

Factors affecting children's mental health over time

April 2018



Longitudinal analysis of factors associated with mental health problems for children¹

March 2018

A. Background

1. In 2016, *Understanding Society*, the UK Household Longitudinal Study (UKHLS), launched a third sector voucher scheme, inviting research ideas that could be examined using the Study. The scheme provided analytical support through the *Understanding Society* Policy Unit. Following a competitive process, a research project by The Children's Society and Barnardo's, was one of those selected. Although the two organisations had submitted proposals separately, a joint voucher was awarded as the two research ideas covered similar ground.
2. The joint research proposal developed was to explore trajectories of mental health and examine the factors that are associated with mental health problems among 10-15 year-olds. The research exploits the longitudinal design of *Understanding Society* to shed light on factors measured at age 10-11 and 14-15 that are important in determining poorer mental health at age 14-15. In particular, *Understanding Society's* longitudinal panel survey enables changes in mental health to be examined over time - identifying risks and protective factors within a household context over the short and long term.
3. We know that one in ten - or three children in every classroom - have a diagnosable mental health disorder² and that half of all lifetime cases of mental illness begin by age 14, with three quarters developing by age 24³. One of Barnardo's and The Children's Society's main aims was to analyse data from *Understanding Society* to better understand which factors or combination of factors were significant at ages 10-11 and 14-15 in determining poorer mental health at age 14-15. This could help to inform both early intervention/prevention programmes and specialist help.
4. In recent years, The Children's Society has carried out numerous analyses of *Understanding Society* data on related topics, in particular to explore factors associated with children's subjective well-being, and how different domains of subjective well-being are associated with different types of mental health problems. Many of the new findings about factors that are important for children's mental health emerging from the *Understanding Society* analysis are similar to previous findings that we have reported in subsequent Good Childhood Reports about factors that are important for children's subjective well-being. Although subjective well-being and mental (ill-) health are related - but distinct - concepts, we felt that it would be useful to consider these findings alongside each other. Therefore, in this briefing paper, we discuss key findings from the new analysis of *Understanding Society* within the

¹ Here we mean an abnormal score for the Total Difficulties Score – or one of the sub-scales – of the Strength and Difficulties Questionnaire. An abnormal score is not a diagnosis of a mental health problem but an indication that a child is at increased risk of having a mental health problem.

² Green, H., McGinnity, A., Meltzer, H., Ford, T. and Goodman, R. (2005) *Mental health of children and young people in Great Britain*, 2004, London: Palgrave Macmillan

³ Kessler, R.C., Berglund, P., Demler, O., Jin, R., Merikangas, K.R. and Walters, E.E. (2005) 'Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication', *Arch Gen Psychiatry*. 2005 Jun;62(6):593-602.

context of other relevant findings from our own previous analysis or the wider research literature on children's mental health and well-being. This is intended to be an illustrative rather than a comprehensive discussion of other literature on children's mental health and well-being.

B. Key findings

5. The key findings bring together new longitudinal analysis separately carried out by Barnardo's and the *Understanding Society* Policy Unit, and specifically which factors at age 10-11 had a statistically significant impact on different aspects of children's mental health at age 14-15. 'Mental health' is measured using the Strength and Difficulties Questionnaire (SDQ), and specifically the four sub-scales of: emotional symptoms; peer relationship problems; conduct problems; and hyperactivity/inattention problems. The analysis highlights factors that are associated with poor mental health later on in a child's life. The key findings for each of the four sub-scales are summarised below:⁴

Emotional symptoms (sample size = 592)

6. Family support at age 10-11 had a statistically significant correlation with the emotional symptoms sub-scale at age 14-15. The analysis indicated that children at age 10-11 who felt either supported by their family in only some of the things they do or not supported by their family in any of the things they do were significantly more likely (3.6 times) to have emotional symptoms at age 14-15 compared to children who felt supported by their families in most or all the things they do at age 10-11.

Peer relationship problems (sample size = 607)

7. A number of factors at age 10-11 had a statistically significant association with subsequent peer relationship problems at age 14-15. At age 10-11, how children felt about school, if children reported that they were bullied, and if children felt supported by their family, were significantly correlated with peer problems at age 14-15. Of these factors, the most important was being bullied: a child who was bullied a lot (a few times every week) at age 10-11 was over 14 times more likely to have peer problems at age 14-15 than a child who reported never being bullied at age 10-11. In addition, children who felt unhappy about school were over 2.5 times more likely to have peer problems at age 14-15 relative to those who felt happy about school.

Conduct problems (sample size = 544)

8. How children at age 10-11 felt about their family had a statistically significant correlation with conduct problems at age 14-15. The analysis indicated that children at age 10-11 who felt unhappy with their family were over 10 times more likely to have conduct problems at age 14-15 compared to children who felt happy with their family at age 10-11.

Hyperactivity/inattention (sample size = 587)

9. Two factors at age 10-11 had a statistically significant association with subsequent hyperactivity problems at age 14-15: if children reported that they were bullied; and if children felt supported by their family. Of these two factors, we found that a child who was bullied a lot (a few times every week) at age 10-11 was over 4 times more likely to have hyperactivity problems at age 14-15 compared to a child who reported never being bullied at age 10-11.

⁴ All results reported are statistically significant to at least the 5% level.

C. Approach

Data

10. All of the analysis discussed in this briefing draws on data from the *Understanding Society* youth survey of 10 to 15-year-olds. *Understanding Society* is a large scale household longitudinal survey that was designed to represent the UK population in 2009-10 (Knies, 2016). Waves 1-5 correspond to the calendar years 2009-2014. Respondents are interviewed annually, at approximately the same time in the year. Whilst the main questionnaire is asked to all adult (aged 16 or over) members of the sampled household, the youth questionnaire is self-completed by 10 to 15-year-olds in the household, with consent from both the children and their parents. Additional details about the sample related to ethnicity and nation are provided in Appendix 1.
11. The sample used in the analysis by the *Understanding Society* Policy Unit (i.e. through the research voucher scheme) comprised children aged 10-15 living in sampled households, who participated in the study at least once across waves 1, 3 and 5. Depending on the age of the child, and how many times they participated in the study, the child may have been included in the analysis between one and three times, with the key findings (see previous section) based on respondents who participated in all three waves.

Measuring mental health problems

12. Waves 1, 3 and 5 of the *Understanding Society* youth survey include a child self-completion version of the Strengths and Difficulties Questionnaire (SDQ). This is a widely validated measure of mental health problems in children (Goodman et al, 1998). The SDQ consists of five sets of five questions that cover emotional symptoms, peer relationship problems, conduct disorders, hyperactivity/inattention disorders and pro-social behaviour. A score is calculated from 0 to 10 for each of these sets, with a score of 5, 6 or 7 or more (depending on the scale) considered abnormal (Youth *in Mind*, 2016). Furthermore, the first four scores are added together to create a 'total difficulties score' (TDS), with a value of 20 or more considered to be abnormal and indicating likely emotional or behavioural difficulties.
13. Within the scope of the research voucher scheme, the *Understanding Society* Policy Unit research was able to analyse the total difficulties score as well as the emotional symptoms sub-scale. Barnardo's replicated this analysis with the other sub-scales – i.e. for peer relationship problems, conduct disorders and hyperactivity/inattention disorders.

Explanatory factors and controls

14. The *Understanding Society* research explored a range of explanatory factors of interest, including screen time, diet/exercise, feelings about appearance, feelings about school, bullying, and family relationships. In addition, a number of household and personal characteristics were controlled for. These include household size, housing tenure, the number of working adults in the household, poverty status (waves 3 and 5 only), ethnicity, highest educational attainment held in the household, country, age of mother, number of dependent children in the household, whether the child has siblings in the household, and the age and gender of the participating child. In this briefing paper, we have not provided the full results from the regression

analysis due to the extensive number of control variables and other factors that are included. The full results can be provided on request.⁵

Statistical significance

15. Statistical significance of the predictors is indicated by asterisks. The minimum threshold for statistical significance used in this report is 5%, indicated by one asterisk. Two asterisks refer to a 1% level and three asterisks indicate significance at the 0.1% level. Statistical significance does not reflect the magnitude, impact or importance of the relationship; this is reflected in the odds ratio explained below.

Interpreting results

16. When interpreting the tables below, the most useful column to focus on is the odds ratio; this reflects the odds of the outcome variable occurring based on the change in the predictor (compared to the base category). Values of less than one in this column indicate that the outcome variable is less likely, with values of more than one indicating that the outcome is more likely.

⁵ A random effects panel logit regression was used to obtain the results for the analysis that examined 10-15 year olds. The fact that many of the background characteristics we want to control for in the analysis do not change over time, meant that the analysis was tailored to use a specific type of framework which allows for this. A standard logit regression model was used to examine the impact of different factors on respondents aged 14-15.

D. Findings

17. This section looks at the different factors related to poorer mental health for 14/15-year-olds. Results are presented for models that examined factors for children aged between 10 and 15, and illustrates which factors have an impact on mental health within this age range. In addition, factors at age 10-11 which have a statistically significant association with mental health at age 14-15 are also discussed.

Family support

18. In addition to the findings about the importance of family support for the emotional symptoms, peer relationship and hyperactivity/inattention sub-scales of the SDQ (presented in the key findings section on page X), the *Understanding Society* analysis found family support to be significantly related to the total difficulties score. Children who only felt supported in some things were twice as likely - and those who did not feel supported were four times as likely - to have an abnormal total difficulties score compared to children who felt supported by their family.

Feeling supported by family and the likelihood (odds ratio) of an abnormal total difficulties score aged 10-15

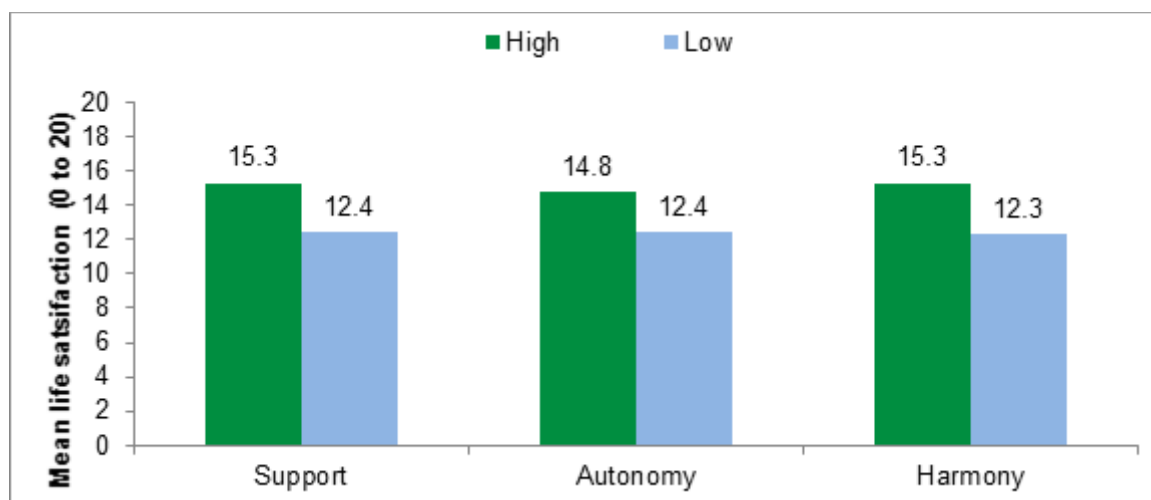
Variable	B (SE)	Odds ratio
Feeling supported by family, who they live with (base group = feels supported in most or all things)		
Feels supported in some things	0.7*** (0.1)	2.0 (1.6, 2.6)
Do not feel supported	1.4*** (0.4)	4.0 (1.8, 8.6)

Note: Results are from random effects panel logistic regressions predicting abnormal TDS of children aged 10-15 at Waves 1, 3 and 5. Confidence intervals provided in parentheses. Sample size = 10,272. *p<0.05, **p<0.01, ***p<0.001.

Source: Understanding Society analysis for The Children's Society and Barnardo's.

19. This longitudinal analysis, showing the importance of the quality of family relationships over time, reinforces cross-sectional analysis that has been presented in successive Good Childhood Reports. The Good Childhood Report 2015 presented analysis of three different dimensions of family relationships - support, harmony and autonomy - and showed that all of these dimensions of family relationships are associated with, and make an independent contribution to, children's subjective well-being.

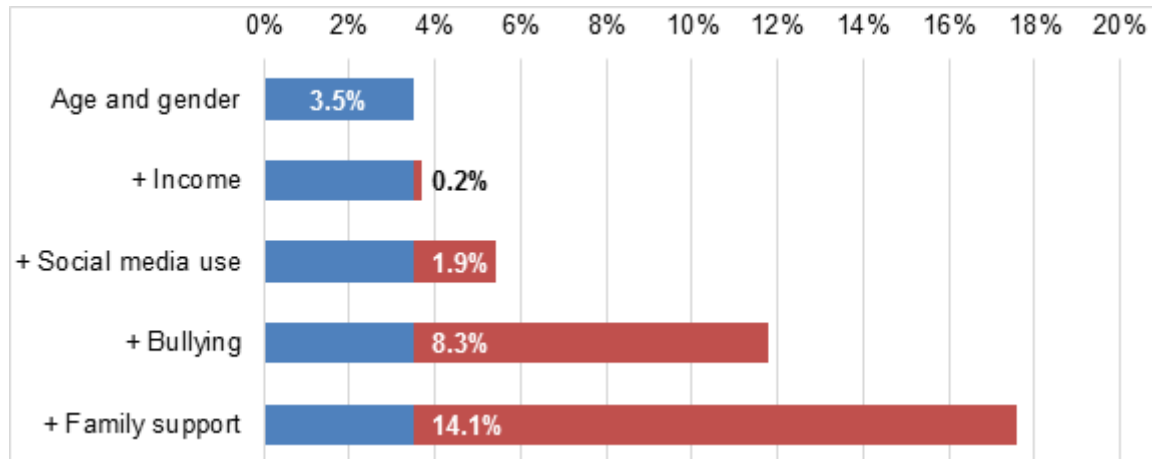
Figure 1: Family support, conflict and autonomy, and children's subjective well-being



Source: Reproduced from Figure 21 in The Good Childhood Report 2015.

20. Most recently, The Good Childhood Report 2017 explored the explanatory power of family support as well as other factors in explaining variations in children subjective well-being. In this model, family support explained 14.1% of the variation in children's subjective well-being, and was the most important of the factors that we looked at, followed by bullying (8.3%), age and gender (3.5%), social media use (1.9%) and household income (0.2%).

Figure 2: Comparison of the statistical power of different factors in explaining variations in children's life satisfaction



Source: Reproduced from Figure 15 in The Good Childhood Report 2017.

Family conflict

21. The new *Understanding Society* analysis also found quarrelling with mother to be significantly related to subsequent mental health problems (measured by the total difficulties score). Children who quarrelled with their mother most days were four times as likely to have an abnormal total difficulties score as children who hardly ever quarrelled with their mother.

Quarrelling with mother and the likelihood (odds ratio) of an abnormal total difficulties score aged 10-15

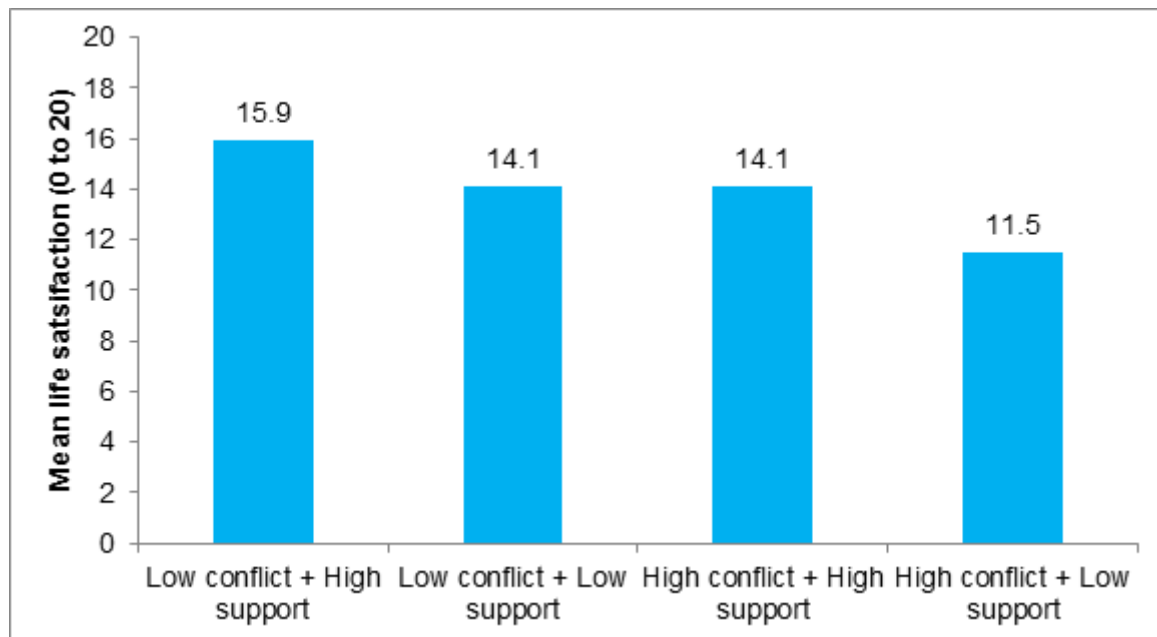
Variable	B (SE)	Odds ratio
How often quarrels with mother (base group=hardly ever)		
Less than once a week	0.5*** (0.1)	1.6 (1.2, 2.6)
More than once a week	0.8*** (0.2)	2.2 (1.6, 2.9)
Most days	1.4*** (0.2)	4.1 (2.9, 5.6)

Note: Results are from random effects panel logistic regressions predicting abnormal TDS of children aged 10-15 at Waves 1, 3 and 5. Confidence intervals provided in parentheses. Sample size = 10,272. *p<0.05, **p<0.01, ***p<0.001.

Source: *Understanding Society* analysis for The Children's Society and Barnardo's.

22. The Good Childhood Report 2015 analysis of children's family relationships mentioned above showed that of the three dimensions of support, harmony and autonomy-giving, family conflict is the strongest predictor, followed by support and then autonomy-granting.

Figure 3: Family conflict, support and children's subjective well-being



Source: Reproduced from Figure 21 in The Good Childhood Report 2015.

Bullying

23. Numerous studies have found bullying to be an important factor associated with children's mental health. One study found that children who had been bullied at age 13 were more than twice as likely to have depression at age 18⁶, while a meta-analysis of 18 longitudinal studies found that internalising problems (e.g. depression and anxiety) were both antecedents and consequences of bullying⁷.
24. The new *Understanding Society* analysis found bullying to be significantly related to subsequent mental health problems (measured by the total difficulties score). Additionally, analysis of the different sub-scales suggests that bullying is a stronger predictor of peer relationship problems than it is of the other types of mental health problem, which is to be expected.

Bullying and the likelihood (odds ratio) of an abnormal total difficulties score aged 10-15

Variable	B (SE)	Odds ratio
Frequency of being bullied, physically or otherwise (base group=never)		
Not much (1-3 times in the last 6 months)	1.3*** (0.1)	3.5 (2.7, 4.6)
Quite a lot (more than 4 times in the last 6 months)	2.1*** (0.2)	8.1 (5.7, 11.6)
A lot (a few times every week)	2.9*** (0.2)	19.0 (12.6, 28.6)

⁶ Bowes, L., Joinson, C., Wolke, D. and Lewis, G. (2015) Peer victimisation during adolescence and its impact on depression in early adulthood, *BMJ* 2015;350:h2469

⁷ Reijntjes, A., Kamphuis, J.H., Prinzie, P. and Telch, M.J. 'Peer victimization and internalizing problems in children: a meta-analysis of longitudinal studies'. *Child Abuse Negl.* 2010;34:244-252.

Note: Results are from random effects panel logistic regressions predicting abnormal TDS of children aged 10-15 at Waves 1, 3 and 5. Confidence intervals provided in parentheses. Sample size = 10,272. *p<0.05, **p<0.01, ***p<0.001. Source: Understanding Society analysis for The Children's Society and Barnardo's.

25. This longitudinal finding is consistent with cross-sectional analysis that has been presented in successive Good Childhood Reports, including in 2017, which found that bullying was an important factor explaining variation in children's subjective well-being.

Appearance

26. Poor body image has been found to be negatively associated with self-esteem and depression, particularly amongst teenage girls. The Siegel et al (1999) study of teenagers in the US found a difference between girls' and boys' body image, self-esteem and depression levels, and that poor body image accounted for the higher prevalence of depression and low self-esteem amongst girls⁸.
27. The Good Childhood Report 2016 highlighted that in 2009/10, 30% of 10 to 15-year-old girls were unhappy with their appearance, but by 2013/14 this had risen to 34%. The proportion of 10 to 15-year-old boys unhappy with their appearance remained unchanged over the same period at 20%.
28. The new *Understanding Society* analysis found unhappiness with appearance to be significantly related to subsequent mental health problems (measured by the total difficulties score). The results in the table below indicate that children age 10-15 who felt unhappy about their appearance were over 3 times more likely to have increased risk of mental health problems than those who felt happy with their appearance.

Happiness with appearance and the likelihood (odds ratio) of an abnormal total difficulties score aged 10-15

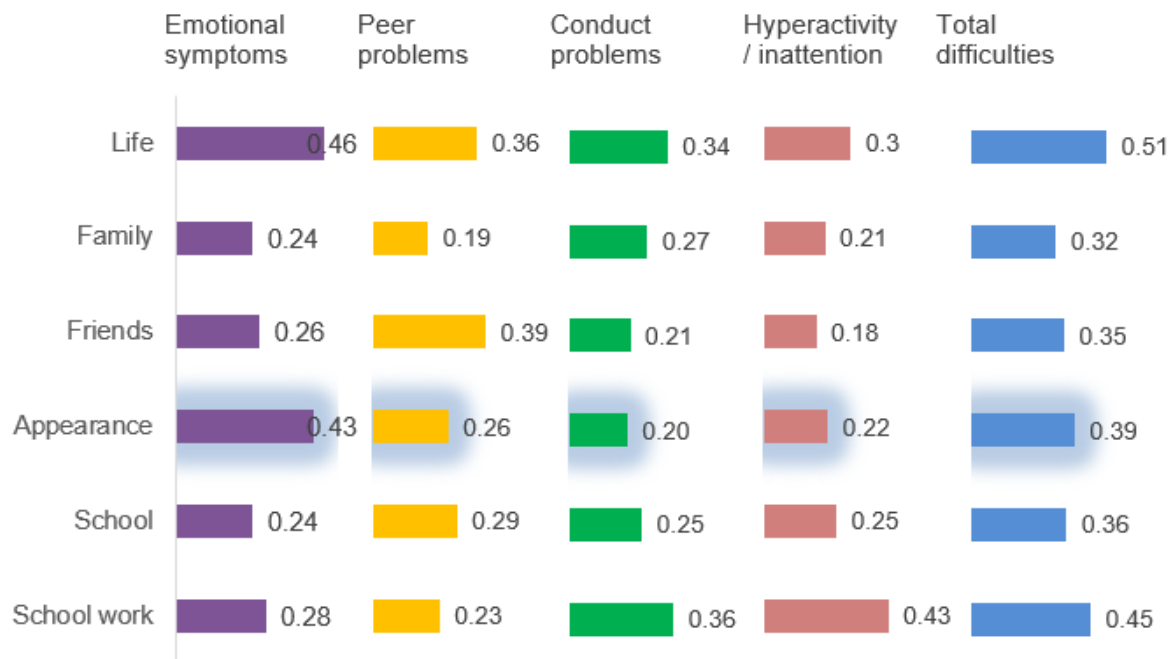
Variable	B (SE)	Odds ratio
Feelings about appearance (base group=happy)		
Neither happy nor unhappy	0.5*** (0.2)	1.7 (1.2, 2.3)
Unhappy	1.1*** (0.2)	3.1 (2.3, 4.1)

Note: Results are from random effects panel logistic regressions predicting abnormal TDS of children aged 10-15 at Waves 1, 3 and 5. Confidence intervals provided in parentheses. Sample size = 10,272. *p<0.05, **p<0.01, ***p<0.001. Source: Understanding Society analysis for The Children's Society and Barnardo's.

29. This longitudinal finding is consistent with cross-sectional analysis that was presented in The Good Childhood Report 2016, which explored the relationship between different domains of subjective well-being and different sub-scales of the SDQ. In addition, The Good Childhood Report 2016 found that happiness with appearance was most strongly related to emotional problems (see Figure 4 below), and this relationship was stronger for girls.

⁸ Siegel, J.M., Yancey, A.K., Aneshensel, C.S. and Schuler, R. (1999) 'Body image, perceived pubertal timing, and adolescent mental health'. *J Adolesc Health*. 1999;25:155-65.

Figure 4: Correlations between subjective well-being and mental health problems



Source: The Good Childhood Report 2016.

Schoolwork

30. The new *Understanding Society* analysis found unhappiness with schoolwork to be significantly related to subsequent mental health problems (measured by the total difficulties score) for children aged 14-15 as shown in the table below. Additionally, specific analysis of the two externalising sub-scales (conduct problems and hyperactivity) for children aged 10-15 suggests that unhappiness with schoolwork made a child between 2.6 and 2.9 times more likely to have conduct problems than a child who was happy with their schoolwork, and at least three times more likely to have hyperactivity problems⁹.

Happiness with schoolwork and the likelihood (odds ratio) of an abnormal total difficulties score at age 14-15

Variable	B (SE)	Odds ratio
Feelings about schoolwork (base group=happy)		
Neither happy nor unhappy	0.7 (0.5)	2.1 (0.7, 5.8)
Unhappy	3.7*** (0.4)	40.2 (16.7, 96.8)

Note: Results are from random effects regression predicting abnormal TDS of children aged 10-15 at Waves 1, 3 and 5. Confidence intervals provided in parentheses. Sample size = 512. *p<0.05, **p<0.01, ***p<0.001.

Source: *Understanding Society* analysis for The Children's Society and Barnardo's.

31. This longitudinal finding is consistent with cross-sectional analysis that was presented in The Good Childhood Report 2016, which found that happiness with schoolwork was more strongly associated with the two externalising subscales of the SDQ than the two internalising sub-scales (see Figure 4 above).

⁹ All of these results are statistically significant at the 5% level.

School

32. Children spend a significant amount of time at school and happiness at school is an important part of their life, which reflects a range of factors, including peer relationships, academic ability, socioeconomic status, and sporting ability. A study of the Avon Longitudinal Study of Parents and Children looked at pupil and school effects during primary school and found that different children have different experiences even at the same school, and that for well-being, “child-school” fit is as important as attending a “good” school¹⁰.
33. The new *Understanding Society* analysis found unhappiness with school to be significantly related to subsequent peer relationship problems, and problematic at both ages 14-15 and 10-11, in terms of the association with mental health problems at age 14-15.

Happiness with school and the likelihood (odds ratio) of an abnormal peer relationship score at age 14-15

Variable	B (SE)	Odds ratio
Feelings about school (base group=happy)		
Neither happy nor unhappy	-1.0 (0.2)***	0.4 (0.24, 0.55)
Unhappy	2.54 (0.33)***	12.7 (6.53, 24.74)

Note: Results are from random effects regression predicting abnormal TDS of children aged 10-15 at Waves 1, 3 and 5. Confidence intervals provided in parentheses. Sample size = 512. *p<0.05, **p<0.01, ***p<0.001.
Source: Understanding Society analysis for The Children's Society and Barnardo's.

34. This longitudinal finding is consistent with cross-sectional analysis that was presented in The Good Childhood Report 2016, which found that happiness with school had a slightly stronger relationship with peer relationship problems than with the other sub-scales of the SDQ (see Figure 4 above).

Social media use

35. The *Understanding Society* analysis found that children with heavy social media use¹¹ (i.e. those who spend 4 or more hours on social media on a normal school day) were significantly more likely to have subsequent mental health problems (measured by the total difficulties score)¹². However, there was no significant relationship between mental health problems and moderate (1 to 3 hours) or light (up to an hour) use.

¹⁰ Gutman, L. and Feinstein, L. (2008) Children's Well-Being in Primary School: Pupil and School Effects Research brief · Volume 25 of Wider benefits of learning research report. Centre for Research on the Wider Benefits of Learning.

¹¹ Over a third (37.3 per cent) of UK 15 year olds are 'extreme internet users' (defined by the OECD as a student who uses the internet for more than six hours outside of school on a typical weekend day). This is substantially higher than the OECD average.

¹² The Office for National Statistics also found a “clear association” between longer time spent on social media and mental health problems. While 12 per cent of children who spend no time on social networking websites on a normal school day have symptoms of mental ill health, that figure rises to 27 per cent for those who are on the sites for three or more hours a day.

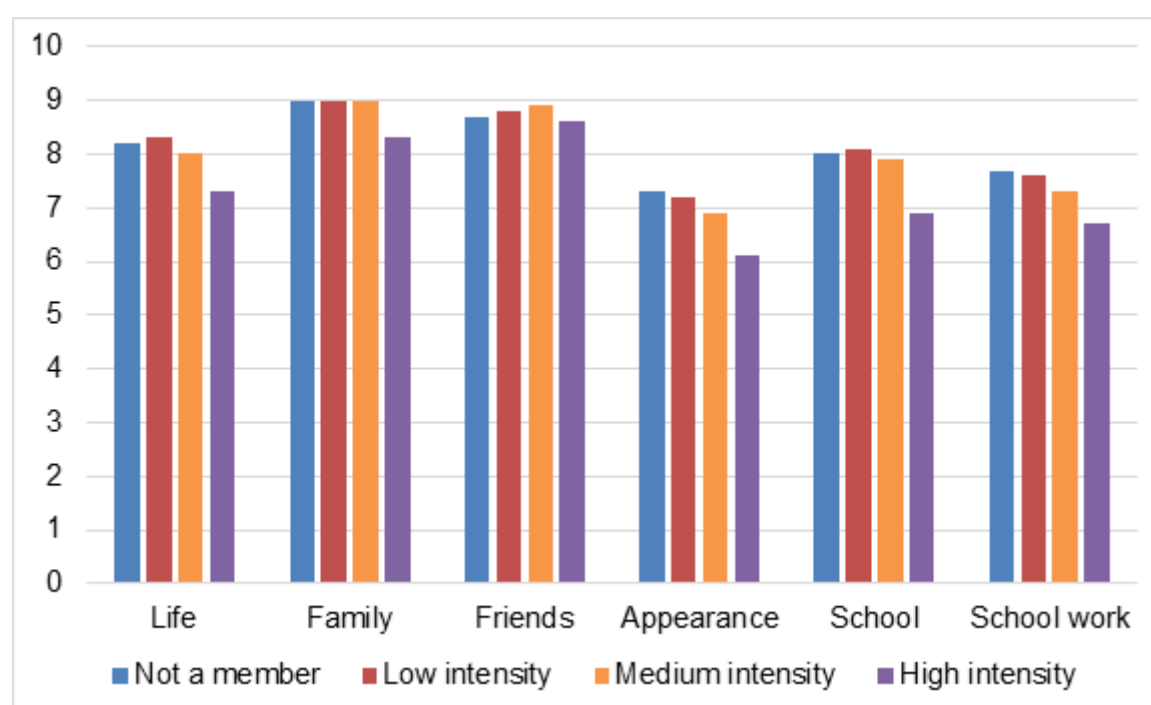
Social media usage and the likelihood (odds ratio) of an abnormal total difficulty score (age 10-15)

Variable	B (SE)	Odds ratio
Hours spent chatting with friends via social media on a normal school day (base group=none)		
Less than an hour	-0.3 (0.1)	0.8 (0.6, 1.0)
1-3 hours	0.1 (0.1)	1.1 (0.8, 1.4)
4 or more hours	0.6** (0.2)	1.7 (1.2, 2.6)

Note: Results are from random effects panel logistic regressions predicting abnormal TDS of children aged 10-15 at Waves 1, 3 and 5. Confidence intervals provided in parentheses. Sample size = 10,272. *p<0.05, **p<0.01, ***p<0.001.
Source: Understanding Society analysis for The Children's Society and Barnardo's.

36. This longitudinal finding is consistent with cross-sectional analysis that was presented in The Good Childhood Report 2017, which highlighted that there were no differences in subjective well-being between children who do not have a social media account, those who are low intensity users and medium intensity users (with the exception of happiness with school work).
37. High intensity use (four or hours or more per day) was associated with lower happiness with life, family, appearance, school and school work, but not with friends.

Figure 5: Children's satisfaction with different aspects of life according to social media use



Source: The Good Childhood Report 2017

38. The OECD also explored the relationship between excessive internet use and young people's subjective well-being. In the UK, extreme internet users had a life satisfaction score of 6.59 out of 10 compared to 7.4 for moderate internet users. Each additional hour spent online was associated with a negative impact on life satisfaction. Even accounting for socio-economic status the OECD highlighted this difference as statistically significant.

39. Extensive social media use at age 10-11 was not found to be a significant determinant of mental health problems at age 14-15 across any of the four sub-scales examined. We suspect this is due to only a very small proportion of the sample – less than 1% (6 out of 690 respondents) – using social media excessively (more than 4 hours per day) at age 10-11. The small sample means it is very difficult to produce reliable and statistically significant results related to social media use at age 10-11. Nonetheless, given other research on the effect of social media use (e.g. see above), it seems important to further investigate the impact of heavy use - including at early ages - when more data becomes available.

E. Conclusions / policy implications

Factors that are important for children's mental health:

40. In this analysis, a number of factors at age 10-11 were significantly related to subsequent mental health problems at ages 14-15, including: family relationships; bullying; engagement with school; and feelings about appearance.

Family relationships

41. This analysis presents clear evidence of the importance of the quality of children's family relationships for their mental health. Children who did not feel supported by their family at age 10-11 were more likely to report emotional symptoms, peer relationships problems and hyperactivity/inattention problems at age 14-15 than children who enjoyed higher levels of support from their family. In addition, unhappiness with family relationships at age 10/11 was linked to conduct problems at age 14-15, while frequent quarrelling with mother was linked to a higher total difficulties score at 14-15.

Bullying

42. Bullying was another factor with a clear relationship to children's mental health. Children who were frequently bullied at age 10-11 were more likely to report peer relationship problems, hyperactivity/inattention problems and a higher total difficulties score at age 14-15.

School and schoolwork

43. Children's happiness with school life during their last year of primary school was linked to their subsequent mental health. Children who were unhappy with school at age 10/11 were more likely to report peer relationships problems at age 14-15. Happiness with school is likely to be related to bullying, as well as to feelings about schoolwork and relationships with teachers. Relatedly, children who were unhappy with schoolwork at age 10/11 were more likely to report conduct and hyperactivity/inattention problems at age 14-15.

Appearance

44. Children's feelings about their appearance were also important for their mental health. Children who were unhappy with the way they look at age 10/11 were more likely to report a higher total difficulties score at age 14/15.

Early intervention and prevention

45. The Government has just consulted on a Green Paper on Mental Health and it is important that the implementation plans for training senior leads in schools in mental health consider what schools could do at age 10-11 to identify emerging problems across the factors mentioned above. This is also a time of transition to secondary school and there are implications for how transition is managed for children displaying poor mental health.
46. For local authorities, it is clear that health and well-being boards need to take a strong lead on promoting the well-being of local children as a mechanism for

preventing mental ill-health in later childhood and adult life. By consulting with children directly and identifying the issues that negatively impact on their well-being within the community, it is possible to put in place interventions to mitigate this. In addition to the factors mentioned above (experiences of bullying and feelings about family relationships, school and appearance), The Children's Society's well-being research suggests that low income, neighbourhood safety, the quality of the local environment and individual characteristics such as age, gender and special educational needs and disabilities are important factors affecting children's well-being. More of a focus on these factors could help children who are at risk of developing mental health problems.

Social media

47. In this analysis, heavy use of social media was associated with subsequent mental health problems. However, further research is needed on different types of social media and different types of usage and what may be driving heavy usage for some children. A review of the evidence by the Education Policy Institute¹³ concluded that *'there is, as yet, no scientific consensus on the impact of screen-based lifestyles on the mental health of young people'* and not enough evidence yet of a causal link between social networking and mental health problems. The Children's Society has previously found that social media use is considerably less important for children's well-being than family support and bullying, as shown earlier (in Figure 2). It might be that children who are not well supported by their family turn to the internet / social media. Certainly, social media usage is higher amongst children who are not well supported by family. Any further research needs to consider the impact of social media at different ages and stages of development, as well as the role of parental supervision and parental support more broadly.

Poverty

48. This analysis controlled for socioeconomic factors (such as household size, housing tenure, the number of working adults in the household, poverty status) rather than looking specifically at how poverty affects children's mental health. However, other research suggests that poverty or low income more generally is an important factor increasing the likelihood of children experiencing poorer mental health.

Adverse childhood experiences

49. Although not a focus of this analysis, there is evidence that many adult mental health problems begin in childhood or adolescence, and emerging evidence that adverse childhood experiences (ACEs) may have negative impacts on future mental health and well-being outcomes. A British cohort study showed that, compared with mentally healthy teenagers, teenagers with a persistent common mental disorder were over six times more likely to have a common mental disorder at age 36 and 43¹⁴. Earlier identification of ACEs would help inform early intervention programmes. This analysis did not look in detail at ACEs, although it did include measures of family conflict such as whether children report quarrelling with their mother or father. The Government has in its Green Paper on Mental Health recognised the impact of ACEs and a better understanding should inform the training of universal services such as

¹³ https://epi.org.uk/wp-content/uploads/2017/06/Social-Media_Mental-Health_EPI-Report.pdf

¹⁴ Jones. P. (2013) 'Adult mental health disorders and their age at onset.' *The British Journal of Psychiatry*, 202 (s54), 5-10.

schools and specialist services including the proposal for mental health support teams in the Green Paper.

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Appendix 1: Data sample

Full sample split by ethnicity

Ethnicity	N	Percentage
British/Irish	8861	68%
Other White	368	3%
Mixed	580	4%
Asian/British	1469	11%
Black/British	685	5%
Other	46	0%
Missing	976	8%
Total	12985	100%

Source: Understanding Society analysis for The Children's Society and Barnardo's.

Full sample split by nation

Nation	N	Percentage
England	10424	80%
Wales	708	5%
Scotland	982	8%
Northern Ireland	798	6%
Missing	73	1%
Total	12985	100%

Source: Understanding Society analysis for The Children's Society and Barnardo's.



Right now in Britain there are children and young people who feel scared, unloved and unable to cope. The Children's Society works with these young people, step by step, for as long as it takes.

We listen. We support. We act.

There are no simple answers so we work with others to tackle complex problems. Only together can we make a difference to the lives of children now and in the future.

Because no child should feel alone.



As the UK's largest children's charity, Barnardo's works directly with over 272,000 children, young people, parents and carers every year through more than 1,000 services. Our services provide counselling for children who have been exploited, support for children in and leaving care and specialist mental health services. Barnardo's purpose is to transform the lives of the most vulnerable children and young people. We work to build stronger families, safer childhoods and positive futures for children and their families/carers through our services, campaigns and research.

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