Article

Is social media bad for mental health and wellbeing? Exploring the perspectives of adolescents

Clinical Child Psychology and Psychiatry
2018, Vol. 23(4) 601–613

DOI: 10.1177/1359104518775154
journals.sagepub.com/home/ccp
SAGE

Michelle O'Reilly[1], Nisha Dogra[1], Natasha Whiteman[2], Jason Hughes[2], Seyda Eruyar[2] and Paul Reilly[3]

[1]Greenwood Institute of Child Health, University of Leicester, UK
[2]University of Leicester, UK
[3]Information School, The University of Sheffield, UK

Abstract

Despite growing evidence of the effects of social media on the mental health of adolescents, there is still a dearth of empirical research into how adolescents themselves perceive social media, especially as knowledge resource, or how they draw upon the wider social and media discourses to express a viewpoint. Accordingly, this article contributes to this scarce literature. Six focus groups took place over 3 months with 54 adolescents aged 11–18 years, recruited from schools in Leicester and London (UK). Thematic analysis suggested that adolescents perceived social media as a threat to mental wellbeing and three themes were identified: (1) it was believed to cause mood and anxiety disorders for some adolescents, (2) it was viewed as a platform for cyberbullying and (3) the use of social media itself was often framed as a kind of 'addiction'. Future research should focus on targeting and utilising social media for promoting mental wellbeing among adolescents and educating youth to manage the possible deleterious effects.

Keywords

Social media, mental health, adolescents, information, wellbeing

Introduction

Adolescence is a significant period of psychological, biological and social change for young people as they adjust to their emergent needs and develop new skills, responsibilities and intimate relationships (Christie & Viner, 2005; Erikson, 1968). It is during adolescence they develop a sense of identity and greater autonomy (Erikson, 1968). This is a complex period of the lifespan, and one arguably more challenging in contemporary environments as adolescents deal with various personal and educational pressures, different from those experienced by previous generations.

Corresponding author:
Michelle O'Reilly, Greenwood Institute of Child Health, University of Leicester and Leicestershire Partnership NHS Trust, Westcotes Drive, Leicester LE3 0QU, UK.
Email: mjo14@le.c.uk

Notably, this period is often made more challenging due to the high prevalence of mental health difficulties (Burns, Durkin, & Nicholas, 2009) as it is during adolescence that many mental disorders are detected for the first time (Patel, Flisher, Hetrick, & McGorry, 2007). However, despite the relative importance of protecting mental health and emotional wellbeing, adolescents tend to have a limited knowledge of what it means to be mentally healthy or how to maintain this status (Dogra et al., 2012).

Social media is a relatively new medium through which adolescents can manage their mental wellbeing. Indeed, young people frequently report turning to sites such as Facebook and Twitter to escape from the external pressures threatening their mental health (boyd, 2014). Adolescents living in many countries (including low, middle and high income) have seen information and communication technologies (ICTs) such as social media become integral to their education, culture and social life (Allen, Ryan, Gray, McInerney, & Waters, 2014; Van Dijk, 2013). Most adolescents now use social media, with figures suggesting that as many as 97% do so regularly (Woods & Scott, 2016). A recent study found that 57% of US teens had begun relationships online, with 50% of respondents having 'friended' someone on Facebook (or similar) to let them know that they were interested romantically (Lenhart, Smith, & Anderson, 2015, p. 3). Evidently, social media are coming to play an increasingly significant role in the social and emotional development of adolescents (O'Keefe & Clarke-Pearson, 2011).

Although social media may be facilitating new forms of communication and social connection (Baker & Moore, 2008), initially there were fears about the amount of time young people were spending online. Internet use was seemingly linked to a reduction in face-to-face contact, increased social isolation, stress, depression and sleep deprivation (Espinoza, 2011; Kraut et al., 1998). It was also claimed to facilitate offensive and harmful behaviour, arguably detrimental to mental health (Mesch, 2009). However, there is research that contradicts this 'Internet paradox' by providing evidence that such negative symptoms disappear once Internet novices became more experienced users of ICTs (Kraut et al., 2002). Furthermore, the effects of using the Internet upon those with conditions such as depression was argued to be dependent upon the purpose of its use and the pre-existing social resources of individual users (Bessière, Kiesler, Kraut, & Boneva, 2008).

Nevertheless, policymakers have continued to express concerns in relation to the level of risk that adolescents are exposed to on social media (boyd, 2014). Specific risks include, being exposed to what is argued to be inappropriate content for their age group, such as online pornography; peer-to-peer abusive behaviour in the form of sexually provocative or antagonistic comments; privacy violations; and the undue influence of third parties such as advertising bodies (O'Keefe & Clarke-Pearson, 2011). Research in the United Kingdom has suggested that 15% of 9- to 16-year olds have been disturbed by online content (Livingstone, Haddon, Vincent, Mascheroni, & Olafsson, 2014), with 28% of 11- to 16-year olds reporting having specifically experienced an upsetting experience on social media (Lilley, Ball, & Vernon, 2014). Cyberbullying, the use of digital media to post threatening messages, embarrassing pictures and rumours intending to cause harm to others, remains a persistent problem (B. Brown & Marin, 2009; Patchin & Hinduja, 2006). The Internet provides a forum for adolescents to anonymously test out different identities (Pujazon-Zazik & Park, 2010), but unfortunately this anonymity can also be exploited by those engaging in trolling and cyberbullying and may promote and facilitate disinhibition in adolescents (Griffiths, 2014). Within this context, while the risks associated with Internet use are probably overstated, there are grounds for concern as children and young people are regularly exposed to risky content and adolescents themselves engage in antisocial online behaviour (Livingstone & Brake, 2010). Specifically, it has been argued that adolescents have *limited capacity for self-regulation and susceptibility to peer pressure* and consequently *are at some risk as they navigate and experiment with social media* (O'Keefe & Clarke-Pearson, 2011, p. 800).

Aims of this article

Despite the exponential growth in adolescent use of social media, there is surprisingly little empirical work investigating how these sites contribute to adolescent mental health. One study suggested that social media is directly linked to increased anxiety and depression, particularly among adolescents emotionally invested in it (Woods & Scott, 2016). In addition, scholars have examined positive and negative uses of social media by adolescents diagnosed with depression (Radovic, Gmelin, Stein, & Miller, 2017). Nonetheless, research examining the impact of social media use upon the mental health of the broader adolescent population is still in its infancy, despite claims that such sites are *profoundly changing the landscape of adolescence* (J. Brown & Bobkowski, 2011, p. 97). If we are to help mitigate the risks for adolescents in the age of social media, then a better understanding of how the new forms of sociality and connection afforded by these sites affect the wellbeing of their young users (Allen et al., 2014). The aim of this article is to investigate empirically how social media is viewed in terms of mental wellbeing by adolescents themselves. This aim is addressed by the question, *What do adolescents think of social media and its relevance to mental health and emotional wellbeing?*

Methods

A qualitative design was utilised to facilitate the exploratory character of the study. The purpose of the project was to build the limited data on the perspectives of adolescents on the potential impact of social media upon mental health and wellbeing. We used a macrosocial constructionist perspective, because this promotes a broader and interpretive layer to analysis. This was considered appropriate because this perspective has formed a basis for many studies exploring young people's experiences and views (Fraser, Lewis, Ding, Kellett, & Robinson, 2004) and reflects the position that children and childhood are constructed phenomena that subject to change (Greig, Taylor, & MacKay, 2007). Specifically, this underpinning theoretical foundation allows for an exploration of the how societal and media discourses of social media are reified through the adolescent accounts.

Data collection and recruitment

Focus groups were conducted as they are particularly useful for exploring topics considered sensitive in nature and are especially well suited for younger participants (Hoppe, Wells, Morrison, Gillmore, & Wilsdon, 1995). Focus groups also mobilise participants to respond to and comment on other's contributions, meaning that issues can be developed and considered in depth (Willig, 2008). Participants were recruited from schools in two cities in the United Kingdom, Leicester and London, reflecting a broad diversity of socioeconomic and ethnic backgrounds. Six focus groups were conducted across 3 months in 2016 with adolescents aged 11–18 years old ($N = 54$). The question schedule for the focus groups was kept relatively broad so that it could be participant-driven and child-centred. Overall, students were asked about their understandings of mental health, defining concepts and drawing on their personal experiences. They were also asked about their use of social media, extent of usage, which social media channels were favoured and their opinions on the different mediums. In addition, students were asked to comment on the potential of social media to promote mental wellbeing and the benefits and challenges of doing so.

Sampling adequacy was assured through the process of data saturation, which is tied to both the number of focus groups and the number of participants within them (Hancock, Amankwaa, Revell, & Mueller, 2016) and was appropriate for the approach taken (see O'Reilly & Parker, 2013).

Saturation was determined by a cessation criterion determined by the point at which no new themes were discussed across or within groups (Francis et al., 2010).

Data analysis

Thematic analysis was utilised due to its data-driven focus and meaning-making direction (Braun & Clarke, 2006), which allowed for the identification of important issues raised by the participants (Boyatzis, 1998). This is important for exploratory studies where the evidence-base is limited. Three members of the team engaged in the three levels of coding process (Boyatzis, 1998) and the coding frames produced were mapped to create a final version. This multiple reading and engagement with the data ensured inter-coder reliability (Armstong, Gosling, Weinman, & Marteau, 1997). In total, 122 second-order codes were identified from the whole data corpus, which collapsed broadly into 10 superordinate themes. In this article, we report on three of these themes. These three themes were represented in this article because they reflect participants' broad perspectives on social media in relation to mental health and wellbeing and thus address the aims and scope of the research question.

Ethics

The University of Leicester Research Ethics Committee provided ethical approval for the study (in 2016). Age-appropriate information sheets provided information to the adolescents and written consent taken from them. Written parental consent was also acquired for those under 16 years.

Findings

Participants expressed generally consistent negative views about the potential impact of social media on mental health. While there was some recognition of possible positive effects, the overwhelming consensus among participants was that social media was dangerous for adolescent mental health in a broad sense, mostly referring to the mental health of others rather than their own. However, this needs to also be contextualised against their perspectives on mental health as participants had varying understandings of this. Many of the adolescents were unable to define mental health clearly, often confusing it with mental ill health. Others simply stated that they did not understand the term. This was particularly the case for younger participants who generally framed it as *things that are happening in your brain* or in terms of specific conditions *like schizophrenia* or simply not knowing *I don't understand what mental health is*. For example, some participants said that they did not believe that mental health could be positive, and others asked the moderators for clarification.

P3: Can mental health be positive as well?
P5: No, it's mental
(London, year 9, aged 13–14 years)

Related to their negative views of social media was adolescents' self-reporting on the extent of their personal usage of social media. Young people in our study reported significant usage levels of both social media and social networking, as well as general Internet use, with some reporting being on *all day*, this was despite beliefs that social media was a potentially '*dangerous*' platform for mental wellbeing (see below). Notably, without exception, they described social media using a range of negative constructs, arguing it to be *dangerous* to wellbeing and risky because of the volume of *damaging websites*.

> It's a dangerous place social media and I think some people don't actually know how dangerous it is. Basically, we don't study it. (P7, Leicester, year 11, aged 15–16 years)

> Because there's like a ton of very damaging websites, especially like on Tumblr (P2, Leicester, year 13, aged 17–18 years)

> And it's dangerous, it's dangerous, people can take advantage on social media. (P5, Leicester, year 11, aged 15–16 years)

> And then people being shot or stabbed and then they say what happens after. I think that's very traumatising for someone to see. (P8, London, year 11, aged 15–16 years)

Evidently, from their general negative discourses, the young people felt that social media posed a threat to the wellbeing of adolescents as a group. While not attributing the danger specifically to their own social media usage, they made third-party attributions endorsing the notion that viewing *damaging websites* could be detrimental to the wellbeing of some and that it may be *traumatising* for *someone to see*. They felt that part of the difficulty was that social media knowledge was limited for their age group generally as *we don't study* it, demonstrating that the absence of social media knowledge through the educational curriculum led to a limited understanding of the risks.

Specifically, in relation to risks to mental wellbeing, participants described three ways in which social media was 'dangerous'. First, they argued that social media use directly causes stress, depression, low self-esteem and suicidal ideation. Second, they reported that social media exposes people to bullying and trolling, thereby negatively impacts on mental health. Third, social media was constructed as addictive.

Theme 1: social media can cause stress, depression, low self-esteem and suicidal ideation

Participants expressed the view that they felt social media was a risk to mental wellbeing. They identified stress, low self-esteem, depression and suicidal ideation as likely negative consequences of social media. This was despite reporting that it can help to connect people and be a source of support. Notably, many of these comments were made in a general third-party attributions sense, rather than being derived from personal experiences.

Social media functions as a platform for users to share comments and express views, and this was seen as presenting risks to adolescents. The implication was that this kind of activity impacts on their emotional wellbeing and young people felt that social media negatively impacts on mood.

> But then there's other people that just like rant and rant and it's just like, those negative things that even if it's not got any like relation to you, just brings you down. (P3, Leicester, year 13, aged 17–18 years)

> As well I think that like nowadays you're taught to have low self-esteem you know like with photo-shopped images and things like that. (P6, Leicester, year 13, aged 17–18 years)

> I think it [social media] sets a lot of expectations and standards for young people who like at that age, like you're really impressionable. (P7, Leicester year 11, aged 15–16 years)

The emotional consequences were reported as causing low mood in young people as they argued that social media *brings you down* and they indirectly blamed social media (and other media) for lowering self-esteem in adolescents because of *photo-shopped images*. This was presented within

a broader discourse of expectations about body image and the influence of a social media culture, with recognition that as a group adolescents are *really impressionable.* While low mood and negative emotional consequences are potentially a risk, some participants emphasised this more strongly and employed discourses of mental ill health to portray this:

> Um, social media can cause suicide and depression. (P4, London, year 9, aged 13–14 years)

> In the past that's also caused deaths of people being like targeted on social media, they end up committing suicide. (P1, London, year 11, aged 15–16 years)

The adolescents felt that for some of their peers, social media may lead to depression and in more extreme cases suicide. Indeed, they positioned social media as the direct cause of these emotions *social media can cause suicide and depression*. Fortunately, cases of suicide are rare, but they do raise the profile of the link between social media and risk, and here, the young people considered these risks as potential harms that could affect some, while not including their own experiences. Furthermore, it was positioned as a prolonged effect, with *people being targeted on social media*, which is linked to the rise of cyberbullying and other types of antisocial behaviour. Nonetheless, such behaviour can have a severe impact on their victims, including suicide (Robson, 2014). It is arguable that this is potentially more problematic for those adolescents who are particularly impressionable and/or vulnerable, although not necessarily the case. As the participants recognised, they may be tempted to copy risky behaviours, such as self-harm observed on social media to cope with their own difficulties.

> You might see someone like doing something and might copy them and there might be like, some people like see people self-harming and they post it on Facebook and that and then they think, oh it might like help me as well, so they start doing it as well. (P6, Leicester, year 10, aged 14–15 years)

Although the general opinion was that social media use might increase stress and depression for some, conversely, they also suggested that social media can positively impact on wellbeing as it has the capacity to reduce stress. This suggests that it is the way that social media is used on that matters.

> Social media as like an escape from if you've been revising for like hours then you can take your mind off it or whatever by getting on your phone or listening to music and stuff like that. (P3, Leicester, year 10, aged 14–15 years)

> Um, it can be a distraction from the things around you and make you less stressed. (P2, London, year 8, aged 12–13 years)

Theme 2: social media opens people to bullying and trolling

As aforementioned, it is well-established that one of the consequential problems of the digital age is the rise of cyberbullying. A recent scoping review of international studies on cyberbullying showed a median prevalence of 23%, with social media being the main platform, alongside social networking and other applications (Hamm et al., 2015). Cyberbullying was an issue that participants talked about considerably and felt was a real risk to young people's mental health and wellbeing. In so doing, they actively blamed social media for facilitating this aspect of adolescent life and was described by some as endemic to adolescent living. Notably, however, they rarely shared personal stories of their own bullying experiences and instead positioned their reports in the

abstract, third-party way, reflecting the broader discourses of the phenomenon often found in schools and traditional media.

> I feel like cyberbullying plays a huge part in everyday life. And that comes mainly from social media. (P4, London, year 11, aged 15–16 years)

It was argued by the adolescents that social media has provided a mechanism for others to engage in behaviour that constitutes bullying, which can in turn create a sense of isolation and negatively impact on emotional wellbeing. Furthermore, they recognised that by utilising social media, adolescents expose themselves to this kind of behaviour as this kind of behaviour was attributed to mainly coming *from social media*.

> Another downside with social media is, um, say if you think that a picture is good, or other people think it's funny you might get bullied, and you might not tell like your friends or you might not tell like an adult, um, that you're getting bullied on social media. (P5, London, year 8, aged 12–13 years)

> Um, yeah, it's just bullies like say on the Internet, um, if you ask for help and they'll say something then you think that no-one ever will help you, and there's no way out of it. (P5, Leicester, year 10, aged 14–15 years)

These young adolescents recognised that while the very function of social media was to share aspects of life with others, for example, pictures, doing so can result in bullying. This behaviour was constructed as challenging to report *you might not tell your friends* or *an adult*. Furthermore, asking for help was seen as hindered by the bullies *on the Internet*. Of course, bullying has been a significant problem in schools for decades. Problematically, though, social media has created a platform for the consistency and continuity of the bullying behaviours and one that extends beyond the school boundaries. In turn, this means that there is almost no escape as social media invades life outside of school, perhaps even more so than in school.

In relation to cyberbullying, participants also discussed the problem of trolling. Trolling has been differentiated from cyberbullying with claims made that trolling is a spectrum of behaviour that ranges from largely offensive through to innocuous behaviour (Phillips, 2015). Trolling is a common problem for adolescents, and in a study of 2000 14- to18-year olds, it was reported that a third had been a victim of trolls, with a quarter being attacked regularly, and 1 in 10 confessing to instigating trolling (Rice, 2013), with trolls being characterised as attention-seeking, vicious, uneducated and having low confidence (Maltby et al., 2016). The consequences for mental health were argued to be severe.

> There's always going to be people like that, especially on social media where you can be like no-one will know who you are cos you're completely hidden. (P2, Leicester year 10, aged 14–15 years)

> There are a lot of people who are nasty on social media or say things are actually too scared to say it to their face and it's an easy way out really. (P4, Leicester, year 11, aged 15–16 years)

> Then people take advantage of their being anonymous and then people just come and target you with loads of rude comments and that can make you feel really insecure. (P3, London, year 11, aged 15–16 years)

The adolescents in our study emphasised the anonymity of some forms of social media as being problematic. They recognised how such negative behaviour is facilitated by the 'mask of the Internet' and implied that this was synonymous with cowardice, as they reported that trolls say things to others that they would be *too scared to say it to their face*. They argued that social media

provides a platform for such trolling behaviour as it allows people to be *completely hidden* so they can *take advantage* of *being anonymous*. Nonetheless, there was a general acceptance that this was the way of social media and that it is a cyberspace where *there's always going to be people like that* and *there are a lot of people who are nasty on social media* – an almost ambivalent general way of viewing the world.

Theme 3: social media is addictive

Despite acknowledging that they were avid users of social media themselves, many argued that social media is addictive for some. Such excessive or compulsive use of social media was argued to be a negative consequence of the modern world by the adolescents, although again they did not self-identify in this way generally.

> Some people can get addicted and feel like they have to stay on that website or social media. (P6, London, year 9, aged 13–14 years)

Particularly noteworthy here was that the adolescents often referred to the idea of addiction to social media with third-party attributions. In other words, when considering people being addicted to social media, they generally spoke about others *some people* rather than self-identifying as over-using these channels themselves. Furthermore, they recognised that there were social consequences to this addictive behaviour for those who did overuse social media as a replacement for quality time with friends and family.

> Some people can't survive without a phone. And they don't like take time to talk to their families most of the time. (P1, London, year 8, aged 12–13 years)

> Social media is like an online drug you can, it has good side effects and bad side effects. (P4, London, year 8, aged 12–13 years)

Of note was the extreme terms in which they described social media use by other adolescents. Phrases such as *people can't survive without their phone* and *social media is like an online drug* demonstrated the severity of the perceived 'addiction'. The suggestion presented was that social media was as addictive as substances and can be problematic for some people, as it takes away from time from their *families* which can have *bad side effects*. Notably, however, as these adolescents framed addiction as an attribution of others, they were arguably generalising this perspective based on anecdotal evidence rather than using their own personal experiences as the benchmark for such claims.

On the rare occasions where they self-referenced their own social media use in terms of compulsive or excessive usage, limited sleep was the primary problematic consequence that they reported. They described instances whereby the constant connectivity to social media had an impact on their sleep and some did express personal insight into their dependence.

> I feel like, um, cos I, I did, I had an experience of that with WhatsApp where lots of people were messaging at the time I'd go to sleep at about 10 o'clock at night and then I felt the need, even when there was no-one messaging me just to keep checking and it did affect my sleep. (P2, Leicester year 11, aged 15–16 years)

> Yeah, I think I'm pretty dependent on social media' (P5, Leicester year 11, aged 15–16 years)

While the impact on young people and sleep was recognised, so too was the general dependence they felt. While it was usually attributed to third parties, the adolescents did report that they would *keep checking* to see if messages arrived during the night. Thus, the young people in the study did acknowledge that they used social media regularly, and some felt that they were *pretty dependent on social media*.

Discussion

Social media is now an integral part of adolescent life, with possible benefits and risks to mental wellbeing, and yet these are poorly understood. There has been a significant focus on the negative elements of the Internet, which has created a culture of fear around social media, despite some of the possible positive impact on social capital (Ahn, 2012). Nonetheless, the intrinsic adverse discourses embedded in the societal portrayal of social media use in adolescence are clearly re-enacted through the views of adolescents themselves. There is little work demonstrating adolescents' perspectives on social media, particularly in terms of their views of social media and mental wellbeing, and this study has demonstrated that adolescents buy into the idea that social media is perceived as 'dangerous'. In other words, it is evident from the views presented that young people are perpetuating the view ingrained in modern society at a political, social and individual levels that inherently social media has negative effects on mental wellbeing. Thus, they seem to reify the moral panic that has become endemic to contemporary digital discourses. Of interest particularly is that the young people spoke mostly anecdotally, generalising about the risks to adolescents in a broad way, rather than reporting on their own personal experiences. Although there were some passing references to their own lives, mostly they preferred to talk about adolescents as a population in terms of their ideas about social media as a dangerous place. This indicates that they are reflecting the dominant discourses of social media without really questioning or challenging that rhetoric. Furthermore, it reflects that the harms being discussed are potential risks to adolescents, rather than actual experienced harms. This suggests that the young people themselves may not have necessarily experienced any negative consequences to their own mental health, although we cannot be certain, and in some cases, personal experiences were identified, but were rare.

The findings demonstrated that participants felt that social media directly causes ill-mental health such as depression and suicidal ideation, was addictive and exposed people to behaviours that impacted negatively on their emotional wellbeing, such as cyberbullying. Although some of the adolescents did draw on their own personal narratives, most of them framed their negative perspectives in anecdotal or generalised ways. This could reflect the ideological dilemma (Billig et al., 1988) faced by these young people in recognising the extent to which they engaged with a medium, which they argued affected their sleep and created dependence, while they themselves were positioning it as 'dangerous' and negative. However, the view that social media is linked to sleep problems and addiction is recognised by clinical professionals and research. Studies have demonstrated that people can and do suffer from Internet addiction and sleep deprivation (Chistakis & Moreno, 2009), as 90% of adolescents will use social media during the day and at night (Duggan & Smith, 2013), with 37% losing sleep because of it (Espinoza, 2011). This is exacerbated further by the likelihood of addiction to the mobile (cell) phone (Walsh, White, & Young, 2008). However, it must be acknowledged that while adolescents utilise the concept of 'addiction' when referring to online activity, this is not necessarily the case in a clinical sense (boyd, 2014). Although the young participants did not have a particularly accurate or detailed understanding of the meaning of positive mental health, consistent with previous research (see Dogra et al., 2012), they could articulate how social media use affected people in their age group.

Adults frequently blame technology for undesirable outcomes instead of acknowledging other cultural, personal or social factors (boyd, 2014), and it seems that this is also the case for adolescents. They tended to directly attribute fault to social media for causing such negative effects in their population. This may represent an oversimplification, as it is neither the Internet nor social media to blame, but how we as users use these mediums. Adolescents may need to be encouraged to take responsibility for their behaviour on the Internet and on social media and not see these as beyond their control. It is arguable from the findings that adolescents need to be better educated about both social media and mental health and perhaps how the two are connected. There have been some efforts made to inform adolescents about the risks they may face on the Internet (Livingstone, 2008), but adolescents in our study reported that they lacked this knowledge because they did not study it in school. This is consistent with other research that has shown that they want to learn more about using social media correctly (Rice, 2013). However, often adolescents are given instructions or directives about how to use the Internet and may ignore these. Engaging them in the dialogue may be more useful. Bone, Dugard, Vostanis, and Dogra (2015) found that young people were aware that there is information that may be incorrect on the Internet so needed to be treated carefully.

Technology has changed the lives of adolescents and has changed the face of social interaction, yet the costs of this are still relatively unknown (Pierce, 2009). Currently, adolescents are not experts of navigating the virtual world but continuous engagement with social media may improve this (boyd, 2014). Indeed, simply understanding the possible negative effects of using such platforms on mental wellbeing certainly did not deter the participants from engaging regularly with a wide range of social media. We still have much to learn about the impact of the Internet and social media on adolescent mental health. However, this study shows that adolescents themselves have concerns about the risks the Internet poses to mental health directly by leading to mood and anxiety disorders and indirectly through cyberbullying. Of particular interest as noted previously, however, is that many of the reports and arguments put forward by the young people regarding social media and mental health were anecdotal and presented as general and abstract, rather than grounded in personal experience. It seems that their views of social media as negative for mental wellbeing have been shaped vicariously through the experiences of others or from media reports and other sources of anecdotal evidence. Thus, the arguably moral panic framing presented of social media evident throughout all focus groups could reflect an underpinning fear of online interactions, when such social media use could in reality provide a rich source of mental health support.

In conclusion, therefore, rather than demonising the process, the way forward may be for adolescents to be actively involved in the development of programmes that identify the way to successfully navigate social media and the Internet without a deleterious impact on mental health including sleep. Indeed, digital technology is unlikely to go away, and it increasingly becomes integral to adolescents' lives. *There's also no reason to think that digital celibacy will help them be healthier, happier, and more capable adults* (boyd, 2014, p. 93), and therefore, we need to find ways to utilise social media in a more positive way and in ways that promote positive wellbeing in this group, while better equipping young people to manage the possible dangerous effects. Furthermore, it seems that adolescents need educating about the meanings of mental health and wellbeing, as well as about mental illness and the ways of preventing this or managing it if they are diagnosed with a condition.

Acknowledgements

We thank Riya George and Liam Voice for their role in data collection. We also thank all our participants for giving up their time to engage with the study.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethics statement

Written consent was taken from adolescents and their parents (for under 16 years).

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was funded by the Wellcome Trust (grant reference 109393/Z/15/Z)

ORCID iD

Paul Reilly https://orcid.org/0000-0002-6890-778X

References

Ahn, J. (2012). Teenagers' experiences with social network sites: Relationships to bridging and bonding social capital. *The Information Society*, *28*, 99–109.

Allen, K., Ryan, T., Gray, D., McInerney, D., & Waters, L. (2014). Social media use and social connectedness in adolescents: The positives and the potential pitfalls. *The Australian Educational and Developmental Psychologist*, *31*, 18–31.

Armstong, D., Gosling, A., Weinman, J., & Marteau, T. (1997). The place of inter-rater reliability in qualitative research: An empirical study. *Sociology*, *31*, 597–606.

Baker, J., & Moore, S. (2008). Blogging as a social tool: A psychosocial examination of the effects of blogging. *CyberPsychology & Behavior*, *11*, 747–749.

Bessière, K., Kiesler, S., Kraut, R., & Boneva, B. S. (2008). Effects of Internet use and social resources on changes in depression. *Information, Communication & Society*, *11*, 47–70.

Billig, M., Condor, S., Edwards, D., Gane, M., Middleton, D., & Radley, A. (1988). *Ideological dilemmas: A social psychology of everyday thinking*. London, England: SAGE.

Bone, C., Dugard, P., Vostanis, P., & Dogra, N. (2015). Students' understandings of mental health and their preferred learning platforms. *Journal of Public Mental Health*, *14*, 185–195.

Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. London, England: SAGE.

boyd, d. (2014). *It's complicated: The social lives of networked teens*. New Haven, CT: Yale University Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101.

Brown, B., & Marin, P. (2009). *Adolescents and electronic media: Growing up plugged*. Washington, DC: Child Trends.

Brown, J., & Bobkowski, P. (2011). Older and newer media: Patterns of use and effects on adolescents' health and well-being. *Journal of Research on Adolescence*, *21*, 95–113.

Burns, J., Durkin, L., & Nicholas, J. (2009). Mental health of young people in the United States: What role can the internet play in reducing stigma and promoting help seeking? *Journal of Adolescent Health*, *45*, 95–97.

Chistakis, D., & Moreno, M. (2009). Trapped in the net: Will Internet addiction become a 21st century epidemic? *Arch Pediatric Adolescent Medicine*, *163*, 959–960.

Christie, D., & Viner, R. (2005). ABC of adolescence: Adolescent development. *British Medical Journal*, *330*, 301–304.

Dogra, N., Omigbodun, O., Adedokun, T., Bella, T., Ronzoni, P., & Adesokan, A. (2012). Nigerian secondary school children's knowledge of and attitudes to mental health and illness. *Clinical Child Psychology and Psychiatry*, *17*, 336–353.

Duggan, M., & Smith, A. (2013). *Demographics of key social networking platforms*. Washington, DC: Pew Internet and American Life Project.

Erikson, E. (1968). *Identity: Youth and crisis*. New York, NY: W.W. Norton Company.

Espinoza, G. (2011). The pervasiveness, connectedness, and intrusiveness of social network sites use among young adolescents. *Cyberpsychology, Behavior and Social Networking*, *14*, 705–709.

Francis, J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M., & Grimshaw, J. (2010). What is adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology and Health*, *25*, 1229–1245.

Fraser, S., Lewis, V., Ding, S., Kellett, M., & Robinson, C. (2004). *Doing research with children and young people*. London, England: SAGE.

Greig, A., Taylor, J., & MacKay, T. (2007). *Doing research with children* (2nd ed.). London, England: SAGE.

Griffiths, M. (2014). Adolescent trolling in online environments: A brief overview. *Education and Health*, *32*(3), 85–87.

Hamm, M., Newton, A., Chisholm, A., Shulman, J., Milne, A., Sundar, P., . . . Harling, L. (2015). Prevalence and effect of cyberbullying on children and young people: A scoping review of social media studies. *JAMA Pediatrics*, *169*, 770–777.

Hancock, M., Amankwaa, L., Revell, M., & Mueller, D. (2016). Focus group data saturation: A new approach to data analysis. *The Qualitative Report*, *21*, 2121–2130.

Hoppe, M., Wells, E., Morrison, D., Gillmore, M., & Wilsdon, A. (1995). Using focus groups to discuss sensitive topics with children. *Evaluation Review*, *19*, 102–114.

Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet paradox revisited. *Journal of Social Issues*, *58*, 49–74.

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, *53*, 1017–1031.

Lenhart, A., Smith, A., & Anderson, M. (2015, October 1). *Teens, technology and romantic relationships*. Washington, DC: Pew Research Center.

Lilley, C., Ball, R., & Vernon, H. (2014). *The experiences of 11–16 year olds on social networking sites*. London, England: NSPCC Report.

Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society*, *103*, 393–411.

Livingstone, S., & Brake, D. (2010). On the rapid rise of social networking sites: New findings and policy implications. *Children and Society*, *24*, 75–83.

Livingstone, S., Haddon, L., Vincent, J., Mascheroni, G., & Olafsson, K. (2014). *Net children go mobile: The UK report*. London, England: London School of Economics and Political Science.

Maltby, J., Day, L., Hatcher, R., Tazzyman, S., Flowe, H., Palmer, E., . . . Cutts, K. (2016). Implicit theories of online trolling: Evidence that attention-seeking conceptions are associated with increased psychological resilience. *British Journal of Psychology*, *107*, 448–466.

Mesch, G. (2009). Parental mediation, online activities, and cyberbullying. *CyberPsychology & Behavior*, *12*, 387–393.

O'Keefe, G., & Clarke-Pearson, K. (2011). Clinical report – The impact of social media on children, adolescents, and families. *Pediatrics*, *127*, 800–804.

O'Reilly, M., & Parker, N. (2013). 'Unsatisfactory saturation': A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, *13*, 190–197.

Patchin, J., & Hinduja, S. (2006). Bullies move beyond the schoolyard. *Youth Violence & Juvenile Justice*, *4*, 148–169.

Patel, V., Flisher, A., Hetrick, S., & McGorry, P. (2007). Mental health of young people: A global public-health challenge. *The Lancet*, *369*, 1302–1313.

Phillips, W. (2015). *This is why we can't have nice things: Mapping the relationship between online trolling and mainstream culture*. Cambridge, MA: The MIT Press.

Pierce, T. (2009). Social anxiety and technology: Face-to-face communication versus technological communication among teens. *Computers in Human Behavior*, *25*, 1367–1372.

Pujazon-Zazik, M., & Park, M. J. (2010). To tweet, or not to tweet: Gender differences and potential positive and negative health outcomes of adolescents' social Internet use. *American Journal of Men's Health*, *4*, 77–85.

Radovic, A., Gmelin, T., Stein, B., & Miller, E. (2017). Depressed adolescents' positive and negative use of social media. *Journal of Adolescence*, *55*, 5–15.

Rice, L. (2013, January 13). *It's time for more Lolz NOT trolls*. vInspired. Retrieved from https://vinspired.com/blog/its-time-for-more-lolz-not-trolls

Robson, S. (2014, December 17). 'I'm sorry': Teen's heartbreaking final message to online trolls before train suicide. *The Mirror*. Retrieved from http://www.mirror.co.uk/news/uk-news/im-sorry-teens-heartbreaking-final-4826932

Van Dijk, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford, UK: Oxford University Press.

Walsh, S., White, K., & Young, R. (2008). Over-connected? A qualitative exploration of the relationship between Australian youth and their mobile phones. *Journal of Adolescence*, *31*, 77–92.

Willig, C. (2008). *Introducing qualitative research in psychology* (2nd ed.). Milton Keynes, UK: Open University Press.

Woods, H., & Scott, H. (2016). #Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *Journal of Adolescence*, *51*, 41–49.

Author biographies

Michelle O'Reilly is a Senior Lecturer at the University of Leicester (Greenwood Institute) and a Research Consultant for Leicestershire Partnership NHS Trust. Michelle's research interests include child mental health, neurodevelopmental conditions, social media and mental health, family therapy and qualitative methodologies.

Nisha Dogra is a Professor of Psychiatry Education at the University of Leicester (Greenwood Institute) and practicing Consultant Child and Adolescent Psychiatrist for Leicestershire Partnership NHS Trust. Her research interests include medical education and training, culture and diversity, child mental health, mental health promotion, and qualitative methodologies.

Natasha Whiteman is a Lecturer for the School of Media, Communication and Sociology at the University of Leicester. Her research interests include ethics related to media reserach, digital environments, media consumption activity and methodological issues relating to online environments.

Jason Hughes is a Professor of Sociology for the School of Media, Communication and Sociology at the University of Leicester. His research interests include sociology focusing on social processes and human relationships, work, emotions and identity, and smoking and e-cigarette use.

Seyda Eruyar is a PhD student in the Department of Neuroscience, Psychology and Behaviour at the University of Leicester. Her PhD focuses on Exposure to War Trauma and Psychological Disorders among Syrian Refugee children in Turkey.

Paul Reilly is a Senior Lecturer in social media and digitial society in the Information School at the University of Sheffield. His research interests include crisis communication, social media activism, digital media and peace building, and online research ethics.