

Protecting adolescent mental health requires regulating algorithms, not just screen time

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About the research

*The UK's Online Safety Act and recent proposals to introduce social media age restrictions for under-16s reflect growing concern about the impact of social media on young people's mental health. However, current policy debates have largely focused on restricting access, removing harmful content, or reducing screen time. **Our research identifies a missing target for public policy: the repeated, algorithmically driven exposure to content that recommendation systems create.***

This briefing draws on a qualitative study involving 27 UK adolescents aged 14-19 years who shared their real TikTok and Instagram recommendation feeds during in-depth photo-elicitation interviews. This provides one of the first detailed wellbeing-related accounts of how young people experience algorithmically-curated social media in everyday life.

Young people consistently described recommendation systems as shaping what they saw and how their online experiences unfolded over time. Rather than isolated encounters with harmful content, adolescents described cumulative patterns of exposure produced by engagement-driven algorithms that interacted with developmental stage, emotional state, family, peers and schools. Although many demonstrated high levels of algorithmic awareness, they often felt unable to meaningfully influence what platforms continued to recommend. These findings suggest that protecting adolescent mental health requires policies that address recommendation systems, platform design and commercial incentives alongside existing approaches to online safety.

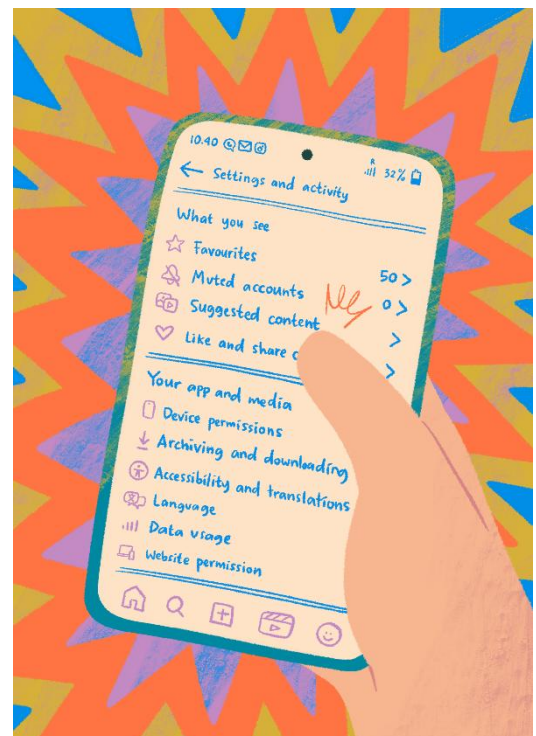


Image by [Yulia Saraswati](#)

Policy Recommendations

1. Regulate recommendation systems as well as harmful content.

The Department for Culture, Media & Sport (DCMS) and Ofcom should require platforms to extend children's risk assessments beyond individual pieces of content to evaluate cumulative algorithmic exposure. Building on Ofcom's existing [Children's Risk Assessment](#) framework, platforms should assess how recommendation systems create cumulative patterns of exposure, including repeated recommendations, emotional reinforcement and harmful recommendation trajectories.

2. Require age-appropriate algorithmic safety by design.

Where recommendation systems present risks to children, platforms should be required to demonstrate how these risks are mitigated through system design. This could include safer defaults, more diverse recommendations, limits on repeated distressing content, and friction mechanisms that interrupt engagement-driven reinforcement. Ofcom should make these expectations explicit within its [Protection of Children Codes of Practice](#).

3. Give young people meaningful control over recommendations

Ofcom should require platforms to provide children with accessible and effective tools to influence how content is recommended, through the Protection of Children Codes of Practice. These should include clear explanations of why content is recommended, effective "Not Interested" and topic preference controls, simple feed reset options, and transparent labelling of advertising and commercial targeting. Platforms should demonstrate through testing with children and young people that these controls are understandable and effective.

4. Embed algorithmic literacy within education

The Department for Education should update the statutory RSHE and Computing curricula, supported by revised [Teaching Online Safety in Schools guidance](#), to include algorithmic literacy as a core component of digital education. This should move beyond generic messages about screen time to teach how recommendation systems personalise content, why platforms optimise for engagement, how to manage recommended content, and how repeated exposure can influence emotions and behaviour. Resources should be age-appropriate, evidence-informed and co-developed with teachers and young people. Algorithmic literacy should complement, rather than replace, regulation of platform design.

5. Move beyond screen time in public health surveillance

The Department for Health and Social Care, DCMS and Ofcom should work together to develop a national framework for monitoring young people's experiences of algorithmically recommended content, including cumulative exposure, emotional impact, perceived control and developmental vulnerability. Ofcom should also require platforms to publish standardised evidence on how recommendation systems operate for children and whether safety measures effectively reduce harmful recommendation trajectories. Treating recommendation systems as a commercial determinant of health would support more meaningful surveillance, policy evaluation and prevention.

Key Findings

Social media platforms increasingly act as environments that shape adolescent wellbeing and development. Recommendation systems determine what young people see, how often, in what combinations, and during which emotional states. This research suggests that digital wellbeing is produced through interactions between platform design, developmental stage, social context and individual characteristics. Policies focusing solely on screen time or individual responsibility are therefore unlikely to address the mechanisms through which many online harms emerge.

Recommendation systems create cumulative exposure

Algorithms determine not simply what adolescents see, but also:

- frequency and persistence,
- combinations of content, and
- emotional intensity.

This repeated exposure was often more important than individual posts.

Recommendation systems repeatedly amplified different forms of content - including body image, mental health, consumerism, news, identity and entertainment - but similar mechanisms were evident across all content types. Content that initially provided support, information or enjoyment could become

emotionally burdensome through repeated algorithmic exposure.

Young people understand algorithms but lack meaningful control

Participants often understood how algorithms worked. However they described:

- tools such as “Not interested” having limited effectiveness,
- feeds reverting to triggering content over time, and
- engagement (e.g., disagreeing with a comment) being interpreted as interest, reinforcing previous vulnerabilities.

Young people described a sense of limited control over feeds despite digital literacy.

Commercial incentives shape what young people see

Participants repeatedly described recommendation systems as optimised for engagement rather than wellbeing. Commercial incentives were perceived to reinforce:

- emotionally engaging content and conflict,
- appearance norms, comparison and consumerism, and
- prolonged attention.

This places platform design within a commercial determinants of health framework.

Further information

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Based on this research, Mind Your Feed (<https://www.mindyourfeed.co.uk/>) is an evidence-informed, school-based algorithmic literacy resource designed to help young people understand how recommendation systems shape their online experiences and develop practical strategies for managing their feeds and protecting their wellbeing.

Winstone, L., Parsonage, J., Cross, L. *et al.* Algorithmic recommendation and adolescent mental health: a grounded theory study of social and commercial determinants. *BMC Public Health* (2026). <https://doi.org/10.1186/s12889-026-28300-5>

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