

# Social media: the root cause of rising youth self-harm or a convenient scapegoat?

Recent events have reignited debate over whether social media is the root cause of increasing youth self-harm and suicide. Social media is a fertile ground for disseminating harmful content, including graphic imagery and messages depicting gendered violence and religious intolerance. This proliferation of harmful content makes social media an unwelcoming space, especially for women, minority groups, and young people, who are more likely to be targeted by such content, strengthening the narrative that social media is at the crux of a youth mental health crisis.

However, the parallel rise in social media use and youth mental health problems does not imply a causal relationship. Increased social media use may be a correlate, exacerbating factor, or a consequence of rising trends in youth self-harm, which may have entirely separate causes. Despite its potential negative impacts, social media is also a source of information and support for young people experiencing mental health problems.<sup>1</sup> Restricting young people's access to social media could impede pathways for help-seeking. This complexity highlights the need for a considered approach.

## The argument that social media is the root cause of rising rates of youth self-harm

Rising self-harm over recent decades coincides with the advent of smartphones. Research shows an 8–11% increase in self-harm among young people,<sup>2</sup> along with increases in depression and anxiety. This increase became apparent around 2010–12,<sup>3</sup> affecting those born after 1995 who entered adolescence during the ascendance of social media and smartphones. In his book *The anxious generation*,<sup>3</sup> Jonathan Haidt argues that widespread adoption of social media, coupled with overly restrictive parenting practices, is the cause of increasing self-harm, brought about via “a new way of growing up”. Others suggest that sharing of content depicting suicide methods or romanticising self-harm might contribute to an increase in self-harm behaviours through a process of social contagion.<sup>4</sup> These trends have raised concerns among parents and politicians, leading to calls for restricting access to digital platforms.<sup>5</sup>

Technological innovations have historically influenced social norms and societal structures, so it is crucial to take these concerns seriously. However, the argument that social media is the cause of rising trends in youth self-harm is relatively weak.

## Evidence that the argument is weak

First, the effect is not universal. Although some studies indicate that rates of anxiety, depression and self-harm have indeed increased among young people, these trends have been disputed by some and may not be universal.<sup>6</sup> Second, associations are weak in

longitudinal studies and meta-analyses. The Black Dog Institute's Future Proofing Study, which followed over 6000 Australian adolescents, revealed only small associations between social media use and future depression,<sup>7</sup> consistent with other studies.<sup>8–11</sup> Meta-analyses also report small associations,<sup>12,13</sup> suggesting that even if a link exists, it may be too weak to explain population-level youth self-harm trends.

Third, any explanation for the causal role of social media on self-harm must account for the disproportionate rise in self-harm in young women compared with young men. Some researchers propose that girls use social media more frequently than boys and are more negatively affected by it, but studies suggest that the impact of social media on depression in girls appears too small to be clinically meaningful.<sup>14</sup> Evidence shows that problematic social media use does not significantly differ in its impact on depression between girls and boys.<sup>15</sup> Therefore, differences in social media use may not fully explain the greater rise in self-harm among young women.

## The importance of this debate

Restricting social media may have harmful effects. Although limiting its use may be reasonable for some, complete bans could harm others. Young people facing mental health challenges often turn to online resources to understand their symptoms,<sup>16</sup> with those experiencing more severe suicidal ideation more likely to seek help online.<sup>17</sup> Research shows that young people who access self-harm content online are often already engaging in self-harm<sup>18</sup> and turn to social media seeking support and understanding.<sup>19</sup> Gender minority youth — individuals whose gender identity differs from their sex assigned at birth — who face high rates of depression, self-harm and suicide, and who face health care discrimination,<sup>20</sup> rely on social media for mental health resources.<sup>21</sup> Complete bans could hinder health literacy development and help-seeking behaviours, especially among those at greater risk. Age-restrictions might push young people into using less regulated platforms, while also undermining the responsibility of existing platforms to create safe online communities.

Focusing solely on social media as the cause of youth mental health issues may obscure critical societal factors. Global challenges, such as violence against women, highlighted by conflicts worldwide and recent attacks in Australia, play a crucial role. Young adults today face significant socio-economic hurdles,<sup>22</sup> including stagnant income growth, reduced home ownership, and job insecurity. These economic trends can intensify gendered violence, hinder health care access, and increase mental health risks for those with pre-existing vulnerabilities. Climate change weighs heavily on youth, ranking among the top issues affecting their mental health.<sup>23</sup> Although social

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media might amplify exposure to these factors (eg, via cyberbullying, excessive negative or harmful content), current data do not definitively support a direct causal link between increased social media use and poorer mental health. In our efforts to understand the drivers of rising youth self-harm, social media cannot become a scapegoat for broader factors that drive mental health problems.

If there is a causal link between social media and youth self-harm, generative artificial intelligence (AI) could exacerbate the problem. Generative AI poses a substantial risk in the context of social media. Rather than merely sharing information, generative AI can fabricate it, enabling more sophisticated online attacks and creation of explicit content. This can exacerbate the disproportionately negative effects on adolescents, women, and minority groups.<sup>24</sup> Of particular concern is the ability of generative AI to deliver personalised content and misinformation about self-harm continuously to young users.

### Recommendations

#### Understand why some individuals are more susceptible to social media harms

Etchells questions, “why do some people prosper online while others get into real difficulty?”<sup>25</sup> We currently lack evidence to answer this, necessitating new longitudinal studies incorporating personal and societal vulnerability factors (eg, trauma, family factors, school environment). Different online interactions — including direct messaging (with strangers versus friends), general screen time, and cyberbullying — may exert very different effects on wellbeing. Research needs to capture the type and amount of social media usage.<sup>11,12</sup> Methods such as ecological momentary assessment may be useful.

#### Assess alternative explanations for youth self-harm trends

Although complex, alternative explanations for the rise in youth self-harm must be investigated (eg, employment conditions, gendered violence, social isolation, and climate concerns). These factors may differentially affect youth, women, and minority groups.

#### Mitigate artificial intelligence (AI)-related risks

Measures needed to mitigate AI risk:

- constraints baked into AI tools;
- identifier codes to identify content creators;
- examine, evaluate, and potentially implement suitable controls on technology platforms;
- technology to detect and remove harmful content;
- education for young people to spot malicious AI content and respond effectively;
- education for the mental health sector to advise young people how to seek help if they are victims of malicious AI content;
- mechanisms to prevent AI algorithms from directing harmful content towards young people.

The benefits of generative AI should be leveraged to detect escalating user mental health risk on social media platforms and facilitate referrals to support. This must be undertaken with consent, co-design, consideration of ethics, and with policies implemented to disincentivise malicious AI use.

#### Evaluate interventions that restrict social media and ensure they are evidence-based

We urge governments and research bodies to introduce embedded prospective studies of the effects of social policies. The use of stepped wedge trials may be possible for local or regional efforts, allowing schools or districts to be compared.

### Recommendations

The **Box** presents our recommendations to better understand the problem. As Australia introduces policies that restrict young people’s social media exposure, we must investigate the effect these policies have or do not have. Does government regulation of inappropriate content result in reductions in self-harm? Does restriction of smartphones in schools improve mental health? Does public education around self-harm and online self-harm content<sup>26</sup> make a difference? Addressing many of these questions is urgent, as a range of initiatives, such as those advocated by the United States Surgeon General’s Advisory,<sup>27</sup> are now being introduced. This is a rare opportunity to identify the extent to which (and for whom) social media has adverse mental health effects.

### Conclusion

Social media is unlikely to be the primary cause of rising mental health problems among young people. Social media amplifies prejudices and attitudes already present in our societies, but it does not create them. Discrimination and inequality increase self-harm risk, regardless of whether they are experienced online or in-person. Young women are subject to major policing of their voices, interests and opinions online, but this reflects broader societal attitudes towards young women, not something unique to social media. Simple solutions to restrict social media are not likely to fix the problem. This would be akin to stopping the flow of toxic chemicals into a river while failing to shut down the factory that causes the pollution. We need to deal with the broader ongoing societal issues of misogyny, violence, racism and discrimination.

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