

Written evidence submitted by Institute for Social and Economic Research, University of Essex

The Institute for Social and Economic Research (ISER) at the University of Essex specialises in the production and analysis of large-scale longitudinal data, and produces high quality quantitative research to provide robust evidence for effective policy making. This submission summarises findings from our recent work, funded by the Economic and Social Research Council (ESRC), looking at factors affecting children's wellbeing and life satisfaction, led by Dr Cara Booker.

Key findings

1. The use of screen-based media – whether that be playing games, using social media, or watching TV – has an impact on children's well-being. Our work has found that, overall, young people who use screen-based media heavily were less happy and more likely to have socio-emotional difficulties than moderate users.
2. Chatting on social networking websites was associated with lower odds of happiness and higher odds of socio-emotional difficulties.
3. Using games consoles was associated with higher odds of socio-emotional problems.
4. Higher total screen-based media use was associated with lower odds of happiness, higher odds of socio-emotional difficulties and increased depressive symptoms.
5. Higher screen-based social media use was also associated with poorer sleep and lower levels of self-esteem.
6. On the other hand, greater participation in sport was associated with higher odds of happiness and lower odds of socio-emotional difficulties.
7. There is a gender difference in social media use in tweens and teens: we found that girls used social media more than boys and were more likely to have problems with their well-being as they reach their later teenage years.
8. Half of girls aged 13 were using social media for more than one hour a day, but only a third of boys of the same age. By age 15, both boys and girls had increased the amount of time spent on social media but using it for more than one hour a day was still more common among girls (59 per cent) than boys (46 per cent). In another UK study of 14-year-olds, 76% of girls and 54% of boys spent at least one hour on social media.
9. Both boys and girls saw a decline in wellbeing by age 15, but the decline was greater for girls, and especially for the girls using social media the most.
10. Our findings suggest that it is important to monitor early interactions with social media, particularly in girls, as this could have an impact on wellbeing later in adolescence and perhaps throughout adulthood. Time limits, in-built into devices or programmes, could be beneficial in protecting wellbeing if they are restricting the amount of time young people spend on social media.
11. Social media impacts on sleep quality and self-esteem could have led to poorer educational outcomes.

1. Longitudinal analysis of social media use and impact on wellbeing

- 1.1 A study by Dr Cara Booker, with Professor Yvonne Kelly and Professor Amanda Sacker (both from UCL), tracked almost 10,000 young people aged 10-15 over five years (2009-2015) and analysed the amount of time spent on social media and wellbeing scores. The young people were participants in “Understanding Society”, the UK Household Longitudinal Study, funded by the Economic and Social Research Council, government departments and the governments of the devolved nations. The published paper is “Gender differences in the associations between age trends of social media interaction and well-being among 10-15 year olds in the UK”. Cara L. Booker Yvonne J. Kelly and Amanda Sacker, March 2018. BMC Public Health, 2018, 18:321: <https://doi.org/10.1186/s12889-018-5220-4>.
- 1.1.1 The young people were asked to report on how much time they spent on social media on a “normal school day”. A few reported no internet access or no time spent at all, but some were on it for four hours or more. We found that 10% of ten-year-old girls reported spending one to three hours a day (compared with 7% of boys) and this increased to 43% of girls at age 15 (and 31% of boys).
- 1.1.2 Our research assessed two measures of well-being for these young people. The first was a combined score of their answers to questions about satisfaction with schoolwork, friends, family, appearance, school and life as a whole. The second measure was a well-established questionnaire which asked the young people about their social and emotional difficulties.
- 1.1.3 At age ten, girls who interacted on social media for an hour or more on a school day had lower levels of well-being compared to girls who had lower levels of social media interaction.
- 1.1.4 Additionally, girls with higher social media interaction at aged ten were more likely to experience more social and emotional difficulties as they got older. Our study was unable to say that the higher level of social media use among young girls directly caused the mental health issues, but there was a strong association.
- 1.1.5 For both boys and girls, levels of happiness fell between the ages of ten and 15, however the fall among girls was greater than that among boys

1. Recent cross-sectional findings on children’s subjective well-being

- 2.1 A 2019 study analysed the relationship between social media use and depressive symptoms amongst UK young people aged 14. The young people were part of the Millennium Cohort Study, funded by the Economic and Social Research Council. The published paper is “Social media use and adolescent mental health: Findings from the UK Millennium Cohort Study”. Yvonne Kelly, Afshin Zilanawala, Cara Booker and Amanda Sacker, 2019 EClinicalMedicine, 6, 59-68. <https://doi.org/10.1016/j.eclinm.2018.12.005>.
- 2.1.1 This cross-sectional study included over 10,000 young people and measured their social media use time and depressive symptoms. Young people were also asked about their sleep quality, self-esteem perceptions of body image and experiences with cyberbullying.
- 2.1.2 The research found high levels of social media use amongst these youth, with higher levels of use amongst girls, 76%, compared to boys, 56%. Higher use of social media, greater than

three hours per day, was associated with higher levels of depressive symptoms amongst both girls and boys. None or low, less than one hour, use of social media was associated with lower depressive symptoms for girls but not boys.

2.1.3 High social media use was associated with poor sleep quality, lower levels of self-esteem and perceptions of body image and greater experiences of cyberbullying. Each of these were also independently associated with depressive symptoms.

2.1.4 These findings suggest that not only does time spent on social media have an impact on depressive symptoms it also has an impact on other factors that may also have negative effects on depressive symptoms.

2.2 A second study, by Dr Cara Booker, Professor Yvonne Kelly and Professor Amanda Sacker (both from UCL), and Dr Alexandra Skew, investigated the relationship between selected types of screen-based media use, total screen-based media sports participation and markers of well-being. The full reference is *Media use, sports participation, and well-being in adolescence: cross-sectional findings from the UK Household Longitudinal Study*. [Cara L. Booker](#) [Alexandra J. Skew](#) [Yvonne J. Kelly](#), [Amanda Sacker](#), January 2015. American Journal of Public Health.

2.2.1 This cross-sectional study used data from the youth panel of Understanding Society (N = 4,899). The research also assessed two measures of well-being for these young people. The first was a combined score of their answers to questions about satisfaction with schoolwork, friends, family, appearance, school and life as a whole. The second measure was a well-established questionnaire which asked the young people about their social and emotional difficulties.

2.2.2 The research found that generally young people used multiple types of screen-based media for at least one hour per day, while only 30 % participated in sport every day. Overall, young people who used screen-based media heavily were less happy and more likely to have socio-emotional difficulties than moderate users. Chatting on social networking websites more was associated with lower odds of happiness and higher odds of socio-emotional difficulties. Using games consoles was associated with higher odds of socio-emotional problems. Higher use of any form of screen-based media was associated with lower odds of happiness and higher odds of socio-emotional difficulties. On the other hand, greater participation in sport was associated with higher odds of happiness and lower odds of socio-emotional difficulties.

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