

WORKING PAPER: TABLES AND FIGURES

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Parents' relationship quality, mother-child relations and children's behaviour problems: evidence from the UK Millennium Cohort Study

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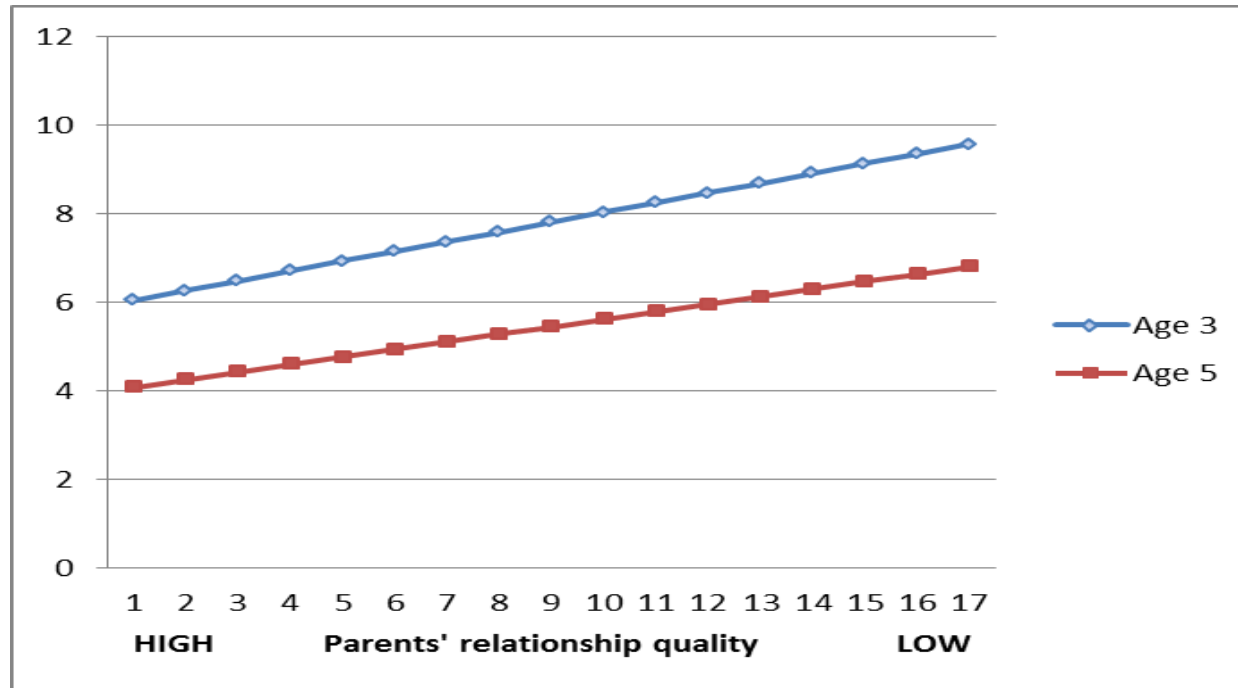
Table 1. Coefficients of the effect of parents' relationship quality on children's externalizing problems at ages 3 and 5.

MODELS	Age 3		Age 5		
	1	2	3	4	5
<i>Parents' relationship quality</i>	0.25***	0.22***	0.19***	0.17***	0.06***
<i>Sex cohort member: Boy</i>		0.73***		0.95***	0.58***
<i>Poverty ratio</i>		-0.23***		-0.13***	-0.02
<i>No qualifications</i>		Ref		Ref	
<i>NVQ level 1</i>		-0.09		0.35	0.37
<i>NVQ level 2</i>		-0.46		0.04	0.23
<i>NVQ level 3</i>		-0.60*		-0.16	0.10
<i>NVQ level 4 & level 5</i>		-1.17***		-0.64***	-0.13
<i>Mother White</i>		Ref		Ref	
<i>Pakistani & Bangladeshi</i>		1.08**		0.42	-0.13
<i>Indian</i>		0.82+		0.13	-0.40
<i>Black</i>		-0.41		-0.38	-0.21
<i>Mixed</i>		0.89		-0.03	0.38
<i>Other</i>		-1.06*		-0.26	-0.08
<i>Married</i>		Ref		Ref	
<i>Cohabitants at 9 month, married at age 3 survey</i>		0.74***		0.59**	0.13
<i>Cohabitants at 9 month and at age 3 survey</i>		0.26+		0.35**	0.25*
<i>Parental divorce in childhood</i>		0.32*		0.19*	0.06
<i>Externalizing problems age 3</i>					0.50***
<i>Constant</i>	5.02***	5.84***	3.91***	3.42***	0.52***
<i>R square</i>	0.04	0.10	0.03	0.09	0.38
<i>Decrease of the effect of parents' relationship quality</i>		12.0 %		10.5%	64.7%

<i>Sample size</i>	6169	6169	6763	6763	5820
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Note: + p < 0.10 *p < 0.05 **p < 0.01 *** < 0.001

Figure 1: Externalizing problems at age 3 and at age 5 by parents' relationship quality



Note: Figure 1 is based on Models 2 and 4 in Table 1. Values are computed using the coefficient for boys, the reference category for the categorical variables and the mean level of the poverty ratio.

Table 2. Coefficients of parents' relationship quality and maternal warmth and maternal conflict on children's externalizing problems

MODELS	Age 3				Age 5				
	1	2	3	4	5	6	7	8	9
<i>Parents' relationship quality</i>	0.22***	0.18***	0.08***	0.07**	0.17***	0.14***	0.09***	0.08**	0.04**
<i>Lowest maternal warmth</i>		Ref		Ref		Ref		Ref	Ref
<i>Low maternal warmth</i>		-0.76**		-0.62**		-0.34***		-0.28	-0.00
<i>Medium warmth</i>		-0.83***		-0.68**		-0.71***		-0.55**	-0.33*
<i>High maternal warmth</i>		-1.49***		-1.07***		-0.87***		-0.63***	-0.16
<i>Highest maternal warmth</i>		-2.21***		-1.21***		-1.48***		-0.89***	-0.39**
<i>Lowest maternal conflict</i>			Ref	Ref			Ref	Ref	Ref
<i>Low maternal conflict</i>			1.24***	0.05			0.82***	0.80***	0.18
<i>Medium conflict</i>			2.46***	-0.15			1.43***	1.33***	0.20*
<i>High maternal conflict</i>			4.02***	-0.40			2.16***	2.04***	0.18
<i>Highest maternal conflict</i>			5.76***	-0.97***			3.45***	3.25***	0.65***
<i>Externalizing problems age 3</i>									0.46***
<i>Constant</i>	5.84***	7.36***	4.02***	4.99***	3.42***	4.41***	2.34***	2.99***	0.81***
<i>R square</i>	0.10	0.15		0.37**	0.09	0.12	0.20	0.21	0.39
<i>% of Decrease of the effect of parents' relationship quality</i>		18.18%	63.63%	68.18%		17.65%	47.06%	52.94%	76.47%
<i>Sample size</i>	6169	6169	6169	6169		6763	6763	6763	5820

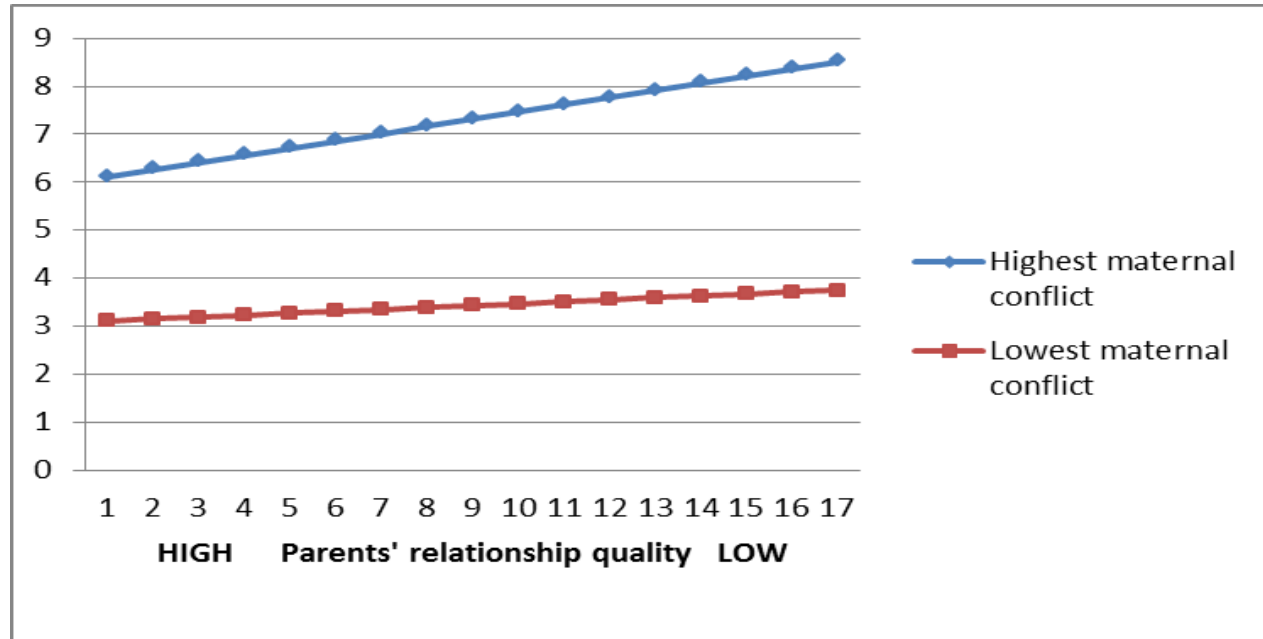
Note: All models include the background control variables and missing categories for the control variables. + p < 0.10 *p < 0.05 **p < 0.01 *** p < 0.001

Table 3. Coefficients of parents' relationship quality and maternal warmth and maternal conflict on children's externalizing problems

MODELS	Age 3		Age 5		
	1	2	3	4	5
<i>Parents' relationship quality</i>	0.19***	0.05*	0.21***	0.04+	-0.00
<i>Lowest maternal warmth</i>	Ref		Ref		
<i>Low maternal warmth</i>	-0.98*		-0.03		
<i>Medium warmth</i>	-0.83*		-0.40		
<i>High maternal warmth</i>	-1.21***		-0.53+		
<i>Highest maternal warmth</i>	-2.21***		-1.17***		
<i>Lowest maternal warmth * parents relationship quality</i>	Ref		Ref		
<i>Low maternal warmth *</i>	0.05		-0.07		
<i>Medium warmth *</i>	-0.00		-0.07		
<i>High maternal warmth *</i>	-0.07		-0.08		
<i>Highest maternal warmth*</i>	0.01		-0.07		
<i>Lowest maternal conflict</i>		Ref		Ref	Ref
<i>Low maternal conflict</i>		1.31***		0.66***	0.02
<i>Medium maternal conflict</i>		2.34***		1.33***	0.13
<i>High maternal conflict</i>		4.02***		2.14***	0.10
<i>Highest maternal conflict</i>		5.41***		3.00***	0.36
<i>Lowest maternal conflict * parents' relationship quality</i>		Ref		Ref	Ref
<i>Low maternal conflict*</i>		-0.02		0.06	0.06+
<i>Medium maternal conflict *</i>		0.04		0.04	0.04
<i>High maternal conflict*</i>		0.01		0.02	0.04
<i>Highest maternal conflict *</i>		0.08+		0.12**	0.10*
<i>Externalizing problems at age 3</i>					0.47***
<i>Constant</i>	7.33***	4.11***	4.11***	2.47***	0.63***
<i>R square</i>	0.15	0.36	0.12	0.20	0.38
<i>Sample size</i>	6169	6169	6763	6763	5820

Note: All models include control variables and missing categories of control variables. + $p < 0.10$ * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Figure 2. Externalizing problems at age 5 by parents' relationship quality and maternal conflict



Note: This figure is based on model 4 in Table 3. Values are computed using the coefficient for boys, the reference category of the categorical variables and the mean level of the poverty ratio.

Table 4. Main effects and interaction terms between parents' relationship quality, maternal warmth and conflict and family poverty ratio.

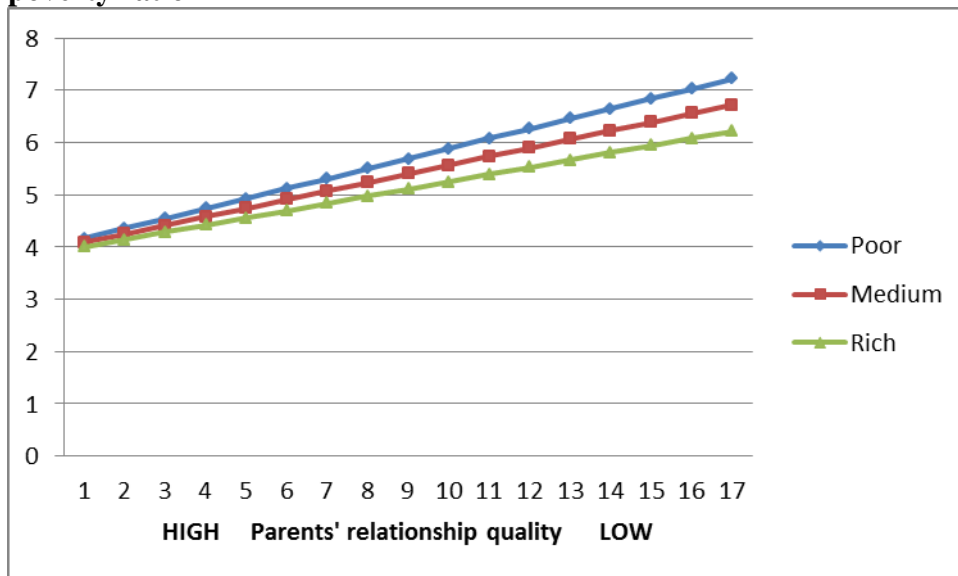
	<i>Age 3</i>			<i>Age 5</i>				
	1	2	3	4	5	6	7	8
<i>Parents' relationship quality</i>	0.28***	0.18***	0.08***	0.21***	0.09***	0.14***	0.09***	0.05***
<i>Poverty ratio</i>	-0.14**	-0.32**	-0.11*	-0.06	0.03	-0.26**	-0.05	0.03
<i>Parents' relationship quality *poverty ratio</i>	-0.03*			-0.02*	-0.02+			0.00
<i>Lowest maternal warmth</i>		Ref				Ref		
<i>Low maternal warmth</i>		-0.85+				-0.94*		
<i>Medium warmth</i>		-1.05**				-0.93**		
<i>High maternal warmth</i>		-1.79***				-1.23***		
<i>Highest maternal warmth</i>		-2.36***				-1.73***		
<i>Lowest maternal warmth *poverty ratio</i>		Ref				Ref		
<i>Low maternal warmth*</i>		0.04				0.30+		
<i>Medium warmth*</i>		0.11				0.11		
<i>High maternal warmth*</i>		0.14				0.17		
<i>Highest maternal warmth*</i>		0.08				0.13		
<i>Lowest maternal conflict</i>			Ref				Ref	Ref
<i>Low maternal conflict</i>			1.40***				1.00***	0.26
<i>Medium conflict</i>			2.75***				1.52***	0.24
<i>High maternal conflict</i>			4.44***				2.25***	0.16
<i>Highest maternal conflict</i>			6.25***				4.00***	1.08***
<i>Lowest maternal conflict *poverty ratio</i>			Ref				Ref	Ref
<i>Low maternal conflict*</i>			-0.07				-0.08	-0.03
<i>Medium conflict*</i>			-0.12+				-0.04	-0.00
<i>High maternal conflict*</i>			-0.17+				-0.04	0.02
<i>Highest maternal conflict*</i>			-0.22*				-0.25*	-0.16
<i>Externalizing problems age 3</i>					0.50***			0.47***

<i>Constant</i>	5.64***	7.56***	3.79***	3.27***	0.40*	4.68***	2.20***	0.45***
<i>R square</i>	0.10	0.15	0.36	0.09	0.38	0.12	0.20	0.39
<i>Sample size</i>	6169	6169	6169	6763	5820	6763	6763	5820

All models include control variables and missing categories for the control variables. Models 2, 3, 6, 7 and 8 include missing categories of maternal warmth and conflict .

+ p < 0.10 *p < 0.05 **p < 0.01 *** p < 0.001

Figure 3. Externalizing problems at age 5 by parents' relationship quality family poverty ratio



Note: This figure is based on model 4 in Table 4. Values of this figure are computed using the coefficient for boys and the reference category of categorical variables.