

# Social media and children's mental health: a review of the evidence

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## Acknowledgements

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## About the Education Policy Institute

The Education Policy Institute is an independent, impartial and evidence-based research institute that aims to promote high quality education outcomes, regardless of social background.

Education can have a transformational effect on the lives of young people. Through our research, we provide insights, commentary and critiques about education policy in England - shedding light on what is working and where further progress needs to be made. Our research and analysis spans a young person's journey from the early years through to higher education and entry to the labour market. Because good mental health is vital to learning, we also have a dedicated mental health team which will consider the challenges, interventions and opportunities for supporting young people's wellbeing.

Our core research areas include:

- Accountability and Inspection
- Benchmarking English Education
- Curriculum and Qualifications
- Disadvantaged, SEND, and Vulnerable Children
- Early Years Development
- School Funding
- School Performance and Leadership
- Teacher Supply and Quality
- Children and Young People's Mental Health

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## Foreword

It is over a decade since the exponential growth of social media began and research into this aspect of our modern lives is therefore in its infancy.

In this new report, the Education Policy Institute investigates what is known so far about the relationship between young people's use of social media and their emotional and mental wellbeing.

As this report demonstrates, further research is required to fully understand the impact of such a rapid change in the way in which young people communicate and develop social relationships in the digital world.

This report points to the need for a greater understanding of how to build resilience in young people as they navigate this relatively uncharted territory. Government policy should therefore focus on what can be done at a national level to invest in further research and to support the industry, families and schools to build this resilience in young people.

Rt Hon. David Laws

Executive Chairman, Education Policy Institute

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# Executive Summary

This report explores the relationship between social media and young people's mental health. The Education Policy Institute has investigated what is known about the extent to which young people are using social media. We have reviewed the evidence so far on the positive aspects of this development, as well as the risks and potential harm to young people's emotional and mental wellbeing. The report also summarises recent Government policy to address concerns about online safety and identifies areas for further research.

## Key Findings

### The digital lives of children and young people

- 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).<sup>1</sup> This is substantially higher than the OECD average. The only OECD country with higher levels of extreme internet use than the UK was Chile.
- Nearly a third (27.6 per cent) of young people in the UK were 6 years old or younger when they first used the internet. This is younger than the OECD average.<sup>2</sup>
- Young people in the UK are extensive users of social media sites, such as Facebook, Instagram and Snapchat. 94.8 per cent of 15 year olds in the UK used social media before or after school in 2015.<sup>3</sup> 11 per cent of UK 10 to 15 year old girls and 5 per cent of boys spent over three hours on social media on a normal school day in 2012-13.<sup>4</sup>
- This online activity is increasingly private, with young people using the internet in their bedrooms or on a smartphone. In 2014, over half (56 per cent) of UK 9 to 16 year olds used smart-phone on a daily basis<sup>5</sup>. The rise in popularity of instant messaging means that online discussions are now often held in private groups, rather than on public profiles.
- The changing pace of technology, such as the recent development of livestreaming, means that the way young people interact with social media is continuing to change.

## Positive Impacts

Social media has many potential positive influences on young people's lives, such as increasing social connections, helping with homework and enabling teenagers to develop their identities and share creative projects. Studies have identified some evidence of a beneficial impact on wellbeing, and young people recognise the value of opportunities to connect online. Teenagers with mental health

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<sup>1</sup> PISA 2015 Results STUDENTS' WELL-BEING VOLUME III, OECD, April 2016: <http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>

<sup>2</sup> PISA 2015 Results STUDENTS' WELL-BEING VOLUME III, OECD, April 2016: <http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>

<sup>3</sup> PISA 2015 Results STUDENTS' WELL-BEING VOLUME III, OECD, April 2016: <http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>

<sup>4</sup> Measuring National Well-being: Insights into children's mental health and well-being, ONS, 2015, using data from the Understanding Society survey 2012-13, ONS: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2015-10-20>

<sup>5</sup> Net Children Go Mobile Final Report (with country fact sheets), November 2014

Mascheroni, G., & Cuman, A., (2014). *Net Children Go Mobile: Final Report (with country fact sheets). Deliverables D6.4 and D5.2. Milano: Educatt.*

problems or concerns are also able to seek support on the internet, either through social media networks or through online provision of advice and counselling support.

## Online risks and harm

Existing research has, however, identified a range of risks associated with social media, including:

- concerns about excessive time spent online;
- sharing too much information;
- being cyber-bullied;
- the influence of social media on body image; and
- sourcing of harmful content or advice, such as websites or social networks enabling the promotion of self-harm;

Studies have also investigated the relationship between these online risks and young people's emotional and mental health. The PISA Wellbeing study found that 'extreme internet users' were more likely to report bullying than moderate internet users:<sup>6</sup> 17.8 per cent stated "*other students spread nasty rumours about me*" compared to 6.7 per cent of moderate internet users, a difference of 11.1 per cent.

The OECD also explored the overall relationship between excessive internet use and young people's wellbeing. In the UK, extreme internet users had a life satisfaction score of 6.59 out of 10 compared to 7.40 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.

The Office for National Statistics has found a "clear association" between longer time spent on social media and mental health problems.<sup>7</sup> 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.

Nevertheless, these are indicators of association and do not necessarily prove that social media causes harm to young people's wellbeing.<sup>8</sup> This may be a sign that young people are using the internet as a coping mechanism when they experience difficulties at school. Equally, it could be the case that excessive internet use is preventing these young people from developing stronger relationships offline.

## Responses to online risk

Young people use a range of coping mechanisms to deal with online risk, such as blocking other internet users, changing privacy settings or taking a break from the internet. Many children do not choose to talk to their parents or a teacher. In one UK study, only one in five children (22 per cent) who were upset by something they had seen online talked with someone else face to face about the

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<sup>6</sup> Defined as those who spend between one and two hours online on a typical weekday. PISA 2015 Results STUDENTS' WELL-BEING VOLUME III, OECD, April 2016: <http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>

<sup>7</sup> Measuring National Well-being: Insights into children's mental health and well-being, ONS, 2015:

<https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2015-10-20>

<sup>8</sup> Online Social Networking and Addiction—A Review of the Psychological Literature

Daria J. Kuss\* and Mark D. Griffiths <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3194102/>

experience.<sup>9</sup> Of those who did seek face to face support, older children were more likely to turn to friends, whereas younger children would seek help from their parents.

Parents adopt different approaches to managing their children's internet use, from restrictions (such as time limits or banning certain sites); monitoring activity; or engaging in open discussion with their children about the internet and teaching them appropriate digital skills. Restricting a child's use of the internet has been shown to reduce the chances of them experiencing online risks, but not to reduce harm caused to those who do go on to experience risks. Such restriction was also linked to the young person having a lower level of digital skills. The research highlighted in this report indicates that restricting a young person's access to the internet could inhibit the development of the skills needed to handle online risk.

The ways in which young people connect with social media is changing rapidly due to the fast pace of technological innovation, such as the development of livestreaming. This demonstrates the inefficacy of attempts to protect children and young people from all online risk. The focus of public policy should therefore be on how to develop resilience in young people to potential risks associated with social media use. The role of government should be to work with the industry, schools and families to help improve young people's emotional wellbeing and resilience and to ensure children are taught and supported to learn digital skills as they start to navigate social media for the first time.

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<sup>9</sup> The experiences of 11-16 year olds on social networking sites, Lilley, Ball & Vernon, NSPCC, 2014:  
<https://www.nspcc.org.uk/globalassets/documents/research-reports/experiences-11-16-year-olds-social-networking-sites-report.pdf>



## Introduction

Since the birth of social media in the new millennium,<sup>10</sup> significant concerns have been raised about its impact on young people's wellbeing. Evidence of a substantial rise in mental health problems in young people, and particularly in young women, has increased interest in the links between social media and mental health.<sup>11</sup>

This report explores the relationship between social media and young people's mental health, asking what we know so far and identifying the research questions that remain unanswered.

Social media has been defined as *"forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos)"*.<sup>12</sup> High profile social networking sites include Facebook, Twitter and Instagram. Given the emerging popularity of instant messaging services, such as WhatsApp, Facebook Messenger and Snapchat, we have also explored research on such messaging where available.

As technology has developed, the lines have blurred between different types of digital media. The division between 'internet use' and 'social media use' is not always distinctive. For example, services such as YouTube are merging television content with interactive elements. Similarly, many video gaming sites are now based on the internet and involve social networking (including options to make new friendships and have conversations while gaming). This report has therefore also included some information about overall time spent online and included studies on video gaming where they were considered relevant to an exploration of social media.

This report has chosen to focus on mental wellbeing in its widest sense, including, but not limited to, research into particular conditions, such as depression, as many studies in this area have adopted broad definitions of mental health.

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<sup>10</sup> The launch of Facebook in February 2004 is a significant date indicating the early days of social networking.

<sup>11</sup> For example, see Education Policy Institute report: Children and Young People's Mental Health: The State of the Nation, April 2016. <https://epi.org.uk/report/children-young-peoples-mental-health-state-nation/> See also: NHS Digital, Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2014, September 29, 2016. <http://content.digital.nhs.uk/catalogue/PUB21748>

<sup>12</sup> Merriam Webster: <https://www.merriam-webster.com/dictionary/social%20media>

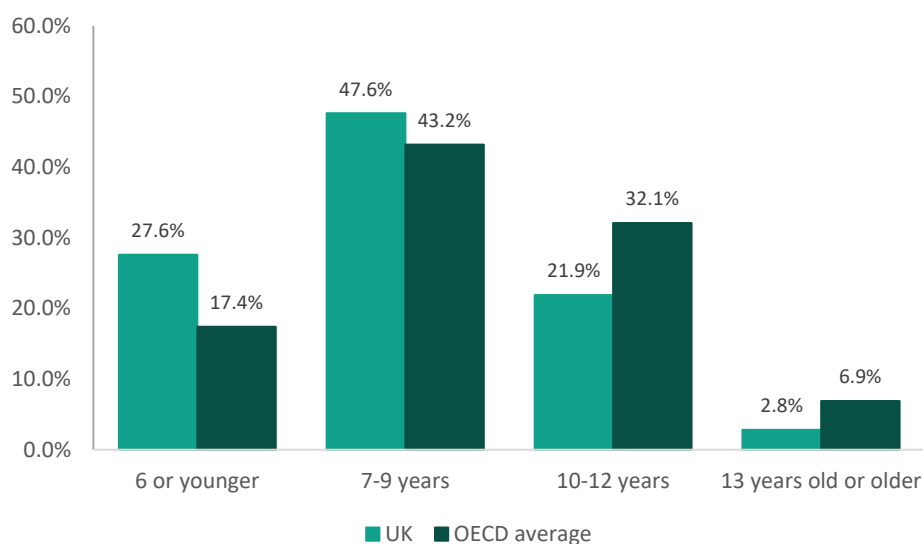
## Part 1: The digital lives of children and young people

### Age of first internet use

An OECD report published in 2016 asked UK 15 year olds in 2015 how old they were when they first began to use the internet. 27.6 per cent were 6 years old or younger. The majority (47.6 per cent) were aged between 7 and 9. Only 2.8 per cent waited until they were a teenager to use the internet and over 99 per cent of children in the UK have used the internet.

This profile was younger than the OECD average (17.4 per cent were six or younger and 43.2 per cent between 7 and 9).<sup>13</sup> The UK has the fifth highest percentage of those going online aged six or younger of all OECD countries. The report compared the OECD average with data from 2012 and found that the age profile had got younger over that period.

**Figure 1.1: Age at which young people started using the internet, UK and OECD average**



A 2014 EU wide study of children's internet usage found a similar pattern. On average, children in the UK first used the internet at the age of eight, which was half a year earlier than the EU average. But 9 to 10 year olds on average first used the internet at the age of six compared to age nine for 15 to 16 year olds.<sup>14</sup> We can hypothesise from these studies that young people are now going online at a younger age and that this trend is happening earlier in the UK than in comparable countries.

### Time spent online

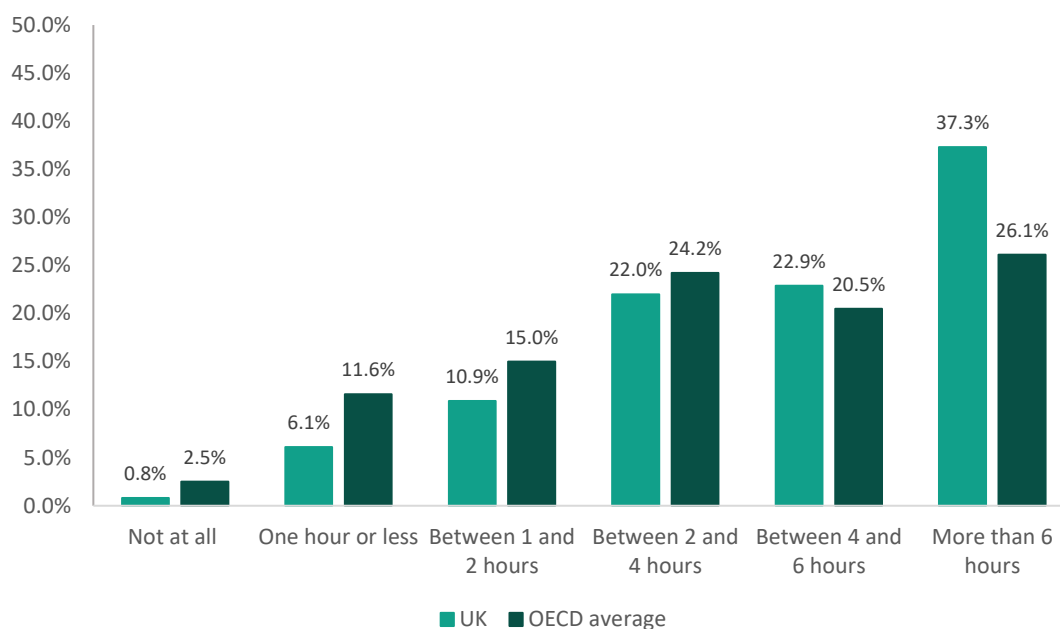
The OECD PISA Wellbeing study also looked at how long young people are spending online. It concluded that over a third (37.3 per cent) of 15 year olds in the UK are 'extreme internet users' (defined as a student who uses the internet for more than six hours outside of school on a typical

<sup>13</sup> PISA 2015 Results STUDENTS' WELL-BEING VOLUME III, OECD, April 2016: <http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>

<sup>14</sup> Livingstone, S., Haddon, L., Vincent, J., Mascheroni, G., and Ólafsson, K. (2014b) Net Children Go Mobile, the UK Report. <http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20III/Reports/NCGMUKReportfinal.pdf>

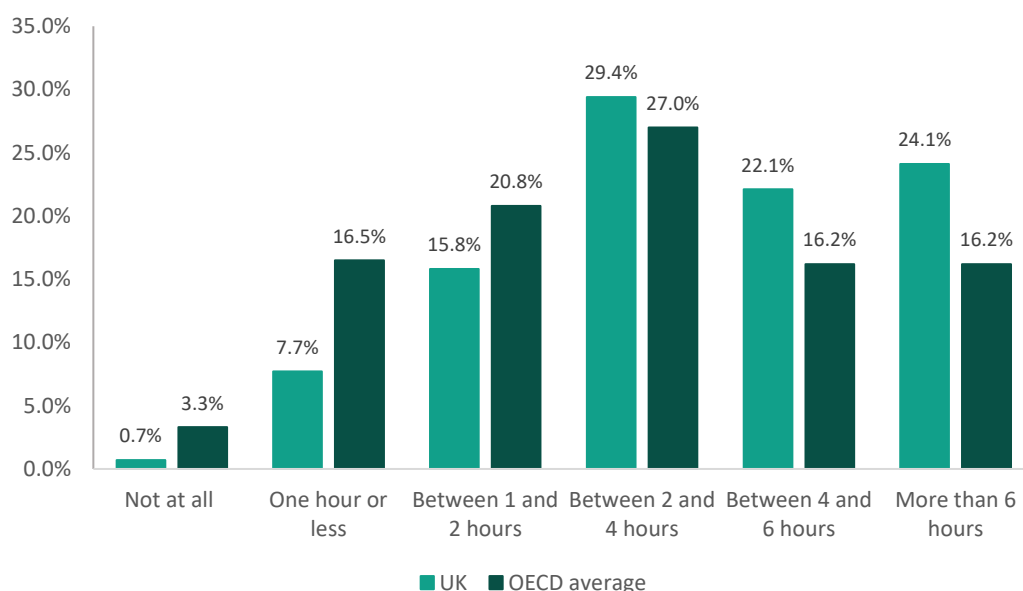
weekend day).<sup>15</sup> This is substantially higher than the EU average. The only OECD country with higher levels of extreme internet use than the UK was Chile.

**Figure 1.2: Internet use on a typical weekend day**



Even on weekdays, nearly a quarter of young people in the UK (24.1 per cent) spent over 6 hours online outside of school, also described by the OECD as ‘extreme internet use’. A similar pattern of a higher incidence of extreme internet use in the UK than in other OECD countries was also apparent for weekend internet use.

**Figure 1.3: Internet use outside of school on a typical weekday**



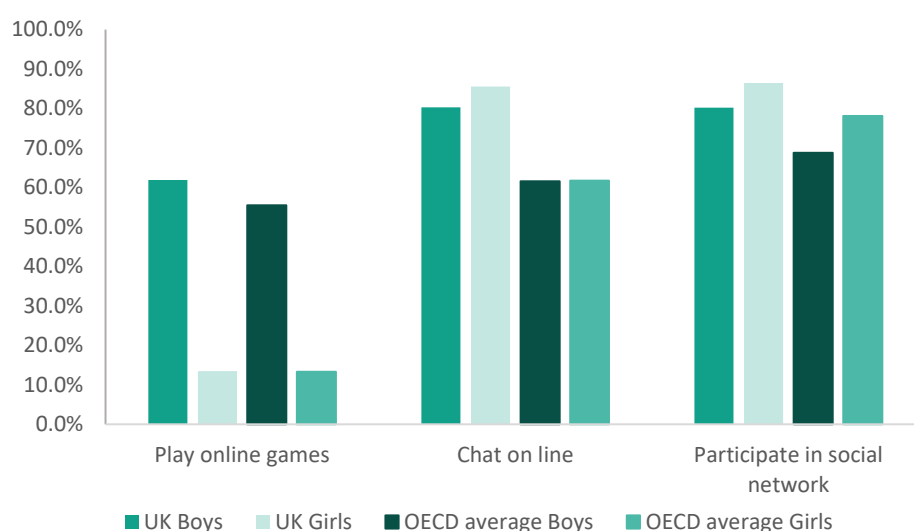
<sup>15</sup> PISA 2015 Results STUDENTS' WELL-BEING VOLUME III, OECD, April 2016: <http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>

## Time spent social networking

Some research has focused in particular on young people's use of social media, rather than overall use of the internet. Social media is now an integral part of young people's experience of growing up. The PISA Wellbeing report found that 94.8 per cent of 15 year olds in the UK used social media before or after school (slightly higher than the OECD average of 92.8 per cent). Those with a lower socio-economic status were more likely to use social networks before school (80.6 per cent in the bottom quartile compared to 75.8 per cent in the top quartile). Girls were more likely than boys to use social networks before school (82.8 per cent and 77.1 per cent respectively).

The gender difference is more apparent in the kind of social networking undertaken by boys and girls. 61.9 per cent of boys played interactive online games 'every day' or 'almost every day', compared to 13.5 per cent of girls. Boys were however slightly less likely than girls to participate in other forms of social networking (such as Facebook): 80.2 per cent of boys did this compared to 86.5 per cent of girls.

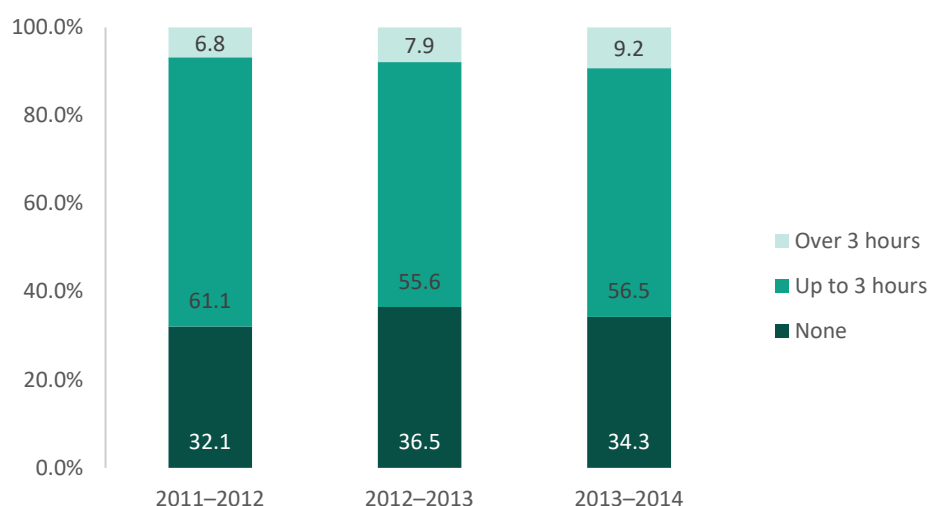
**Figure 1.4: Use of online games/chat/social networks outside of school, by gender**



In 2015, the Office of National Statistics investigated time spent on social media based on data from 2013-14. As shown in Figure 1.1, on a normal school day, over a third (34.3 per cent) of UK children aged between 10 and 15 spent no time on social networking sites. Nevertheless, over half (56.5 per cent) were on these sites for up to three hours.<sup>16</sup> Almost 10 per cent (9.2 per cent) spent more than three hours on social media.

**Figure 1.5: Percentage of children aged between 10 and 15 spending time on social networking**

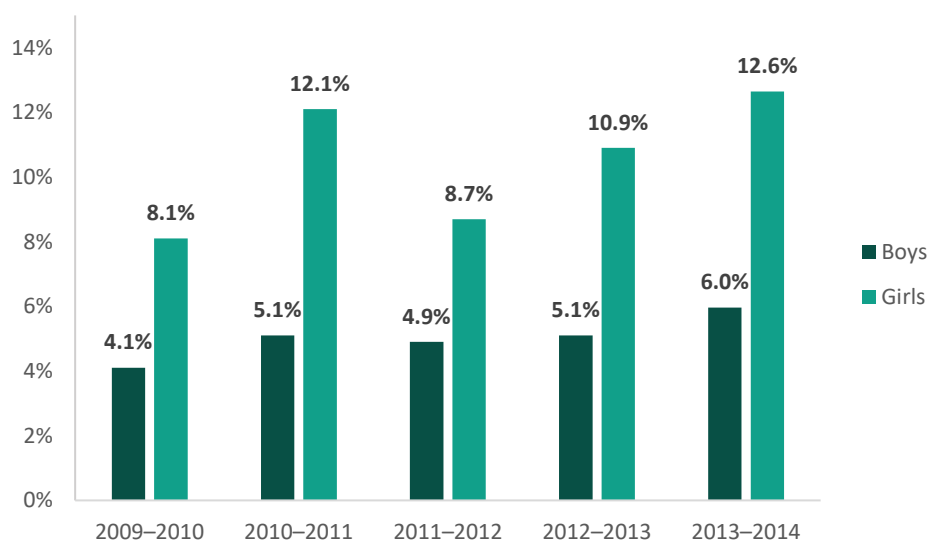
<sup>16</sup> Measuring National Well-being: Insights into children's mental health and well-being, ONS, 2015: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2015-10-20>



Source: Office of National Statistics Children's Wellbeing Measures, March 2016. Data from Understanding Society: the UK Household Longitudinal Survey

In comparison with 2011-12 there was a slight increase in those spending over 3 hours on social media. Given the high levels of overall internet usage reported in the PISA Wellbeing report it is likely that this figure will now have risen further. Girls were twice as likely as boys to spend over three hours on social media, as shown in Figure 1.2.

**Figure 1.6: Percentage of children aged between 10 and 15 spending over three hours on social networking by gender**



Source: Office of National Statistics Children's Wellbeing Measures, March 2016. Data from Understanding Society: the UK Household Longitudinal Survey

## Young Adults

On average in 2016, 16-24 year olds report spending 29 hours browsing the internet each week.<sup>17</sup> Nearly every young adult uses social media: 99 per cent reported using social networks at least weekly. Social media accounted for nearly a third of their total communication time (27 per cent), a much greater proportion than for all adults. On average, 16-24 year olds spent two hours 26 minutes per day using social media in 2016, noticeably higher than the average time spent by all adults (1 hour 16 minutes).<sup>18</sup> Social media is now a part of the way in which young people interact with each other and build relationships.

## Emerging trends

Children and young people are increasingly likely to access the internet privately, whether on a computer in their own bedroom or via a smart phone.

By 2011, around half of the children in Europe were accessing the internet from their own bedrooms (49 per cent). Younger children were more likely to use a computer in a family room such as the sitting room whereas teenagers were more likely to access the internet from their bedroom.

The average age for a UK child to get their first smart-phone was 12.3 years.<sup>19</sup> In 2014, over half (56 per cent) of 9 to 16 year olds in the UK used a smart-phone on a daily basis.<sup>20</sup> Of those who owned mobile phones, 76 per cent could access the internet.

Instant messaging is now particularly popular amongst young people.<sup>21</sup> More than 8 in 10 (81 per cent) 18-24 year olds with smartphones used Facebook Messenger in April 2016. 16-24 year olds considered instant messaging as their most important means of communication (36 per cent of this age group felt that instant messaging was most important, compared to 2 per cent of those aged 65 and over).

This increase in the private use of the internet by young people is likely to hinder attempts to prevent them from encountering online risks such as by restricting their access to inappropriate websites and supervising their online activities. Similarly, the growth in instant messaging means that parents or teachers are often not aware of activity online, such as a conversation in a Whatsapp group as opposed to on a Facebook profile.

As technological development continues, new issues are emerging. For example, a third (33 per cent) of young people aged 8-17 who responded to a 2016 survey by the UK Safer Internet Centre had reported livestreaming.<sup>22</sup> This development has implications for young people's wellbeing, such as the potential for their actions to be recorded and posted online without their consent. There have

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<sup>17</sup> The Communications Market Report 2016, Ofcom. [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/26826/cmr\\_uk\\_2016.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/26826/cmr_uk_2016.pdf). Page 30.

<sup>18</sup> Digital Day 2016 defines social media as communicating (excluding checking updates) and consuming media (including short video clips on e.g. YouTube, news sites; streamed online music; music videos; games; sports news/updates; other websites or apps; other activities).

<sup>19</sup> Livingstone, S., Haddon, L., Vincent, J., Mascheroni, G. and Ólafsson, K (2014) Net Children Go Mobile, the UK Report.

<http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20III/Reports/NCGMUKReportfinal.pdf>

<sup>20</sup> Mascheroni, G. and Cuman A. (2014) Net Children Go Mobile: Final Report (with country fact sheets).

[http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/NCGM\\_FinalReport\\_Country\\_DEF.pdf](http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/NCGM_FinalReport_Country_DEF.pdf)

<sup>21</sup> The Communications Market Report 2016, Ofcom. [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/26826/cmr\\_uk\\_2016.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/26826/cmr_uk_2016.pdf)

<sup>22</sup> Power of Image: A report into the influence of images and videos in young people's digital lives, UK Safer Internet Centre, 2017:

<https://d1afx9quaogywf.cloudfront.net/cdn/farfuture/QJdfc3eLb1dtCGdoXveKonZd7ln12diuLEglGIW73Bk/mtime:1486223538/sites/default/files/Safer%20Internet%20Day%202017/Power%20of%20Image%20-%20a%20report%20into%20the%20influence%20of%20images%20and%20videos%20in%20young%20people%27s%20digital%20lives.pdf>

also been isolated examples of livestreaming of distressing content, such as assaults, and of young people livestreaming suicide attempts.

Another example of the way in which the internet landscape is constantly evolving is the latest generation of virtual reality headsets, which are now on sale and are likely to rise in popularity in the next five years.

These new developments, coupled with the increase in more private ways of going online, such as through instant messaging and smart phones, pose new challenges for those concerned with the impact of online activity on young people's mental health. This constantly changing environment creates complexity for policy-makers, who are often still engaged in responding to earlier developments (such as the initial growth in social media networks).

The speed of technological development indicates that a strategy based on eliminating all online risk is likely to be unsuccessful.

## Part 2: Positive impacts of social media

Social media has many positive aspects for young people, including:<sup>23</sup>

- Connecting with friends and family, especially over long distances, such as by sharing pictures and videos, and therefore addressing social isolation and loneliness;
- Making new friends<sup>24</sup> particularly with people with shared interests;
- Community involvement, such as charitable or political activism;
- Sharing new creative projects such as online videos, blogs and podcasts;
- Developing an individual identity during adolescence;
- Collaborating on projects through online communities (for example, a homework whatsapp group for people in the same class or a twitter hashtag for those studying for school or university exams),<sup>25</sup> including interaction with teachers online;
- Accessing health information online and finding supportive networks of people with similar conditions.<sup>26</sup>

While much media attention has focused on the risk of harm caused by social media, some studies have shown a positive impact on young people. Use of social media has, for example, been associated with improved social skills amongst teenagers (such as helping shy young people become more socially active).<sup>27</sup>

Young people tend to view social media as a positive influence in their lives, in particular, valuing the social benefits it can provide. These include talking to friends online, expressing themselves and having the opportunity to be creative.<sup>28</sup> Teenagers find social networks help them to hone their social skills and are a valuable source of advice and emotional support.<sup>29</sup> In the PISA wellbeing study of 15 year old students, 90.5 per cent of boys and 92.3 per cent of girls in the UK agreed or strongly agreed with the statement “*It is very useful to have social networks on the internet*”. This was much higher than the OECD average (82.1 per cent and 86.5 per cent respectively).<sup>30</sup>

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<sup>23</sup> Ito, M., Horst, H., Bittanti M., et al. (2008) Living and Learning with New Media: Summary of Findings From the Digital Youth Project. John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning:.

<http://digitalyouth.ischool.berkeley.edu/files/report/digitalyouth-WhitePaper.pdf>

Boyd, D. (2007) Why youth (heart) social network sites: the role of networked publics in teenage social life. In: Buckingham D ed. MacArthur Foundation Series on Digital Learning: Youth, Identity, and Digital Media Volume. Cambridge, MA: MIT Press:

[www.danah.org/papers/WhyYouthHeart.pdf](http://www.danah.org/papers/WhyYouthHeart.pdf)

<sup>24</sup> Lenhart, A., Smith, A., Anderson, M., Duggan, M. and Perrin, A., (2015) Teens, Technology and Friendships. Pew Research Center: <http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/>

<sup>25</sup> Boyd D. Taken Out of Context: American Teen Sociality in Networked Publics, Berkeley, CA: University of California; 2008: [www.danah.org/papers/TakenOutOfContext.pdf](http://www.danah.org/papers/TakenOutOfContext.pdf).

<sup>26</sup> Nevertheless young people do risk encountering inaccuracies online and may need guidance to identify reliable sources and navigate potentially overwhelming amounts of information. Lenhart A., Purcell, K., Smith, A. and Zickhur, K. (2010) Social Media and Young Adults. Pew Research Center. <http://pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx>.

<sup>27</sup> Rosen, L.D., (2011). Social Networking's Good and Bad Impacts on Kids. American Psychological Association:

<http://www.apa.org/news/press/releases/2011/08/social-kids.aspx>

<sup>28</sup> Lilley, C., Ball, R. and Vernon, H. (2014) The experiences of 11-16 year olds on social networking sites. NSPCC:

<https://www.nspcc.org.uk/globalassets/documents/research-reports/experiences-11-16-year-olds-social-networking-sites-report.pdf>

<sup>29</sup> O’Keeffe, G. S. and Clarke-Pearson, K. (2011) The Impact of Social Media on Children, Adolescents, and Families. Pediatrics. 127(4), pp.800–804.

<sup>30</sup> PISA 2015 Results STUDENTS’ WELL-BEING VOLUME III, OECD, April 2016: <http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>



## Finding support online

The internet, and social media, can also be a valuable source of information and support for young people with mental health problems. The vast majority (78 per cent) of young people contacting Childline now do so online, via email or online chat, and more counselling from the service (59 per cent) now takes place online than by telephone.<sup>31</sup>

The Crisis Text line service in the US is an example of young people accessing help through new media.<sup>32</sup> Teenagers send a text to the organisation, staffed with expert counsellors, when they are in any kind of crisis, such as having suicidal thoughts or being abused. The organisation uses its online platform to share anonymous data on service usage to help researchers understand patterns in young people's mental health. For example, the data shows that young people are most likely to contact the service having experienced anxiety on a Wednesday and less likely to seek support on a weekend.<sup>33</sup>

The Chief Medical Officer has noted that social media may widen access for groups who find it difficult to access traditional services, through access to support out of traditional hours and from a young person's own home.<sup>34</sup> A range of companies now provide online support and counselling for young people in the UK.<sup>35</sup>

Where young people are at risk of suicide, they often turn to the internet for support. While the risks of this approach have been outlined above, there are also positive benefits of the internet, such as access to peer support groups.<sup>36</sup> Evidence indicates that online suicide prevention may be effective and that social media provides an opportunity to identify and support those at risk.<sup>37</sup>

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<sup>31</sup>Can I Tell You Something: What's Affecting Children in 2013, ChildLine [https://www.nspcc.org.uk/globalassets/documents/research-reports/childline-review-2012-2013.pdf? t\\_id=1B2M2Y8AsgTpgAmY7PhCfg%3d%3d& t\\_q=can+i+tell+you+something& t\\_tags=language%3aen%2csiteid%3a7f1b9313-bf5e-4415-abf6-aaf87298c667& t\\_ip=217.34.50.8& t\\_hit.id=Nspcc Web Models Media GenericMedia/ 2237db4b-fe86-4b45-9fed-be6867de5a6d& t\\_hit.pos=1](https://www.nspcc.org.uk/globalassets/documents/research-reports/childline-review-2012-2013.pdf? t_id=1B2M2Y8AsgTpgAmY7PhCfg%3d%3d& t_q=can+i+tell+you+something& t_tags=language%3aen%2csiteid%3a7f1b9313-bf5e-4415-abf6-aaf87298c667& t_ip=217.34.50.8& t_hit.id=Nspcc Web Models Media GenericMedia/ 2237db4b-fe86-4b45-9fed-be6867de5a6d& t_hit.pos=1)

<sup>32</sup> <http://www.crisistextline.org/>

<sup>33</sup> Crisistrends.org

<sup>34</sup> Public Mental Health Priorities: Investing in the Evidence, Annual Report of the Chief Medical Officer 2013 [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/413196/CMO\\_web\\_doc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/413196/CMO_web_doc.pdf)

<sup>35</sup> Examples of online mental health support are provided by the NHS online: <http://www.nhs.uk/conditions/online-mental-health-services/Pages/introduction.aspx>

<sup>36</sup> <http://www.samaritans.org/digitalfutures>

<sup>37</sup> Christensen, H., Batterham, P. and O'Dea, B., (2014) E-Health Interventions for Suicide Prevention. International Journal of Environmental Research and Public Health.

Sueki, H. (2015) The association of suicide-related Twitter use with suicidal behaviour: A cross-sectional study of young internet users in Japan. Journal of Affective Disorders 170 pp.155-160.

Jashinsky, J., Burton, S.H., Hanson, C.L., West, J., Giraud-Carrier, C. et al. (2014) Tracking suicide risk factors through Twitter in the US. Crisis. PubMed 35: 51-59

## Part 3: Online risks and the potential for harm to mental health and wellbeing

Numerous studies have been undertaken to understand the relationship between young people's internet use and their wellbeing, which will be outlined further in this section. These explored a range of risks associated with social media, such as:

- the impact of excessive time spent online;
- sharing too much information;
- being cyber-bullied;
- the influence of social media on body image;
- sourcing of harmful content or advice, such as websites or social networks enabling the promotion of self-harm;

Studies have also investigated the relationship between these online risks and both general wellbeing (including impact on sleep or general anxiety, such as the fear of missing out) and specific mental health conditions.

### Concern about excessive time spent online

One concern frequently raised is the effect of young people spending a great deal of their time on the internet. Ofcom research in 2016<sup>38</sup> explored this issue and found that 59 per cent of UK 16-24 year olds agreed that they spent too much time online. A quarter (25 per cent) said that they feel nervous and/or anxious when they are offline (this phenomenon is sometimes described as FOMO or 'fear of missing out'). Nearly four in ten (37 per cent) of 16-24s said that they had neglected their work or job.

Teenagers however were less likely to think they spent too much time online: only 37 per cent thought this. Nevertheless, their other responses provided evidence to the contrary:

- Nearly 8 in 10 (78 per cent) had been told off by their parents for spending too much time on the internet.
- 72 per cent said they had missed out on sleep because of their online habits.
- 60 per cent agreed that they had neglected their schoolwork or studies.

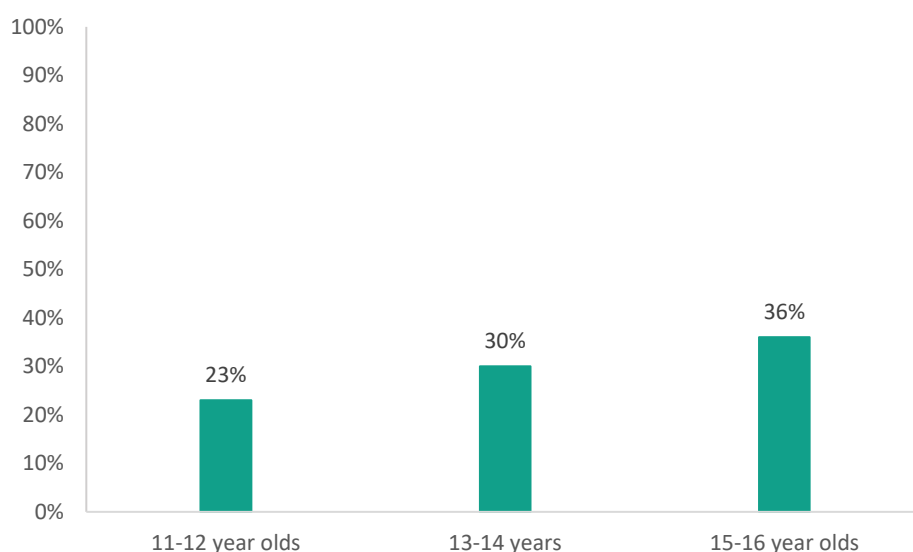
The EU Kids Online study drew on an established set of questions to identify excessive use of the internet (such as whether the child had unsuccessfully tried to spend less time online).<sup>39</sup> They found that excessive use increases with age: 23 per cent of 11-12 year olds report it, rising to 36 per cent for 15-16 year olds.

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<sup>38</sup> The Communications Market Report 2016, Ofcom. [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/26826/cmr\\_uk\\_2016.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/26826/cmr_uk_2016.pdf)

<sup>39</sup> Hasebrink, U., Görzig, A., Haddon L., Kalmus, V., and Livingstone S., (2011) Patterns of risk and safety online: in-depth analyses from the EU Kids Online survey of 9- to 16-year-olds and their parents in 25 European countries. EU Kids Online study of children and young people's internet behaviours across Europe: [http://eprints.lse.ac.uk/39356/1/Patterns\\_of\\_risk\\_and\\_safety\\_online\\_%28LSERO%29.pdf](http://eprints.lse.ac.uk/39356/1/Patterns_of_risk_and_safety_online_%28LSERO%29.pdf)

**Figure 3.1: Excessive internet use by age in EU children**



This research indicates that there is concern amongst young people and their families about their overall time spent online.

The PISA Wellbeing study asked 15 year olds about their feelings about their internet use. Around 6 in 10 young people in the UK agreed that *“I forget about time when I’m using digital devices”* and *“I feel really bad if no internet connection is possible”*.<sup>40</sup>

### Sharing too much?

The internet, and social networks in particular, have changed the way we think about privacy and sharing personal information outside our personal friendship networks. Researchers have described an ‘online disinhibition effect’ where people are more likely to share personal information or display more intense behaviour than they would offline, including anti-social behaviour such as rude language and harsh criticisms.<sup>41</sup>

The growth of smart phones has increased the opportunity for young people to access social media at times when they are vulnerable, for example when they have been drinking or are in a very emotional state. This has, in turn, increased the opportunities for young people to share personal information, photos and video content on social networks, or to livestream their activities. This has increased the risks of young people ‘sharing too much’. Regulatory frameworks on issues such as data protection and privacy have not kept pace with technological change, and this can hinder young people’s ability to control their online presence.<sup>42</sup>

Concerns have been raised about the sending of nude images online, although the evidence indicates that this is not a widespread problem. Only a small minority of young people are likely to send nude images of themselves via social media. A 2016 study by Middlesex University for the NSPCC found 2.9 per cent of children aged 11 to 16 had taken a fully naked picture of themselves, 55

<sup>40</sup> 61.6 per cent of boys agreed that *“I forget about time when I’m using digital devices”* and 64.1 per cent agreed that *“I feel really bad if no internet connection is possible”*. For girls, the figures were 68.5 and 66.4 per cent.

<sup>41</sup> Suler, J. (2004) The online disinhibition effect. *Cyberpsychol Behav*: <https://www.ncbi.nlm.nih.gov/pubmed/15257832>.

<sup>42</sup> Livingstone, S., Carrier, J. and Walden, I. (2012) The legal basis of children’s and young people’s engagement with the internet. (Unpublished) This version available at: <http://eprints.lse.ac.uk/55435/>

per cent of whom had shared the image.<sup>43</sup> Although this issue is not widespread, having had a personal image of this sort shared without their consent can have damaging consequences for a young person's wellbeing.

## Cyberbullying

Cyberbullying can be defined in different ways, but is most often used to describe any kind of bullying behaviour that occurs online, for example through social networks or instant messaging. There are many types of bullying online behaviour such as:<sup>44</sup>

- Sending or posting abusive or threatening messages
- Creating and sharing embarrassing photos or videos
- Sharing secrets about someone online without their consent
- Intentionally leaving someone out of an online activity or friendship group
- Voting on someone in an abusive poll
- Creating a website with mocking or critical content about someone
- Hijacking online identities or creating a fake profile to damage another's reputation
- Sending explicit messages or encouraging a young person to send a text, then sharing that more widely
- Cyberstalking: Continuously harassing and denigration including threats of physical harm

Particular aspects that make cyber-bullying different from offline bullying are that:

- While young people can get respite from bullying at school at evenings and weekends, online bullying is not limited by school timetables or physical presence within the school building;
- A single incident can be shared and forwarded multiple times;<sup>45</sup>
- The use of technology provides anonymity and allows for more frequent sexual or violent content and greater cruelty compared with face-to-face bullying.<sup>46</sup>

The Net Children Go Mobile study<sup>47</sup> in 2014 found that while a minority (12 per cent) of UK 9 to 16 year olds had experienced cyber-bullying, this has risen from 8 per cent in four years since 2010. Some children surveyed for the study reported concerns that this rise was linked to the increased privacy of access to the internet via smart phones and through free messaging services. Girls were more likely to have been bullied than boys.

Estimates differ on whether cyberbullying is as prevalent as offline bullying. In fact, studies indicate that there is a link between the two, with young people using both internet and face to face

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<sup>43</sup>Martellozzo, E., Monaghan, A., Adler, J.R., Davidson, J., Leyva, R. and Horvath, M.A.H. (2016) I wasn't sure it was normal to watch it. London: NSPCC <https://www.nspcc.org.uk/globalassets/documents/research-reports/mdx-nspcc-occ-pornography-report.pdf>

<sup>44</sup> Cyber Bullying Statistics, NSPCC, <https://noblebullying.com/cyber-bullying-statistics-2014/>

<sup>45</sup> Slonje, R., and Smith, P.K. (2008) Cyberbullying: another main type of bullying? *Scand J Psychol*.

<sup>46</sup> Kiriakidis, S.P., and Kavoura, A. (2010) Cyberbullying: a review of the literature on harassment through the Internet and other electronic means. *Fam Community Health*.

Mitchell, K.J., Ybarra, M., Finkelhor, D. (2007) The relative importance of online victimization in understanding depression, delinquency, and substance use. *Child Maltreat*.

Valkenburg, P.M., Peter, J. (2011) Online communication among adolescents: an integrated model of its attraction, opportunities, and risks. *J Adolesc Health*.

<sup>47</sup> Mascheroni, G. and Cuman A. (2014) Net Children Go Mobile: Final Report (with country fact sheets).

[http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/NCGM\\_FinalReport\\_Country\\_DEF.pdf](http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/NCGM_FinalReport_Country_DEF.pdf)

communication to bully others.<sup>48</sup> This indicates that, while cyberbullying may be different in some respects to offline bullying, it is part of the same problem and cannot be addressed in isolation.

Studies suggest the majority of online bullying victims know the person bullying them.<sup>49</sup> These findings imply that while the method of bullying may have changed, the relationship between the perpetrator and the victim has not.

Research has suggested that cyberbullying, like offline bullying, has a negative impact on young people's wellbeing<sup>50</sup> such as reduced confidence or self-esteem.<sup>51</sup>

## Body image

Researchers have also explored the impact of social media on young people's self-esteem, and in particular their happiness with their own bodies. With the advent of smartphone cameras, and the development of online filters and image-manipulation techniques, there has been a rise in the popularity of 'selfies'. This has led to concerns about the abundance of idealised images of beauty on social networks and the impact this has on young people's view of their own appearance. While the prevalence of photoshopped images of models and celebrities in magazines is not a novel issue, the rise of social media has led to this kind of manipulated image being posted by a teenager's own personal contacts. The hypothesis is that this more personal comparison has a stronger effect on a young person's self-esteem.

There is some evidence of this negative impact. A study by the University of the West of England linked time spent by teenage girls on social media with body image concerns, particularly "*higher levels of internalisation of the thin ideal, body surveillance and dieting, and lower body esteem*".<sup>52</sup> A University of Glasgow study has noted similar effects for young adults.<sup>53</sup>

## Harmful information and advice online

Another potential risk is that young people can access harmful information on the internet or make online connections with people who encourage self-harm. For example, some websites imply that unhealthy behaviours, such as anorexia and self-harm, can be normal lifestyle choices.<sup>54</sup> Social media also provides the opportunity for online groups to form that promote these unhealthy behaviours.<sup>55</sup>

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<sup>48</sup> Lenhart, A. (2007). Cyberbullying. Pew Research Center. Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) Patterns of risk and safety online: in-depth analyses from the EU Kids Online survey of 9- to 16-year-olds and their parents in 25 European countries: [http://eprints.lse.ac.uk/39356/1/Patterns\\_of\\_risk\\_and\\_safety\\_online\\_%28LSERO%29.pdf](http://eprints.lse.ac.uk/39356/1/Patterns_of_risk_and_safety_online_%28LSERO%29.pdf)

<sup>49</sup> Hinduja, S. and Patchin, J. (2009). Bullying Beyond the Schoolyard: Preventing and Responding to Cyberbullying. Thousand Oaks, CA: Sage.

<sup>50</sup> Spears, B. A., Taddeo, C. M., Daly, A. L., Stretton, A. and Karklins, L. T. (2015). Cyberbullying, help-seeking and mental health in young Australians: Implications for public health. *International Journal of Public Health*. . doi:10.1007/s00038-014-0642-y.

<sup>51</sup> Douglas, T., von Kaenel-Flatt, J., and O'Brien, J. (2012). Beatbullying Virtual Violence II: Progress and Challenges in the Fight against Cyberbullying.

<sup>52</sup> Tiggerman and Slater (2014). NetTweens: The Internet and Body Image Concerns in Preeteenage Girls). NetGirls: The Internet, Facebook, and body image concern in adolescent girls.

Tolman, D., Impett, E., Tracy, A., and Michael, A. (2006). Looking good, sounding good: femininity, ideology and adolescent girls' mental health. *Psychology of Women Quarterly*..

<sup>53</sup> Manago, A.M., Ward, L.M., Lemm, K.M. et al. (2015). Facebook Involvement, Objectified Body Consciousness, Body Shame, and Sexual Assertiveness in College Women and Men". *Sex Roles*.

Eckler P. et al. (2016). Facebook Use and Negative Body Image Among U.S. College Women. *Women and Health*.

Briggs, H. (2014). 'Selfie' body image warning issued. BBC News: <http://www.bbc.co.uk/news/health-26952394>

<sup>54</sup> Andrist, L.C. (2003). Media images, body dissatisfaction, and disordered eating in adolescent women. *MCN Am J Matern Child Nurs*.

Luxton, D.D., June, J.D. and Fairall, J.M. (2012). Social media and suicide: a public health perspective. *Am J Public Health*. Whitlock, J.L., Powers, J.L. and Eckenrode, J. (2006). The virtual cutting edge: the internet and adolescent self-injury. *Dev Psychol*.

<sup>55</sup> Bell V. (2007). Online information, extreme communities and internet therapy: is the Internet good for our mental health? *J Ment Health*.

Studies have shown that it is very easy to find pro-suicide information, such as detailed information on methods, on the internet:<sup>56</sup>

- 11 per cent of 11-16 year olds in Europe have seen websites where people discuss ways of hurting themselves.
- 6 per cent have seen suicide websites.
- 13 per cent of 11-16 year olds have seen sites that promote eating disorders; rising to 16 per cent for those aged between 13-14 years.<sup>57</sup>

Another concern is the risk of ‘contagion’ where young people are encouraged to take their own lives after witnessing others describing suicidal thoughts or leaving suicide notes on social media.<sup>58</sup> More recently, there have been several reported incidents of young people livestreaming suicides on social media.<sup>59</sup>

A systematic review<sup>60</sup> of research on the internet and self-harm amongst young people found that while young people most often use the internet to find help, there is the risk that the internet can normalise self-harm and discourage young people from talking about their problems and seeking professional help. It is not possible, however, to conclude that access to the internet and social media makes it more likely that an at-risk young person will self-harm or seek to take their own life.

## Online risk and young people’s wellbeing

The Net Children Go Mobile study asked children if they had experienced one or more of seven online ‘risks’, such as bullying, seeing sexual content or harmful user generated content, such as pro self-harm content. 34 per cent of those in the UK had experienced at least one of the risks.<sup>61</sup> Exposure to such risks increases by age. We can therefore conclude that young people in the UK are likely to experience some examples of the risks explored above through using the internet.

While we do need to assess how far young people are experiencing risk, to understand its impact on wellbeing, it is also important to investigate what harm has been caused by such experiences. It appears that exposure to online risks does not always cause harm to young people. Only 15 per cent of UK 9-16 year olds who use the internet have been bothered by something they experienced online, according to Net Children Go Mobile.<sup>62</sup> Girls and older teenagers were more likely to have experienced this.

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<sup>56</sup> Biddle, L., Donovan, J., Hawton, K., Kapur, N. and Gunnell, D. (2008). Suicide and the Internet2: <https://www.ncbi.nlm.nih.gov/pubmed/18403541>

<sup>57</sup> Mascheroni, G., and Ólafsson, K. (2014) Net Children Go Mobile: Risks and opportunities. Second Edition: [http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/DEF\\_NCGM\\_SecondEdition\\_Report.pdf](http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/DEF_NCGM_SecondEdition_Report.pdf)

<sup>58</sup> Baume, P., Cantor, C.H. and Rolfe, A. (1997). Cybersuicide: the role of interactive suicide notes on the Internet. Crisis: [\[PubMed\]](#)

<sup>59</sup> Dean, S. Facebook to use artificial intelligence to combat suicides. (2017). Telegraph: <http://www.telegraph.co.uk/technology/2017/03/01/facebook-use-artificial-intelligence-combat-suicides/>

<sup>60</sup> Daine et al. (2013) The Power of the Web: A Systematic Review of Studies of the Influence of the Internet on Self-Harm and Suicide in Young People. University of Granada.

<sup>61</sup> Mascheroni, G. and Cuman A. (2014) Net Children Go Mobile: Final Report (with country fact sheets). p25. [http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/NCGM\\_FinalReport\\_Country\\_DEF.pdf](http://netchildrengomobile.eu/ncgm/wp-content/uploads/2013/07/NCGM_FinalReport_Country_DEF.pdf)

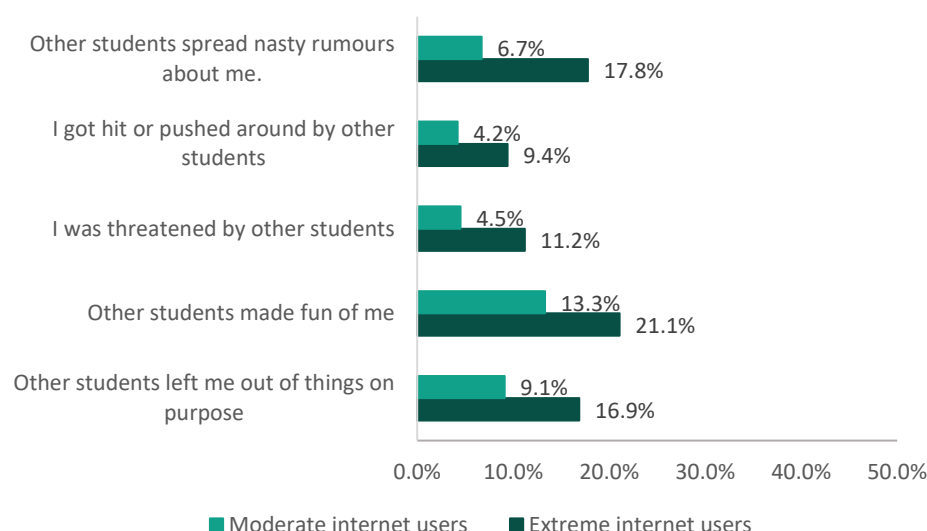
<sup>62</sup> Livingstone, S., Haddon, L., Vincent, J., Mascheroni, G., and Ólafsson, K. (2014b) Net Children Go Mobile, the UK Report. <http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20III/Reports/NCGMUKReportfinal.pdf>

According to EU Kids Online, Bullying is the online risk that most upsets young people,<sup>63</sup> with 85 per cent of those who had been a victim of cyber-bullying reporting that they had been upset by it. In contrast, only about a quarter of the children who saw sexual content online found it upsetting. Younger children were more likely to feel upset by viewing sexual content or meeting online contacts offline, but younger and older children were upset equally by cyber-bullying. Girls are more likely to be upset by online bullying and sexual content than boys.

The PISA Wellbeing report explored the relationship between internet use and various aspects of young people's wellbeing. 'Extreme internet users' were less likely than moderate internet users to report a sense of belonging at school, and were more likely to report feeling lonely at school. Only 59.1 per cent of 'extreme internet users' agreed that *"I feel like I belong at school"* compared to 74.2 per cent of moderate internet users, a difference of 15.1 per cent.<sup>64</sup>

The study also looked at associations between young people being bullied and their internet use. Extreme internet users were more likely to report bullying: 17.8 per cent stated *"other students spread nasty rumours about me"* compared to 6.7 per cent of moderate internet users, a difference of 11.2 per cent. 21.1 per cent said *"other students make fun of me"* compared to 13.3 per cent of moderate internet users (a difference of 7.8 per cent).

**Figure 3.2: Being bullied at school, by time spent on the Internet outside of school on weekdays**



The OECD also explored the overall relationship between excessive internet use and young people's wellbeing. 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.

<sup>63</sup> Hasebrink, U., Görzig, A., Haddon, L., Valmus, and Livingstone, S. (2011). Patterns of risk and safety online: in-depth analyses from the EU Kids Online survey of 9- to 16-year-olds and their parents in 25 European countries::

[http://eprints.lse.ac.uk/39356/1/Patterns\\_of\\_risk\\_and\\_safety\\_online\\_%28LSERO%29.pdf](http://eprints.lse.ac.uk/39356/1/Patterns_of_risk_and_safety_online_%28LSERO%29.pdf)

<sup>64</sup> Extreme internet users were recorded as those who spent six hours or more online on a typical weekday. Moderate users were those who spent between one and two hours online. PISA 2015 Results STUDENTS' WELL-BEING VOLUME III, OECD, April 2016:

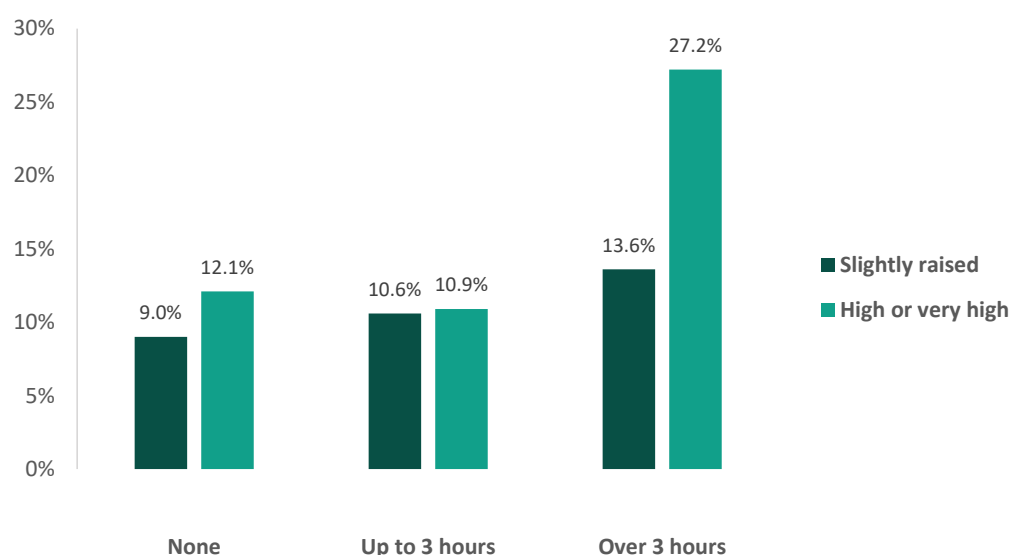
<http://www.oecd.org/edu/pisa-2015-results-volume-iii-9789264273856-en.htm>

This may be a sign that young people are using the internet as a coping mechanism when they experience difficulties at school. Equally, it could be the case that excessive internet use is preventing these young people from developing stronger relationships offline.

## Social media and mental health problems

In addition to the impact on young people's wellbeing and life satisfaction, there also appears to be a link with mental health problems. In 2015, the Office for National Statistics<sup>65</sup> found that there is a "clear association" between time spent on social media and mental health problems. While 12 per cent of children who spend no time on social networking websites have symptoms of mental ill health, the figure rises to 27 per cent for those who are on the sites for three or more hours a day. One in 10 girls was found to be in the top category for time spent on the websites, compared to just one in 20 boys.

**Fig 3.3: Total difficulties score category (based on Strengths and Difficulties Questionnaire) by time spent on social networking websites, 2011 to 2012**



Source: Understanding Society, the UK Household Longitudinal Study, Office of National Statistics, 2011-12

Research has linked excessive internet use with depression,<sup>66</sup> and social media use with poor sleep quality<sup>67</sup> and other social and emotional problems. Potential negative effects include increased physiological arousal, decreased attention, hyperactivity, aggression, antisocial or fearful behaviour, social isolation and excessive use or 'technological addiction'.<sup>68</sup> The use of mobile technologies such

<sup>65</sup>Measuring National Well-being: Insights into children's mental health and well-being, ONS, 2015.

<sup>66</sup> Morrison, C.M. and Gove, H. (2010). The relationship between excessive internet use and depression: a questionnaire-based study of 1,319 young people and adults. Psychopathology. Reported in *Science A Go Go*. (2010): [www.scienceagogo.com/news/20100102231001data\\_trunc\\_sys.shtml](http://www.scienceagogo.com/news/20100102231001data_trunc_sys.shtml).

<sup>67</sup> Punamäki, R.L. et al. (2007). Use of information and communication technology (ICT) and perceived health in adolescence: the role of sleeping habits and waking-time tiredness. *Journal of Adolescence*, 30(4):569–585.

NatCen Social Research (2013). Predictors of Wellbeing. Commissioned by the Department of Health: [www.natcen.ac.uk/study/predictors-of-wellbeing](http://www.natcen.ac.uk/study/predictors-of-wellbeing)

Heim, J., Brantzaeg, P.B. Kaare, B.H. et al. (2007) Children's usage of media technologies and psychosocial factors. *New Media & Society*, vol. 9 (pg. 425-454)

Cleland Woods, H. Scott, H. University of Glasgow, 2016

<sup>68</sup> Chief Medical Officer Annual Report 2013, Public Mental Health Priorities: Investing in the Evidence:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/413196/CMO\\_web\\_doc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/413196/CMO_web_doc.pdf). Report cites:

Anderson CA. An update on the effects of playing violent video games. *J Adolesc.* 2004 Feb;27(1):113-22.



as smartphones have also been linked to anxieties about conforming with social norms<sup>69</sup> and the need for “likes”: external validation from friends for personal content posted online.<sup>70</sup> Time spent online has also been associated with a decline in academic achievement and participation in offline social interaction.<sup>71</sup>

The evidence suggests a "dose-response" relationship, where each additional hour of viewing increases the likelihood of experiencing socio-emotional problems.<sup>72</sup> Nevertheless, these are indicators of association and do not necessarily prove that social media causes harm to young people's wellbeing.<sup>73</sup> For example, it could be that someone already experiencing a mental health problem is more likely to use social media, or that there are other relevant factors.

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Kappos AD. The impact of electronic media on mental and somatic children's health. *Int J Hyg Environ Health*. 2007 Oct;210(5):555-62.  
 Mathers M, Canterford L, Olds T, Hesketh K, Ridley K, Wake M. Electronic media use and adolescent health and well-being: cross-sectional community study. *Acad Pediatr*. 2009 Sep-Oct;9(5):307-14.  
 Zimmerman FJ, Christakis DA. Associations between content types of early media exposure and subsequent attentional problems. *Pediatrics*. 2007 Nov;120(5):986-92.

<sup>69</sup> UK Council for Child Internet Safety, Net Children Go Mobile: UK Qualitative Research Results, 2015:

[http://www.saferinternet.org.uk/downloads/Research\\_Highlights/UKCCIS\\_RH83\\_Net\\_Children\\_Go\\_Mobile\\_Qualitative\\_Research\\_UK\\_Results\\_2.pdf](http://www.saferinternet.org.uk/downloads/Research_Highlights/UKCCIS_RH83_Net_Children_Go_Mobile_Qualitative_Research_UK_Results_2.pdf) [Accessed: 10th August 2015]

<sup>70</sup> Lenhart, A., Smith, A., Anderson, M., Duggan, M., Perrin, A., Teens, Technology and Friendships. Pew Research Center, 2015:

<http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/>

Teens, Technology and Friendships. Pew Research Center. Lenhart, A., Smith, A., Anderson, M., Duggan, M., Perrin, A., (2015b): <http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships>

<sup>71</sup> Rosen, L.D., (2011). Social Networking's Good and Bad Impacts on Kids. Retrieved from <http://www.apa.org>

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<sup>71</sup> University of California at Los Angeles (UCLA), *Computers in Human Behaviour*, 2014

<sup>72</sup> How healthy behaviour supports children's wellbeing, Public Health England, 2013.

Electronic screen use and mental well-being of 10–12-year-old children. Fei Yang Asgeir R. Helgason Inga Dora Sigfusdottir Alfgeir Logi Kristjansson. *Eur J Public Health* (2012) 23 (3): 492-498. DOI: <https://doi.org/10.1093/eurpub/cks102>

<sup>73</sup> Online Social Networking and Addiction—A Review of the Psychological Literature

Daria J. Kuss\* and Mark D. Griffiths <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3194102/>

## Part 4: Responses to online risk

Young people use a range of coping mechanisms to deal with online risk. Research by the NSPCC<sup>74</sup> found that only 22 per cent of children who were upset by something they had seen online talked with someone else face to face about the experience. Of those who did seek face to face support, older children were more likely to turn to friends, whereas younger children more often chose to confide in their parents. The fact that only one in five children would tell someone about an upsetting experience indicates the challenges faced by parents and teachers in ensuring that children are supported to cope with such experiences.

As young people are not always likely to ask for support, it is important that they learn digital skills to protect themselves from online risks. The Net Children Go Mobile study asked children about twelve 'digital skills', such as being able to block a user or update their privacy settings.

Overall, children in the UK claimed to be able to do half the things asked about. Younger children lack significant skills. On average 11-12 year olds could do 2.8 of the skills asked about compared to 5.2 for 15 to 16 year olds. Fewer than half of 11 to 13 year olds can block unwanted messages, for example, and only a third can compare websites to decide if information is true. Boys are slightly more skilled than girls.<sup>75</sup> Children from high socio-economic backgrounds are more skilled than those from low SES background.

Comparison with the EU Kids Online study in 2010 showed that children are more likely to have social media related skills than they did in 2010. Smart phone and tablet users claimed nearly twice as many skills as those without these devices. These findings support the idea that the more children use the internet, the more skills they develop. The research also demonstrates the value of actively teaching younger children about these digital skills to help them navigate the internet safely.

### Parental involvement

There has been much debate about the skills of parents who grew up without social media to handle the difficulties faced by their children in today's online world. 38 per cent of children interviewed by the Net Children Go Mobile study<sup>76</sup> felt it was 'very true' that they knew more about the internet than their parents. 58 per cent of those who had smart phones felt that it was 'very true' that they knew more than their parents about using them.

The Net Children Go Mobile study explored parental responses to online risk for their children. This was grouped into 'active mediation' and 'restrictive mediation':

- Active mediation involves talking with children about their activities and sharing these activities with them as well as guiding them in online safety.
- Restrictive mediation involves setting up rules about what children can or cannot do online, installing filters to block harmful content and monitoring a child's online activity by looking

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<sup>74</sup> The experiences of 11-16 year olds on social networking sites, Lilley, Ball & Vernon, NSPCC, 2014:

<sup>75</sup> Boys claimed 4.3 skills whereas girls had 4.0 of the skills asked about.

<sup>76</sup> Net Children Go Mobile Final Report (with country fact sheets) – November 2014

[Mascheroni, G., & Cuman, A., \(2014\). Net Children Go Mobile: Final Report \(with country fact sheets\). Deliverables D6.4 and D5.2. Milano: Educatt.](#)

at their internet history, installing monitoring software or checking a child's social network profile.

According to the study, 86 per cent of UK parents actively mediated their children's internet safety (using two or more strategies asked about). Common strategies adopted were explaining why some websites were good or bad, or suggesting safer internet usage. A smaller proportion (67 per cent) used restrictive mediation such as time limits or restriction of use of certain applications. Only 45 per cent used technical solutions to restrict their child's internet use, such as filters or monitoring apps.

The EU Kids Online study<sup>77</sup> also examined parents' strategies to mediate their children's internet use. Parental involvement was seen to relax as children got older and those with lower socio-economic status were less likely to restrict internet use. Parents were slightly more likely to restrict girls' use of the internet than boys (87 per cent compared to 83 per cent).

Restrictive mediation was seen to reduce the likelihood of a young person experiencing online risk but not to reduce harm caused to those who experience risks. It was also linked to the young person having a lower level of digital skills. The researchers concluded:

*"The more children do online, the more skills they have and the more they judge that they know a lot about the internet. Or the more skills and/or self-confidence children have, the greater the range of online activities they undertake. But the converse is also the case – the less of one of these, the less likely the others".*

This finding indicates that restricting a young person's access to the internet could inhibit the development of the skills needed to handle online risk. Other evidence also suggests that excessive parental controls can inhibit the acquisition of internet safety skills – especially in older children.<sup>78</sup> Research with teenagers in the UK on online resilience indicates that learning from experience is associated with developing skills to manage online risks.<sup>79</sup> It is therefore possible to conclude that policy solutions should be focused on building young people's resilience and their digital skills by supporting them to use the internet safely rather than by restricting their use of social media.

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<sup>77</sup> Patterns of risk and safety online: in-depth analyses from the EU Kids Online survey of 9- to 16-year-olds and their parents in 25 European countries, Uwe Hasebrink, Anke Görzig, Leslie Haddon, Veronika Kalmus, and Sonia Livingstone, 2011.

[http://eprints.lse.ac.uk/39356/1/Patterns\\_of\\_risk\\_and\\_safety\\_online\\_%28LSERO%29.pdf](http://eprints.lse.ac.uk/39356/1/Patterns_of_risk_and_safety_online_%28LSERO%29.pdf)

<sup>78</sup> Ofcom, Children's Media Lives: Year 1 Findings, 2015. [http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/childrens-media-lives-year-1/childrens\\_media\\_lives\\_report\\_FINAL1.pdf](http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/childrens-media-lives-year-1/childrens_media_lives_report_FINAL1.pdf)

<sup>79</sup> Przybylski, A. K., Mishkin, A., Shotbolt, V., and Linington, S. (2014) A shared responsibility: building children's online resilience: [http://parentzone.org.uk/system/files/attachments/VM%20Resilience%20Report\\_1.pdf](http://parentzone.org.uk/system/files/attachments/VM%20Resilience%20Report_1.pdf)

## Part 5: Policy responses

The UK Government has, over the last ten years, taken action to help address online safety concerns. Commissioned by the then Labour Government, the 2008 Byron Review of Internet Safety set out a series of recommendations on regulating internet access and building resilience in children and young people. The review led to the establishment of the cross-government UK Council for Child Internet Safety, which brings together 200 organisations across industries, academia, charities and law enforcement and parenting groups, working together to equip children and young people to identify and respond to online risks. UKCCIS collates internet safety research, conducts its own consultations and gives advice to industry providers. For example, in 2016, it established four new working groups covering digital resilience, technical developments, evidence and education.

In September 2014, the Government<sup>80</sup> introduced age-appropriate lessons on e-safety across all stages of the National Curriculum, from age 5 to age 11. Children are taught how to use technology safely and respectfully, how to keep personal information private and where to go for help and support when they have concerns about content on the internet or other online technologies. Schools are also able to teach pupils about the use of social media and to learn strategies for keeping physically and emotionally safe, including safety online, as part of their Personal, Social, Health and Economic (PSHE) lessons.

The Department for Education has issued statutory guidance ‘Keeping children safe in education’,<sup>81</sup> which includes new obligations to have appropriate filters and monitoring systems and provides advice on online safety as a safeguarding issue. It has also produced a case study for schools showing good practice in dealing with cyberbullying.<sup>82</sup> Search powers included in the Education Act 2011 have given teachers stronger powers to tackle cyber-bullying<sup>83</sup> by searching for and, if necessary, deleting inappropriate images (or files) on electronic devices, including mobile phones. The Department has also issued advice for parents and carers on cyberbullying.<sup>84</sup>

There are also a range of resources to support teachers and parents in advising children and young people. These include [MindEd](#) and the Child Exploitation’s Online Protection Centre’s [Thinkuknow](#) programme. The [UK Safer Internet Centre](#) also provides advice to parents, schools and professionals. The wealth of resources available indicate that the focus should be the promotion of existing resources rather than development of new materials.

The government has set expectations<sup>85</sup> that social media companies have robust processes in place to act promptly on reported abuse, such as removing inappropriate content and suspending accounts of perpetrators where appropriate, and, with the UKCCIS, has developed a practical guide for social media providers.<sup>86</sup> The Criminal Justice Act 2015 strengthened two existing offences: section 1 of the Malicious Communications Act 1988, and section 127 of the Communications Act 2003 which can now be used to prosecute misuse of social media.

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<sup>80</sup> Written answer, Edward Timpson, Hansard 20 Oct 2016 48744

<sup>81</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/550511/Keeping\\_children\\_safe\\_in\\_education.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/550511/Keeping_children_safe_in_education.pdf)

<sup>82</sup> <https://www.gov.uk/government/case-studies/talking-about-and-responding-to-school-cyberbullying>

<sup>83</sup> 26 May 2016 | Written questions | 37991 Karen Bradley

<sup>84</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/375420/Advice\\_for\\_Parents\\_on\\_Cyberbullying\\_131114.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/375420/Advice_for_Parents_on_Cyberbullying_131114.pdf)

<sup>85</sup> Sarah Newton, House of Lords, 774 c1788, 11 Oct 2016

<sup>86</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/487973/ukccis\\_guide-final\\_\\_3\\_.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/487973/ukccis_guide-final__3_.pdf)

The Government has announced work on a new Internet Safety Strategy, due for publication in summer 2017, which will explore how to help young people protect themselves; how to help parents face up the dangers and discuss them with children; the responsibilities the industry has towards society; and how technology can help provide solutions.<sup>87</sup>

Young Minds and Ecorys' report Resilience for the Digital World<sup>88</sup> proposes actions which could be adopted as part of such a strategy:

- Structured opportunities for discussion between young people and adults on the risks and opportunities presented by the internet, including the involvement of young people in the design of support resources
- An exploration of the potential for increasing the level professional support and peer support to be provided online for vulnerable young people, including improved training.<sup>89</sup>
- Further research with young people with restricted digital rights to explore the impact on their wellbeing (such as those in the youth justice system)
- Further research to understand how children's resilience skills are developed and how young people cope with upsetting online experiences
- Consideration of developing targeted resources for young people who are most at risk of online harm
- A focus on digital rights, based on the UN Convention on the Rights of the Child as proposed by iRights UK and supported by the Children's Commissioner.

In order to be effective, a strategy would need the participation of children and young people.<sup>90</sup> The Education Policy Institute's Commission on Children and Young People's Mental Health<sup>91</sup> called for the government to develop a strategy to empower young people to live safe digital lives. Such an approach could be adopted by the Internet Safety Strategy. The evidence assessed as part of this report indicates that the strategy should focus on developing young people's resilience and critical thinking skills in the face of online threats, given the impossibility of eliminating all online risk.

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<sup>87</sup> <https://www.gov.uk/government/news/government-launches-major-new-drive-on-internet-safety>

<sup>88</sup> [http://www.youngminds.org.uk/assets/0002/5852/Resilience\\_for\\_the\\_Digital\\_World.pdf](http://www.youngminds.org.uk/assets/0002/5852/Resilience_for_the_Digital_World.pdf)

<sup>89</sup> Bell, J. (2014) Harmful or helpful? The role of the Internet in self-harming and suicidal behaviour in young people. *Mental Health Review Journal*, Vol 19(1) pp. 61-71.

<sup>90</sup> UNICEF (2011) Child Safety Online: Global challenges and strategies. Florence: UNICEF Innocenti Research Centre: [http://www.unicef.org/pacificislands/ict\\_eng.pdf](http://www.unicef.org/pacificislands/ict_eng.pdf)

<sup>91</sup> <https://epi.org.uk/wp-content/uploads/2016/12/time-to-deliver-web.pdf>

## Part 6: Conclusions and scope for further research

There is, as yet, no scientific consensus on the impact of screen-based lifestyles on the mental health of young people.<sup>92</sup> More research is needed on the positive and negative influences of social media on young people's mental health. In particular, further understanding is required before it would be possible to provide evidence of a causal link between social networking and mental health problems.

There is also limited research on effective interventions to address online risk, for example interventions to prevent or reduce cyber-bullying among young people.<sup>93</sup> In addition, further understanding is needed on how healthcare professionals can work with at risk people online<sup>94</sup>.

The government has funded work by the Samaritans and Bristol University into the influence of online platforms on suicidal behaviour<sup>95</sup> but it has not funded specific research into the mental health impact of children's social media use, stating that it has "no plans" to commission research on this topic.<sup>96</sup>

Research into childhood resilience<sup>97</sup> has identified learnable skills, such as emotional regulation, empathy and reaching out, which support young people's resilience to harm. Longitudinal studies could be used to study the relationship between social media and mental health and to further understand what builds resilience in young people in the face of online risks.

The evidence explored in this report indicates that, while restricting access to the internet may reduce the likelihood of young people experiencing online risk, it also restricts the opportunities for young people to develop digital skills and to build resilience. Young people are increasingly conducting their online lives in private, through instant messaging and on smart phones. The way in which young people connect with social media is changing rapidly due to the fast pace of technological innovation, such as the development of livestreaming. It is therefore likely to be futile to attempt to protect children and young people from all online risks. This indicates that the focus of public policy should be on how to develop resilience in young people to maintain their emotional and mental wellbeing and to live safe digital lives.

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<sup>92</sup> <https://amp.theguardian.com/education/2016/dec/25/screen-based-lifestyle-harms-health-of-children>  
<https://www.theguardian.com/science/head-quarters/2017/jan/06/screen-time-guidelines-need-to-be-built-on-evidence-not-hype>

<sup>93</sup> Thompson F, Robinson S, Smith PK. Cyberbullying in the UK: an evaluation of some intervention procedures. Bologna: Bullying and Cyber; 2014. Available from: [www.bullyingandcyber.net/media/cms\\_page\\_media/55/Thompson-Robinson-Smith.pdf](http://www.bullyingandcyber.net/media/cms_page_media/55/Thompson-Robinson-Smith.pdf).

<sup>94</sup> Jacob, N., Scourfield, J., Evans, R. (2014) Suicide Prevention Via the Internet. A descriptive Review. *Crisis* Vol. 35(4) pp261-267

<sup>95</sup> 23 Feb 2016 | Written questions | 27104 Alistair Burt

<sup>96</sup> 14 Sep 2016 | Written questions | 45167 Lord Blencathra

<sup>97</sup> Reivich, K. (2008) The Seven Ingredients of Resilience: <http://www.cnbc.com/id/25464528>