

Potential of social media in promoting mental health in adolescents

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Summary

The growing prevalence of adolescent mental disorders poses significant challenges for education and healthcare systems globally. Providers are therefore keen to identify effective ways of promoting positive mental health. This aim of this qualitative study was to explore perceptions that social media might be leveraged for the purposes of mental health promotion amongst adolescents aged between 11 and 18 years. Utilizing focus groups conducted with adolescents ($N=54$), educational professionals ($N=16$) and mental health practitioners ($N=8$). We explored their views about the value of social media for this purpose. Three themes were identified. First, social media appears to have potential to promote positive mental health. Second, adolescents frequently utilize social media and the internet to seek information about mental health. Finally, there are benefits and challenges to using social media in this way. We conclude that despite challenges of using social media and the risks, social media does offer a useful way of educating and reaching adolescents to promote mental wellbeing.

Key words: adolescents, mental health, promotion, social media

INTRODUCTION

Globally between 10 and 20% of adolescents experience a mental disorder (Kieling *et al.*, 2011). Policymakers and practitioners have expressed concern at the increasing prevalence of anxiety, depression and self-harm within UK schools (Key, 2017), a position mirrored internationally. For example, Polanczyk *et al.* (Polanczyk *et al.*, 2015) conducted a systematic review of 41 studies (27 countries) showing worldwide prevalence at 13.4%. In the USA, ~40% of participants with one class of disorder also meet the criteria for another class of lifetime disorder (Merikangas *et al.*, 2010). Undoubtedly poor mental

health outcomes are undesirable, thus preventative action, early intervention and multi-agency approaches are needed (Department of Health [DoH], 2015).

Promotion of positive mental health and prevention of ill health is important to address this problem. The World Health Organization (WHO, 2016) defined promotion in relation to the actions needed to create environments that provide people with skills to maintain 'mentally healthy' lifestyles. This is because mental health is not simply the absence of mental illness; but a state of wellbeing that allows people to contribute productively to society (WHO, 2004). Prevention

necessitates strategies designed to reduce the incidence, prevalence and recurrence of mental disorders (WHO, 2016). Although promotion and prevention overlap, the former focuses on 'positive mental health', i.e. keeping people mentally healthy, while the latter concentrates on 'mental ill health', i.e. avoiding illness (Kalra et al., 2012).

Strategies to promote positive adolescent mental health include, early interventions, targeting vulnerable groups, community development programmes and anti-stigma campaigns (Dogra et al., 2017). Schools play a central role, providing a systematic way for targeting adolescents in a location where they spend considerable time (Sturgeon, 2006). This environment provides a useful platform for promoting mental health (Janè-Llopis and Barry, 2005) and school-based programmes have included improving awareness and reducing stigmatization (Mellor, 2014). In these programmes, an inclusive approach is essential—one that involves school personnel and efforts that are sensitive to developmental factors and population diversity (Weist and Murray, 2008).

Adolescents also spend significant time on social media, defined here as the 'web-based services that allow individuals, communities, and organizations to collaborate, connect, interact, and build community by enabling them to create, co-create, modifies, share, and engage with user-generated content that is easily accessible' [(McCay-Peet and Quan-Haase, 2017), p. 17]. Platforms such as Facebook and Twitter have been linked to new forms of political participation amongst adolescents in countries such as the UK, US and Australia; even those that are not politically engaged there appears to be an openness to engage with politicians and celebrities on these sites (Xenos et al., 2014; Vromen, 2017). Despite moral panic discourses that have emerged in relation to online threats, such as online sex predators, cyber-crime and online radicalization, networked teens continually express frustration at the assumptions made by adults that they are irresponsible with the information and content they share on these sites (boyd, 2014). Indeed, young people appear to develop new strategies in response to the flattening of multiple audiences on social media and the blurring of the boundaries between private and public (Marwick and boyd, 2014).

This presents new opportunities and challenges for mental health promotion. Yet, the potential for positive impact, such as health promotion has received limited attention (Neiger et al., 2012). Technology is widely used, with over 90% of adolescents using social media regularly (Duggan and Smith, 2013). Social media has an information-dimension, media-related dimension and social-dimension (Kaplan and Haenlein, 2010), and can

facilitate adolescents' technical skills, social connection and communication (Ito et al., 2008); not least because much of their social and emotional development is happening digitally (O'Keeffe and Clarke-Pearson, 2011).

Traditionally, social media have been used by adolescents to increase social connectivity, broaden social relationships and for entertainment (Allen et al., 2014). Yet, social media is a potentially inexpensive way to have conversations about mental health, impart information and challenge stigma (Betton et al., 2015). Furthermore, information on social media can be tailored for the priorities of intended users, due to its versatility (Hamm et al., 2015). Indeed, social media is starting to be embraced for physical health promotion (Fergie et al., 2016a), to promote help-seeking for mental health difficulties (Burns et al., 2009) and could be used for universal mental health promotion (O'Reilly et al., 2018). Limited research in mental health promotion with young adults has shown that social media is viewed positively as a resource (Fergie et al., 2016b), can reduce stigma (Burns et al., 2009) and encourages social networking, reducing isolation (Gowen et al., 2012). However, there are risks of reliability and thus more research is needed (Moorhead et al., 2013) if it is to be used in this way.

For adolescents, this is especially important, as they are often exposed to online media from a young age and can lack skills to critically assess information credibility (Eastin et al., 2006). Using social media as a learning platform needs further evaluation for a better understanding of adolescents' preferences (Bone et al., 2015) and how they engage with information online (Fergie et al., 2016a,b). This is especially important as research into adolescent social media use 'is still in its infancy' [(Allen et al., 2014), p. 21]. The aim of this study therefore was to examine the potential of social media for mental health promotion from the perspective of key stakeholders, exploring their opinions on how social media can be used effectively, their creative ideas for how it might be implemented, and the possible limitations to this approach. The research question was 'what are the perspectives of key stakeholders about the extent to which social media can play a role in mental health promotion?'

METHODS

A qualitative design was adopted as this was congruent with the exploratory character of the research question.

Data collection and sampling

Participants were recruited from London and Leicester (UK) through 2016, and focus groups were conducted

Table 1: Demographics of professionals

	Male	Female	Total
Educationalists:			16
Teachers	6	6	
Teaching assistants		1	
Head teachers		1	
Guidance/student support		2	
CAMHS:			8
Psychiatrists	1	2	
Nurses	1	3	
Other		1	
Total	8	16	

separately with different groups, which included 6 groups (6-12 participants in each) with adolescents, 11-18 years ($N = 54$), 2 with mental health practitioners ($N = 8$) and 2 with educational professionals ($N = 16$). Demographic details can be found in [Tables 1](#) and [2](#). Focus groups were conducted as this method allows participants to share ideas and engage with the contributions made by different parties ([Willig, 2008](#)). The focus group schedule was organized round three core issues that reflected the scope of the main project, including conceptualizations of mental health/illness, opinions and experiences of social media, and the potential of social media as a source of mental health promotion. Sampling adequacy was achieved through the process of saturation ([Hancock et al., 2016](#)), which was congruent with the approach ([O'Reilly and Parker, 2013](#)). The saturation point was determined via the 'stopping criterion'; the point at which no new ideas emerged within or across groups ([Francis et al., 2010](#)).

Analysis

Thematic analysis was utilized because of its data-driven strategy and meaning-making focus ([Braun and Clarke, 2006](#)). This allows the identification of salient issues from the perspective of participants ([Boyatzis, 1998](#)), which is essential for areas with only a limited evidence-base. Three team members engaged in coding ([Boyatzis, 1998](#)), mapped to create a final framework. This led to a total of 122 second order codes, broadly conceptualized as 10 superordinate themes. These superordinate themes were the very broad overarching themes from the whole project data corpus, reflecting that coding was complete, not selective. Each had more specific themes within those broad issues identified, and these specific themes were generated from thematizing the 122 second-order codes. Thus, the themes identified through analysis were conceptualized under broad

Table 2: Demographics of the adolescents by gender

	Male	Female	Total
London	18	9	27
Leicester	12	15	27
Total	30	24	

Table 3: Year group and ages in England

Year group	Age range (years)
Year 7	11-12
Year 8	12-13
Year 9	13-14
Year 10	14-15
Year 11	15-16
Year 12	16-17
Year 13	17-18

superordinate issues to guide dissemination. This paper reports on the single overarching issue of mental health promotion and the three themes related to that.

Ethics

The research was governed by the University of Leicester Research Ethics Committee, who approved the study. Informed consent was obtained from all parties, and for those aged 15 years and under, parental consent was acquired first. All transcripts were anonymized. In our use of quotations, we identify participants by the school year group with their ages outlined in [Table 3](#).

FINDINGS

Most participants were cautious about using social media to promote mental health due to their belief that social media contributes to mental illness ([O'Reilly et al., in press](#)). Nonetheless, they did argue that there was potential if done well. Three key themes were identified: (i) the role social media can play for mental health promotion; (ii) adolescents' use of social media and (iii) benefits and challenges of using social media to promote mental health.

Theme one: the role social media can play for mental health promotion

Reflecting on the potential of social media, participants discussed this source of information to maintain positive mental health and to help them cope with stress. Furthermore, they considered how social media, and internet sources, might support and educate about mental

illness, citing examples of when they had used it in this way for their own conditions, or those of their peers.

Although adolescents commented on the negative effects of social media, they could see that this channel provided 'amazing opportunities' for promoting mental health. They reported that social media focused their attention on certain issues pertaining to mental health information.

1. I think there's some like forms of social media that you really can use in productive way like, um, like I've got a blog and I've also got like a Tumblr blog as well. And like I think, the same with Instagram really, some people have got like amazing opportunities through these websites.

(P5—Leicester year-group 13)

2. You might get an idea from social media and search for something.

(P2—London year-group 9)

Adolescents reported social media could be used productively in learning about issues that might impact on their mental health. Citing specific forms such as Instagram, they reported that opportunities for learning about those issues can be achieved by engaging with 'websites' (meaning social media). For example, there were suggestions that embracing the culture of social media 'challenges', could be harnessed to promote wellbeing.

3. It's like 'hundred-happy-day' challenge it started few years ago, that's more pitched at adults, something similar that can be done for the students ... So the idea was every day you took a photo about what made you happy ... all kids would do that.

(P8—London education)

It was recognized that 'challenges' are commonly distributed on social media, and adolescents frequently become engaged in these. Citing the 'hundred-happy-day' challenge, P8 argued this could be a strategy used to engage them in promoting wellbeing.

They also argued that social media itself may promote ideas and thought-provoking material that encourages adolescents to seek out further information that promotes positive mental health. A good example of this, was acknowledging the role of celebrity culture.

4. Zoella did her anxiety video, didn't she? And I think that helped a few girls like thinking, oh it's not just me that's like that.

(P1—Leicester year-group 13)

The negative influence of celebrity culture on adolescents is well-known but if redeployed may facilitate mental health promotion. Participants acknowledged celebrity culture could be used in a positive way to

promote wellbeing, but also learn about mental illness. Thus, promotion could be achieved in a way that was fast and had great geographical spread.

5. But I think that way social media can be helpful because you could do like videos and get messages out there quickly to teach like young people what not to do.

(P4—CAMHS group 2)

Here P4 implies that the speed of information flow across social media platforms is beneficial in the context of mental health promotion. They felt that social media was 'helpful' to spread messages about mental health 'quickly' which can help educate adolescents about protecting their mental wellbeing.

6. I think, yeah, social media's actually a great way to support people.

(P10—Leicester year-group 13)

7. like you're using a hash tag as a therapy is and loads of people will then follow and like and support and they'll post pictures of like what they've been eating, or how they're coping with different things and I think that creates a community which is supportive.

(P3—Leicester education)

While the adolescent (P10) here talked generally about social media providing a source of support in the context of stress, and the teacher (P3) more specifically referred to those with diagnosed disorders, both acknowledged the role it can play in supporting individuals. Indeed, it was argued that social media has potential to create 'a community which is supportive'. The implication is that likeminded adolescents can help each other. Indeed, adolescents argued that social media can promote positive mental health. For example, adolescents cited some benefits, as they acknowledged that using channels, such as YouTube, could promote relaxation and help them to cope with pressures of education.

8. I usually like to go on YouTube, like it relaxes me.

(P2—London year-group 9)

9. I think it [social media] just sometimes relieves the stress for some people.

(P6—London year-group 8)

Furthermore, there was scope for using social media, and the internet, to seek information to promote their personal positive mental health, or educate them about mental illness.

10. Generally, I use Google or those websites but sometimes I use texting WhatsApp and ask a friend.

(P8—London year-group 9)

11. I've learned through mental illness, mental health through social media like I found an interview with a documentary maker like Louis Theroux and he made some documentaries about autism and I then searched because I didn't know much about autism.

(P5—Leicester year-group 13)

This demonstrates how adolescents mix sources of information, using different platforms for different purposes. For example, they may 'use Google' for information-searching, but 'WhatsApp' for communication. Thus, they already used social media to find out more about mental health and illness, inspired from watching documentaries, and then using this for seeking further guidance from the internet. However, there was little acknowledgement or discussion that they may need to balance that information and consider the accuracy of it.

12. So, it's a massively under-used tool in terms of health promotion, mental health promotion, what is good mental health.

(P2—CAMHS group 1)

13. I think it's good to have social media but to like have a control, a controlled usage of it because too much can like be bad for you, but some of it can help educate you.

(P6—London year-group 8)

Despite acknowledging that adolescents regularly use social media for information-seeking, participants suggested it is 'massively under-used' for this purpose. Furthermore, they recognized there was a need to proceed with caution as excessive social media use may impact negatively on mental health, thus counteracting any positive effect.

Theme two: young people's use of social media

If we are to consider the value of social media as a mental health promotion tool, this needs to be contextualized against wider use of social media and the pressures adolescents face. Adolescents are arguably under increasing stress, and while there are potential risks associated with social media, it could support their coping. Social media appeared to both reinforce and provide release from stress and was often cited as a relaxation method. Any discussion of mental health promotion via social media, therefore needs to be considered against the backdrop of the modern construction of children and childhood, recognizing the changing views of adolescents and the position they occupy in society.

14. You have too much pressure.

(P7—London year-group 9)

It was argued by participants that the changing landscape of education and the different ways in which children are positioned in society has put a greater pressure on adolescents. Consequently, they find the pressure difficult to cope with. Notably, while meeting academic targets mean that young people's mental wellbeing is put at risk, they also reported that some pressure comes from participating with social media itself. In other words, there was peer pressure to engage with social media.

15. ... and if you don't follow that certain way you are seen as like an outsider or like, just someone weird.

(P2—London year-group 11)

16. You can't just turn off your phone and leave it, cos like the two worlds are so like intertwined that if you're not, you're almost like a weird outcast.

(P4—Leicester year-group 13)

The blurring of online and offline worlds was considered central to their lives. They reported social media formed a core feature of their identity and peer relationships, as without this they would be viewed as an 'outsider' or 'weird outcast'. This was exacerbated by the connectivity enabled by smart phones, as they felt they could not turn off the phone, suggesting an implicit pressure to stay connected. Consequently, for some this created a certain dependency.

17. Yeah, I think I'm pretty dependent on social media.

(P5—Leicester year-group 11)

This reliance was viewed as having some detrimental impact on mental health, and was viewed as a risk to wellbeing by both adolescents and professionals.

18. Social media can fuel cyber-bullying and that could lead to problems like suicide, anger and depression.

(P3—London year-group 8)

19. I think sometimes social media can be the thing that's causing not helping with their mental health.

(P5—Leicester education)

Such statements reflect the dilemma of social media as a mental health promotion tool, as it can have this negative side. However, while risks were associated with social media use, it was also regarded as a positive environment, and it is this that could be exploited to educate adolescents in strategies to protect their mental health as well as inform them about mental disorders.

Theme three: benefits and challenges of social media to promote mental health

Given the time adolescents spend using social media and the use to facilitate relaxation and reduce stress, it is

important to better understand the possible benefits and challenges of using social media to promote mental health. For any mental health promotion tool/intervention to be developed it is essential key stakeholders' advice shapes the ways in which this applied. Participants, therefore, provided ideas for how such tools could be made accessible, while recognizing the challenges of doing so.

A benefit of using social media to promote mental health was the possibility of anonymity. Participants recognized that mental illness was associated with stigma, and argued that promoting positive mental health needed to mitigate against this.

20. And I think a lot of people feel like if they speak out about their mental health they might get judged for it.
(P2—London year-group 11)

21. I think it's quite a taboo subject between friends, you don't really want to, if you've got a problem you feel quite ostracised and quite isolated about it.
(P4—Leicester year-group 11)

Thus, anonymity was positioned as a useful way of circumnavigating the embarrassment or judgment associated with mental illness, with social media presented as one method.

22. Social media is fantastic because you're anonymous, okay? So, you've got a mental health issue that you don't want to discuss with anyone at school, you can become anonymous.
(P4—Leicester education)

23. I think some social media platforms are better than others because, like, say on some you could have like an anonymous question, answer sort of thing
(P7—Leicester year-group 10)

24. I guess for children remaining anonymous is important.
(P2—CAMHS group 1)

The adolescents repeatedly highlighted that anonymity afforded by social media was a useful way for them to learn about and discuss mental health concerns. Anonymity was important, hence social media was viewed as 'fantastic' because they could seek information and ask questions anonymously about issues affecting them. Indeed, this anonymity was something several adolescents acknowledged they had taken advantage of.

25. It was like, it was a few months back when I was quite depressed and I needed to talk to someone and I didn't want to go down to the doctors or whatever

because that's just, I just find that awkward talking to someone in person, so I just did it on social media instead.

(P5—Leicester year-group 11)

Adolescents discussed help-seeking more generally outside of social media acknowledging that speaking to a doctor or family member about issues they found difficult or embarrassing could be problematic. Evidence indicates that families, and adolescents specifically, find help-seeking for mental health-related difficulties challenging (Vostanis *et al.*, 2013). Our adolescents agreed, showing social media offers an anonymous alternative to traditional help-seeking strategies. For example, P5, reported that s/he 'didn't want to go down to the doctors', and used 'social media instead'.

Notably, while anonymity could have negative effects, it was constructed as an important benefit of using social media for mental health promotion. Participants argued that this could also function to reduce the stigma associated with mental illness.

26. Social media's definitely like an amazing platform for like advertisement. You could really like, as we were saying that mental illness is kind of taboo, I think through social media there is definitely a way to get it out of the taboo and into everyday life.

(P4—Leicester year-group 13)

However, to promote wellbeing and tackle stigma, any mental health promotion intervention/tool used through social media must be accessible, educational, youth-friendly and raise awareness. Participants articulated that mental health awareness was an important aspect of mental health promotion, and felt they needed to learn about mental illness, to appreciate positive mental health.

27. On Snapchat, they have like, um, like you click into news articles and stuff like that and sometimes like on big events they have stories from other people around the world that have been sharing it, and they could, um, do one for like mental health awareness week.

(P2—Leicester year-group 10)

28. I think if you were going to advertise the importance of mental health on social media I don't think it would be good enough to just tell people the effects ... I think it's about using real stories like finding people that a lot of young people would look up to and finding about any personal stories they've gone through.

(P2—Leicester year-group 11)

Adolescents argued that in raising awareness about mental health personal stories helped them. They reported social media was a useful advertising platform, as it provides a

mechanism for sharing these stories. Indeed, they felt social media created an opportunity for supportive communities between groups experiencing the same difficulties.

29. The communities on Instagram . . . cos you can get that like, like creating groups for people with like certain mental illnesses that could be a good thing.

(P6—Leicester year-group 13)

30. I see a lot of YouTubers that I watch that go through mental illnesses, I think it makes people that are going through it themselves think that they're not alone and that they can speak up about it and it is a normal thing they can get treatment from. So, I think in that aspect social media can support people.

(P2—Leicester year-group 10)

Creating a supportive environment for those that experience mental illnesses was argued to be achievable through social media, such as 'Instagram' and 'YouTube'. In other words, social media provided a sense of community, to reduce isolation. Social media was also argued to be a good source of information.

31. You can provide like information like via links to like other websites and, um, like that kind of stuff.

(P4—Leicester year-group 10)

32. Yeah, you could teach kids like cos you can show examples of what happens.

(P5—Leicester year-group 10)

Adolescents argued that social media could educate them about mental illness, as well as staying mentally healthy. Furthermore, social media can provide a basis for providing links to other sources of information on the internet. Given the digital ways in which adolescents prefer to learn, it was perhaps unsurprising that participants felt that visual social media—sites like YouTube, Tumblr and Instagram—were a simple way of engaging adolescents in learning.

33. I think that way social media can be helpful because you could do like videos and get messages out there quickly.

(P4—CAMHS group 2)

34. Instead of spending hours and hours looking for information in books you could just like watch a video and that would be great.

(P1—London year-group 8)

Implied in the adolescents' narratives, was the idea that information-searching needed to be simple and fast, and instead of seeking information through other sources, a simple video posted on social media was more effective. Indeed, mental health practitioners also saw the benefit

of this as they felt that social media allows messages to be distributed 'quickly'.

While participants appreciated the virtues of social media for information and promotion of mental health, they were cautious as they outlined the risks and challenges of using it in this way. Specifically, they felt it was important that the source was credible and trustworthy as they argued that much was not.

35. So, the websites do actually give quite, some of them give quite accurate information.

(P4—Leicester year-group 13)

36. I feel like some people wouldn't trust it because it a lot of the stuff that is based on social media is probably not true.

(P5—leicester year-group 11)

Adolescents could assess some risks associated with seeking support and information through social media. They recognized therefore there was an issue of 'trust' when using social media in this way. Nonetheless, they did acknowledge that some 'websites' are a reliable source of knowledge. This was also an issue presented by professionals as they felt that any social media mental health promotion would need to be perceived as credible and trustworthy.

37. I don't think there's anywhere that explains the quality of a website cos anybody can post anything. I think one of the things that's always interesting to me is there's no accountability for how you post information.

(P1—CAMHS group 1)

38. It's got to be trusted sources, hasn't it?

(P5—Leicester education)

As adolescents are not always savvy in judging the credibility of sources online (Eastin *et al.*, 2006), one plausible suggestion offered by participants was the involvement of schools in using social media for mental health promotion. In other words, an integration of school-based mental health promotion work, with a digital platform, encouraging teachers to be involved in judging the quality of the information.

39. Um, no I think the only times like you'd find it is when the school would show you like this is a website you can go to.

(P7—Leicester year-group 10)

40. I think social media is important if you do it the right way but that's not the main, it's almost like a side dish to the main you would need to challenge perceptions through schools and that would just be,

you know, alongside the campaign that would be in schools.

(P4—London education)

Adolescents recognized they would benefit from school personnel being involved in the search for mental health information. They felt some direction on the issue would be important in their use of the Internet. Similarly, educational professionals expressed that social media without additional support might be insufficient, and it would be helpful to go 'through schools'.

DISCUSSION

Social media is often not thought of in positive ways and because of that it can be challenging to consider how this medium might be used to promote adolescent mental health. Through our focus groups, we opened the possibility that a digital platform that is so entrenched in adolescents' lives might be utilized for mental health promotion, while recognizing some of the challenges that this might create. While adult participants and older adolescents were more sophisticated and cautious in their ideas for using social media this way, there was considerable agreement and congruence of ideas across all groups. By listening to the voices of adolescents, educationalists and mental health practitioners, it became clear that from their point of view social media does have this potential. They foregrounded that perspective on the basis that adolescents are increasingly relying on social media as a source of information and as a tool of relaxation.

These voices are especially important as they guide our understanding of the key issues of implementing any promotion strategy. This is essential, as with the increasing prevalence of mental disorders, economic projections suggest that there is likely to be a huge impact on the economy by 2026 (Knapp *et al.*, 2011). Thus, assuring the provision of a good understanding of mental health and promoting a mentally healthy lifestyle is necessary (Singletary *et al.*, 2015). Given the extensive usage, social media provides a possible cost-effective way to promote mental health (Betton *et al.*, 2015).

In this study, participants, while cautious, generally articulated the positive potential of using social media to learn about and promote their mental health, and provided different ways to implement. Participants felt that learning about mental health and illness through multiple platforms was important and argued that the internet as an educational tool was valuable if used carefully and when supported by appropriate adults, such as teachers. Participants acknowledged the extensive use of

social media by adolescents and suggested that the challenges of using this medium to promote mental health needed to be addressed for the successful utilization of this type of work. As adolescents are often reluctant to seek help when experiencing symptoms, for reasons such as stigma, mistrust in health care or lack of awareness (Jorm *et al.*, 2007), a popular alternative has been through the internet. In contemporary society, adolescents are already using the internet to learn about mental illness and to seek support when feeling angry, stressed or sad (Gould *et al.*, 2002). The implication is that healthcare and educational organizations could use social media specifically, to target adolescents in promoting wellbeing, preventing mental illness and supporting those with diagnosed conditions. Notably, this would require the development of both universal and targeted interventions.

The participants in our study offered ideas regarding the possible benefits of using social media for universal mental health promotion. Universal approaches are useful as they target large populations of adolescents in a general way (O'Reilly *et al.*, 2018). Our adolescents recognized that the relative anonymity afforded by the internet, and by certain social media channels, allowed adolescents to search for information and participate in a community of supportive others, as well as learning from celebrities. They recognized some challenges, such as the credibility and trustworthiness of the sources of information. Adolescents wanted quick and accessible information and generally failed to scrutinise the quality of that information carefully, but trustworthiness was important to them. Notably, participants circumnavigated this pitfall by proposing that mental health promotion ought to be hosted through social media, but supported by schools. In other words, they felt that integrating existing school-based work on mental health with a digital platform would provide the trustworthiness required for the information but actively encourage young people to engage. Indeed, there have been a significant amount of universal school-based mental health programmes in schools, yet surprisingly very little work has embraced social media within these (see Durlak *et al.*, 2011; O'Reilly *et al.*, 2018 for recent reviews).

Although there is limited evidence, existing research has suggested that in developing mental health promotion tools using social media, it is necessary to carefully articulate the key messages, account for current trends, utilise multidimensional strategies, and provide user-generated content (Korda and Itani, 2013). From the perspectives of our stakeholders, we argue that we need to embrace the digital age and the potential that new developments in technology offer us. Social media is probably here to stay

and digital platforms have changed the lives of adolescents, but we are still relatively unaware of the costs (Pierce, 2009) or benefits. Indeed, healthcare and education providers are in a unique position to actively utilise these platforms to educate adolescents to promote their wellbeing. Furthermore, by engaging educational institutions actively in the use of these platforms there is a mediating possibility of adult supervision that allows the young users to be confident in the trustworthiness on two levels; the provider and the supporter. This could be especially important, as evidence suggests that universal mental health promotion needs the activities to be sequenced, that is, coordinated and using an active form of learning to be effective (Durlak *et al.*, 2011). Furthermore, they require a sound theoretical base, training for delivery and a focus on outcomes (Weare and Nind, 2011).

Importantly, the incorporation of any social media mental health promotion tool/intervention needs to account for the practical strategies delineated by key stakeholders. Evidently, adolescents desire quick, accessible and anonymous ways to find out information about mental health and mental illness, and thus platforms that allow anonymous identities may be preferred. As adolescents cited visual media as preferable, such as Instagram and YouTube, this opens possibilities to target certain groups with specific developmentally appropriate messages. Furthermore, given the pervasive celebrity culture, and the preference for personal stories, there are opportunities to convey important persuasive messages and tackle stigma through existing online narratives. Congruent with these findings and important messages, our own future direction is to develop these ideas further and create social media promotion tools and explore their effectiveness.

In conclusion, we argue that notwithstanding the negative implications of social media and the need for some caution, social media can have a role to play in mental health promotion. While we acknowledge that there are limitations to our study, such as adolescents' interchangeable understanding of positive mental health and mental illness, the findings do suggest that adolescents, education providers and mental health practitioners are amenable to digital health promotion. Providing that healthcare/education organizations developing the tools account for the possible challenges outlined, and schools recognise the value of supporting young people in the social media use, it is arguably a cost-effective, fast and efficient way to reach large numbers of adolescents. This could therefore be integrated as part of broader mental health promotion packages, as a way of distributing information, raising awareness and possibly signposting to sources of help, as well as

providing platforms for relaxation and coping with stress. Of course, some caution should be expressed. It must be recognized that the absence of mental illness is not necessarily synonymous with the presence of mental health, and curing mental illness will not guarantee a mentally healthy society (Keyes, 2007); but by working with appropriate organizations in health and education, the digital society affords some opportunity to reach adolescents in ways that are missed in traditional help-seeking avenues. Evidently, this is an area where a much larger evidence-base is needed.

ETHICAL APPROVAL

Ethical approval was provided by the lead organization governance structure, and all core principles were adhered to throughout.

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