Growing Up in Scotland: Change in early childhood and the impact of significant events

TECHNICAL APPENDIX

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B.1 Statistical modelling

Logistic regression analysis is used in this report to examine the background variables associated with each event as well as the association between events and drivers of child outcomes, while controlling for other predictors. A wide range of possible predictor variables (those listed in tables 2.5, 3.6, 4.5 and 5.5) were tested in each model using a forward stepwise procedure, and any that were significant were included in the final model. This gives an estimate of the independent effect of each predictor variable on the outcome when all the other independent variables were included in the model.

The results of the regression analyses are presented in tables (sections C and D in this appendix) showing odds ratios for the final models, together with the probability that the association is statistically significant. The predictor variable is significantly associated with the outcome variable if $p<0.1$. The models show the odds of being in the particular category of the outcome variable (e.g. being in income poverty in sweep 5) for each category of the independent variable (e.g. parental separation categories). Odds are expressed relative to a reference category, which has a given value of 1. Odds ratios greater than 1 indicate higher odds, and odds ratios less than 1 indicate lower odds. Also shown are the 95% confidence intervals for the odds ratios. Where the interval does not include 1, this category is significantly different from the reference category.

Ordinal logistic regression was used for the model where house moves was the dependent variable, as this variable has three categories; no moves, one move and two or more moves. Ordinal logistic regression models can be interpreted in much the same way as binary logistic regression models. One of the assumptions underlying ordinal logistic regression is that the relationship between each pair of outcome groups is the same. In other words, ordinal logistic regression assumes that the odds ratios that describe the relationship between, say, the lowest versus all higher categories of the outcome variable are the same as those that describe the relationship between the next lowest category and all higher categories, etc. This is called the proportional odds assumption or the parallel regression assumption. Because the relationship between all pairs of groups is the same, there is only one set of odds ratios (only one model). If this was not the case, we would need different models to describe the relationship between each pair of outcome groups. This assumption was tested using both the Brant test (which compares slope coefficients of the 2 binary logistic models implied by the ordinal regression model) and a likelihood-ratio test of whether the coefficients are equal across categories. Both tests confirmed that the proportional odds assumption was valid in this case.

B.2 Understanding odds ratios

To understand an odds ratio we first need to describe the meaning of odds. The definition of odds is similar but significantly different to that of probability. This is best explained in the form of an example. If 200 individuals out of a population of 1000 experienced persistent poverty, the probability (p) of experiencing persistent poverty is 200/1000, thus $p=0.2$. The probability of not experiencing persistent poverty is therefore $1-p = 0.8$. The odds of experiencing persistent poverty are calculated as the quotient of these two mutually exclusive events. So, the odds in favour of experiencing persistent poverty to not experiencing persistent poverty, is therefore $0.2/0.8=0.25$. Suppose that 150 out of 300

people living in social rented housing experience persistent poverty compared to 50 out of 150 who live in owner occupied housing. The odds of a person living in social rented housing of experiencing persistent poverty are 0.5/0.5=1.0. The odds of a person living in owner occupied housing of experiencing persistent poverty is 0.3333/0.6666=0.5. The odds ratio of experiencing persistent poverty is the ratio of these odds, 1.0/0.5=2.0. Thus the odds of experiencing persistent poverty are twice as high among people who live in social rented housing (compared to people who live in owner occupied housing – the 'reference category').

C ADDITIONAL TABLES - REGRESSION MODELS (EVENTS)

Table C.1 Parental separation logistic regression results

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Parental relationship status *(p<0.001)*	Married	1	2,207		
	Cohabiting	2.80	852	0.46	(2.02,3.89)
GUS child's birth planned *(p=0.006)*	Birth planned by both parents or by mother	1	2,218		
	Not planned, but not prevented	1.43	424	0.29	(0.95,2.15)
	Not at all planned	1.78	381	0.34	(1.22,2.59)
Income Poverty *(p<0.001)*	Not relative low income	1	2,226		
	Relative low income	2.40	549	0.41	(1.71,3.37)
	Income missing	1.52	284	0.41	(0.9,2.6)

Table C.2 **Residential moves ordinal logistic regression results**

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Mothers age *(p<0.001)*	Under 20	1	158		
	20 to 29	0.52	1,289	0.10	(0.35,0.78)
	30 or over	0.27	2,123	0.05	(0.18,0.41)
Tenure *(p<0.001)*	Owner occupied	1	2,589		
	Social rented	1.13	743	0.12	(0.92,1.38)
	Private rented	6.11	188	1.12	(4.24,8.81)
	Other	2.85	93	0.68	(1.76,4.6)
Birth order *(p<0.001)*	First child or only child	1	1,759		
	Older siblings	0.70	1,856	0.06	(0.6,0.82)
Urban-rural *(p=0.02)*	Large urban	1	1,303		
	Other urban	1.01	1,076	0.10	(0.82,1.23)
	Small towns	0.84	490	0.10	(0.65,1.08)
	Rural	0.72	746	0.08	(0.58,0.9)
Maternal-infant attachment *(p<0.001)*	Good	1	3,007		
	Poor	1.45	480	0.15	(1.18,1.79)

Table C.3 **Job loss logistic regression results**

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Lone parents only					
Mothers age *(p<0.001)*	Under 20	1	12		
	20 to 29	0.10	36	0.07	(0.02,0.43)
	30 or over	0.02	42	0.02	(0.00,0.15)
Birth order *(p=0.004)*	First child or only child	1	64		
	Older siblings	6.44	28	4.03	(1.83,22.63)
Urban-rural *(p=0.002)*	Large urban	1	25		
	Other urban	0.98	47	0.74	(0.21,4.50)
	Small towns	0.04	14	0.03	(0.01,0.19)
	Rural	1.15	6	1.34	(0.11,11.96)
Sf-12 physical health scale *(p=0.012)*		0.88	92	0.04	(0.8,0.97)
Couple parents only					
Tenure *(p<0.001)*	Owner occupied	1	2,149		
	Social rented	3.04	191	0.75	(1.86,4.97)
	Private rented	0.86	91	0.44	(0.31,2.38)
	Other	1.07	52	0.78	(0.25,4.55)
Birth order *(p=0.003)*	First child or only child	1	1,213		
	Older siblings	0.56	1,270	0.11	(0.38,0.81)
Income Poverty *(p<0.001)*	Not relative low income	1	1,986		
	Relative low income	2.58	288	0.59	(1.64,4.07)
	Income missing	2.24	209	0.59	(1.32,3.79)

Table C.4 Maternal health logistic regression results

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Parental occupational class *(p=0.027)*	Managerial and professional occupations	1	1,316		
	Intermediate occupations	1.27	226	0.47	(0.60,2.68)
	Small employers and own account workers	1.82	318	0.86	(0.71,4.70)
	Lower supervisory and technical occupations	0.97	419	0.46	(0.38,2.50)
	Semi-routine and routine occupations	1.40	527	0.45	(0.74,2.67)
	No one employed	3.58	296	1.28	(1.76,7.29)
Mother's mental health *(p<0.001)*	Good	1	2,769		
	Poor	3.56	352	1.12	(1.90,6.68)
Sf-12 physical health scale *(p<0.001)*		0.92	3,121	0.01	(0.90,0.95)

D ADDITIONAL TABLES - REGRESSION MODELS (DRIVERS)

Table D.1 Chaos logistic regression results – parental separation event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Parental separation *(p=0.774)*	Stable couple family throughout	1	2861		
	Parents separated	1.05	197	0.19	(0.74,1.50)
Mother's mental health *(p<0.001)*	Good	1	2669		
	Poor	1.98	389	0.18	(1.65,2.38)
Number of dependent children *(p<0.001)*	One	1	1392		
	Two	1.17	1110	0.11	(0.97,1.4)
	Three or more	2.04	556	0.28	(1.56,2.67)
Sf-12 physical health scale *(p=0.014)*		0.98	3046	0.01	(0.97,1)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.007)*	Least Deprived	1	763		
	2	1.00	712	0.13	(0.78,1.3)
	3	1.33	670	0.18	(1,1.75)
	4	1.37	499	0.26	(0.94,2)
	Most Deprived	1.61	414	0.26	(1.17,2.22)
Family owns/has access to car *(p=0.0452)*	No	1	210		
	Yes	0.66	2847	0.13	(0.45,0.99)
GUS child's birth planned *(p=0.002)*	Birth planned by both parents or by mother	1	2218		
	Not planned, but not prevented	1.43	423	0.14	(1.18,1.74)
	Not at all planned	1.02	381	0.11	(0.82,1.27)

Table D.2 Income poverty logistic regression results – parental separation event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Parental separation *(p<0.001)*	Stable couple family throughout	1	2862		
	Parents separated	4.24	197	0.98	(2.67,6.73)
Income poverty *(p<0.001)*	Not relative low income	1	2226		
	Relative low income	4.34	549	0.70	(3.14,5.98)
	Income missing	2.86	284	0.62	(1.85,4.42)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.044)*	Least Deprived	1	764		
	2	1.34	712	0.40	(0.74,2.42)
	3	1.59	670	0.45	(0.91,2.79)
	4	1.90	499	0.50	(1.13,3.21)
	Most Deprived	2.10	414	0.55	(1.25,3.53)
Family owns/has access to car *(p=0.020)*	No	1	210		
	Yes	0.59	2848	0.13	(0.37,0.92)
Tenure *(p<0.001)*	Owner occupied	1	2454		
	Social rented	2.19	417	0.36	(1.57,3.05)
	Private rented	1.94	128	0.57	(1.08,3.49)
	Other	5.07	59	2.23	(2.11,12.18)
Birth order *(p=0.010)*	First child or only child	1	1426		
	Older siblings	1.41	1633	0.18	(1.09,1.83)
Low birth weight *(p=0.008)*	Low	1	165		
	Not low	0.51	2893	0.13	(0.31,0.83)
Child's ethnicity *(p<0.001)*	White	1	2943		
	other groups	3.66	114	0.84	(2.32,5.79)
Highest Education level of mother *(p<0.001)*	Higher or above	1	2500		
	Standard grade or other	1.62	420	0.24	(1.2,2.19)
	No qualifications	2.05	139	0.52	(1.23,3.39)
Parental occupational class *(p<0.001)*	Managerial and professional occupations	1	1397		
	Intermediate occupations	2.56	216	0.63	(1.56,4.19)
	Small employers and own account workers	3.71	351	0.81	(2.39,5.75)
	Lower supervisory and technical occupations	2.14	449	0.41	(1.46,3.15)
	Semi-routine and routine occupations	4.01	512	0.77	(2.74,5.88)
	No one employed	8.08	111	2.76	(4.09,15.96)

Table D.3 Mental health logistic regression results – parental separation event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Parental separation and Mother's mental health at sweep 1 *(p<0.001)*	Stable couple family throughout and Mother's mental health at sweep 1 good	1	2517		
	Stable couple family throughout and Mother's mental health at sweep 1 poor	5.94	345	0.87	(4.45,7.95)
	Parents separated and Mother's mental health at sweep 1 good	2.56	153	0.59	(1.61,4.05)
	Parents separated and Mother's mental health at sweep 1 poor	7.02	44	2.69	(3.27,15.09)
Sf-12 physical health scale *(p=0.003)*		0.98	3047	0.01	(0.96,0.99)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.011)*	Least Deprived	1	764		
	2	1.12	712	0.21	(0.77,1.62)
	3	1.56	670	0.29	(1.08,2.27)
	4	1.21	499	0.22	(0.85,1.73)
	Most Deprived	2.04	414	0.43	(1.34,3.11)
Tenure *(p=0.046)*	Owner occupied	1	2454		
	Social rented	1.60	417	0.27	(1.14,2.25)
	Private rented	1.25	128	0.40	(0.67,2.36)
	Other	0.73	59	0.44	(0.21,2.46)

Table D.4 Warmth logistic regression results – parental separation event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Parental separation *(p=0.165)*	Stable couple family throughout	1	2861		
	Parents separated	1.26	197	0.21	(0.91,1.75)
Maternal-infant attachment *(p<0.001)*	Good	1	2590		
	Poor	1.56	369	0.19	(1.22,1.99)
Mother's mental health *(p=0.024)*	Good	1	2669		
	Poor	1.33	389	0.17	(1.04,1.71)
Tenure *(p<0.001)*	Owner occupier	1	2453		
	Soc rent	2.30	417	0.31	(1.77,3)
	Private rent	1.67	128	0.30	(1.16,2.39)
	Other	1.83	59	0.54	(1.02,3.3)

Table D.5 Conflict logistic regression results – parental separation event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Parental separation *(p=0.653)*	Stable couple family throughout	1	2861		
	Parents separated	0.91	197	0.19	(0.60,1.38)
Maternal-infant attachment *(p=0.020)*	Good	1	2590		
	Poor	1.39	369	0.19	(1.06,1.84)
Mother's mental health *(p<0.001)*	Good	1	2669		
	Poor	2.15	389	0.34	(1.58,2.94)
Tenure *(p=0.038)*	Owner occupied	1	2453		
	Social rented	1.44	417	0.24	(1.03,2.02)
	Private rented	1.77	128	0.44	(1.07,2.92)
	Other	0.75	59	0.40	(0.25,2.20)
Low birth weight *(p=0.090)*	Low	1	165		
	Not low	1.71	2892	0.53	(0.92,3.19)

Table D.6 Chaos logistic regression results – residential moves event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Residential house move *(p=0.464)*	Did not move house	1	2274		
	Moved once	1.00	1091	0.09	(0.84,1.18)
	Moved twice or more	0.82	250	0.13	(0.59,1.13)
Mother's mental health *(p<0.001)*	Good	1	3098		
	Poor	1.83	523	0.16	(1.54,2.17)
Number of dependent children *(p<0.001)*	One	1	1694		
	Two	1.13	1283	0.10	(0.95,1.34)
	Three or more	1.86	644	0.24	(1.44,2.41)
Sf-12 physical health scale *(p=0.002)*		0.98	3607	0.01	(0.97,0.99)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.015)*	Least Deprived	1	787		
	2	1.00	785	0.13	(0.77,1.3)
	3	1.29	780	0.18	(0.97,1.72)
	4	1.37	621	0.24	(0.97,1.94)
	Most Deprived	1.44	648	0.23	(1.05,1.97)
Family owns/has access to car *(p=0.027)*	No	1	505		
	Yes	0.75	3115	0.10	(0.58,0.97)
Tenure *(p=0.017)*	Owner occupied	1	2595		
	Social rented	1.41	743	0.15	(1.15,1.73)
	Private rented	1.10	188	0.20	(0.76,1.59)
	Other	1.38	93	0.41	(0.77,2.5)

Table D.7 Income poverty logistic regression results – residential moves event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Residential house move and income poverty *(p<0.001)*	Did not move house and did not have relative low income at sweep 1	1	1539		
	Did not move house and had relative low income at sweep 1	4.95	530	0.86	(3.5,7.01)
	Did not move house and did not answer income question at sweep 1	3.89	205	0.92	(2.42,6.24)
	Moved once and did not have relative low income at sweep 1	0.94	680	0.17	(0.65,1.35)
	Moved once and had relative low income at sweep 1	3.55	321	0.85	(2.2,5.72)
	Moved once and did not answer income question at sweep 1	2.49	90	0.71	(1.41,4.4)
	Moved twice or more and did not have relative low income at sweep 1	2.73	109	0.75	(1.58,4.72)
	Moved twice or more and had relative low income at sweep 1	4.91	111	1.33	(2.85,8.45)
	Moved twice or more and did not answer income question at sweep 1	2.12	30	1.06	(0.78,5.77)
Mother's mental health *(p=0.018)*	Good	1	3098		
	Poor	1.44	523	0.22	(1.07,1.95)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.009)*	Least Deprived	1	787		
	2	1.15	785	0.26	(0.74,1.79)
	3	1.64	780	0.33	(1.10,2.44)
	4	1.85	621	0.39	(1.22,2.81)
	Most Deprived	2.02	648	0.43	(1.32,3.09)
Tenure *(p<0.001)*	Owner occupied	1	2595		
	Social rented	2.01	743	0.30	(1.50,2.7)
	Private rented	1.95	188	0.41	(1.28,2.96)
	Other	3.57	93	1.01	(2.03,6.27)
Birth order *(p<0.001)*	First child or only child	1	1760		
	Older siblings	1.47	1861	0.15	(1.20,1.80)
Mothers age at birth of GUS child *(p=0.075)*	Under 20	1	158		
	20 to 29	0.94	1292	0.22	(0.59,1.49)
	30 or over	0.71	2126	0.18	(0.42,1.19)

Child's ethnicity *(p<0.001)*	White	1	3491		
	other groups	2.58	128	0.64	(1.57,4.22)
Highest Education level of mother *(p=0.007)*	Higher or above	1	2808		
	Standard grade or other	1.39	575	0.20	(1.05,1.85)
	No qualifications	1.87	238	0.41	(1.21,2.92)
Parental occupational class *(p<0.001)*	Managerial and professional occupations	1	1460		
	Intermediate occupations	2.23	261	0.52	(1.4,3.54)
	Small employers and own account workers	3.23	362	0.66	(2.15,4.87)
	Lower supervisory and technical occupations	2.27	477	0.39	(1.61,3.2)
	Semi-routine and routine occupations	3.85	616	0.70	(2.68,5.53)
	No one employed	4.97	418	1.07	(3.24,7.62)

Table D.8 Mental health logistic regression results – residential moves event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Residential house move and Mother's mental health *(p<0.001)*	Did not move house and Mother's mental health at sweep 1 good	1	1963		
	Did not move house and Mother's mental health at sweep 1 poor	7.02	311	1.18	(5.03,9.81)
	Moved once and Mother's mental health at sweep 1 good	1.37	935	0.18	(1.05,1.79)
	Moved once and Mother's mental health at sweep 1 poor	4.93	156	1.11	(3.15,7.72)
	Moved twice or more and Mother's mental health at sweep 1 good	1.18	196	0.23	(0.79,1.76)
	Moved twice or more and Mother's mental health at sweep 1 poor	10.12	54	3.21	(5.37,19.06)
Sf-12 physical health scale *(p<0.001)*		0.97	3607	0.01	(0.96,0.99)
Tenure *(p<0.001)*	Owner occupied	1	2595		
	Social rented	1.67	743	0.21	(1.29,2.15)
	Private rented	1.47	188	0.35	(0.92,2.35)
	Other	0.56	93	0.25	(0.23,1.38)
Income poverty *(p=0.002)*	Not relative low income	1	2331		
	Relative low income	1.63	964	0.21	(1.26,2.12)
	Income missing	1.28	326	0.25	(0.87,1.88)

Table D.9 Warmth logistic regression results – residential moves event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Residential house move *(p=0.873)*	Did not move house	1	2274		
	Moved once	0.96	1091	0.10	(0.78,1.18)
	Moved twice or more	1.06	250	0.19	(0.74,1.51)
Maternal-infant attachment *(p=0.023)*	Good	1	3010		
	Poor	1.32	482	0.16	(1.04,1.68)
Mother's mental health *(p=0.015)*	Good	1	3098		
	Poor	1.35	523	0.16	(1.06,1.72)
Tenure *(p<0.001)*	Owner occupied	1	2595		
	Social rented	1.95	743	0.20	(1.59,2.4)
	Private rented	1.69	188	0.34	(1.14,2.51)
	Other	1.39	93	0.38	(0.8,2.41)
Low birth weight *(p=0.083)*	Low	1	212		
	Not low	0.69	3407	0.14	(0.46,1.05)

Table D.10 Conflict logistic regression results – residential moves event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Residential house move *(p=0.138)*	Did not move house	1	2274		
	Moved once	1.18	1091	0.11	(0.98,1.41)
	Moved twice or more	0.92	250	0.16	(0.65,1.3)
Maternal-infant attachment *(p=0.007)*	Good	1	3010		
	Poor	1.39	482	0.16	(1.10,1.75)
Mother's mental health *(p<0.001)*	Good	1	3098		
	Poor	2.08	523	0.29	(1.58,2.75)
Family owns/has access to car *(p<0.001)*	No	1	505		
	Yes	0.58	3115	0.08	(0.45,0.75)

Table D.11 Chaos logistic regression results – job loss event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Job loss *(p=0.065)*	Stable employment	1	2408		
	Job loss (decrease in WIR of 0.5 or more)	1.43	167	0.27	(0.98,2.08)
Mother's mental health *(p<0.001)*	Good	1	2281		
	Poor	2.35	294	0.24	(1.92,2.87)
Number of dependent children *(p<0.001)*	One	1	1239		
	Two	1.10	935	0.11	(0.89,1.34)
	Three or more	2.06	401	0.29	(1.55,2.74)
Sf-12 physical health scale *(p=0.005)*		0.98	2567	0.01	(0.96,0.99)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.007)*	Least Deprived	1	694		
	2	0.96	627	0.14	(0.71,1.29)
	3	1.42	559	0.21	(1.05,1.91)
	4	1.32	400	0.26	(0.89,1.95)
	Most Deprived	1.42	295	0.27	(0.97,2.06)

Table D.12 Income poverty logistic regression results – job loss event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Job loss *(p<0.001)*	Stable employment	1	2408		
	Job loss (decrease in WIR of 0.5 or more)	7.87	167	1.72	(5.09,12.17)
Income poverty *(p<0.001)*	Not relative low income	1	2015		
	Relative low income	5.83	347	1.02	(4.12,8.27)
	Income missing	2.55	213	0.73	(1.44,4.52)
Tenure *(p<0.001)*	Owner occupied	1	2199		
	Social rented	1.79	214	0.43	(1.10,2.90)
	Private rented	2.43	102	0.78	(1.28,4.61)
	Other	6.33	60	2.18	(3.18,12.61)
Child's ethnicity *(p=0.012)*	White	1	2503		
	other groups	2.88	72	1.18	(1.27,6.54)
Highest Education level of mother *(p<0.001)*	Higher or above	1	2177		
	Standard grade or other	1.80	321	0.31	(1.28,2.53)
	No qualifications	2.24	77	0.73	(1.18,4.29)
Parental occupational class *(p<0.001)*	Managerial and professional occupations	1	1266		
	Intermediate occupations	2.66	195	0.80	(1.46,4.86)
	Small employers and own account workers	3.79	289	1.16	(2.06,6.98)
	Lower supervisory and technical occupations	2.37	388	0.64	(1.38,4.07)
	Semi-routine and routine occupations	4.32	434	1.04	(2.67,7)
	No one employed	-	-	-	-

Table D.13 Mental health logistic regression results – job loss event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Job loss *(p=0.204)*	Stable employment	1	2408		
	Job loss (decrease in WIR of 0.5 or more)	1.41	167	0.37	(0.83,2.39)
Mother's mental health *(p<0.001)*	Good	1	2281		
	Poor	5.92	294	1.01	(4.22,8.31)
Sf-12 physical health scale *(p<0.001)*		0.96	2567	0.01	(0.95,0.97)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.024)*	Least Deprived	1	694		
	2	1.03	627	0.20	(0.7,1.53)
	3	1.33	559	0.28	(0.88,2.03)
	4	1.13	400	0.22	(0.77,1.67)
	Most Deprived	2.14	295	0.51	(1.34,3.43)
GUS child's birth planned *(p=0.029)*	Birth planned by both parents or by mother	1	1898		
	Not planned, but not prevented	1.52	350	0.33	(0.98,2.35)
	Not at all planned	1.45	304	0.33	(0.93,2.28)

Table D.14 Warmth logistic regression results – job loss event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Job loss *(p=0.232)*	Stable employment	1	2408		
	Job loss (decrease in WIR of 0.5 or more)	1.34	167	0.33	(0.82,2.18)
Maternal-infant attachment *(p=0.002)*	Good	1	2206		
	Poor	1.65	308	0.25	(1.22,2.25)
Mothers age at birth of GUS child *(p=0.002)*	Under 20	1	32		
	20 to 29	0.27	783	0.11	(0.12,0.61)
	30 or over	0.26	1738	0.10	(0.12,0.55)
Child's ethnicity *(p=0.021)*	White	1	2503		
	other groups	2.21	72	0.74	(1.13,4.32)
Family type *(p=0.071)*	Respondent is not living with spouse/partner	1	92		
	Respondent is living with spouse/partner	1.83	2483	0.60	(0.95,3.54)

Table D.15 Conflict logistic regression results – job loss event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Job loss *(p=0.018)*	Stable employment	1	2408		
	Job loss (decrease in WIR of 0.5 or more)	1.57	167	0.29	(1.08,2.27)
Maternal-infant attachment *(p=0.001)*	Good	1	2206		
	Poor	1.71	308	0.27	(1.24,2.35)
Mother's mental health *(p<0.001)*	Good	1	2281		
	Poor	1.94	294	0.35	(1.36,2.78)

Table D.16 Chaos logistic regression results – maternal health problems event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Onset of maternal health problems *(p<0.001)*	Stable good health	1	3039		
	Developed a persistent limiting health problem	2.23	82	0.51	(1.42,3.52)
Mother's mental health *(p<0.001)*	Good	1	2769		
	Poor	2.09	352	0.20	(1.73,2.54)
Number of dependent children *(p<0.001)*	One	1	1491		
	Two	1.21	1105	0.10	(1.02,1.44)
	Three or more	2.10	525	0.26	(1.63,2.69)
Sf-12 physical health scale *(p=0.003)*		0.97	3121	0.01	(0.96,0.99)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.011)*	Least Deprived	1	722		
	2	1.04	697	0.15	(0.78,1.37)
	3	1.38	681	0.22	(1,1.89)
	4	1.37	510	0.26	(0.94,2)
	Most Deprived	1.59	511	0.27	(1.14,2.22)
Family owns/has access to car *(p=0.001)*	No	1	370		
	Yes	0.64	2750	0.08	(0.49,0.83)

Table D.17 Income poverty logistic regression results – maternal health problems event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Onset of maternal health problems *(p=0.017)*	Stable good health	1	3039		
	Developed a persistent limiting health problem	2.42	82	0.87	(1.18,4.97)
Income poverty *(p<0.001)*	Not relative low income	1	2100		
	Relative low income	4.35	752	0.76	(3.07,6.16)
	Income missing	2.65	269	0.54	(1.77,3.99)
Quintiles of the Index of Multiple Deprivation 2006 *(p=0.006)*	Least Deprived	1	722		
	2	1.28	697	0.34	(0.76,2.18)
	3	2.18	681	0.53	(1.35,3.53)
	4	2.05	510	0.52	(1.23,3.41)
	Most Deprived	2.21	511	0.62	(1.27,3.86)
Tenure *(p<0.001)*	Owner occupied	1	2316		
	Social rented	2.27	566	0.34	(1.68,3.07)
	Private rented	2.05	153	0.47	(1.3,3.23)
	Other	3.41	85	1.01	(1.9,6.15)
Child's ethnicity *(p=0.016)*	White	1	3028		
	other groups	2.44	91	0.88	(1.19,5.02)
Highest Education level of mother *(p=0.006)*	Higher or above	1	2474		
	Standard grade or other	1.60	474	0.28	(1.13,2.26)
	No qualifications	2.00	173	0.48	(1.24,3.22)
Parental occupational class *(p<0.001)*	Managerial and professional occupations	1	1316		
	Intermediate occupations	2.49	226	0.63	(1.5,4.12)
	Small employers and own account workers	3.74	318	0.80	(2.44,5.72)
	Lower supervisory and technical occupations	2.32	419	0.46	(1.57,3.44)
	Semi-routine and routine occupations	3.84	527	0.71	(2.65,5.56)
	No one employed	4.12	296	0.91	(2.65,6.39)
Duration of breastfeeding *(p=0.023)*	Never breastfed	1	1024		
	Up to 2 weeks	0.73	391	0.16	(0.47,1.12)
	more than 2 weeks, up to 2 months	0.66	438	0.10	(0.49,0.9)
	3-5 months	0.90	364	0.16	(0.62,1.29)
	6-9 months	0.50	432	0.13	(0.3,0.83)
	Breastfeeding at Sw1 interview	0.63	472	0.13	(0.42,0.94)

Table D.18 Mental health logistic regression results – maternal health problems event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Onset of maternal health problems *(p<0.001)*	Stable good health	1	3039		
	Developed a persistent limiting health problem	8.57	82	2.58	(4.7,15.63)
Mother's mental health *(p<0.001)*	Good	1	2769		
	Poor	5.63	352	0.84	(4.18,7.58)
Sf-12 physical health scale *(p=0.003)*		0.97	3121	0.01	(0.95,0.99)
Family owns/has access to car *(p=0.003)*	No	1	370		
	Yes	0.61	2750	0.10	(0.44,0.84)
Income poverty *(p=0.039)*	Not relative low income	1	2100		
	Relative low income	1.52	752	0.24	(1.11,2.1)
	Income missing	1.33	269	0.32	(0.83,2.13)

Table D.19 Warmth logistic regression results – maternal health problems event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Onset of maternal health problems *(p=0.516)*	Stable good health	1	3039		
	Developed a persistent limiting health problem	0.81	82	0.26	(0.43,1.54)
Maternal-infant attachment *(p=0.060)*	Good	1	2654		
	Poor	1.28	380	0.17	(0.99,1.66)
Mother's mental health *(p=0.003)*	Good	1	2769		
	Poor	1.52	352	0.21	(1.16,2.00)
Tenure *(p<0.001)*	Owner occupied	1	2316		
	Social rented	1.83	566	0.21	(1.45,2.31)
	Private rented	1.53	153	0.34	(0.98,2.38)
	Other	1.43	85	0.39	(0.83,2.46)
Low birth weight *(p=0.055)*	Low	1	161		
	Not low	0.62	2958	0.15	(0.38,1.01)

Table D.20 Conflict logistic regression results – maternal health problems event

		Odds Ratio	Base (unweighted)	Standard Error	95% Confidence Interval
Onset of maternal health problems *(p=0.005)*	Stable good health	1	3039		
	Developed a persistent limiting health problem	2.15	82	0.57	(1.26,3.64)
Maternal-infant attachment *(p=0.021)*	Good	1	2654		
	Poor	1.42	380	0.21	(1.06,1.91)
Mother's mental health *(p<0.001)*	Good	1	2769		
	Poor	2.08	352	0.31	(1.54,2.81)
Family owns/has access to car *(p<0.001)*	No	1	370		
	Yes	0.56	2750	0.08	(0.42,0.75)