Effect of social media on mental health and emotional wellbeing of young people

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"Our children have become unknowing participants in a decades-long experiment."

- Social Media and Youth Mental Health: The U.S. Surgeon General's Advisory, 2023[1]

This essay explores how public discourse has shifted in relation to the effects of social media on the mental health and emotional wellbeing of young people. Whilst there are still ongoing challenges in elucidating the causal mechanisms of social media's effects on mental health and wellbeing, there is a growing consensus around a need to take action to mitigate social media's negative impacts. I argue that in an age of ever-accelerating technological change, we can identify from established evidence and core principles ways to make informed judgements about the effect of social media on the mental health and wellbeing of young people, and more importantly to minimise exposure to negative effects.

I will first review the academic literature around the effect of social media on mental health, paying attention to how the evidence is contextualised and framed, before considering recent popular publications and guidance. I will finally propose a series of questions which may help young people, parents, clinicians and policy makers judge the likely benefits and harms of digital social platforms.

Social media has "the potential to both benefit and harm"[1], but we also need to protect our children from known and unknown risks

In systematic reviews and policy reports the research evidence is described in a confusing mix of tones, both equivocal and in a tone that highlights concern and a need to act. Alongside a recognition of a need for more robust empirical longitudinal research on many aspects of the effects of social media on developing minds, is a growing concern from parents, young people and professionals of potential significant harms of social media[1–3].

At the most extreme end of harms, exposure to unsolicited harmful content, either through direct contact by malignant individuals or incidental exposure, can result in what clinicians would consider as 'never events'[4]. Ian Russell, founder of the Molly Rose Foundation, whose daughter tragically died by suicide in 2017, has been key in highlighting the need to take urgent action due to the risks from exposure to harmful content to 'help ensure, that in future, there will be fewer Mollys to mourn'[5].

Systematic reviews of the impact of social media on the mental health of adolescents and young people often describe both these negative effects, such as decline in sleep, school performance, social functioning and an increase in mental distress and self-harm; while also describing the positive aspects of increased opportunities for social connection, boosts to self-esteem, and the gaining of access to medical information[3].

Other positive aspects of social media, such as the buffering effects against stress from group affiliation and social support reported by racial, sexual and gender minority young people, has been described further in qualitative interviews with young people[6].

Studies on the effects of social media on youth mental health have often been broad, heterogenous and from a variety of different disciplines which has impacted their rigor and generalisability[3]. For example, they are often cross-sectional, sample different groups of community and clinical populations, rely on self-report, and use a range of measures which has often led to the inability to draw causal conclusions regarding the negative impacts of

social media on mental health[3]. In addition, there are rapid changes to trends in how young people use different social media platforms, for example moves from Facebook to Snapchat, to Instagram and TikTok which can limit comparisons between studies.

In a quasi-experimental design that made use of the staggered roll-out of Facebook across U.S. colleges, the platform was associated with an 9% increase in depression and 12% increase in anxiety. If this relationship was causal and extended to the whole college population, this would have contributed to more than 300,000 new cases of depression[7]. Since the study, the way Facebook and other platforms facilitate engagement, interaction and social comparison will have changed, therefore this estimate is already likely to be out of date.

There is a recognition that gathering high-quality evidence that establishes causal links and explain underlying mechanisms may take many years and rely on the co-operation of social media companies to share data. In the meantime, young people are likely to be affected by social media in different ways with some young people being disproportionately impacted due to preexisting vulnerability such as having a prior mental health diagnosis, or cultural, historical and socio-economic factors[8,9].

How evidence influences policy- 'the need to use persuasion to reduce ambiguity'[10] in practice

The shifts in public debate and regulation around young people and social media has brought to the forefront the contradictions in assumptions which are shared by many that "policymaking should be as 'evidence based' as medicine"[10]. In practice both the identification of the right questions and methods to generate appropriate evidence, and the subsequent translation of this evidence into policy and practice is often more complex and uncertain. However, in the face of this complexity, it does not necessarily mean that we should be stymied from making informed judgements and taking actions based on underlying principles and shared values.

There has been increasing consensus in the concerns expressed by parents, teachers, policy-makers and clinicians around the potential harms of social media on the mental health and emotional wellbeing of young people. It is likely that a number of conversations were occurring at different levels in parallel which led to increased acceptability for urgent actions whilst more comprehensive evidence is being generated.

In May 2024, Ofcom published a draft Children's Safety Codes of Practice with 40 practical measures that set expectations for technology companies to 'tame toxic algorithms' to protect children online[11]. The measures specifically focus on limiting young people's exposure to harmful content on suicide, self-harm and eating disorders in their online social media feeds, and through search functions. The guidance reinforces technology companies' legal responsibilities for the most extreme end of possible harms from social media.

Jonathan Haidt's book, 'The Anxious Generation'[12], published in March 2024 popularised sociopsychological theories and research around the negative effects of the shift away from play-based childhoods, which build social relationships and resilience, to screen-based childhoods. Haidt's writing is good at turning scientific research into persuasive arguments. He underlines social media's negative effects on mental health and emotional wellbeing across four mechanisms which include sleep deprivation, attention fragmentation, fostering an addiction to rewards on social media, and taking time away from potentially more meaningful social interactions in the real world.

Since then, it is likely that this framing of the wider public discourse, and the associated call for collective action has facilitated institutions at various levels to limit social media use for young people. Such actions include whole local authorities such as Southwark schools banning phones in school[13], to the Australian government banning children under the age of 16 from using social media[14].

Evidence-informed questions we should ask of new digital technologies

The potential harms of social media are not inevitable. Goodyear and colleagues in a BMJ analysis article, proposed that outright bans of social media are only a temporary solution[15]. A rights-based approach is needed to underpin social media design and education[15].

More research is needed regarding how we can maximise the benefits to individuals and society of potential new technologies that may go on to change how we communicate and relate to each other. There may be particularly pernicious aspects of a social media platform's design, for example the addictive nature of an algorithm aimed at maintaining your interest. However, platforms can also be designed in a more cooperative and collaborate way that emphasises technology for the public benefit.

Although we currently do not have robust conclusive evidence on aspects of good design of social media due to the fast moving the nature of field, we do have evidence regarding what is good for mental well-being.

We already know many aspects of what is good for mental health from decades of research on populations in the 'real world'. There are many established factors from the evidence on positive psychology, research on resilience and the key ingredients from psychological and social interventions that we know are good for mental health. We can use some of these principles to develop questions we can ask to help us appraise the benefits and harms of current and potentially new social media platforms.

One simple framework that clinicians, policy makers and the wider public can use is "The 5 Ways to Wellbeing" which has been widely disseminated as a public mental health campaign[16]. We can make judgements of whether current and future digital social media technologies might be protective of children and young people's wellbeing based on whether the technologies support young people *to connect, take notice, give, move and learn a new skill.*

Some questions we might wish to ask of these platforms might include:

1. To what extent does the platform promote high quality social relationships?

Connecting with others is part of 5 ways of wellbeing. Loneliness is associated with poorer mental health, and social support has been found to be an important protective factor for better physical and mental health. What aspects of a digital platform might support and encourage the formation of high-quality relationships, rather than just superficial interactions?

2. To what extent does the platform support users to learn new skills?

Learning new skills and building a sense of confidence and mastery is associated with mental wellbeing. Many people may use different social media platforms to look up tutorials regarding how to cook new recipes or play a musical instrument. Does the platform effectively facilitate and support these uses?

3. To what extent does the platform encourage users to pay attention to the present moment?

In an increasingly interconnected world, our attention is being stretched simultaneously in different directions in response to multiple notifications. We know that paying attention to the present moment, or mindfulness is associated with improved mood and anxiety symptoms. Does the digital platform promote deeper focus, less distraction and/or paying attention to the present moment?

Conclusion:

In certain respects, the speed of technological change is accelerating with the development of new "AI" technologies, and the evidence and practice around mitigating any potential harms may find it hard to keep pace. The potential harms and benefits of social media does not just affect young people but also influences how we all experience and live our lives. We should all be more cognisant regarding how social media can be used and designed with a greater emphasis on positive mental health. I have hopefully shown that there are key underlying principles and questions which we can keep on asking to each new iteration of digital social technologies which may be helpful to guide research, policy and clinical practice.

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