



Marriage Foundation

Family breakdown and teenage mental health

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- The link between a dysfunctional family environment and children's mental health is well-established. However current UK policy discussion tends to focus on parental conflict and overlooks family structure and breakdown, whether the parents are married and stay together.
- Our analysis of Millennium Cohort study data from 10,929 mothers with 14 year old children reveals that mental health problems are especially prevalent among children whose parents split up. Problems are also more common among children whose parents were not married when the child was born, or who were least certain of their relationship happiness at that time.
- In line with other research, we confirm that teenage girls are more likely to exhibit emotional problems whereas teenage boys are more likely to exhibit behavioural problems.
- Our findings show that the influence of family behaviour on teenage mental health extends far beyond parental conflict. Family breakdown is the single biggest factor for girls and equal top influence for boys, along with parental relationship happiness. Whether parents are married, happy, stay together, and remain close to their child all make a unique contribution.

Mental health problems during childhood cast a 'long shadow' over future life chances, affecting work, relationships and well-being on into adulthood (*Goodman et al, 2011*).

According to the Office for National Statistics, 1 in 8 young teenagers report symptoms of mental ill-health, with problems at school, home, and with self-image cited as risk factors (*ONS, 2015*).

Although severe child mental health problems are known to be more prevalent within lone parent and step families compared to two natural parent families (*Gutman et al 2015*), UK reviews that cover child mental health have little to say about marital status (*Goodman et al, 2015*).

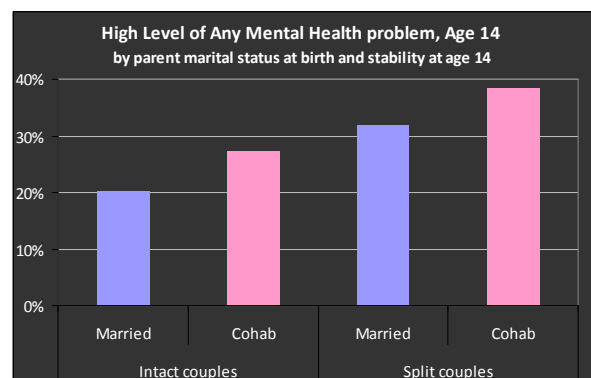
Our study looks at the prevalence of mental health problems among 10,929 fourteen year old children whose mothers took part in the Millennium Cohort Study and completed the Strengths and Difficulties Questionnaire (SDQ).

We find that 27 per cent of boys and girls exhibit high levels of emotional, conduct, hyperactive or peer problems, double that reported by ONS.

Mental health problems are more likely where parents split up, or report least certainty about their relationship happiness, or where parents were cohabiting even though still together.

Among intact married families, 20 per cent of 14 year olds exhibit high level of mental health problems, compared to 27 per cent among intact cohabiting families. Among divorced families, 32 per cent exhibit problems, compared to 38 per cent among separated cohabiting families.

Family breakdown affects children by reducing closeness to each parent and family income.



INTRODUCTION

Mental health problems during adolescence cast a 'long shadow' over life prospects during adulthood, affecting work, marriage and well-being. According to a UK longitudinal study of adults born in 1958, mental health problems during childhood are 'far more important' than physical health problems (*Goodman et al 2011*).

Government reviews find that three quarters of mental health problems in adult life begin during childhood or adolescence. One in ten children need support for mental health problems that are associated with lower educational attainment and behaviours that pose health risks (*McShane & Rouse 2015*).

Family background plays a major role in children's mental health. Among the major risk factors for child mental health problems is poverty.

Analysis of data on 11 year olds from the Millennium Cohort Study, the same cohort that we use for our study, showed that persistent levels of poverty and transitions into poverty are both strongly associated with child mental health problems (*Fitzsimons et al 2017*).

This particular study also found that the parents own mental health and whether they stayed together as a couple had similar effects, independent of poverty.

A recent review of 18 UK and international studies supported this conclusion that parental divorce was associated with an increased long term risk of depression in their adult offspring (*Sands et al 2017*).

A review carried out for the Department of Work and Pensions by the Early Intervention Foundation found that the quality of the inter-parental relationship is a primary influence on children's long-term mental health and life chances (*Harold et al 2016*).

This review focused heavily, and drew its conclusions, primarily on the well-evidenced effects of parental conflict. However despite a nod to the substantial evidence base linking family structure with child outcomes (p45), the review concludes that family stability is the consequence of high levels of conflict, an assumption at odds with UK and US evidence that the vast majority of family breakdown is low

conflict in nature (*Benson & James, 2015; James 2015*).

Using the latest data from the Millennium Cohort Study, now on 14 year olds, our study looks specifically at family structure, to investigate whether the marital status of parents when their child is born, and whether or not the parents remain together as a couple, can be dismissed so easily.

Previous analysis of UK datasets has found that younger children fare similarly well in married and cohabiting households, provided the parents stay together and taking into account background factors (*Crawford et al 2013*).

Therefore we do not expect to see differences in children's outcomes depending on whether the parents are married or cohabiting and still living together.

However, as *Fitzsimons et al* have already demonstrated, we expect to see lower levels of children's mental health where the parents have split up rather than stayed together.

Finally, because parents who are not married when their child is born are so much more likely to split up (*Benson 2015*), we also expect to see lower levels of mental health among cohabiting parents overall.

METHOD

Our analysis draws on Millennium Cohort Study data from 10,929 mothers with children born between 2000 and 2002. The mothers were surveyed initially when their children were approximately nine months old, and again when their children were aged 3, 5, 7, 11 and 14.

Our dependent variable was the mental health of children at age 14, as reported by mothers in the twenty five item Strengths and Difficulties Questionnaire (SDQ) (*Goodman 1997*).

Mothers were asked to mark each item as 'Not true', 'Somewhat true' or 'Certainly true' based on their child's behaviour 'over the last six months or this school year'.

Items included 'Considerate of other people's feelings', 'Restless, overactive, cannot stay still for long', 'Often has temper tantrums or hot tempers', and 'Often plays alone'.

A full list of items is included at the end of this study.

Most researchers use the Total Difficulties score, from which ONS, for example, state that one in eight teens report mental health problems (ONS 2015).

However SDQ also divides into five subgroups or scales: emotional symptoms, conduct problems, hyperactivity/inattention, peer problems and prosocial behaviour. Like others, we have excluded 'prosocial behaviour' as this scale is less well validated (Fitzsimons et al 2017).

Each scale then has a cut-off score for distinguishing 'slight', 'high' and 'very high' problems.

We use standard cut-offs for 'high' and 'very high'. For the emotion scale, the cut-off is 5 or more out of a possible ten; for conduct, 4 out of ten; for hyperactive, 8 out of ten; and for peer problems, 4 out of ten.

Where we bring a new approach is to look at whether teens breach the cut-off for high levels of problems on any of these four scales.

As independent variables, we use mother's age, education, ethnicity, marital status and happiness with relationship at Wave 1, when the child was nine months old, and whether both parents were living in the household at Wave 6, when the child was fourteen years old.

The Millennium Cohort Study divides mother's marital status at the time of child's birth into seven categories: Married and living together, cohabiting/living as married, separated, divorced, closely involved, just friends, not in any relationship.

We have confined our analysis to comparing SDQ scores at age 14, as reported by the parent, by whether the parents were married or cohabiting at the first wave, shortly after their child's birth. We have combined the 'other' relationship categories as numbers are too small for meaningful comparison.

RESULTS

Our first finding is that boys and girls exhibit clear differences in mental health scores for each scale.

In line with previous research (e.g. Tamm et al 2017) we found that girls are more likely to exhibit emotional problems, whereas boys are more likely to exhibit behavioural problems.

Table 1 lists the proportion of teenagers exhibiting problems on each scale, by whether those problems are 'slight', 'high' or 'very high'.

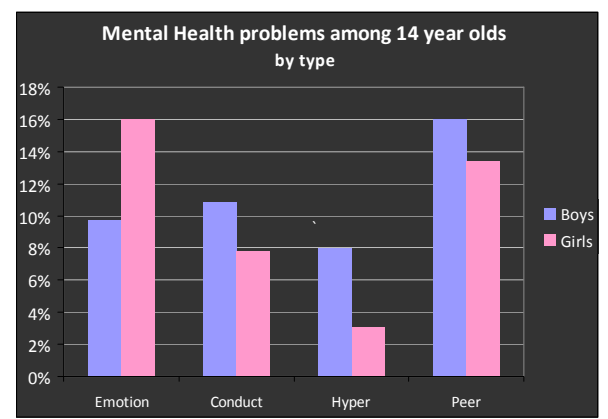
Figure 1 displays the proportion exhibiting 'high' or 'very high' levels of problems for each scale.

So for example, emotional problems affect 16.0 per cent of girls compared to 9.7 per cent of boys; whereas hyperactive/inattentive problems affect 8.0 per cent of boys and 3.1 per cent of girls.

Table 1

		Emotion	Conduct	Peer	Hyper
Boys	Slight	6.5%	8.8%	10.7%	10.9%
	High	6.7%	7.6%	6.6%	3.4%
	V high	3.1%	3.2%	9.4%	4.6%
	n=	5470	5475	5466	5477
Girls	Slight	7.7%	9.3%	10.5%	6.5%
	High	10.5%	6.1%	6.4%	1.7%
	V high	5.5%	1.7%	7.0%	1.4%
	n=	5452	5450	5451	5452

Figure 1



Our second finding is that use of the Total Difficulties score significantly understates the prevalence of mental health problems.

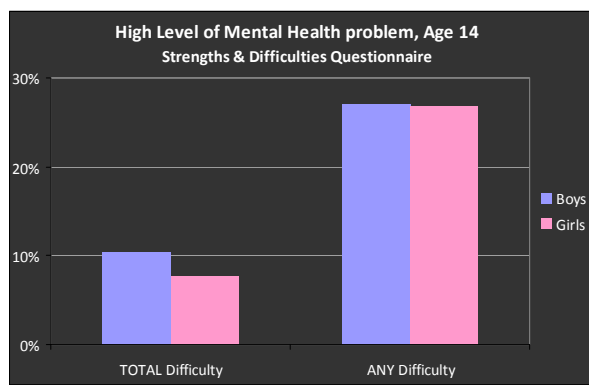
Whereas 10.5 per cent of boys and 7.7 per cent of girls exhibit Total Difficulties, 16.0 per cent of boys exhibit peer problems and 16 per cent of girls exhibit emotional problems.

Across the board, we find that 27.1 per cent of boys and 26.8 per cent of girls exhibit any of these problems (Table 2 and Figure 2).

Table 2

	Boys	Girls
Emotion	9.7%	16.0%
Conduct	10.8%	7.8%
Hyper	8.0%	3.1%
Peer	16.0%	13.4%
TOTAL Difficulty	10.5%	7.7%
ANY Difficulty	27.1%	26.8%

Figure 2



Turning to family structure, we find that children whose parents were married when they were born are less likely to experience any mental health problem at age 14, as reported by their parents, compared to children with cohabiting parents.

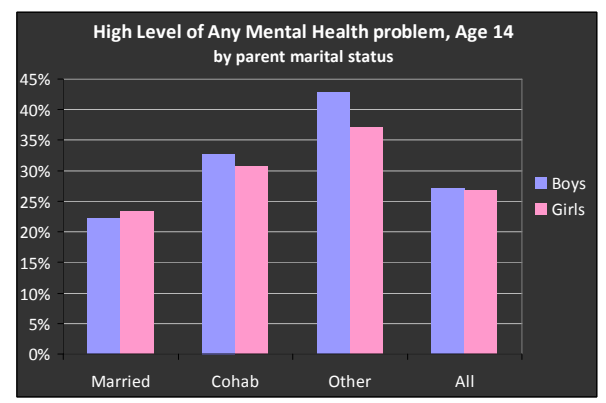
Those born into less formal ‘other’ relationships are most likely to experience mental health problems. This is true for both boys and girls (Table 3 & Figure 3).

Table 3 shows that 22 per cent of boys and 23 per cent of girls with initially married parents experience high level of problems, compared to 33 per cent of boys and 31 per cent of girls with cohabiting parents, and 43 per cent of boys and 37 per cent of girls whose parents were in other types of relationships.

Table 3

	Married	Cohab	Other	All
Boys	22%	33%	43%	27%
<i>n=</i>	3536	1296	642	5474
Girls	23%	31%	37%	27%
<i>n=</i>	3500	1277	674	5451

Figure 3



Next we look at family breakdown by comparing children whose parents have stayed together versus those whose parents have split up.

We find that intact families – whether married or cohabiting – have lower levels of child mental health problems (Table 4 & Figure 4).

Children whose parents are both married and intact have the lowest of all. This is again true for both boys and girls.

Table 4 and Figure 4 show that 19 per cent of boys and 21 per cent of girls living with both married parents have high or very high levels of any mental health problem, compared to 29 per cent of boys and 25 per cent of girls living with both cohabiting parents.

However high or very high levels of problems are even more prevalent among children whose parents have divorced at 32 per cent for boys and 31 per cent for girls, and among children whose parents have separated after cohabiting at 38 per cent for boys and 38 per cent for girls.

Table 4

	Intact couples		
	Married	Cohab	All
Boys	19%	29%	22%
Girls	21%	25%	23%
All	20%	27%	22%
	Split couples		
	Married	Cohab	All
Boys	32%	38%	38%
Girls	31%	38%	35%
All	32%	38%	36%

Figure 4

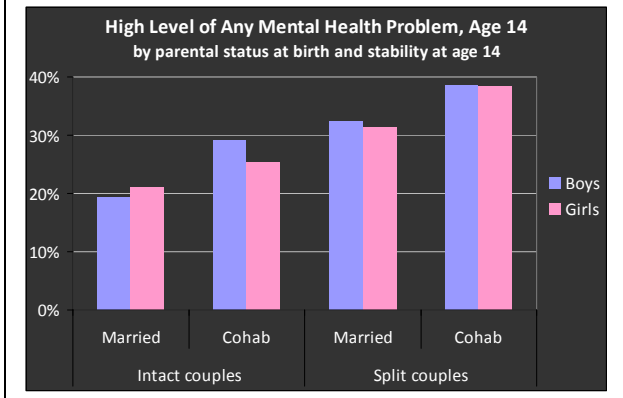


Table 5 shows how the same pattern of rising differences is replicated within each of the four component sub-groups of the SDQ – emotion, conduct, hyperactivity/inattention and peers.

In each case, the lowest level of problems is found among intact married parents. Children of intact cohabiting parents are more likely to experience problems, though less so than children whose parents have split up – whether previously married or not.

Figures 5 & 6 illustrate the pattern for emotional problems, more common among girls, and hyperactive problems, more common among boys.

Table 5

		Intact		Split	
		Married	Cohab	Married	Cohab
Boys	Emotion	7.0%	10.6%	12.8%	11.3%
	Conduct	6.5%	10.7%	13.0%	19.0%
	Hyper	4.6%	7.9%	10.1%	14.3%
	Peer	10.9%	18.2%	21.4%	20.6%
	Total	5.4%	12.3%	14.5%	17.1%
	Any	19.3%	29.0%	32.5%	38.5%
Girls	Emotion	12.7%	15.6%	20.1%	21.4%
	Conduct	4.4%	7.5%	10.0%	12.9%
	Hyper	1.7%	3.1%	3.3%	4.5%
	Peer	10.1%	12.5%	15.8%	17.6%
	Total	4.5%	7.0%	9.7%	10.8%
	Any	21.1%	25.4%	31.4%	38.3%

Figure 5

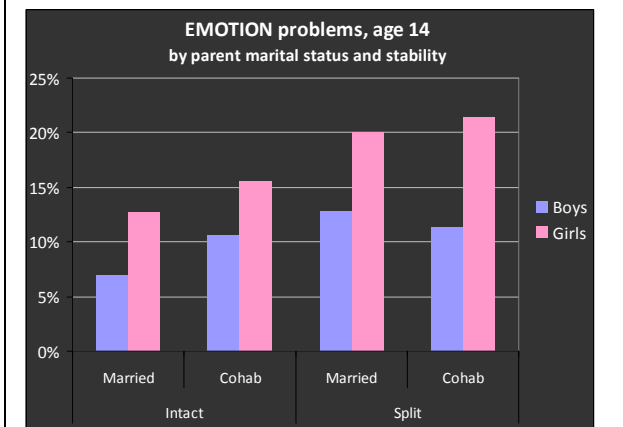
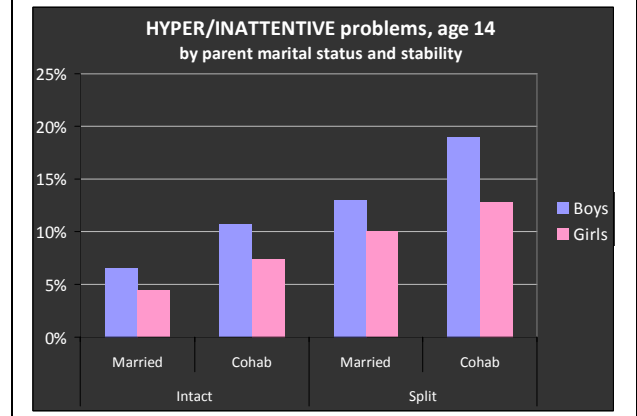


Figure 6



Adding relationship happiness at child's birth into the mix produces interesting results.

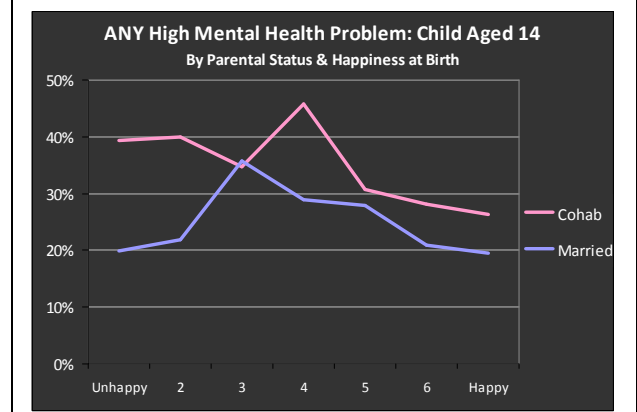
In line with our previous findings (Benson & McKay 2017), it is the children born to couples who are least clear about their relationship happiness at the time of birth who are most at risk of subsequent mental health problems.

Children whose parents are initially either happiest or unhappiest (despite relatively small numbers) with their relationship tend to fare best (Table 6 & Figure 7).

Table 6

	V Unhappy ...	3	4	5	... V Happy			
Married		20%	22%	36%	29%	28%	21%	19%
	n=	171	156	187	436	1102	2237	2505
Cohab		39%	40%	35%	46%	31%	28%	26%
	n=	56	55	121	212	434	786	716

Figure 7



Married and cohabiting mothers differ in the Millennium Cohort sample in all sorts of ways.

For example, married mothers are more likely to be Christian or Muslim by religion, Asian by

ethnicity, in their 30s when the child was born, have a degree, be working and to be a manager, all compared to cohabiting mothers.

Cohabiting mothers are more likely to be white, to have no religion, to be in their 20s when the child was born, having their first child, to be in poverty, renting, and on benefits.

These differences need to be taken into account in order to explain the extent to which marital status and family breakdown are really responsible for mental health problems.

Our first regression model (see top half of [Appendix A](#) at the end of this paper) looks at the entire sample of children, to see the unique influence of individual factors on whether children experience specific or any type of mental health problem.

The factors we include are mother's marital status at Wave 1, when the child was nine months old, whether the father is still present in the household at Wave 6, when the child is 14 years old, and various background factors, the mother's age, education (whether she has a degree), ethnicity, and her relationship happiness at Wave 1 (rated from 1=very unhappy to 7=very happy).

The model shows the unique influence of each factor on boys and girls, across emotional, conduct, hyperactive, and peer problems, concluding with whether children exhibit high levels of any of these four problems.

Beginning with the top left corner of the model, compared to boys with married parents (the reference), boys with cohabiting parents have 1.33 higher odds of exhibiting high levels of any problem. The pink box shows that being married is statistically highly significant at the $p < .01$ level, and the Wald test number is 11. Wald numbers give an idea of the size of the effect.

Continuing across, the model shows that having cohabiting parents has a significant effect (the yellow box in each case denoting $p < .05$) on boys' mental health problems across all four scales, with higher odds ranging from 1.27 to 1.39.

Continuing down, family breakdown has an even stronger effect. If the child's father is not in the house, he faces 1.56 higher odds of any problem, with the red box showing high significance $p < .001$, and a high Wald test of 29.

Reading across, the only area where family breakdown does not influence boys mental health is emotion. For conduct, hyperactivity, and peer problems, the odds are 1.61 to 1.72 times higher, all highly significant at $p < .001$.

For boys, family breakdown (Wald=29) has a similar influence as parental relationship happiness (Wald=32).

Compared to marital status and family breakdown, however, the background factors of mother's age and education play relatively minor, albeit significant, roles. Ethnicity has no effect.

For girls, having cohabiting parents raises the odds of any kind of problem by 1.27 times. But only conduct problems are specifically affected by marital status.

Family breakdown however has a large and highly significant effect on all areas except hyperactivity, with 1.61 higher odds of any problem compared to children living with parents who remain intact.

Where initial relationship happiness has an effect, it is noteworthy that it is parents who score between 3 and 5 out of seven (in the case of boys) and between 4 and 5 out of seven (in the case of girls) whose children face the highest risk of problems.

This new finding shows that the highest risk is not faced by the children of parents who are unhappiest but those whose parents are least certain about their happiness, neither one thing nor another. This represents one quarter of all parents.

This mirrors our previous research that found couples in the middle range were also least likely to stay together (*Benson & McKay 2017*).

Our second model (see bottom half of [Appendix A](#)) looks only at those teenagers whose parents have stayed together.

Even after taking into account mother's age, education, ethnicity and relationship happiness, the marital status of intact parents continues to have an effect on children's mental health.

Boys face 1.45 higher odds of exhibiting any problem if their parents are not married. For girls the odds are 1.29 higher.

For boys, having parents who are not married has a particular effect on the risk of all types of

problems. For girls, the risk is confined to conduct and peer problems.

Once again, children face higher risks if their parents were uncertain about their relationship happiness. For boys, this mostly affects emotion and peer problems. For girls, this affects emotion and conduct problems.

Finally it is noteworthy that mother's ethnicity is a significant risk factor for any kind of problem for girls, especially conduct and peer problems. This mostly affects the daughters of Muslim mothers.

DISCUSSION

Child mental health has been a key topic in all party political manifestos, and a green paper from the government is expected imminently.

Research to date has highlighted the influence of poverty and parental conflict in determining child mental health.

Our findings show that this is too narrow a view.

Children respond and react to all aspects of their parents relationship with each other and with the child.

In this study we have shown that factors present in the parents relationship right from the moment a child is born have a deep and long-lasting influence on children's mental health.

• **First, the scale of children mental health problems is widely understated.**

The Strengths and Difficulties Questionnaire is a well-established inventory for identifying mental health problems. Most researchers – such as ONS – use the Total Difficulties score from all twenty five questions, as well as the individual subscales for emotional, conduct, hyperactive and peer problems.

However this clearly understates the prevalence of problems. For example, we found that 10 per cent of boys and 8 per cent of girls reach the threshold for a high level of problem on the Total Difficulties Score. Yet 16% of girls reach the threshold for emotional problems and 16% of boys reach the threshold for peer problems.

By looking at whether each child crosses the threshold for any of these four subscales, we find that 27% of both boys and girls exhibit high levels of problem in one or more area.

• **Second, teenage girls and boys exhibit different problems**

In line with previous research, we found that teenage girls were more likely to exhibit emotional problems whereas boys were more likely to exhibit behavioural problems.

For example, 16% of girls exhibited emotional problems compared to 10% of boys. In contrast 11% of boys exhibited conduct problems compared to 8% of girls. And 8% of boys exhibited hyperactive problems compared to just 3% of girls.

• **Third, family breakdown has a significant impact on subsequent child mental health**

As already established by *Fitzsimons et al* earlier this year using data from parents of 11 year old children in the Millennium cohort, we confirmed that 14 year old children whose parents stayed together were less likely to experience mental health problems.

Regardless of the mother's background when the child is born – her age, education, ethnicity, marital status and initial relationship happiness – family breakdown is the single biggest influence on mental health for girls and equal top influence for boys, alongside the parents' initial relationship happiness.

For boys, having two parents in the house benefits their behaviour – conduct, hyperactive, peer – but has no effect on emotional problems.

For girls, having two parents in the house benefits their behaviour – conduct and peer – and also reduces their emotional problems.

• **Fourth, parental happiness matters – but not unhappiness**

One of our most striking findings is that it is not the unhappiest parents whose children are most at risk.

For both boys and girls, it is the one quarter of parents who are least certain about their relationship – who rate their happiness in the middle of the scale, as neither especially happy nor unhappy – whose children tend to fare worst.

We have already established that stability is lowest among this group (*Benson & McKay 2017*). Our new finding demonstrates that relationship uncertainty extends to the children's outcomes as well.

Parents who are uncertain about their happiness with the relationship have a strong effect on subsequent emotional problems for girls and on peer problems for boys. This effect is limited to emotional problems for girls however for boys the effect is across the board.

- **Fifth, having married parents matters**

We found that children whose parents were married at the time of the child's birth were less likely to experience mental health problems at age 14.

These results are in line with many other findings (e.g. *Crawford et al 2013*), and were expected mainly because, as our own previous research has shown, married parents are more likely to stay together (*Benson 2015*).

However where our study breaks new ground is in showing that the effect of marriage extends well beyond stability and selection effects.

For boys, whether their parents are married or not when they were born remains one of the two biggest influences on their subsequent overall mental health, even after taking into account their mother's age, education, ethnicity and relationship happiness when the child was born, and whether the parents stayed together or not.

For boys, having parents who are not married directly affects the odds of exhibiting behavioural or emotional problems.

For girls, having parents who are not married only affects the odds of exhibiting conduct problems.

In a recent advisory paper, the Early Intervention Foundation state that their aim is: "*to shift the debate about effective family policy away from a focus on family stability or structure (whether parents are married, divorced or separated) and towards more important questions about the quality of the relationship between parents and the role this has in driving outcomes for children.*" (*Stock et al 2017*).

Far too many policy papers summarily dismiss the formative nature of parental marital status for no obvious reason.

Our study counters this ideology with clear empirical evidence that marital status matters.

- **Sixth, even among intact parents, children of married parents are less likely to exhibit mental health problems**

This finding was unexpected.

In contrast to *Crawford et al's* conclusion that there are few differences in outcomes between younger children with married or cohabiting parents, so long as the parents remain together, we found significant differences once those children reach age 14.

For boys the effect is direct across all four mental health measures, both emotional and behavioural.

For girls, the effect is direct only for the behavioural measures of conduct and peer problems.

The influence of family structure may not have been apparent at younger ages because the prevalence of emotional problems in particular increases between age 7 and 11 for boys and between age 7 and 14 for girls. The prevalence of behavioural problems for both boys and girls also increases more gradually from age 7 to 14 (*Patalay & Fitzsimons 2017*).

Our findings now render untenable the idea that the '*more important*' influence of family on children's mental health is through parental conflict.

Harold et al are right to claim that disruptions in the parent-child relationship and the negativity surrounding conflict explain why children are more likely to struggle in the presence of parental conflict.

Yet there has always been an inadequacy to this hypothesis in the well established finding that it is not just parental conflict that affects children but the interaction between conflict and stability (*Booth & Amato 2001*).

What children see is what affects them. Hence when they see little to no conflict and their parents split up, it makes no sense and they fare worse.

We have broadened the range of possibilities further to show that the structure and stability of the relationship between the parents matters as much as the quality of the mother-father relationship and the quality of the mother-child and father-child relationship.

What makes girls internalise their concerns whereas boys act them out? It makes sense that this is rooted in how they see their parents

behave towards one another and themselves at home.

Yet our most intriguing new finding is that children are also responding to whether or not their parents are married, even among parents who have stayed together for the past 14 years.

To make sense of this finding, the children of unmarried parents may be seeing something in their parents behaviour that gives them cause for concern.

One possibility is that children see a more negative interactive style of arguing that falls short of open conflict but reflects higher levels of insecurity in the relationship.

In a study of 236 married and cohabiting parents that we conducted through the NHS post-natal system, we found that cohabiting parents were nearly twice as likely to 'back off or fire back' during arguments (*Benson 2009*).

We hypothesised at the time that this was due to asymmetric commitment, where one partner is more committed than the other. The more committed partner would be more likely to want to keep the peace, whereas the less committed partner would be more indifferent to what he or she said or did.

This has since been found to be the case. In a recent survey, more than twice as many cohabiting partners as married partners said they worried that their partner did not share the same level of commitment as them (*Marjoribanks & Bradley 2017*).

Either way, children are picking up on some aspect of their parents behaviour that is related to their commitment, whether married or cohabiting, that is independent of relationship happiness and requires further investigation.

In a further analysis ([Appendix B](#)) we added two factors sequentially to our model, firstly closeness to mother and father and secondly equalised household income.

It is important to note that these factors were both measured at Wave 6 when the children were aged 14, and are more likely to be consequential rather than causal in nature.

Between them, these two factors account for all of the effect of family breakdown, part of the effect of marital status, but none of the effect of parental happiness for both boys and girls.

When we look at just the sample of children living with both parents together, more of a difference emerges between boys and girls.

For girls, family income becomes the dominant indicator of mental health, followed by parental happiness and closeness to dad.

For boys, parental happiness becomes the main indicator, followed by family income, closeness to mum and whether the parents are married.

What this further analysis is telling us is that the main effect of family breakdown is to reduce closeness to parents and to reduce subsequent family income.

Finally, there are consequences for public policy from our findings.

If inter-parental conflict is deemed to be the main driver, it makes a good case for existing relationship support and counselling services.

However the vast majority of high-conflict parents will be nigh-on impossible to identify and won't access such services. Any policy impact will always be severely limited.

In contrast, if the early commitment of the parents to each other is deemed to be the root cause, public policy can make an impact through the signals sent by government about commitment, the language used on government forms about marriage and marital status, public information about marriage and commitment, and fiscal incentives to marry.

REFERENCES

- Benson, H. (2009). Back off or fire back? Negative relationship behaviours amongst postnatal married and cohabiting couples. In H. Benson and S. Callan (Eds.), *What works in relationship education: Lessons from academics and service deliverers in the United States and Europe* (pp. 55-66). Doha, Qatar: Doha International Institute for Family Studies and Development.
- Benson, H. (2015). *Get married BEFORE you have children*. Cambridge: Marriage Foundation.
- Benson, H. & James, S. (2015). *Out of the blue: Family breakdown in the UK*. Cambridge: Marriage Foundation
- Benson, H. & McKay, S. (2017). *Couples on the brink*. Cambridge: Marriage Foundation
- Booth, A. & Amato, P. (2001) Parental pre-divorce relations and offspring post-divorce well-being. *Journal of Marriage & Family*, 63, 197-212.
- Crawford, C., Goodman, A., & Greaves, E. (2013). *Cohabitation, marriage, relationship stability and child outcomes: final report (No. R87)*. IFS Reports, Institute for Fiscal Studies.

- Fitzsimons, E., Goodman, A., Kelly, E., & Smith, J. P. (2017). Poverty dynamics and parental mental health: Determinants of childhood mental health in the UK. *Social Science & Medicine*, 175, 43-51.
- Goodman, R. (1997) The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38, 581-586.
- Goodman, A., Joyce, R., & Smith, J. (2011). The long shadow cast by childhood physical and mental problems on adult life. *Proceedings of the National Academy of Sciences*, 108, 6032-6037.
- Goodman, A., Joshi, H., Nasim, B., & Tyler, C. (2015) Social and emotional skills in childhood and their long-term effects on adult life. A review for the Early Intervention Foundation. Institute of Education.
- Gutman, L., Joshi, H., Parsonage, M., & Schoon, I. (2015). Children of the new century. Mental health findings from the Millennium Cohort Study. London: Centre for Mental Health
- Harold, G., Acquah, D., Sellers, R., & Chowdry, H. (2016) What works to enhance inter-parental relationships and improve outcomes for children. London: Early Intervention Foundation.
- James, S. (2015) Variation in Marital Quality in a National Sample of Divorced Women. *Journal of Family Psychology*, 29, 479-489
- Marjoribanks, D. & Bradley, A. (2017) It takes two: Couple relationships in the UK. Doncaster: Relate.
- McShane, M. & Rouse, J. (2015). Future in mind: promoting, protecting and improving our children and young people's mental health and wellbeing. Department of Health.
- Office for National Statistics (2015). Insights into children's mental health and well-being.
- Patalay P & Fitzsimons E. (2017) Mental ill-health among children of the new century: trends across childhood with a focus on age 14. Centre for Longitudinal Studies: London
- Sands, A., Thompson, E. J., & Gaysina, D. (2017). Long-term influences of parental divorce on offspring affective disorders: A systematic review and meta-analysis. *Journal of Affective Disorders*.
- Stock, L., Acquah, D., Molloy, D. & Piergallini, I. (2017) Inter-parental relationships, conflict and the impacts of poverty. London: Early Intervention Foundation.
- Tamm, A., Tõnissaar, M., Jaani, J., & Tulviste, T. (2017). Associations between adolescent boys' and girls' psychological adjustment and behaviour in school. *Educational Psychology*, 1-11.

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STRENGTH & DIFFICULTIES QUESTIONNAIRE

Emotion

- *Often complains of headaches, stomach-aches or sickness*
- *Many worries, often seems worried*
- *Often unhappy, down-hearted or tearful*
- *Nervous or clingy in new situations, easily loses confidence*
- *Many fears, easily scared*

Conduct

- *Often has temper tantrums or hot tempers*
- *Generally obedient, usually does what adults request*
- *Often fights with other children or bullies them*
- *Often lies or cheats*
- *Steals from home, school or elsewhere*

Hyperactive

- *Restless, overactive, cannot stay still for long*
- *Constantly fidgeting or squirming*
- *Easily distracted, concentration wanders*
- *Thinks things out before acting*
- *Sees tasks through to the end, good attention span*

Peer

- *Rather solitary, tends to play alone*
- *Has at least one good friend*
- *Generally liked by other children*
- *Picked on or bullied by other children*
- *Gets on better with adults than with other children*

APPENDIX A – REGRESSION MODEL, Any problem

ALL PARENTS				ANY PROBLEM			EMOTION			CONDUCT			HYPER/INATT			PEER				
Variables in the Equation		n=	Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald			
MALE	MARITAL STATUS	Married	3033				ns													
		Cohab	1008	1.33		11	1.28		4	1.32		5	1.39		5	1.27		5		
	FATHER IN HOUSE	Yes	3133			30			ns			19			16			24		
		ie Family Stability No	991	1.56		29			ns			16	1.72		16	1.63		24		
	AGE	Older		0.98		6			ns			0.96		14	0.97		7	ns	0	
	DEGREE	Yes	983	0.75		10	0.68		11	0.64		8	0.67		5			ns	3	
	ETHNICITY	White	3609			ns			ns			ns		4			ns	7	ns	4
	HAPPY	6 Happy	1350			32			ns			22			ns			ns		34
		1 V unhappy	90			ns			ns			ns			ns			ns		ns
		2	88			ns			ns			ns			ns			ns		ns
3		149	1.89		14	2.18		11	1.62		4	1.95		7	2.25		18		ns	
4		279	1.47		7			ns	1.61		6			ns			ns		ns	
5		709	1.33		7	1.46		6	1.44		5			ns			1.51		11	
7 V Happy		1488			ns			ns			ns			ns			ns		ns	
FEMALE	MARITAL STATUS	Married	3080											17			ns		ns	
		Cohab	1051	1.27		8			ns			ns			ns			ns		
	FATHER IN HOUSE	Yes	3161			35			17			21			ns			24		
		ie Family Stability No	1055	1.61		34	1.49		17	1.86		21			ns			1.62		21
	AGE	Older				ns			ns			0.96		11	0.91		19	ns	0	
	DEGREE	Yes	1010	0.66		21	0.58		22	0.47		14			ns		0.76		5	
	ETHNICITY	White	3654			21			ns			ns			ns				12	
	HAPPY	6 Happy	1348			22			30			ns			ns			ns		ns
		1 V unhappy	123			ns			ns			ns			ns			ns		ns
		2	109			ns			ns			ns			ns			ns		7
3		135			ns			1.55		4				ns			ns		ns	
4		306	1.53		10	1.84		15			ns			ns			ns		ns	
5		700	1.26		5	1.32		5			ns			ns			ns		ns	
7 V Happy		1529			ns			ns			ns			ns			ns		ns	
INTACT PARENTS ONLY																				
Variables in the Equation		n=	Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald			
MALE	MARITAL STATUS	Married	2457	1.45		12	1.59		8	1.50		6	1.51		5	1.52		10		
	AGE	Older	3070	0.97		8			ns			0.95		11	0.95		7	ns		
	DEGREE	Yes	823			ns			0.68		5			ns			ns	ns		
	ETHNICITY	White	2643			ns			ns					ns			ns	ns		
	HAPPY	6 Happy	1015			24			16			ns			ns			ns	26	
		1 V unhappy	61			ns			ns			ns			ns			ns	ns	
		2	58			ns			ns			ns			ns			ns	ns	
		3	76	1.74		5			ns			ns			ns			2.07		7
4		145	1.64		6	1.85		5			ns			ns			1.72		5	
5	490	1.42		7	1.47		4	1.64		6			ns			1.47		6		
7 V Happy	1225			ns			ns			ns			ns			ns		ns		
FEMALE	MARITAL STATUS	Married	2475	1.29		6			ns			1.59		5			ns	1.42		6
	AGE	Older	3100			ns			ns					0.89		16	1.03		4	
	DEGREE	Yes	844	0.71		11	0.58		16	0.47		10			ns		ns		ns	
	ETHNICITY	White	2632			18			ns					ns					12	
	HAPPY	6 Happy	1018			21			26			ns			ns			ns		ns
		1 V unhappy	83			ns			ns			ns			ns			ns		ns
		2	69	1.68		4			ns			ns			ns			2.28		7
		3	69			ns			ns			ns			ns			ns		ns
4		185	1.60		7	1.81		9	2.11		6			ns			ns		ns	
5	465			ns			ns	1.68		4			ns			ns		ns		
7 V Happy	1211			ns			0.77			4			ns			ns		ns		

■ p<.001
■ p<.01
■ p<.05
 ns non significant

APPENDIX B – REGRESSION MODEL, Any problem, Closeness and Income added

ALL PARENTS

Variables in the Equation		Model 1			Model 2			Model 3		
		Background?			Close?			Income?		
		Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald
MALE	MARITAL STATUS	1.33		11	1.31		10	1.26		7
	FAMILY BREAKDOWN	1.56		29	1.33		9	1.05	ns	0
	AGE	0.98		6	0.98		6	0.99	ns	2
	DEGREE	0.75		10	0.44		9	0.87	ns	2
	ETHNICITY		ns	4		ns	4		ns	5
	HAPPINESS			32			27			25
	CLOSE TO MUM						20			17
	CLOSE TO DAD						16			13
	INCOME									47
FEMALE	MARITAL STATUS	1.27		8	1.24		6	1.16	ns	3
	FATHER IN HOUSE	1.61		34	1.28		7	0.95	ns	0
	AGE	1.00	ns	0	1.00	ns	0	1.00	ns	1
	DEGREE	0.66		21	0.68		18	0.81		5
	ETHNICITY			21			21			14
	HAPPY			22			18			19
	CLOSE TO MUM						23			19
	CLOSE TO DAD						30			24
	INCOME									64

INTACT PARENTS

Variables in the Equation		Model 1			Model 2			Model 3		
		Background?			Close?			Income?		
		Odds	Sig	Wald	Odds	Sig	Wald	Odds	Sig	Wald
MALE	MARITAL STATUS	1.45		12	1.42		10	1.37		8
	AGE	0.97		8	0.97		8	0.98		5
	DEGREE	0.85	ns	2	0.84	ns	3	0.92	ns	1
	ETHNICITY		ns	3		ns	3		ns	2
	HAPPY			24			21			21
	CLOSE TO MUM						13			13
	CLOSE TO DAD					ns	4		ns	4
	INCOME									12
	FEMALE	MARITAL STATUS	1.29		6	1.24		4	1.12	ns
AGE		1.01	ns	1	1.01	ns	1	1.02		5
DEGREE		0.71		11	0.74		9	0.86	ns	2
ETHNICITY				18			18			14
HAPPY				21			19			20
CLOSE TO MUM							8		ns	6
CLOSE TO DAD							15			14
INCOME										52

1 = mother's relationship happiness, age, education, ethnicity
 2 = adds child closeness to mother and father at age 14
 3 = adds equalised household income at age 14

p<.001
 p<.01
 p<.05
 ns non significant