

Table 1: Association between parenting factors and children's outcomes at age 5 (bivariate odds ratios)

	Sample %	FSP OR	p value	SDQ OR	p value	Health OR	p-value
Pianta Warmth							
35 Highest	49.6	1.00		1.00		1.00	
33-34	30.5	1.07	0.561	1.73	0.000	1.46	0.016
30-32	14.8	1.83	0.000	2.36	0.000	1.88	0.002
7-29 Low	5.1	3.77	0.000	6.44	0.000	2.47	0.001
Pianta Conflict							
7-15 Low	50.0	1.00		1.00		1.00	
16-20	27.2	1.22	0.800	2.15	0.000	1.11	0.541
21-26	17.3	1.14	0.314	5.28	0.000	1.38	0.102
27-35 Highest	5.4	2.25	0.000	16.45	0.000	2.57	0.000
Positive Home Observation							
6-positive	69.6	1.00		1.00		1.00	
5	23.6	1.53	0.001	1.56	0.000	1.74	0.000
3-4	5.2	2.20	0.000	2.50	0.000	1.97	0.009
0-2	1.5	6.51	0.000	4.60	0.000	2.20	0.050
Negative Home Observation							
0 - None	91.6	1.00		1.00		1.00	
1	6.4	2.21	0.000	2.59	0.000	1.28	0.313
2 or more	1.9	2.67	0.000	2.97	0.000	1.02	0.970
Frequency of reading to the child							
Every day	60.2	1.00		1.00		1.00	
Several times a week	19.0	1.67	0.000	1.44	0.006	1.25	0.160
Once or twice a week	14.1	2.91	0.000	2.14	0.000	1.98	0.000
Once or twice a month	2.5	2.86	0.000	1.97	0.011	1.36	0.362
Less often/not at all	4.1	4.22	0.000	4.26	0.000	2.87	0.000
Irregular bedtimes at age 3							
No	80.4	1.00		1.00		1.00	
Yes	19.6	2.66	0.000	2.18	0.000	2.87	0.000
Irregular mealtimes at age 3							
No	91.3	1.00		1.00		1.00	
Yes	8.7	2.66	0.000	3.20	0.000	2.12	0.000
Shouted at the Child							
Less frequently	82.5	1.00		1.00		1.00	
Every Day	17.5	1.34	0.006	3.19	0.000	1.14	0.457
Smacked the Child							
Less Frequently	90.5	1.00		1.00		1.00	
Weekly	9.5	1.13	0.417	2.30	0.000	1.06	0.785
Partnership Disagreement over the child							
Never	36.2	1.00		1.00		1.00	
Less than once a week	48.5	0.73	0.017	1.02		0.95	0.795
Once a week	9.5	1.24	0.18	2.20	0.000	0.66	0.166
Several times a week or more	5.8	1.33	0.197	4.81	0.000	2.11	0.003

Table 2: Association between age 3 partnership and relationship factors and children's outcomes at age 5 (bivariate odds ratios)

	Sample %	FSP		SDQ		Health	
		OR	p value	OR	p value	OR	p-value
Family Status							
Married Couple	66.1	1.00		1.00		1.00	
Cohabiting couple	15.9	1.62	0.000	2.01	0.000	1.13	0.480
Lone Parent	15.7	2.59	0.000	3.42	0.000	1.89	0.000
Step Parent Family	2.1	2.09	0.006	2.51	0.001	2.02	0.041
No Natural Parent	0.2	1.04	0.969	0.72	0.757	5.27	0.035
Use of Force							
None	93.0	1.00		1.00		1.00	
Yes	4.0	2.66	0.000	2.92	0.000	1.85	0.000
Don't want to say	3.0	1.16	0.568	2.06	0.002	0.65	0.296

Table 3: Association between mother's health and health related behaviours and children's outcomes at age 5 (bivariate odds ratios)

	Sample %	FSP OR	p value	SDQ OR	p value	Health OR	p-value
Mental Health							
Depression							
Never Diagnosed	71.4	1.00		1.00		1.00	
Ever diagnosed not currently being treated	21.1	1.37	0.008	1.83	0.000	1.36	0.046
Currently being treated	7.6	1.86	0.000	3.17	0.000	1.78	0.002
Kessler Scale							
0-3 Low	66.1	1.00		1.00		1.00	
4 to 6	19.4	1.22	0.099	2.65	0.000	1.73	0.002
7 to 12	11.4	2.01	0.000	4.71	0.000	3.20	0.000
13-24 High	3.2	2.89	0.000	7.98	0.000	3.21	0.000
Maternal General Health							
Excellent	30.6	1.00		1.00		1.00	
Good	51.7	1.49	0.000	1.47	0.004	1.88	0.000
Fair/Poor	17.7	2.66	0.000	3.04	0.000	4.80	0.000
Frequency of Drinking							
Never	18.6	1.79	0.000	1.42	0.007	2.02	0.000
Rarely (Reference Group)	35.5	1.00		1.00		1.00	
Once or twice a week	26.4	0.77	0.025	0.78	0.071	1.02	0.885
Three to four times a week	11.7	0.34	0.000	0.48	0.000	0.39	0.002
Five times or more a week	7.8	0.58	0.018	0.62	0.126	0.52	0.026
Use of Recreational Drugs							
Never	94.5	1.00		1.00		1.00	
Occasionally	3.4	1.19	0.476	1.61	0.002	0.74	0.473
Regularly	0.1	1.67	0.268	3.27	0.003	1.90	0.391
Can't say	1.3	2.02	0.034	1.86	0.075	1.69	0.306
Smoking in the same room as the child							
No	83.9	1.00		1.00		1.00	
Yes	16.1	2.18	0.000	2.77	0.000	1.73	0.001

Table 4: Association between socio-economic situation at age 3 and children's outcomes at age 5 (bivariate odds ratios)

	Sample %	FSP OR	FSP p value	SDQ OR	SDQ p value	Health OR	Health p-value
Adult in employment							
1 or more	84.7	1.00		1.00		1.00	
None	15.3	3.84	0.000	3.51	0.000	2.45	0.000
Socio-economic group of Mother							
Managerial/Professional	39.7	1.00		1.00		1.00	
Intermediate	30.9	1.49	0.047	1.18	0.421	1.22	0.001
Routine	29.4	3.20	0.000	2.65	0.000	2.09	0.000
Socio-economic group of Partner							
Managerial/Professional	44.7	1.00		1.00		1.00	
Intermediate	21.5	2.08	0.000	1.56	0.011	1.67	0.017
Routine	33.8	3.95	0.000	2.49	0.000	2.36	0.000
Income quintiles							
Highest	20.7	1.00	0.000	1.00		1.00	
60-80	20.1	1.43	0.138	2.02	0.008	2.00	0.048
40-60	20.7	2.35	0.000	3.66	0.000	3.17	0.000
20-40	19.8	4.51	0.000	4.82	0.000	5.80	0.000
Lowest	18.7	6.44	0.000	8.20	0.000	6.29	0.000
Income Poverty (< 60% UK Median)							
No	73.5	1.00		1.00		1.00	
Yes	26.5	3.15	0.000	2.78	0.000	2.85	0.000
Receipt of Means Tested Benefits							
No	82.4	1.00		1.00		1.00	
Yes	17.6	3.63	0.000	3.80	0.000	2.64	0.000
Housing Tenure							
Owner Occupier	67.6	1.00		1.00	0.000	1.00	
Privately Rented	6.8	2.49	0.000	2.97	0.000	2.03	0.001
Social Housing	22.4	3.58	0.000	3.54	0.000	2.13	0.000
Other	3.1	2.48	0.000	2.54	0.000	1.07	0.853
Area Index of Multiple Deprivation							
Highest quintile	20.9	1.00		1.00		1.00	
60-<80	19.2	0.81	0.368	1.13	0.571	1.14	0.648
40-<60	20.7	1.76	0.010	1.65	0.013	1.55	0.086
20-<40	18.4	2.58	0.000	2.16	0.000	2.41	0.000
Lowest quintile	20.8	4.28	0.000	4.37	0.000	3.05	0.000
Housing Difficulties							
No	96.4	1.00		1.00		1.00	
Yes	3.6	1.48	0.061	2.46	0.000	1.46	0.172
Mother's Qualifications							
NVQ level 4/5	35.7	1.00		1.00		1.00	
NVQ level 3	14.2	1.76	0.002	1.97	0.000	1.77	0.002
NVQ level 2	30.1	2.60	0.000	2.20	0.000	2.26	0.000
NVQ Level 1	8.4	5.07	0.000	3.55	0.000	2.70	0.000
No qualifications	11.7	7.12	0.000	5.67	0.000	3.42	0.000

Table 5: Association between demographic and other characteristics and children's outcomes at age 5 (bivariate odds ratios)

	Sample %	FSP OR	p value	SDQ OR	p value	Health OR	p-value
Gender							
Female	49.4	1.00		1.00		1.00	
Male	50.6	1.81	0.000	1.78	0.000	1.33	0.017
Age group months							
September-December	34.6	1.00	0.000	1.00		1.00	
January-March	23.9	1.76	0.000	1.22	0.089	0.97	0.829
April-June	25.4	2.21	0.000	0.95	0.699	0.76	0.099
July-August	16.1	3.78	0.000	1.06	0.684	1.07	0.676
Mother born in the UK							
Yes	88.2	1.00		1.00		1.00	
No	11.8	1.86	0.000	1.44	0.014	1.16	0.472
Cohort Member's Ethnicity							
White	85.6	1.00		1.00		1.00	
Other	9.8	1.66	0.001	1.83	0.001	1.29	0.178
Pakistani and Bangladeshi	4.6	3.59	0.000	2.91	0.000	2.67	0.000
Language usually spoken in the home							
English	88.6	1.00		1.00		1.00	
English and other	8.9	2.03	0.000	1.59	0.003	1.77	0.001
Other language only	2.5	2.41	0.000	2.22	0.002	1.40	0.221
Grandparents in household							
No	96.1	1.00		1.00		1.00	
Yes	3.9	2.03	0.000	1.71	0.036	1.38	0.210
Number of children in the household							
One	23.6	1.00		1.00		1.00	
Two	48.0	0.99	0.998	0.72	0.002	0.78	0.061
Three	18.8	1.42	0.006	0.92	0.604	1.05	0.782
Four or more	9.7	2.48	0.000	1.06	0.715	1.65	0.007
Attended pre-school							
Yes	92.9	1.00		1.00		1.00	
No	7.1	1.82	0.000	1.39	0.030	0.97	0.901

Table 6: Association between age 3 child outcomes and children's outcomes at age 5 (bivariate odds ratios)

	Sample %	FSP OR	FSP p value	SDQ OR	SDQ p value	Health OR	Health p-value
Bracken School Readiness Score							
Very delayed	1.8	8.83	0.000	5.78	0.000	3.05	0.000
Delayed	10.6	4.93	0.000	2.53	0.000	1.89	0.000
Average (reference Group)	60.3	1.00		1.00		1.00	
Advanced	22.2	0.30	0.000	0.46	0.000	0.71	0.069
Very advanced	5.1	0.16	0.002	0.30	0.002	0.47	0.078
Behavioural Difficulties Score							
0 to11	72.1	1.00		1.00		1.00	
12 to 15	17.0	1.96	0.000	4.91	0.000	2.40	0.000
16 to 30	10.9	3.89	0.000	20.70	0.000	4.58	0.000
Longstanding Disability							
None	83.9	1.00		1.00		1.00	
Non-limiting	13.0	1.30	0.037	1.35	0.020	2.30	0.000
Limiting	3.1	2.51	0.000	4.01	0.000	9.06	0.000

Table 7: Association between new 9 month factors and children's outcomes at age 5 (bivariate odds ratios)

	Sample %	FSP OR	FSP p value	SDQ OR	SDQ p value	Health OR	Health p-value
Body Mass Index Pre-Pregnancy							
Less than 18.5 (under weight)	5.5	1.47	0.041	1.87	0.002	1.69	0.078
18.5 to 25 (normal: ref group)	65.8	1.00		1.00		1.00	
Over 25 to 30 (over weight)	19.5	1.02	0.854	1.33	0.035	1.48	0.015
Over 30 to 35 (obese)	6.4	1.30	0.151	1.33	0.170	1.31	0.264
35 and over (morbidly obese)	2.7	1.76	0.009	1.22	0.488	0.88	0.742
Longstanding Disability							
None	78.3	1.00		1.00		1.00	
Non-limiting	12.6	1.16	0.223	1.69	0.000	1.80	0.000
Limiting	9.1	1.47	0.008	1.81	0.000	2.13	0.000
Adult in employment							
1 or more	84.5	1.00		1.00		1.00	
None	15.5	3.44	0.000	2.87	0.000	2.63	0.000
Attitude to Child's Development - Summed Score							
7-8 very positive	63.8	1.000		1.00		1.00	
5 to 6	25.6	1.34	0.006	1.28	0.033	1.24	0.095
4	7.7	2.00	0.000	1.57	0.009	1.47	0.061
0 to 3	2.9	2.53	0.000	2.60	0.000	1.19	0.604

Figure 1: Age 3 factors maintained as predictive for children’s outcomes at age 5 in model selection
 [Key – shaded cells xxx retained in model including age 3 outcomes; (xxx) indicates retained only if age 3 outcomes not included]

	SDQ ¹	FSP ²	Health ³
Demographic characteristics			
Child is male	xxx	xxx	xxx
Age of child		xxx	
Ethnicity of child	xxx	(xxx)	xxx
Child is first born		xxx	
Mother’s age at first birth		xxx	
Mother’s partnership status at age 3	xxx		
Parenting measures			
Pianta warmth score	(xxx)	xxx	
Positive home observation score		(xxx)	
Reads to child		xxx	
Use of child care prior to school		xxx	
Pianta conflict score	xxx		
Negative home observation score		(xxx)	
Shout at child if naughty	(xxx)		
Bedtimes		xxx	(xxx)
Mealtimes	xxx		xxx
Disagree with partner over child	xxx		
Anyone smokes in same room as child	(xxx)		
Mother’s health and wellbeing			
Self rated general health		xxx	xxx
Depression score	xxx		(xxx)
Currently treated for depression	xxx		
Socioeconomic situation			
Mothers NVQ level	xxx	xxx	
Worklessness in household		xxx	
Receipt of means tested benefits	xxx		xxx
Net household income	xxx	(xxx)	xxx
Housing tenure		(xxx)	
Outcomes for child at age 3			
Bracken school readiness	xxx	xxx	xxx
SDQ	xxx	xxx	
Longstanding illness	xxx	xxx	xxx

¹ Highest 9 percent for total difficulties score from Strengths and Difficulties Questionnaire

² Poorest 10 percent on Foundation Stage Profile total assessment of learning and development

³ General health rated as fair or poor (4 percent) versus excellent, very good or good.

Table 9 (continued) Selected predictive factors for child outcomes at age 5 (SDQ, FSP, and Health)

Age 3 factor	SDQ 10% no outcomes		SDQ 10% with outcomes		FSP 10% no outcomes		FSP 10% with outcomes		Health Fair/Poor no outcomes		Health Fair/Poor with outcomes	
	OR	p-value	OR	p-value	OR	p-value	OR	p-value	OR	p-value	OR	p-value
Mother NVQ level 3 at age 3	(1.308	0.060)										
Mother NVQ level 2 at age 3	(1.308	0.060)			1.381	0.005	1.462	0.001				
Mother NVQ level 1 at age 3	(1.425	0.089)			1.900	0.000	1.881	0.000				
Mother no qualifications at age 3	1.968	0.000	1.591	0.002	1.629	0.000	1.881	0.000				
Workless household at age 3					1.725	0.000	1.735	0.000				
In receipt of non-universal benefits at age 3	1.564	0.008	1.450	0.024					1.540	0.001	1.422	0.010
20-40% incomes (vs top 20%) at age 3	1.821	0.030	(1.652	0.059)								
Income lowest 60% at age 3	2.205	0.002	2.093	0.004	1.445	0.012			2.007	0.000	1.998	0.000
Not owner-occupiers at age 3					1.314	0.019						
Outcomes at age 3												
Total SDQ score 12-15 at age 3			2.791	0.000			1.260	0.050			1.744	0.000
Total SDQ score 16-30 at age 3			8.067	0.000			1.535	0.004			2.142	0.000
Bracken School ready 50-69 (vs 85-115) at age 3			3.485	0.000			5.779	0.000				
Bracken School ready 70-84 at age 3			1.445	0.025			3.347	0.000				
Bracken School ready 116-150 at age 3							0.428	0.000				
CM non-limiting longstanding illness							1.358	0.031			2.230	0.000
CM limiting longstanding illness			2.033	0.003			1.718	0.010			6.556	0.000
Fit statistics												
Sample size (N)	6343		6343		7394		7394		8390		8390	
F-statistic	21.9		28.3		22.3		38.4		25.9		25.3	
Degrees of freedom	27		27		28		25		12		14	
Wald Chi-Square	523.8		670.3		653.5		726.8		217.3		323.8	
Receiver Operating Characteristic (LROC)	0.8161		0.8527		0.8016		0.8260		0.7251		0.7643	
Bayesian Information Criterion (BIC)	3358		3125		4320		4093		2865		2767	

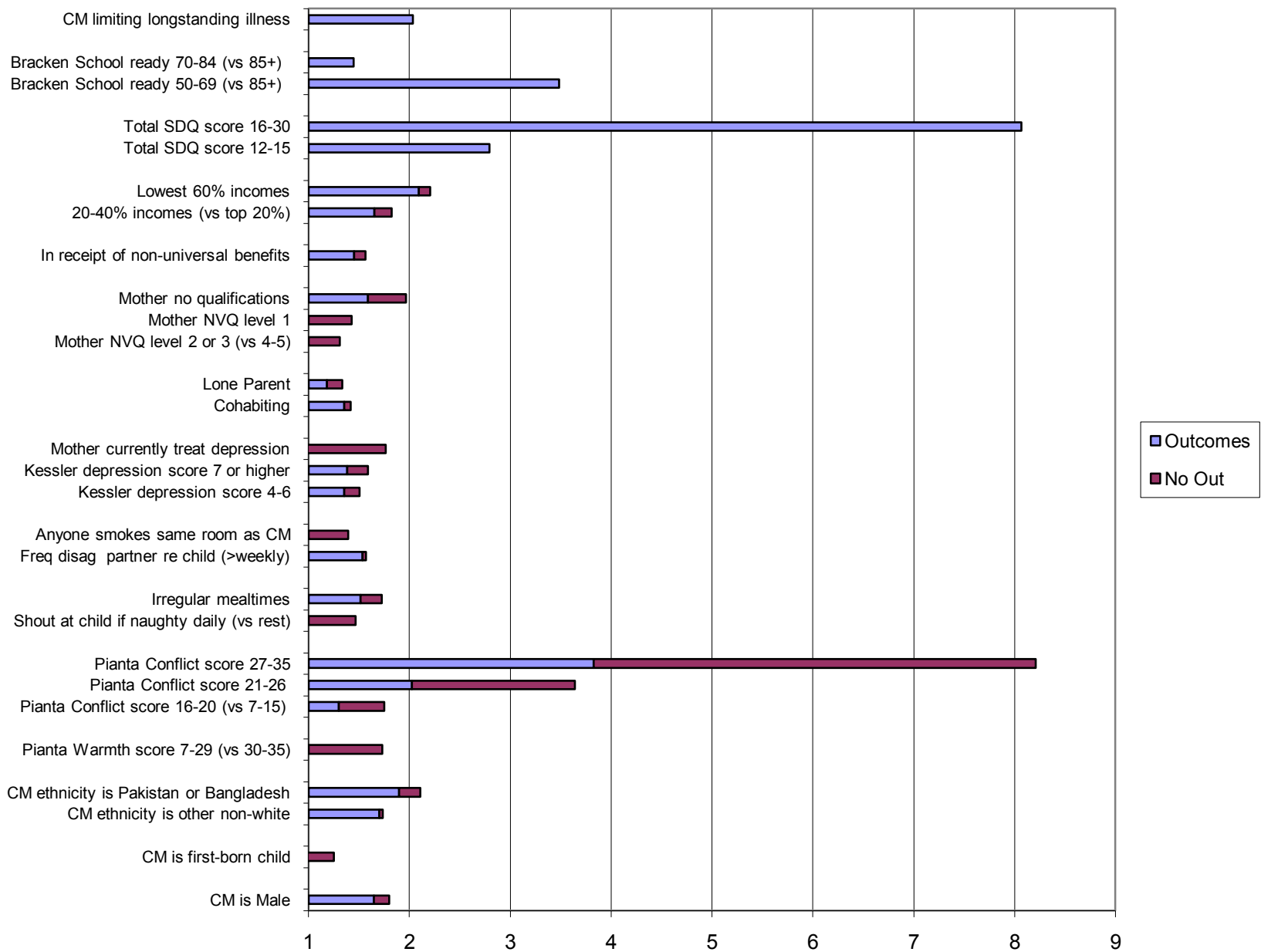


Figure 2: Odds ratios for selected predictors for behavioural difficulties

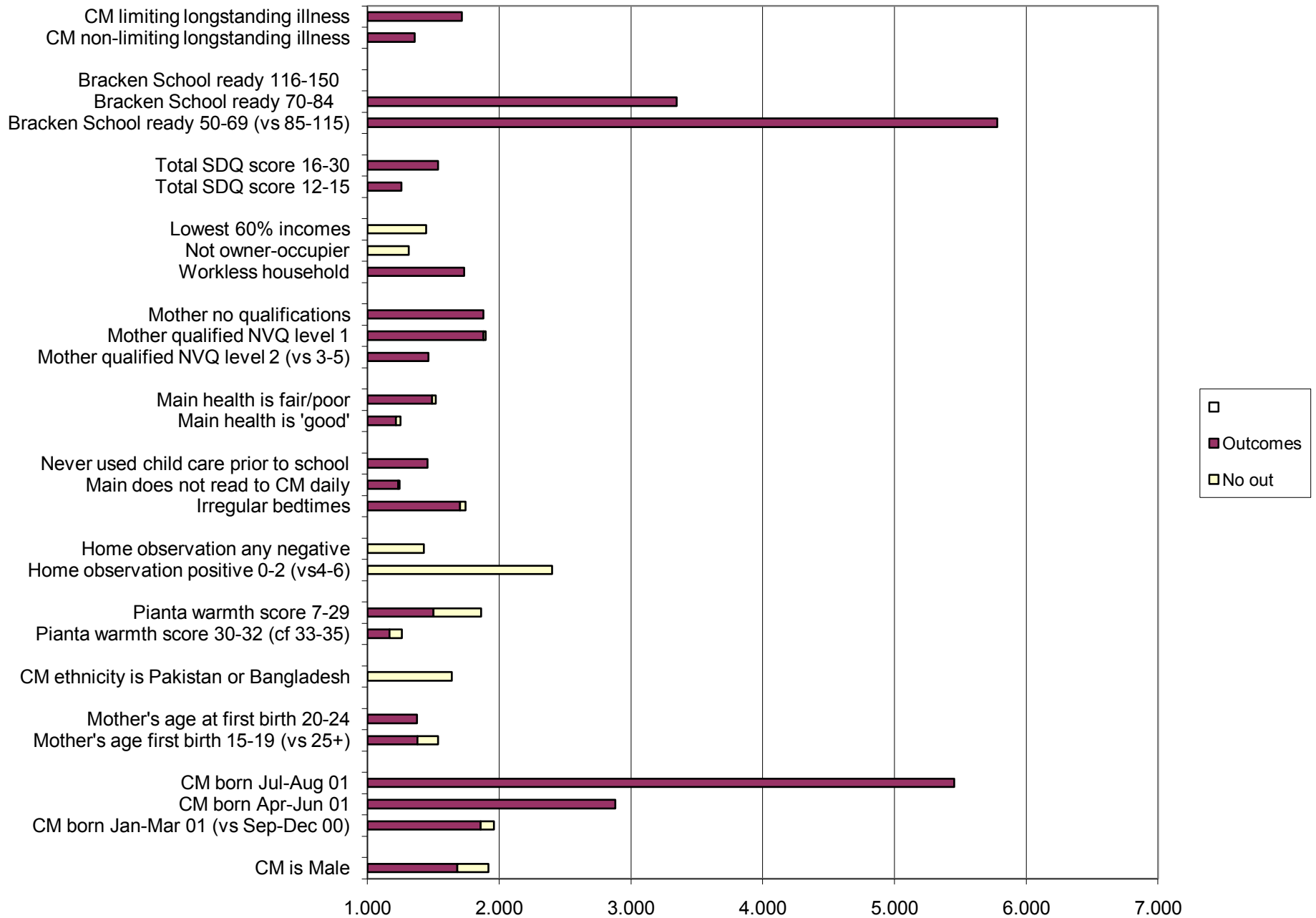


Figure 3: Odds ratios for selected predictors for poor learning and development

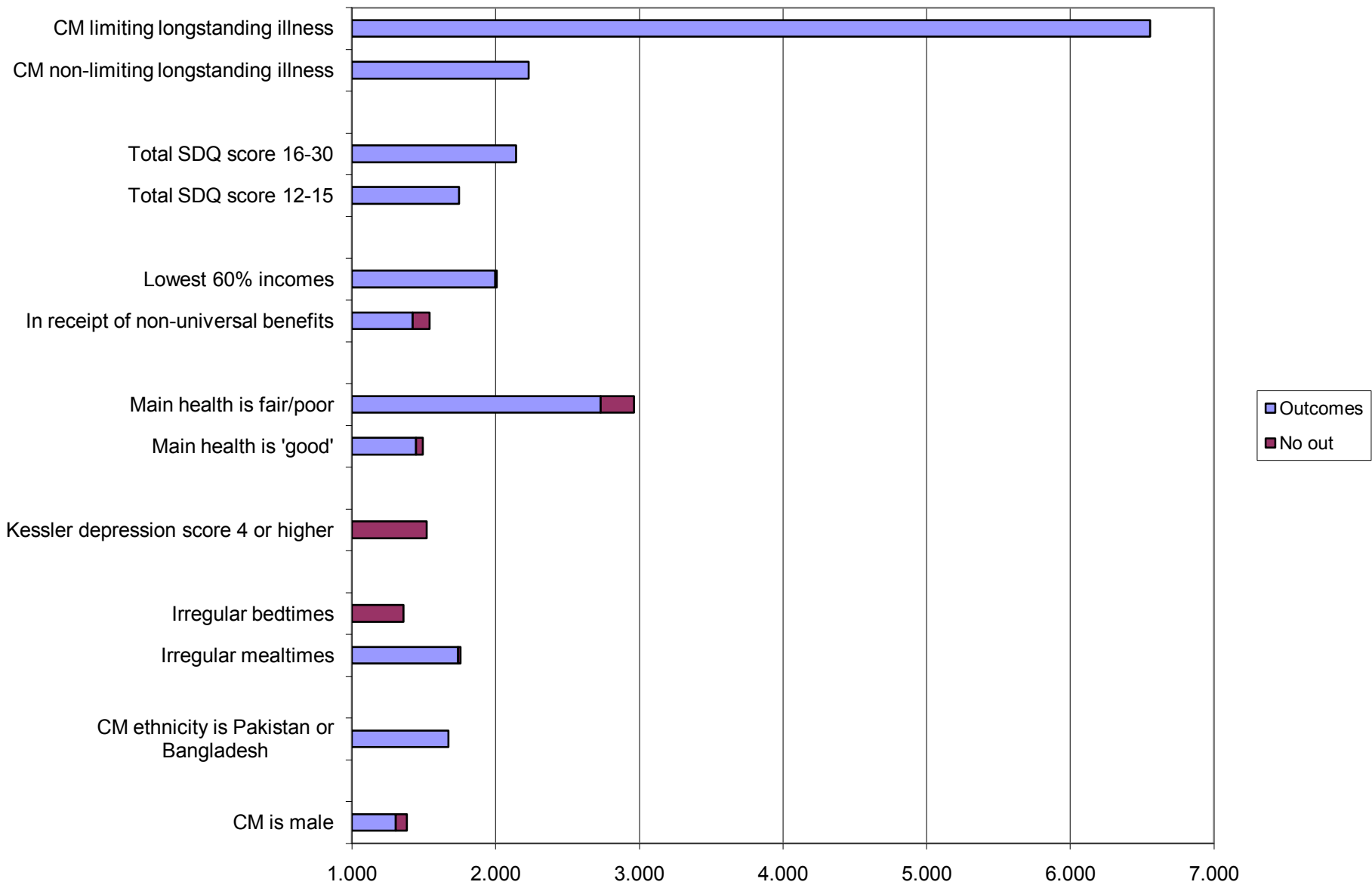


Figure 4: Odds ratios for selected predictors Poor or Fair Health outcome

Figure 5A ROC curve for SDQ models including age 3 predictors

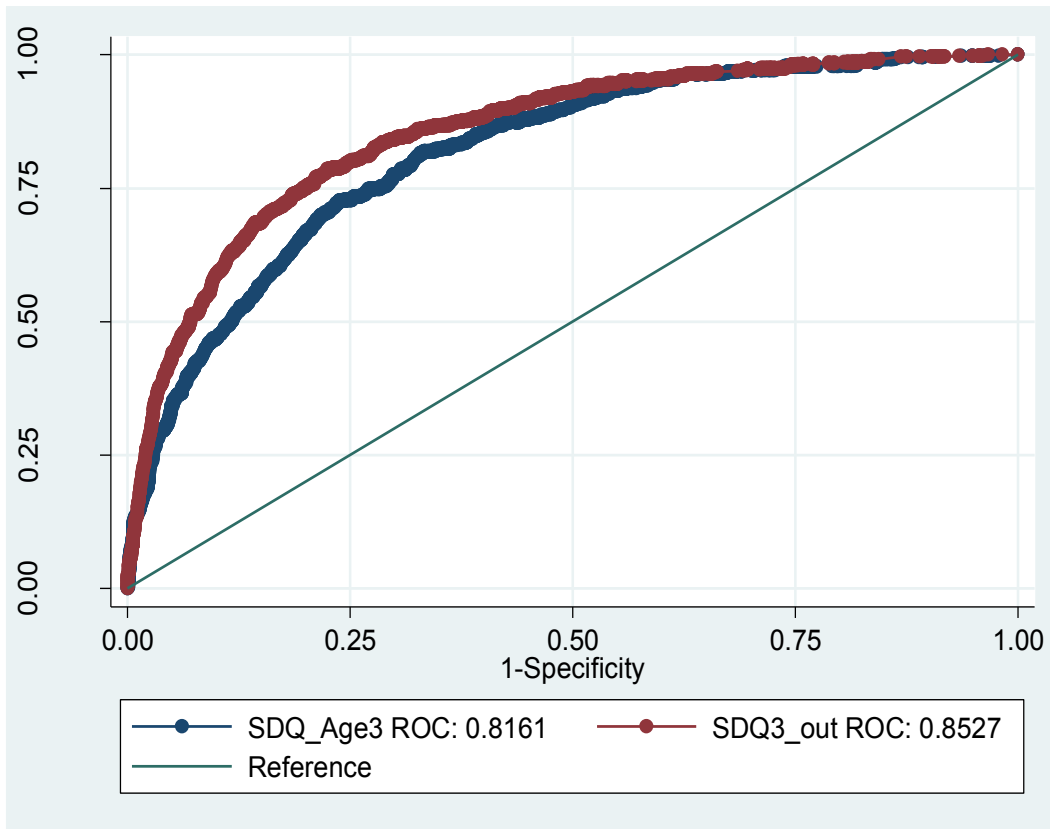


Figure 5B ROC curve for FSP models including age 3 predictors

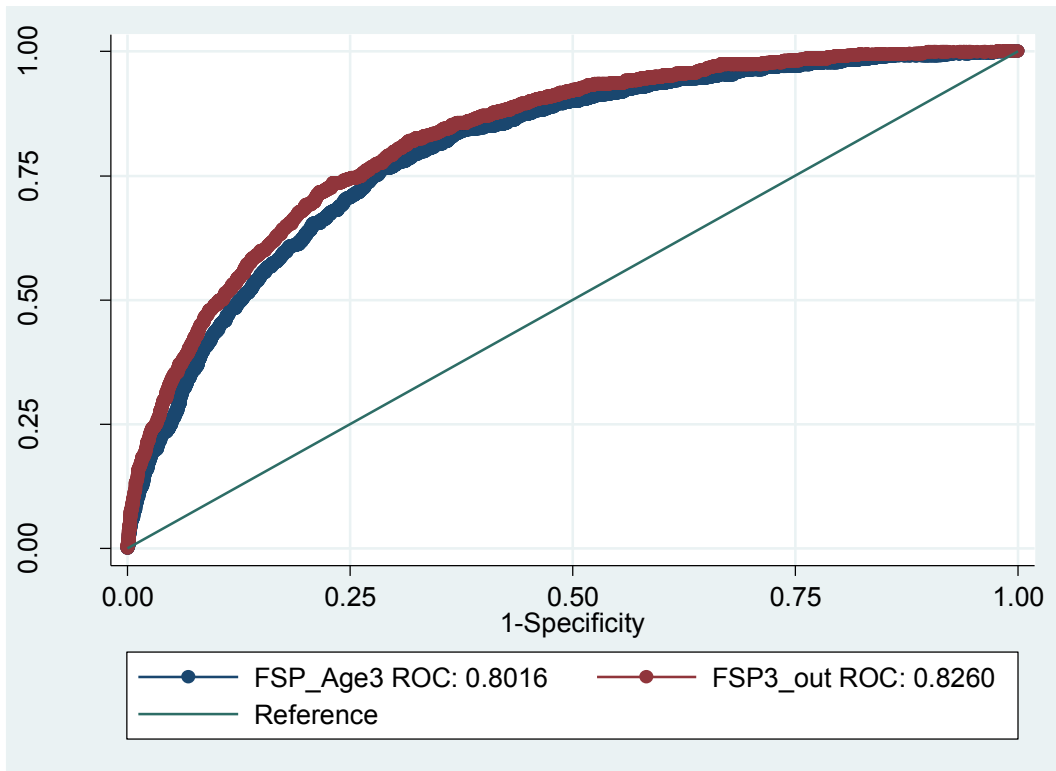


Figure 5C ROC curve for Child Health models including age 3 predictors

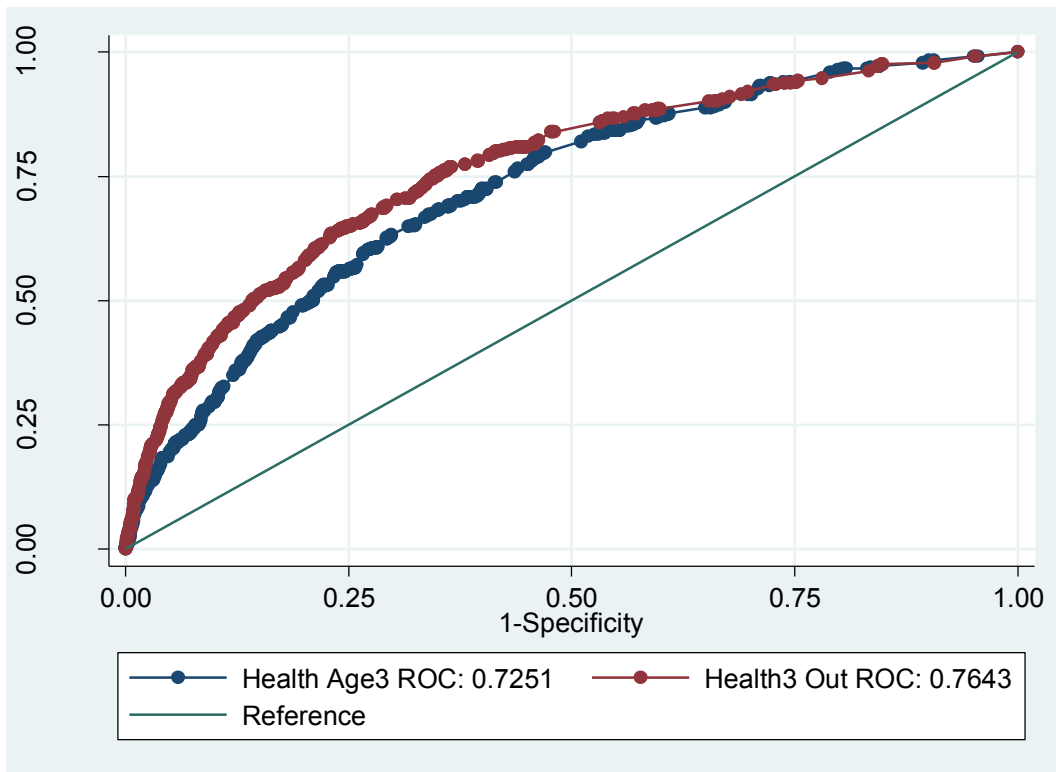


Figure 6: Birth and age 9 months factors maintained as predictive for children’s outcomes at age 5 in model selection [Key – shaded cells xxx retained in model including age 3 factors and outcomes; xxx indicates retained in model just including MCS1 indicators]

	SDQ ¹	FSP ²	Health ³
Demographic characteristics (fixed – either 9m or age 3)			
Child is male	xxx	xxx	xxx
Birth date of child		xxx	
Ethnicity of child	xxx	xxx	xxx
Child is first born	xxx		
Birth weight low	xxx	xxx	xxx
Mother’s age at first birth		xxx	
Mother’s parents separated before age 17			xxx
Mother’s characteristics from MCS1			
Mother’s partnership status at 9m	xxx		
Three or more children in home at 9m		xxx	
Mother overweight/ obese pre-pregnancy	xxx		
Parenting measures			
Mother not 'very happy' when pregnant	xxx		
Late ante-natal care			xxx
Mother smoked through pregnancy	xxx		
Breastfeeding	xxx	xxx	xxx
Mother poor attitudes child development at 9m	xxx	xxx	
Mother’s health and wellbeing at 9 months			
Mother non-limiting longstanding illness at 9m			
Self rated general health	xxx	xxx	xxx
Malaise score	xxx	xxx	xxx
Mother any lack of self-efficacy at 9m	xxx		
Socioeconomic situation at 9 months			
Mothers NVQ level	xxx	xxx	
Workless household			xxx
Household income			xxx
Income poverty		xxx	
Housing tenure	xxx	xxx	
Index of Multiple Deprivation	xxx	xxx	

¹ Highest 9 percent for total difficulties score from Strengths and Difficulties Questionnaire

² Poorest 10 percent on Foundation Stage Profile total assessment of learning and development

³ General health rated as fair or poor (4 percent) versus excellent, very good or good.

Table10 Selected predictive factors for Lowest 10% Strengths and Difficulties Questionnaire at age 5

	Birth		Age 3 - No Out		Age 3&Outcomes		Birth, Age3 & Outcomes	
	OR	p-value	OR	p-value	OR	p-value	OR	p-value
CM is Male	1.903	0.000	1.800	0.000	1.646	0.000	1.634	0.000
Birth weight < 2.5kg	1.454	0.021						
CM breastfed <3 m or never	1.397	0.003						
CM ethnicity is other non-white	1.461	0.031	1.700	0.003	1.737	0.002	1.633	0.012
CM ethnicity is Pakistan or Bangladesh	2.297	0.000	2.106	0.000	1.896	0.002	1.683	0.012
CM is First born	1.287	0.022			1.249	0.045	1.423	0.002
Mother cohabiting or solo at birth	1.369	0.005						
Cohabiting at age 3			1.419	0.008	1.352	0.031		
Lone Parent at age 3			(1.334	0.052)	(1.182	0.264)		
Mother not 'very happy' when pregnant	1.278	0.039						
Mother poor attitudes child devel at 9m	1.625	0.050						
Mother overweight/ obese pre- pregnancy	1.337	0.012					1.310	0.023
Mother smoked through pregnancy	1.522	0.000					1.296	0.030
Anyone smokes same room as CM age 3			1.394	0.014				
Pianta Warmth score 7-29 at age 3			1.732	0.008				
Pianta Conflict score 16-20 at age 3			1.750	0.001	(1.300	0.123)	(1.360	0.072)
Pianta Conflict score 21-26 at age 3			3.640	0.000	2.025	0.000	2.026	0.000
Pianta Conflict score 27-35 at age 3			8.209	0.000	3.829	0.000	3.987	0.000
Shout at child if naughty daily age 3			1.466	0.001				
Irregular mealtimes at age 3			1.726	0.000	1.517	0.009	1.499	0.010
Freq disagree partner re child age 3			1.569	0.027	1.535	0.048	(1.540	0.055)
Mother's health poor or fair at 9m	1.332	0.026						
Mother high malaise score (4-9) at 9m	2.048	0.000					1.942	0.000
Kessler depression score 4-6 at age 3			1.507	0.006	(1.356	0.055)		
Kessler depression score 7+ at age 3			1.591	0.002	1.383	0.029		
Mother curr treated depression at age 3			1.573	0.012	1.765	0.002		
Mother any lack of self-efficacy at 9m	1.940	0.000					1.502	0.005
Mother NVQ level 2 or 3 (vs 4-5) at 9m	(1.274	0.092)						
Mother NVQ level 1 at 9m	1.532	0.022						
Mother no qualifications at 9m	1.827	0.003						
Mother NVQ level 2 or 3 (vs 4-5) at age 3			(1.308	0.060)			(1.152	0.342)
Mother NVQ level 1 at age 3			(1.425	0.089)			(1.152	0.342)
Mother no qualifications at age 3			1.968	0.000	1.591	0.002	1.705	0.007
Receipt of non-universal benefits age 3			1.564	0.008	1.450	0.024	1.399	0.025
20-40% incomes (vs top 20%) at age 3			1.821	0.030	(1.652	0.059)	(1.607	0.088)
Lowest 60% incomes at age 3			2.205	0.002	2.093	0.004	1.887	0.019
Housing tenure private rental at 9m	1.635	0.007						
Housing tenure social at 9m	(1.272	0.086)						
Housing tenure other at 9m	(1.034	0.893)						
Index Multiple Depriv. low 20-60% at 9m	(1.185	0.198)						
Index Multiple Depriv. lowest 20% at 9m	1.482	0.009						
Total SDQ score 12-15 at age 3					2.791	0.000	2.665	0.000
Total SDQ score 16-30 at age 3					8.067	0.000	7.657	0.000
Bracken School ready 50-69 at age 3					3.485	0.000	3.527	0.000
Bracken School ready 70-84 at age 3					1.445	0.025	1.447	0.027
CM limiting longstanding illness age 3					2.033	0.003	2.146	0.002
Fit statistics								
F-statistic	22.5		21.9		28.3		25.5	
Degrees of freedom	30		27		27		31	
Wald Chi-Square	443.9		523.8		670.3		702.7	
Receiver Operating Characteristic (LROC)	0.7774		0.8161		0.8527		0.8575	
Bayesian Information Criterion (BIC)	3610		3358		3125		3123	

Table 11: Selected predictive factors for Lowest 10% Foundation Stage Profile at age 5

	Birth		Age 3 - No Out		Age 3&Outcomes		Birth, Age3 & Outcomes	
	OR	p-value	OR	p-value	OR	p-value	OR	p-value
CM is Male	2.015	0.000	1.919	0.000	1.682	0.000	1.743	0.000
CM born Jan-Mar 2001 (cf Sep-Dec 2000)	1.866	0.000	1.961	0.000	1.860	0.000	1.849	0.000
CM born Apr-Jun 2001	2.589	0.000	2.731	0.000	2.883	0.000	2.895	0.000
CM born Jul-Aug 2001	4.661	0.000	4.999	0.000	5.453	0.000	5.404	0.000
Birth weight 2.5 - 3.0 kg	1.393	0.004					1.275	0.047
Birth weight < 2.5kg	1.848	0.000					1.633	0.001
CM breastfed <3 m or never	1.282	0.012					1.231	0.047
CM ethnicity is Pakistan or Bangladesh	1.886	0.002	1.641	0.019				
CM is First born			0.768	0.006				
Three or more children in home at 9m	1.514	0.000					1.309	0.014
Mother's age at first birth 13-19	1.290	0.021	1.537	0.001	1.378	0.002		
Mother's age at first birth 20-24	1.290	0.021	1.310	0.024	1.378	0.002		
Mother poor attitudes child devel at 9m	1.377	0.019						
Pianta warmth score 30-32 (cf 33-35)			(1.260	0.108)	(1.167	0.309)	(1.125	0.446)
Pianta warmth score 7-29			1.862	0.000	1.501	0.036	1.455	0.049
Home observation low positive 0-2			2.401	0.001				
Home observation any negative			1.429	0.022				
Irregular bedtimes			1.744	0.000	1.703	0.000	1.606	0.000
Main does not read to CM daily			1.244	0.012	1.235	0.018	1.205	0.042
Never used child care prior to school			1.406	0.018	1.457	0.010	1.464	0.009
Mother's health good at 9m	(1.198	0.087)						
Mother's health poor or fair at 9m	1.436	0.007						
Mother's health good age 3			1.251	0.049	(1.215	0.089)	(1.182	0.156)
Mother's health poor or fair at age 3			1.520	0.001	1.490	0.002	1.428	0.006
Mother high malaise score (4-9) at 9m	1.345	0.038						
Mother NVQ level 2 (vs 3-5) at 9m	1.420	0.002						
Mother NVQ level 1 or no quals at 9m	2.038	0.000						
Mother NVQ level 2 (vs 3-5) at age 3			1.381	0.005	1.462	0.001	1.341	0.011
Mother NVQ level 1 at age 3			1.900	0.000	1.881	0.000	1.787	0.001
Mother no qualifications at age 3			1.629	0.000	1.881	0.000	1.435	0.008
Workless household at age 3			1.725	0.000	1.735	0.000	1.476	0.001
Income poverty at 9m	1.453	0.001						
Income lowest 60% at age 3			1.445	0.012				
Not owner-occupiers at 9m	1.754	0.000					1.506	0.001
Not owner-occupiers at age 3			1.314	0.019				
Lowest 60% Index Multiple Depriv. at 9m	1.639	0.001					1.535	0.004
Total SDQ score 12-15 at age 3					1.260	0.050	(1.243	0.068)
Total SDQ score 16-30 at age 3					1.535	0.004	1.421	0.018
Bracken School ready 50-69 age 3					5.779	0.000	5.481	0.000
Bracken School ready 70-84 at age 3					3.347	0.000	3.170	0.000
Bracken School ready 116-150 at age 3					0.428	0.000	0.447	0.000
CM non-limiting longstanding illness					1.358	0.031	1.352	0.033
CM limiting longstanding illness					1.718	0.010	1.704	0.013
Fit statistics								
F-statistic	19.4		22.3		38.4		28.4	
Degrees of freedom	25		28		25		32	
Wald Chi-Square	598.1		653.5		726.8		750.9	
Receiver Operating Characteristic (LROC)	0.7908		0.8016		0.8260		0.8331	
Bayesian Information Criterion (BIC)	4361		4320		4093		4106	

Table 12 Selected predictive factors for Cohort Member's Health - Fair or Poor

	Birth		Age 3 - No Out		Age 3&Outcomes		Birth, Age3 & Outcomes	
	OR	p-value	OR	p-value	OR	p-value	OR	p-value
CM is Male	1.392	0.008	1.380	0.009	1.304	0.031	1.332	0.023
Birth weight 2.5-3.5 kg	(1.277	0.063)					(1.192	0.186)
Birth weight < 2.5kg	2.322	0.000					1.919	0.000
First ante-natal care 13-20 weeks	(1.236	0.203)						
First ante-natal care >20 weeks or none	1.620	0.029						
CM not breastfed	1.362	0.019					1.300	0.047
CM ethnicity is Pakistan or Bangladesh	1.983	0.000	1.606	0.008	1.673	0.004	1.758	0.003
Mother's parents separated before age 17	1.474	0.005					1.325	0.048
Irregular mealtimes at age 3			1.756	0.001	1.740	0.001	1.697	0.002
irregular bedtimes at age 3			1.360	0.025				
Mother's health good at 9m	1.448	0.020					(1.218	0.255)
Mother's health poor or fair at 9m	2.630	0.000					1.787	0.010
Mother's health good at age 3			1.493	0.020	1.447	0.032	(1.300	0.156)
Mother's health poor or fair at age 3			2.962	0.000	2.730	0.000	2.125	0.000
Mother high malaise score (4-9) at 9m	1.538	0.006						
Mother's Kessler score 4-24 age 3			1.518	0.010				
Household income 20.8K-31.2K at 9m	(1.476	0.131)						
Household income 10.4K-20.8K at 9m	2.006	0.002						
Household income <10.4K at 9m	1.985	0.014						
Household income lowest 60% at age 3			2.007	0.000	1.998	0.000	1.969	0.000
Receipt of non-universal benefits age 3			1.540	0.001	1.422	0.010		
Workless household at 9m	1.424	0.029						
Total SDQ score 12-15 at age 3					1.744	0.000	1.690	0.001
Total SDQ score 16-30 at age 3					2.142	0.000	1.981	0.000
CM non-limiting longstanding illness					2.230	0.000	2.152	0.000
CM limiting longstanding illness					6.556	0.000	6.239	0.000
Fit statistics								
F-statistic	11.4		25.9		25.3		19.0	
Degrees of freedom	20		12		14		20	
Wald Chi-Square	229.9		217.3		323.8		341.5	
Receiver Operating Characteristic (LROC)	0.7239		0.7251		0.7643		0.7726	
Bayesian Information Criterion (BIC)	2948		2865		2767		2797	

Table 13 Selected predictive factors for Any Poor Outcome (complete) at age 5

	Birth		Age 3 - No Out		Age 3&Outcomes		Birth, Age3 & Out	
	OR	p-value	OR	p-value	OR	p-value	OR	p-value
CM is Male	1.840	0.000	1.745	0.000	1.560	0.000	1.607	0.000
CM born Jan-Mar 2001 (cf Sep-Dec 2000)	1.412	0.001	1.483	0.000	1.461	0.001	1.437	0.001
CM born Apr-Jun 2001	1.449	0.001	1.560	0.000	1.545	0.000	1.550	0.000
CM born Jul-Aug 2001	2.289	0.000	2.461	0.000	2.566	0.000	2.528	0.000
Birth weight 2.5 - 3.0 kg	1.351	0.008					(1.265	0.052)
Birth weight < 2.5kg	1.888	0.000					1.747	0.000
CM breastfed <3 m	1.241	0.035						
CM never breastfed	1.515	0.000						
CM ethnicity is other non-white	(1.339	0.053)						
CM ethnicity is Pakistan or Bangladesh	2.228	0.000	1.681	0.004	1.614	0.011	1.536	0.027
Mother's parents separ. before age 17			1.201	0.035				
Pianta warmth score 30-32 (cf 33-35)			(1.200	0.165)				
Pianta warmth score 7-29			1.623	0.011				
Home observation not all positive 0-5			1.228	0.046				
Main reads to CM often not daily age 3			(1.181	0.170)				
Main reads to CM 1/2 week or less age 3			1.269	0.036				
Pianta Conflict score 21-26 at age 3			1.549	0.000				
Pianta Conflict score 27-35 at age 3			2.821	0.000	1.544	0.027	1.506	0.035
Irregular bedtimes at age 3			1.471	0.000	1.496	0.000	1.494	0.000
Irregular mealtimes at age 3			1.442	0.006	1.339	0.028		
Freq disagree partner re child age 3			1.317	0.029				
Mother non-limiting longstand ill at 9m	1.363	0.006					1.304	0.047
Mother's health poor or fair at 9m	1.449	0.001						
Mother's health poor or fair at age 3			1.469	0.001	1.484	0.000	1.375	0.005
Mother high malaise score (4-9) at 9m	1.679	0.000					1.723	0.000
Kessler depression score 4-6 at age 3			1.409	0.004	1.315	0.014		
Kessler depression score 7+ at age 3			1.443	0.009	1.315	0.014		
Mother any lack of self-efficacy at 9m	1.551	0.000						
Mother NVQ level 2 (vs 3-5) at 9m	1.379	0.001						
Mother NVQ level 1 at 9m	1.931	0.000						
Mother NVQ no quals at 9m	2.079	0.000						
Mother NVQ level 2 (vs 3-5) at age 3			1.322	0.006	1.262	0.028	(1.228	0.053)
Mother NVQ level 1 at age 3			1.618	0.002	1.559	0.006	1.485	0.018
Mother no qualifications at age 3			1.780	0.000	1.795	0.000	1.638	0.002
Receipt of non-universal benefits ge 3			1.779	0.000	1.697	0.000	1.442	0.002
20-40% incomes (vs top 20%) at age 3			1.489	0.046	(1.456	0.061)	(1.379	0.112)
Income lowest 60% at age 3			1.874	0.000	1.804	0.001	1.557	0.014
Private rental housing at 9m	2.055	0.000					1.312	0.014
Social housing at 9m	1.926	0.000					1.312	0.014
Other not O-O housing at 9m	(1.304	0.154)					1.312	0.014
40-60% Index Multiple Depriv. at 9m	1.446	0.001					1.333	0.022
20-40% Index Multiple Depriv. at 9m	1.552	0.001					1.306	0.037
Lowest 20% Index Multiple Depriv. at 9m	1.766	0.000					1.426	0.005
40-60% Index Multiple Depriv. at age 3			(1.159	0.290)				
20-40% Index Multiple Depriv. at age 3			(1.265	0.061)				
Lowest 20% Index Multiple Depriv. at age 3			1.478	0.003				
Total SDQ score 12-15 at age 3					2.182	0.000	2.131	0.000
Total SDQ score 16-30 at age 3					4.461	0.000	4.438	0.000
Bracken School ready 50-69 at age 3					3.917	0.000	3.814	0.000
Bracken School ready 70-84 at age 3					2.155	0.000	2.090	0.000
Bracken School ready 116-150 at age 3					0.680	0.002	0.707	0.006
CM non-limiting longstanding illness					1.380	0.010	1.375	0.010
CM limiting longstanding illness					1.855	0.004	1.822	0.006
Fit statistics								
F-statistic	18.44		20.96		26.97		24.05	
Degrees of freedom	28		34		30		38	
Likelihood Ratio Chi-Square	579.9		612.4		726.9		746.8	
Receiver Operating Characteristic (LROC)	0.7661		0.7798		0.8109		0.8185	
Bayesian Information Criterion (BIC)	4851		4809		4538		4548	