State benefits	.33	.96	.96
Poverty	.13	.94	.85
Workless household	.05	.81	.56
Able to make regular savings	.50	.27	.31
Bottom 2 deciles IMD	.21	.72	.50
Rented home	.44	.99	.94
Overcrowded home	.29	.17	.76
Damp home	.15	.28	.29
Dislike home	.17	.36	.46
Dislike area live	.17	.48	.42
Area not good area for children	.47	.80	.78
Disorganised home	.17	.07	.39
Can't hear self think at home	.17	.22	.63
Not a calm atmosphere at home	.06	.07	.42
Longstanding illness	.24	.27	.44
Diagnosed depression	.40	.49	.66
High malaise score	.18	.28	.42
Recreational drugs	.10	.09	.22
Smokes	.39	.87	.77
Partner used force	.10	.12	.21
Never breastfed child	.23	.49	.51
N	*83*	*119*	*103*

Table A9.3: Predictors of group membership: multinomial logistic regression (relative risk ratio [rrr])

Class (Ref: Resilient Mothers)	Impoverished Mothers	Distressed Mothers
	rrr	rrr
OHC experience (ref: care-home)		
Foster care	.46*	.54*
Duration in OHC (ref: < 1 year)		
>1 <5 years	1.28	1.63
5+ years	.67	.89

Note: * indicates p<.1