Chapter 11

STEPPARENTING AND MENTAL HEALTH

Paul Boyle[1,2], Peteke Feijten[1,2], Zhiqiang Feng,[1,2], Vernon Gayle[3] and Elspeth Graham[1]
[1]School of Geography and Geosciences, University of St Andrews, United Kingdom; [2]Longitudinal Studies Centre – Scotland, University of St Andrews, United Kingdom; [3]Department of Applied Social Science, University of Stirling, United Kingdom.

Abstract: This chapter describes a study of the effects of being a stepparent or a partner of a stepparent on mental health. Using longitudinal cohort data from the National Child Development Study (NCDS), it was found that adults aged 33 living in stepfamilies have a higher risk of having poor mental health than otherwise comparable adults in 'first families'. It was also shown that this was partly due to selection of respondents with prior mental health problems into stepfamilies. Among those who had no prior mental health problems, only adults in stepfamilies where both partners are stepparents to each others' children had an increased risk of having poor mental health. For those with prior mental health problems, being in any type of stepfamily increased the risk of poor mental health compared to first families, suggesting that stepfamily life poses an extra burden on the already frail mental health of this group.

Keywords: birth cohort; mental health; National Child Development Study (NCDS); parenthood; longitudinal analysis; selection effects; stepfamily.

1. INTRODUCTION

Demographic changes in the Western world over the last few decades, such as later marriages, lower fertility, increasing divorce rates and rising rates of cohabitation, have brought about significant changes in household formation and composition. One outcome is a growing number of stepfamilies, where a parent, whether never married, separated, widowed or divorced, forms a new marriage or partnership. Nowadays, most stepfamilies result from divorce, while in the past they were more likely to result from widowhood.

Despite the rising incidence of stepfamilies and the demographic and social differences between stepfamilies and traditional families with two biological parents, researchers concerned with family life and parenting were relatively slow in acknowledging the importance of such non-traditional families (Ferri and Smith 1998, Utting 1995). While there has been an increase in social science research on stepfamilies in recent years much remains to be done (Coleman *et al*. 2000). For example, numerous researchers have explored the effect of living in a stepfamily on *children*, including studies of their psychological well-being but, perhaps surprisingly, little research has considered the potential psychological impacts on the *adults* (stepparents and their partners) of living in such a household arrangement. This is the focus of this study.

2. BACKGROUND

In the UK most people live in traditional households, but non-traditional households are becoming more common. Of those marrying during the 1990s, nearly 50% will end up divorced if current trends continue (Allan 1999), and a growing number of divorcees are starting new relationships. Haskey (1994) estimated that 12% of British children will live in a stepfamily before their sixteenth birthday. Recent estimates for Britain suggest that about 40% of mothers will experience being a lone parent and about 75% of lone mothers will go on to form a stepfamily (Ermisch and Francesconi 2000). Currently nearly 90% of stepfamilies involve children living with their mother and a new male partner (Finch 2002). Importantly, stepfamilies differ from traditional families demographically because they tend to include more and older children than do first families (Haskey 1994). The greater complexity of intra-household relationships in stepfamilies provides scope for tensions to arise and, perhaps, increases the potential for negative health impacts for both the children and the parents.

Numerous studies highlight the strains that every-day life in stepfamilies may entail and the effects this may have on *stepchildren's* health and well-being (Brown and Booth 1996; Pryor and Rodgers 2001). Not only do stepchildren experience the breakdown of their parent's relationship but they often feel relatively neglected by the biological parent. This may be combined with the potentially disruptive effects of having to divide their time between two homes. Most studies of the effects of remarriage on children fail to show a benefit, despite the financial advantages that usually result (Fergusson *et al*. 1994; Pagani *et al*. 1998; Walper 1995; Duncan and Hoffman 1985; Zill 1988). Some findings point to negative effects, with stepchildren performing worse at school (Pong 1997; Teachman *et al*. 1996), five-year old children in stepfamilies being significantly more at risk of behavioural and developmental problems than children in traditional families (Wadsworth *et al*. 1985), and a higher risk of drinking alcohol, drug abuse and problem behaviour among schoolchildren living with a stepfather (del Carmen *et al*. 2002; Mekos *et al*. 1996). While Joshi *et al*. (1999) found that maternal educational attainment and, to a lesser extent, family economic circumstances eliminated the relationship between family structure and children's cognitive and behavioural outcomes, the majority of quantitative studies suggest that stepchildren are at greater risk of a range of problems (Coleman *et al*. 2000; Ram and Hou 2003).

There is also a considerable literature on the effects of family arrangements and marital status on *adult* health. Higher mortality rates among the unmarried, those who live alone and the divorced, compared to those who are married, are well established (Seeman *et al*. 1987; Trovato and Lauris 1989; Gardner & Oswald, 2004). More depressive symptoms are apparent among both the recently separated (Neff and Schluter 1993) and those who have been separated for longer (Richards *et al*. 1997), even when mental health status prior to separation/divorce is taken into account (Wade and Pevalin 2004). In some studies, the beneficial effects of marriage are found for men but not women (Berkman and Syme 1979; Avlund *et al*. 1998). Lone parenthood has been studied in some detail. Hope *et al*. (1999) found that lone parents suffer higher levels of mental distress than other parents, although this may be related to the significantly higher poverty levels they experience (Keirnan and Mueller 1998; Shouls *et al*. 1999). Notably, within this large literature, there are virtually no studies examining explicitly the effects of living in a stepfamily on stepparents' and their partner's health.

Another strand of the literature which is relevant to this study considers 'marital quality' and how people cope with the redefinition of kinship that follows divorce and remarriage (overviews are provided by Coleman & Ganong, 1990 and Pasley *et al*., 1993). Remarriage has been found to lead to lower marital quality and satisfaction than first marriage (Clingempeel, 1981; White and Booth, 1985), and this may have an impact upon mental health. In a qualitative study by Simpson (1994), it was argued that the roles of remarried persons compared to married persons, and stepparents compared to biological parents, are less well defined and thus harder to fulfil with confidence and satisfaction. This is sometimes labelled as the 'incomplete institution hypothesis' (Cherlin, 1978). We found one study specifically focusing on the experience of stepparenting and how this affected marital quality and the stepparent-stepchild relationship. Ambert (1986) showed that an intimate relationship between stepparents and stepchildren was harder to establish when stepchildren were not resident and that the birth of a common child into the stepfamily made the stepparent-stepchild relationship better for men, but not for women.

Thus, stepfamily arrangements are potentially stressful since they involve the negotiation of different intra-household relationships that may introduce new sources of tension. For example, Hetherington and Jodl (1994) found that stepparents remain less engaged and more authoritarian in parenting stepchildren than in parenting their biological children, illustrating the scope for friction between biological parents and stepparents. Yet a recent wide-ranging literature review on remarriage and stepparenting cited only a small number of studies on the psychological health of adults, the majority of which examined the general effects of remarriage (Coleman *et al*. 2000). A study by Ferri and Smith (1998) suggested that adults in stepfamilies were more likely to express 'negative feelings' and suffer from depression than those in first families. Also, a recent study considered the relationship between depression and being a parent in the US (Evenson and Simon 2005). Parents with young children living at home were shown to have significantly higher rates of depression than non-parents and those with adult children who have left home. However, no increased risk of depression for stepparents with minor aged stepchildren was found and this study only considered the mental health of stepparents, not their partners.

In addition to the lack of previous work on the topic, another challenge to any quantitative study of stepparenting comes from relatively recent, largely qualitative studies that have begun to undermine the *idée fixe* that divorce is always harmful, at least to children (Smart 2003). These new approaches benefit from life course perspectives and deploy different conceptual categories. In developing our quantitative research design, we have tried to incorporate a greater subtlety into our analysis than some previous studies, by recognising that there are many types of stepfamily and that health impacts may change over time.

Coleman *et al*. (2000) state that more longitudinal quantitative studies of the effects of stepparenting are required. One particularly important reason for this is that cross-sectional studies cannot control adequately for selection effects. Thus, while stepparenting may result in poorer mental health, the opposite effect is also possible; those prone to poorer mental health may be more likely to end up living in stepfamilies (Amato 2000). Only with longitudinal data could this be explored. The National Child Development Study (NCDS) collects data for a large birth cohort based on all children born in a single week in 1958 and provides information from birth throughout childhood and adolescence into young and middle age adulthood. These data made it possible to control for adolescent characteristics which may influence subsequent mental health. This is a simple but effective way of providing

improved statistical control for the potential of increased representation of mentally ill people into stepparenthood.

In sum, there is a dearth of research on the mental health of adults living in stepfamilies, a need for a large scale quantitative longitudinal study in the UK and a demand that such a study gives due consideration to new and challenging conceptualisations of family arrangements. Our study, a longitudinal analysis using secondary data from a British birth cohort study, is designed to respond to all three of these points.

3. RESEARCH AIMS AND HYPOTHESES

The study aimed to fill the gap in knowledge about the relationship between stepparenting and mental health in the UK. Our main research question was, 'how does the mental health of adults in stepfamilies differ from the mental health of adults in otherwise comparable first families?' We were also interested in several dimensions of stepfamilies that are identified in the literature as affecting marital quality and personal well-being. These relate to the characteristics of the stepparent, such as age, income and attitude, and the characteristics of the children in the stepfamily, such as age and whether they are resident or non-resident. Thus, we derived the following hypotheses:

1. Stepparents have worse mental health outcomes than parents in first families.
2. The partners of stepparents have worse mental health outcomes than parents in first families.

These first two hypotheses are at the heart of our study, as described above.

3. The poorer the stepfamily, the greater the negative effect on mental health for both partners.

This has been identified as an understudied area in stepfamily research, but we base our hypothesis on clinicians' reports that financial issues are one of the primary sources of stress in stepfamilies (Coleman & Ganong, 1990).

4. The younger the stepparent, the greater the negative effect on mental health for both partners.

Firstly, young age indicates a lack of experience with children. Palisi *et al*. (1991) found that stepparents who had previous parenting experience performed better at stepparenting than those with no experience. Secondly, young age can be interpreted as a proxy for time spent in the stepfamily. There is some evidence that the family situation improves when the stepparent is longer in the family (Pasley *et al*. 1993).

5. The presence of a child born to the two partners in a stepfamily reduces the likelihood of poor mental health outcomes for both partners.

Studies in the past (Berman, 1980; Ambert, 1986) have found that a common child increases the quality of the marriage of partners in a stepfamily, and this leads us to expect that it also positively affects the mental health of the partners. However, the quality of the relationship between stepparents and stepchildren has not been found to improve as a result of the birth of a common child (White and Booth, 1985).

6. The presence of adolescent stepchildren increases the likelihood of poor mental health outcomes for both partners in stepfamilies.

In a study on the well-being of stepchildren, Hetherington and Clingempeel (1992) showed that stepparents found it particularly hard to cope with adolescent stepchildren who were often coercive and hostile towards the stepparent, whereas

with younger children it was often easier for the stepparent to find a parenting style that worked. The relationship between stepfathers and adolescent stepdaughters was found to be especially problematic.

7. The likelihood of poor mental health outcomes for both parents in stepfamilies increases where stepparents hold more traditional views.

Those with traditional views often have an authorative parenting style, and the literature shows that authorative parenting styles do not work well with stepchildren (especially older stepchildren) (Hetherington *et al*. 1988; Hetherington 1991). Therefore, we expect traditional views to lead to an increased risk of poor mental health for such parents.

8. The presence of non-resident children in the household increases the likelihood of poor mental health outcomes for both partners in stepfamilies.

Relationships between stepparents and resident children have been shown to be closer than between stepparents and non-resident stepchildren. Stepparents with non-resident stepchildren may have to manage a relationship with the ex-spouse and it may also be difficult to develop close bonds with stepchildren who rarely visit (Ambert, 1986). These issues may add stress to the relationship and subsequently affect the stepparent's mental health.

4. METHODS

The data used for this study is the National Child Development Study (NCDS), which is a sample of all babies born in the UK in one week in the spring of 1958. The sample originally included 17,416 respondents and they have been returned to seven times to collect a variety of data on issues including: mental health, partnership histories, and other time-invariant and time-varying demographic, health and socio-economic variables (University of London, 2007). We focused in this study on characteristics as recorded in 1991 when the sample members were aged 33, but we also included some variables from earlier in the life course which we expected to be related to subsequent mental health status (University of London, 2000). The sample (N=6,121) includes those with children, with a valid measures of behavioural/mental problems at age 16 and age 33, and family status information. Descriptive statistics for all the variables are given in Appendix 1.

Our outcome variable of interest is mental health. The measurement instrument used to measure mental health in the NCDS is the Malaise Inventory Scale (MIS) developed by Rutter *et al.* (1970). It consists of 24 questions which are designed to capture depression and anxieties, obsessions and phobias. It has commonly been used as a mental health screening instrument and several studies have tested and confirmed the alpha reliability and internal consistency of this scale (e.g. Cherlin *et al*. 1998; Hirst and Bradshaw 1983). The distribution of the MIS scale is highly skewed, and a common solution to deal with this is to divide the scale into a binary variable. As in other studies, such as Flouri and Buchanan (2002) and Power *et al*. (1988), we defined a score of 7 or higher out of 24 as an indicator of poor mental health. As Chase-Landsdale *et al.* (1995: 1619) point out, the MIS is merely a screening instrument, and a score of 7 or higher must be interpreted as "a clinical cut off score, indicating a high likelihood of the presence of mental illness and the need for psychiatric help". Twelve percent of adults aged 33 have a score over 6 on the MIS.

We also wanted to control for proneness to poor mental health at the onset of adulthood, because we hypothesised that this may influence whether people are more or less likely to end up living in a stepfamily – a potential sample selection effect. This was operationalised through the Home Behaviour Scale (HBS), also developed by Rutter *et al.* (1970). This measure was collected in 1974 when respondents were aged 16. The instrument consists of a 22-item scale that is meant to signal both externalizing (where the child shows under-controlled behaviour such as aggression or disobedience) and internalizing (where the child shows over-controlled behaviour such as anxiety or depression) behavioural disorders in children. Again, a score of 7 or higher was chosen as a threshold for defining behavioural problems. Twenty one per cent of children at age 16 have a score over 6 on the HBS.

In order to distinguish different types of (step)families, we created a categorical variable with five categories: (1) respondents in first families, (2) respondents in lone parent families, (3) respondents who are stepparents, (4) respondents who are the partners of stepparents and (5) respondents who are stepparents and partners of stepparents at the same time (i.e., both partners have children from a previous relationship). We label this group 'dual stepfamilies'.

Finally, we extracted additional explanatory variables expected to influence mental health. We used variables from different points in the life course. Some reflect the status of the sample respondents in the year of analysis, 1991, when respondents were 33 years old. These included the sex of the respondent, their economic status, highest educational qualification and social class. We also included the number of children in the family, as stepfamilies are larger than first families on average. Then, we included variables about respondents' characteristics at ages 7 and 16, to control for previous circumstances expected to be associated with mental health outcomes in later life (see Cherlin *et al*. 1998 and Flouri and Buchanan 2003). These included domestic tension at age 7, financial hardship in the child's household at age 7, whether the child lived with his/her natural mother at age 16, whether the father was interested in the child's education at age 16, and school abilities at ages 7 and 16.

The method used is logistic regression, with mental health status at age 33 (1991) as the binary dependent variable (0 = non-poor mental health; 1 = poor mental health). All models include the control variables described above, and the results are expressed as parameter estimates in the tables. We first estimated a model without behavioural problems in adolescence, and then a model that included this variable, where we were particularly interested in the effects of the interaction between behavioural problems at age 16 and family status at age 33 on mental health status at age 33. We also graphed the coefficients by family status. In order to better facilitate appropriate visual comparisons between categories of the explanatory variable, we have plotted comparison intervals as suggested by Firth (2003) and further illustrated by Gayle and Lambert (2007).

5. RESULTS

5.1 Description of stepfamilies

We distinguish between stepparents, partners of stepparents, and families where both partners are stepparents to each other's children in our study ('dual stepfamilies'). The distribution of respondents over these family types is shown in Table 1 (column 1). Table 1 also shows that adults living in stepfamilies are different from adults living in

first families and lone parent families, in terms of age, number of children in the household and the age range of these children (see also Haskey, 1994). The second and third columns show the average number of children per family type (excluding and including non-resident children). Columns four and five show the average age range of the children in the household, and the average age of (step)parents per family type. It can be seen that adults in stepfamilies are on average older and have more children, who are of a wider age range, than people in first families and lone parent families.

Table 1. Demographic characteristics by family type

	Distribution of family type (%)	Average number of children (resident children only)	Average number of children (incl. non-resident children)	Average age range children (resident children only)	Average age (step)parent *
First family	75.6	2.0	2.0	2.8	33.3
Lone parent family	7.2	1.7	1.9	3.0	---
All stepfamilies	17.3	1.8	2.8	4.5	34.7
stepparent	6.4	1.7	2.7	4.1	37.5
partner of stepparent	8.1	1.8	2.5	4.9	32.0
both stepparents	2.8	2.3	4.2	4.6	36.1

Source: NCDS sweep 1991

* This statistic is based on partners of NCDS cohort members, because cohort members themselves were all aged 33 at the time of the survey.

5.2 Association between being a (partner of a) stepparent and mental health

Table 2 shows the numbers and percentages of people with poor and non-poor mental health, by family type, at age 33. Adults in stepfamilies (both stepparents and their partners) were more likely to suffer poor mental health than adults in first families, but less likely than lone parents.

Table 2. Poor mental health by family type

	Non-poor mental health		Poor mental health	
	N	%	N	%
First family	5631	90.7	575	9.3
Lone parent family	434	73.9	153	26.1
Stepfamily	176	83.1	240	16.9

Source: NCDS sweep 1991

5.3 Health selection into stepfamilies?

As argued above, it is possible that part of this association is due to health selection into stepfamilies. Table 3 shows the numbers and percentages of people with and without behavioural problems at age 16 who ended up in a stepfamily at age 33. Those with behavioural problems at age 16 were significantly more likely to live in a stepfamily as an adult (22.9%) than those who had no behavioural problems at age 16 (15.9%). This supports the idea that at least part of the worse mental health of (partners of) stepparents is due to the selection of people prone to poorer mental health into stepfamilies. This is therefore accounted for in the models below.

Table 3. Behavioural problems at age 16 by stepfamily status at age 33

Behavioural problems at age 16?	In a stepfamily at age 33? No		Yes		Total
	N	%	N	%	%
No	4057	84.1	766	15.9	100
Yes	1001	77.1	297	22.9	100
Pearson chi2(1) = 34.9; p < 0.000					

Source: NCDS sweeps 1974 and 1991

5.4 Modelling results

All hypotheses were tested in models with and without control variables, which included: sex, household size, employment status, highest completed education, social class, domestic tension at age 7, financial hardship at age 7, school abilities at ages 7 and 16, living with the natural mother at age 16, and father interested in education at age 16. Table 4 shows the results from two multivariate analyses. Model 1 does not take behavioural problems at age 16 into account while Model 2 does.

We see, first of all, that the number of children in the household does not affect the risk of having poor mental health (Model 1). Gender does have an influence: our result replicates the well-known finding that women have a higher risk of poor mental health than men. The employment status variable shows that people who do not work are at increased risk of having poor mental health, especially those who are unemployed. Also, those with lower levels of education and from lower social classes have an increased risk of poor mental health.

Childhood circumstances at age 7 also affect mental health at age 33. Living in a household with domestic tension or financial hardship, or performing below average at school increases the risk of being in poor mental health. Those who lived with their natural mother or had a father who was interested in their education at age 16 have better mental health at age 33. Also school abilities at age 16 are positively associated with mental health at age 33. Our main variable of interest at age 16 is whether the respondent had behavioural problems. Model 2 shows that those with behavioural problems at age 16 had a significantly higher risk of poor mental health at age 33. To summarise, most control variables, both at age 33 and in childhood, are associated with mental health in the hypothesised directions.

Table 4. Modelling results for mental health status at age 33 (1991) (N=6121)

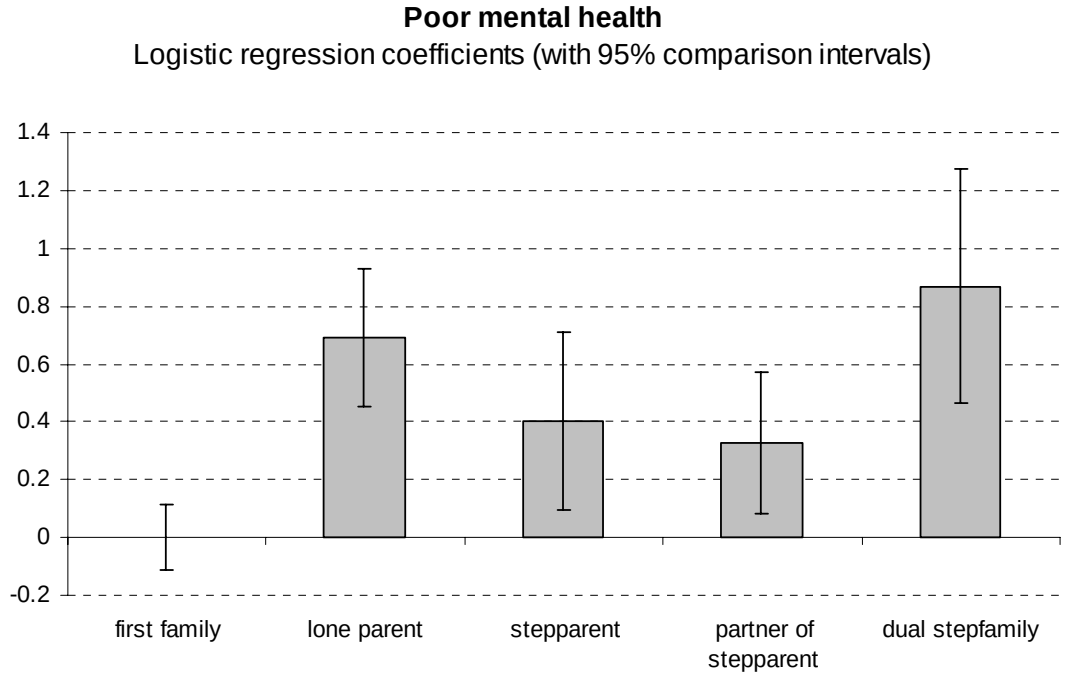
	Model 1		**Model 2**	
Variable	**Coef.**	**p-value**	**Coef.**	**p-value**
Constant	-2.378	0.000	-2.470	0.000
Behavioural problems age 16				
HBS score < 7			0.000	
HBS score >= 7			0.554	0.000
Family type age 33				
First family	0.000		0.000	
Lone parent family	0.692	0.000	0.572	0.001
Stepparent	0.401	0.017	0.282	0.187
Partner of stepparent	0.329	0.017	0.211	0.240
Dual stepfamily	0.869	0.000	0.966	0.000
Behavioural problems age 16 * Family type age 33				

First family			0.000	
Lone parent family			0.194	0.468
Stepparent			0.257	0.452
Partner of stepparent			0.206	0.463
Dual stepfamily			-0.320	0.429
Number of children in the household (incl. non-resident)	-0.011	0.797	-0.021	0.630
Sex				
Male	0.000		0.000	
Female	0.658	0.000	0.624	0.000
Employment status age 33				
Fulltime working	0.000		0.000	
Part-time working	-0.080	0.556	-0.076	0.576
Unemployed	0.628	0.001	0.572	0.003
Other not working	0.228	0.079	0.224	0.086
Highest completed educational level age 33				
No education completed	0.000		0.000	
CSE levels 2-5	-0.410	0.001	-0.373	0.002
O levels	-0.523	0.000	-0.481	0.000
A levels	-0.734	0.000	-0.663	0.001
Degree or subdegree	-1.064	0.000	-0.985	0.000
Unknown	-0.617	0.119	-0.528	0.184
Social class age 33				
Unskilled	0.000		0.000	
Partly skilled	-0.157	0.371	-0.139	0.434
Skilled manual	-0.235	0.212	-0.219	0.250
Skilled non-manual	-0.431	0.018	-0.401	0.029
Managerial / technical	-0.510	0.008	-0.469	0.016
Professional	-0.802	0.063	-0.725	0.094
Unknown	0.195	0.202	0.221	0.278
Domestic tension age 7				
No	0.000		0.000	
Yes	0.497	0.004	0.428	0.015
Unknown	-1.449	0.152	-1.454	0.158
Financial hardship age 7				
No	0.000		0.000	
Yes	0.370	0.012	0.360	0.016
Unknown	1.474	0.141	1.471	0.149
School abilities age 7				
Most abilities on or above average	0.000		0.000	
Most abilities below average	0.231	0.023	0.215	0.037
Unknown	0.070	0.736	0.080	0.702
Living with natural mother age 16				
No	0.000		0.000	
Yes	-0.440	0.013	-0.433	0.015
Father interested in child's education age 16				
No	0.000		0.000	
Yes	-0.326	0.008	-0.332	0.008
Unknown	-0.279	0.018	-0.270	0.023
School abilities at age 16				
Half or more of subjects above CSE 1/O levels	0.000		0.000	
More than half of subjects below CSE 1/O levels	0.375	0.023	0.339	0.041
Unknown	0.425	0.007	0.389	0.014

5.5 Family type

Of particular interest were the effects of family type. Figure 1 graphs the regression coefficients for the five family types (as in Model 1, Table 4). Compared to those in first families, the risk of poor mental health is significantly higher for lone parents and all three types of stepfamily. For lone parents, the odds of poor mental health are twice as high (exp(0.692) = 2.0) as for those in first families, and for dual stepfamilies 2.4 times as high (exp (0.869) = 2.38). The difference between people in first families and people in families with only one stepparent is smaller, yet significant at the 95% confidence interval level. These initial results are consistent with the hypothesis that the various strains involved in stepparenting may result in poorer mental health for both stepparents and their partners compared to those in first families, and that these strains are even stronger in more complex stepfamilies where both partners have stepchildren.

Figure 1. Poor mental health at age 33 (1991) by family status (derived from Model 1, Table 4)



However, as we argued earlier, it is also possible that those prone to poorer mental health may be selected into stepfamilies, and we showed in section 5.3 that those with a high HBS score at age 16 were more likely to end up in a stepfamily at age 33 than those with a low HBS score at age 16. Therefore, we controlled for behavioural problems in adolescence in Model 2, by including an interaction between family type at age 33 and behavioural problem status at age 16.

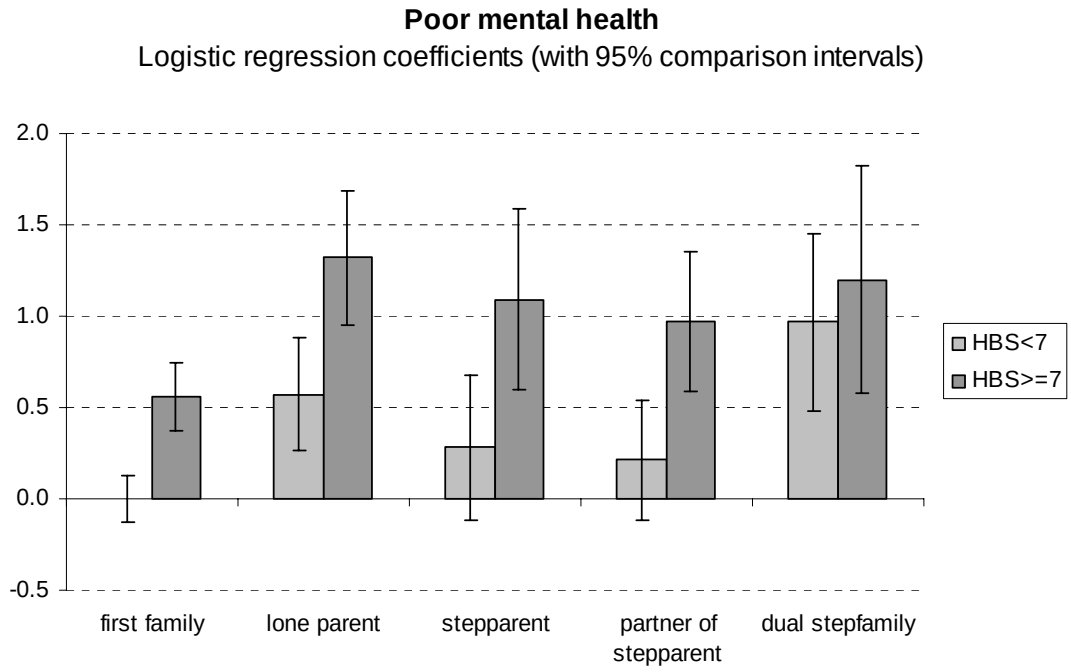
Figure 2 shows the coefficients calculated from the main effects and interaction effects of family type (at age 33) and behavioural problem status (at age 16) from Model 2 (Table 4). Of those who had few behavioural problems at age 16 (HBS<7), only lone parents and those couples where both partners were stepparents had significantly worse health than those in first families at age 33. This fits in with the finding from earlier studies that stepparent-stepchild relationships were more distant if both parents had their own children living in the household (Coleman &

Ganong, 1990). In the more common stepfamilies, where only one of the adults was a stepparent, neither the stepparents nor their partners had significantly worse health than those in first families, if they had few behavioural problems at age 16.

On the other hand, the risk for those who had a high HBS score at age 16 was considerably higher in every family status category. Comparing across the categories for those with high HBS scores at age 16, we find that lone parents, stepparents and partners of stepparents and partners who were both stepparents, all have a significantly higher risk of poor mental health at age 33 than their counterparts in first families (although only significant at the 90% confidence interval level for partners of stepparents and dual stepfamilies; note that the larger confidence interval for dual stepfamilies will partly be caused by the small number of observations in this category (N=55)). Hence our results suggest that those who had behavioural problems in adolescence are much more likely to suffer poor mental health in later life, but that those who end up living in *stepfamilies* (and lone parent families) suffer a significantly heavier burden on their mental health.

Finally, we compare those with and without behavioural problems at age 16 within each family type. For those in first families who had high HBS scores at age 16 the risk of having poor mental health at age 33 was significantly higher than for those in first families with low HBS scores at age 16. Also, lone parents, stepparents and partners of stepparents have a significantly higher risk of having poor mental health if they had high HBS scores at age 16 than if they had low scores. Only for dual stepfamilies, there is no difference in poor mental health risk for those with and without behavioural problems in adolescence. For both groups the risk is high, indicating that living in a stepfamily with children from both partners' previous relationships leads to stress and worries, no matter what the prior mental health status.

Figure 2. Poor mental health at age 33 (1991) by family status (derived from Model 2, Table 4)



The next five hypotheses, concerning the characteristics of the adults and the children in stepfamilies, were tested in multivariate models with the same set of control

variables as shown in Table 4. The effects of the control variables in all models were very comparable to those in Table 4 and are not discussed further.

5.6 Characteristics of the adults in stepfamilies

We hypothesised that being poor affects the mental health of those in stepfamilies, because financial problems are a primary source of stress. We measured socio-economic background in three ways: highest completed level of education, social class and economic activity status (income information in the NCDS is not suitable for this present analysis, so we did not use it). Each dimension shows the same picture, but the results for labour market activity are the most marked, and remain largely significant after controlling for background variables. The results show that people who do not work have a higher risk of poor mental health than people who work. Among those who work, those working part-time have a slightly elevated risk of poor mental health compared to fulltime workers, but only in the model without control variables. Overall, our findings confirm that adults in stepfamilies with poorer socio-economic circumstances have a higher risk of having poor mental health. However, we also find this effect for adults in first families and lone parent families, so it is not exclusively true for stepfamilies. When we control for background variables, the effects of level of education and social class remain in the same direction, but their magnitude decreases and they become largely insignificant.

Our next hypothesis was that the younger the stepparent, the greater the negative impact of stepparenting on mental health. In the NCDS, it is not possible to test hypotheses about age differentiation directly, because NCDS cohort members are all the same age. However, we explored this by comparing results at age 33 (NCDS sweep 1991) and age 41/42 (NCDS sweep 2000). Comparison of the results shows that differences in mental health between those in first families and those in stepfamilies were larger at age 33 than at age 41/42, confirming our hypothesis. Of particular interest is the finding that at age 33, adults in stepfamilies have a higher risk of poor mental health than those in first families, and this difference has disappeared at age 41/42 (although, only for those with behavioural problems at age 16 in the model with control variables). When we compare those who did and did not have behavioural problems in adolescence within each family type, we also see that differences were bigger at age 33 than at age 41/42.

Last, we find some confirmation for our hypothesised effect of traditional attitudes on the likelihood of poor mental health for adults in stepfamilies. We did this analysis on the data at age 41/42, with attitudes as measured at age 33 (prior attitudes should provide a better explanation of current behaviour than current attitudes). A traditional attitude was measured as a cumulative score on several attitudinal items such as “wives who don't have to work should not do so”. The results show that adults in lone parent families and dual stepfamilies who held more traditional views at age 33 have a slightly higher risk of poor mental health at age 41/42 than their counterparts who held less traditional views (although, only significant for those who had no behavioural problems in adolescence). For people in first families and ‘single’ stepfamilies, attitude does not affect mental health. For people who had behavioural problems in adolescence, attitude has no effect for stepfamilies and lone parent families, but it does for first families (the more traditional, the higher the risk of poor mental health).

5.7 Characteristics of the children in stepfamilies

The presence of a child born to both parents in a stepfamily was expected to reduce the risk of poor mental health, because it can cement the bond between family members and provide more role clarity to the stepparent. We found marginal support for this, as having common children did reduce rates of mental illness, but none of the differences between adults in stepfamilies with and without common children were statistically significant, even in the models without control variables.

The presence of adolescent children (age 13-17) in the household does increase the likelihood of poor mental health, but this is true for all family types, not just stepfamilies. In fact, the effect is greatest for adults in first families. When we control for background variables, the differences between families with and without adolescent children disappears, except for those in first families and those in double stepfamilies who had no behavioural problems in adolescence.

Lastly, we studied the effect of having non-resident children (that is, either or both adults in the stepfamily have a child or children who live(s) somewhere else, usually with the other biological parent) on mental health. We expected that having non-resident children would increase the risk of mental health problems. Firstly, for the parent him/herself because (s)he is always in the shadow of the parent with whom the children live, and because (s)he may miss the child(ren) and suffer from feelings of guilt that (s)he does not spend more time with them. The stepparents of non-resident children may also find it difficult to cope with stepchildren who they only see infrequently, and to support their partner. Our results show a consistent effect of having non-resident children in both the models with and without control variables. Lone parents and adults in stepfamilies with non-resident children are more likely to have mental health problems than their counterparts who do not have non-resident children. The differences between those with and without non-resident children are particularly large among people who had behavioural problems in adolescence.

6. SUMMARY AND CONCLUSION

This study has shown that there are significant differences in mental health between adults in first families and different types of stepfamilies. Stepparents themselves, and their partners, are more at risk of having poor mental health than their counterparts in first families. When both adults in a stepfamily are stepparents to each other's children, their mental health is even more at risk.

However, as we also showed, part of this association is due to the fact that adults who live in stepfamilies are more prone to poor mental health in the first place. This 'proneness to poor mental health' was captured using a variable that measured behavioural problems at age 16, which is a good predictor of mental health problems in later life. Those who had behavioural problems at age 16 were more likely to end up in stepfamilies, and therefore make up a larger proportion of the stepfamily population than they do of the first family population. The temporal ordering of these events means that cross-sectional data would not allow this issue to be explored. Evenson and Simon (2005), for example, show a higher likelihood of depression among some types of stepparents compared to parents in first families, but they acknowledge in their discussion that this may partly be due to selection into and out of stepfamilies of people with different prior mental health status (interestingly, they

speculate that it may be people with *better* initial mental health who select themselves into stepfamilies).

Once we took prior mental health into account, we found that stepfamily life is particularly harmful to the mental health of people who had behavioural problems in adolescence. They appear to find it hard to cope with the role of being a stepparent, or the partner of a stepparent, presumably because of the problems and tensions in stepfamilies that are largely absent in first families. Adults who did not have behavioural problems as an adolescent only have an increased risk of poor mental health if they live in dual stepfamilies or lone parent families.

Several other elements of stepfamilies were also shown to account for the adverse effect of stepfamily life on mental health. When stepfamilies have non-resident children, that is, one (or both) of the adults has children who live in another household, this increases the risk of poor mental health. The age of the stepparent also mattered: the younger, the higher the likelihood of poor mental health. Other factors increasing the likelihood of poor mental health in stepfamilies are: not working, or working part-time (compared to working full-time), and having adolescent (step)children in the household. However, these factors also increase the risk of poor mental health for adults in the other family types (first families and lone parent families), and are thus not only true for stepfamilies.

This study is one of the first of its type to compare the risk of mental health problems for stepparents, or partners of stepparents, compared to those in first families. Although we could not directly compare our outcomes with any previous studies, the results do conform to studies on related topics. Studies arguing that stepfamilies are more stressful environments than first families (such as Brown and Booth 1996; Pryor and Rodgers 2001) seem to be supported by our findings. Also, the worse mental health of people in stepfamilies may affect marital quality and marital stability of couples in stepfamilies. This would provide an additional explanation for the markedly higher divorce rates found in remarriages that involve stepchildren. Such marriages have been found to suffer from worse marital quality (e.g. Coleman & Ganong, 1990; Pasley, 1993), but the explicit link with mental health has not been made in such studies.

It is also possible that our results underestimate the adverse effect of stepfamily life on mental health. If those who find it hard to cope with being a (partner of a) stepparent are more likely to end the relationship, they will be ignored in our analysis. While their mental health may have been most seriously affected by stepparenthood, leaving the relationship may have caused improvements making it difficult to estimate the effect of stepparenting. Only long-running panel data (with frequent waves) would allow us to examine such a case, as we would be able to observe people entering and exiting different types of households over their life course, and relate their (changing) family type to their mental health status.

Our results demonstrate the value of longitudinal analysis, which has allowed the subtlety of the relationship between stepparenting and mental health to be explored and we support Coleman *et al.*'s (2000) plea for more longitudinal analyses of complex family circumstances. Clearly, the health outcomes for stepparents and their partners would appear to deserve more attention and the results of such analyses may be of interest to family researchers, as well as clinicians and counsellors working with adults who are struggling with stepparenting issues.

REFERENCES

Allan, G. (1999) *The Sociology of the Family.* Oxford, Blackwell.

Amato, P.R. (2000) The consequences of divorce for adults and children, *Journal of Marriage and the Family,* 62: 1269-1287.

Ambert, A.M. (1986) Being a stepparent: live-in and visiting stepchildren, *Journal of Marriage and the Family*, 48: 795-804.

Avlund, K., Damsgaard, M.T. and Holstein, B.E. (1998) Social relations and mortality. An eleven year follow-up study of 70-year-old men and women in Denmark, *Social Science and Medicine,* 47: 635-643.

Berkman, L.F. and Syme, S.L. (1979) Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents, *American Journal of Epidemiology,* 109: 186-204.

Berman, C. (1980) *Making it as a stepparent: New roles/new rules.* Garden City (NY), Doubleday.

Brown, S.L. and Booth, A. (1996) Cohabitation versus marriage: a comparison of relationship quality, *Journal of Marriage and the Family,* 58: 668-678.

Chase-Lansdale, P.L., Cherlin, A.J. and Kiernan, K.E. (1995) The long-term effects of parental divorce on the mental health of young adults: a developmental perspective, *Child Development* 66: 1614-1634.

Cherlin. A.J. (1978) Remarriage as an incomplete institution, *American Journal of Sociology*, 86: 634-650.

Cherlin, A.J., Chase-Lansdale, P.L. and McRae, C. (1998) Effects of Parental Divorce on Mental Health throughout the Life Course, *American Sociological Review,* 63(2): 239-249.

Clingempeel, G. (1981) Quasi-kin relationships and marital quality, *Journal of Personality and Social Psychology*, 41: 890-901.

Coleman, M. and Ganong, L.H. (1990) Remarriage and stepfamily research in the 1980s: increased interest in an old family form, *Journal of Marriage and the Family*, 52: 925-940.

Coleman, M., Ganong, L. and Fine, M. (2000) Reinvestigating remarriage: another decade of progress, *Journal of Marriage and the Family,* 62: 1288-1307.

Del Carmen, M., Alcon, G., Pedersen, J.M., Maria, A., and Gonzalez, C. (2002) Greenlandic family structure and communication with parents: influence on schoolchildren's drinking behaviour, *International Journal of Circumpolar Health,* 61: 319-331.

Duncan, G.J. and Hoffman, S.D. (1985) A reconsideration of the economic consequences of marital dissolution, *Demography,* 22: 485-497.

Ermisch, J. and Francesconi, M. (2000) The increasing complexity of family relationships: Lifetime experience of lone motherhood and stepfamilies in Great Britain, *European Journal of Population,* 16: 235–249.

Evenson, R.J. and Simon, R.W. (2005) Clarifying the relationship between parenthood and depression, *Journal of Health and Social Behaviour,* 46: 341-358.

Fergusson, D.M., Lynskey, M.T. and Horwood, L.J. (1994) The effects of parental separation, the timing of separation and gender on children's performance on cognitive tests, *Journal of Child Psychology and Psychiatry and Allied Disciplines,* 35: 1077-1092.

Ferri, E. and Smith, K. (1998) *Step-parenting in the 1990s,* Family Policy Studies Centre, London.

Finch, N. (2002) *Demographic Trends in the UK,* Social Policy Research Unit, University of York.

Firth, D. (2003) Overcoming the Reference Category Problem in the Presentation of Statistical Models, *Sociological Methodology,* 33(1): 1-18.

Flouri, E. and Buchanan, A. (2002) The role of father involvement in children's later mental health, *Journal of Adolescence,* 26: 63-78.

Gardner, J. and Oswald, A. (2004) How is mortality affected by money, marriage, and stress?, *Journal of Health Economics,* 23: 1181-1207.

Gayle, V. and Lambert, P. (2007) Using Quasi-variance to Communicate Sociological Results from Statistical Models, *Sociology,* 41: 1191-1207.

Haskey, J. (1994) Stepfamilies and stepchildren in Great Britain, *Population Trends,* 76: 17-28.

Hetherington, E.M., Arnett, J.D. and Hollier, E.A. (1988) Adjustment of parents and children in remarriage. In Wolchick, S.A. and Karoly, P. (eds.), *Children of Divorce,* University of Chicago Press, Chicago, pp. 67-107.

Hetherington, E.M. (1991) Presidential address: Families, lies and videotape, *Journal of Research on Adolescence,* 1: 323-348.

Hetherington, E.M. and Clingempeel, W.G. (1992) Coping with marital transitions: A family systems perspective, *Monographs of the Society for research in Child Development,* 57: 2-3 (serial no. 227).

Hetherington, E.M. and Jodl, K.M. (1994) Stepfamilies as settings for child development. In Booth, A. and Dunn, J. (eds.) *Stepfamilies: Who benefits? Who does not?*, Lawrence Erlbaum Associates, Hillsdale (New Jersey), pp. 55-80.

Hirst, M.A. and Bradshaw, J.R. (1983) Evaluating the Malaise Inventory: A Comparison of Measures of Stress, *Journal of Psychosomatic Research,* 27(3): 193-199.

Hope, S., Power, C. and Rodgers, B. (1999) Does financial hardship account for elevated psychological distress in lone mothers?, *Social Science and Medicine,* 49: 1637-1649.

Joshi, H., Cooksey, E., Wiggins, R., McCulloch, A., Verropoulou, G. and Clarke, L. (1999) Diverse family living situations and child development: a multi-level analysis comparing longitudinal evidence from Britain and the United States, *International Journal of Law, Policy and the Family,* 13: 292-314.

Keirnan, K. and Mueller, G. (1998) *Who are the divorced, and who divorces?* CASEbrief 6, Centre for Analysis of Social Exclusion, London.

Mekos, D., Hetherington, E.M. and Reiss, D. (1996) Sibling differences in problem behaviour and parental treatment nondivorced and remarried families, *Child Development*, 67: 2148-2165.

Murphy, M., Glaser, K., and Grundy, E. (1997) Marital status and long-term illness in Great Britain, *Journal of Marriage and the Family*, 59: 156-164.

Neff, J.A. and Schluter, T.D. (1993) Marital status and depressive symptoms: The role of race/ethnicity and sex, *Journal of Divorce and Remarriage*, 20: 137-160.

Pagani, L., Tremblay, R.E., Vitaro, F., Kerr, M. and McDuff, P. (1998) The impact of family transition on the development of delinquency in adolescent boys: A 9-year longitudinal study, *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 39: 489-499.

Palisi, B.J., Orleans, M., Caddell, D. and Korn, B. (1991) Adjustment to stepfatherhood: The effects of marital history and relations with children, *Journal of Divorce and Remarriage*, 14 (3/4): 89-106.

Pasley, K., Dollahite, D.C. and Ihinger-Tallman, M. (1993) Clinical applications of research findings on the spouse and stepparent roles in remarriage, *Family Relations*, 42: 315-322.

Pong, S.L. (1997) Family structure, school context, and eighth grade math and reading achievement, *Journal of Marriage and the Family*, 59: 734-746.

Power, C., Manor, O., Fox, J. and Fogelman, K. (1988) *Health Selection: An Explanation of Social Inequalities in Health in Young Adults?* NCDS Working Paper 28, City University, London.

Pryor, J. and Rodgers, B. (2001) *Children in Changing Families: Life After Parental Separation*, Blackwell, London.

Ram, B.L. and Hou, F. (2003) Changes in family structure and child outcomes: Roles of economic and familial resources, *Policy Studies Journal*, 31: 309-330.

Richards, M., Hardy, R., and Wadsworth, M. (1997) The effects of divorce and separation on mental health in a national UK birth cohort, *Psychological Medicine*, 27: 1121-1128.

Rutter, M., Tizard, J. and Whitmore, K. (1970) *Education, Health and Behaviour*, Longman, London.

Seeman, T.E., Kaplan, G.A., Knudsen, L., Cohen, R. and Guralnik, J. (1987) Social network ties and mortality among the elderly in the Alameda County Study, *American Journal of Epidemiology*, 126: 714-723.

Shapiro, A.D. (1996) Explaining psychological distress in a sample of remarried and divorced persons: The influence of economic distress, *Journal of Family Issues*, 17: 186-203.

Shouls, S., Whitehead, M., Burstrom, B. and Diderichsen, F. (1999) The health and socio-economic circumstances of British lone mothers over the last two decades, *Population Trends*, 95: 41-46.

Simpson, B. (1994). Bringing the `unclear' family into focus: divorce and re-marriage in contemporary Britain, *Man, New Series*, 29: 831-851.

Smart, C. (2003) Introduction: new perspectives on childhood and divorce, *Childhood*, 10: 123-129.

Teachman, J.D., Paasch, K. and Carver, K. (1996) Social capital and dropping out of school early, *Journal of Marriage and the Family*, 58: 773-783.

Trovato, F. and Lauris, G. (1989) Marital status and mortality in Canada: 1951-1981, *Journal of Marriage and the Family*, 51: 907-922.

University of London (2000). Institute of Education. Centre for Longitudinal Studies, National Child Development Study: Sweeps 1 (1965), 2 (1969) and 3 (1974) [computer file]. National Birthday Trust Fund, National Children's Bureau and City University Social Statistics Research Unit [original data producer(s)]. UK Data Archive, University of Essex, Colchester [distributor], 25 July 2000 (2nd Edition). SN: 3148.

University of London (2007). Institute of Education. Centre for Longitudinal Studies, National Child Development Study: Sweep 5, 1991 [computer file]. City University. Social Statistics Research Unit, [original data producer(s)]. Colchester, Essex: UK Data Archive [distributor], January 2007. SN: 5567.

Utting, D. (1995) *Family and Parenthood: Supporting Families, Preventing Breakdown*, Joseph Rowntree Foundation, York.

Wade, T.J. and Pevalin, D.J. (2004) Marital transitions and mental health, *Journal of Health and Social Behavior*, 45: 155-170.

Wadsworth, J., Burnell, I., Taylor, B. and Butler, N. (1985) The influence of family type on children's behaviour and development at five years, *Journal of Child Psychology and Psychiatry*, 26: 245-254.

Walper, S. (1995) Family relationships and adolescents social development in nuclear, single mother, and stepfather families, *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, 27: 93-121.

White, L.K. and Booth, A. (1985) The quality and stability of remarriages: The role of stepchildren, *American Sociological Review*, 50: 689-698.

Zill, N. (1988) Behavior, achievement, and health problems among children in stepfamilies: Findings from a national survey of children health. In Hetherington, E.M. and Arasteh, J. (eds.) *The Impact of Divorce, Single Parenting and Stepparenting on Children*, Lawrence Erlbaum Associates, Hillsdale (New Jersey), pp. 325-368.

Appendix 1. Descriptive statistics (N = 6121)

Variable	Number	Percentage
Mental health age 33		
Good health	5395	88.1%
Poor health	726	11.9%
Behavioural problems at age 16		
HBS score < 7	4823	78.8%
HBS score >=7	1298	21.2%
Family type age 33		
First family	4638	75.8%
Lone parent	420	6.9%
Stepparent	400	6.5%
Partner of stepparent	494	8.1%
Both stepparents	169	2.8%
Mean number of children by family type	Mean	S.d.
Overall mean	2.1	1.0
First family	2.0	0.8
Lone parent	1.9	1.0
Stepparent	2.7	1.2
Partner of stepparent	2.5	1.1
Both stepparents	4.2	1.5
Sex		
Male	2714	44.3%
Female	3407	55.7%
Employment status		
Fulltime working	3264	53.3%
Parttime working	1356	22.2%
Unemployed	195	3.2%
Other not working	1306	21.3%
Highest completed educational level		
No education completed	1076	17.6%
CSE 2-5	1201	19.6%
O levels	2482	40.5%
A levels	604	9.9%
Degree	684	11.2%
Unknown	74	1.2%
Social class		
Unskilled	280	4.6%
Partly skilled	1046	17.1%
Skilled manual	1137	18.6%
Skilled non-manual	1388	22.7%
Managerial / technical	1642	26.8%
Professional	212	3.5%
Unknown	416	6.8%
Domestic tension age 7		
No	5194	84.9%
Yes	255	4.2%
Unknown	672	11.0%
School abilities age 7		
Most abilities below average	4181	68.3%
Most abilities on or above average	1331	21.7%
Unknown	609	9.9%
Financial hardship age 7		

No	5071	82.8%
Yes	378	6.2%
Unknown	672	11.0%
Living with natural mother age 16		
No	245	4.0%
Yes	5876	96.0%
Father interested in child's education age 16		
No	781	12.8%
Yes	3022	49.4%
Unknown	2318	37.9%
School abilities at age 16		
More than half below CSE 1/O levels	1189	19.4%
Half or more above CSE 1/O levels	1989	32.5%
Unknown	2943	48.1%