MRC/CSO Social and Public Health Sciences Unit Briefing: The relationship between social media use and young people's engagement in health-risk behaviours – Findings from a systematic review

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Why did we do this study?

We know social media use may offer several benefits for young people's development, such as facilitating collaborative learning, communication and social relationships. However, concerns have been raised over social media's impact on young people's engagement in several health-risk behaviours, including alcohol, drug and tobacco use, and its potential to widen health inequalities.

Systematic reviews offer a summary of the nature and quality of evidence in a given area, which can then be used to inform decision-making. However, existing review evidence investigating the relationship between social media use and young people's health-risk behaviours focuses on university and college students. It does not consider social media explicitly (instead examining internet use or use of digital technologies) and does not consider the underlying quality of the included studies. Rigorous evaluation of these studies is especially important to assess the potential harms/benefits of social media on young people's health-risk behaviours to inform policy focused on securing young people's safety online.



What did we do?

We systematically reviewed the evidence on social media use and young people's healthrisk behaviours (addressing the aforementioned evidence gaps), in order to answer the following questions with input from a Policy Advisory Group¹:

- 1. How is social media use measured when investigating social media's relationship with young people's engagement in health-risk behaviours?
- 2. What is the relationship between time spent on social media/frequency of use and young people's health-risk behaviours and young people's engagement in health-risk behaviours?
- 3. What is the relationship between exposure to health-risk behaviour content on social media and young people's health-risk behaviours, and does the relationship differ by the type of content viewed (user or marketer-generated)?
- 4. Does the relationship between social media and young people's health-risk behaviours change depending on the social media platform/category used or by the age, sex, and family- and country-level socioeconomic circumstance?
- 5. What is the quality of existing evidence?

For a study to be included in our review, it had to investigate social media's relationship with one or more of the following outcomes: alcohol, drug, tobacco, electronic nicotine delivery system use, sexual risk behaviour, gambling (not via social media), unhealthy dietary behaviour, inadequate physical activity, anti-social behaviour and multiple risk behaviours, in young people aged 10-19 years.

We synthesised the results of these studies by categorising the studies by the:

- aspect of social media use investigated (time spent, frequency of use, exposure to health-risk behaviour content on social media)
- social media characteristics investigated, including social media category (e.g. social networking sites), micro-blogging sites and platform (e.g. Facebook, Instagram), and in the case of exposure to health-risk behaviour content on social media, whether the content viewed was user (e.g. peer to peer posts) or marketer-generated (e.g. advertisements or influencer content)
- health-risk behaviour investigated

We were then able to see if the different aspects and characteristics of social media had harmful, beneficial or no influence on young people's engagement in health-risk behaviours.

¹ Members included representatives from the UK Health Security Agency, Office for Health Improvement and Disparities, Scottish Government, Public Health Scotland, We Are With You, University of Sheffield, and the University of Stirling.

What did we find?

- In total, 1,431,534 young people were investigated, with an average age of 15 years.
- We found that most of the 126 studies included in the review were from high-income countries, including the USA, Canada, Australia, and the UK.
- We found use of social media (considering time spent, frequency of use and exposure to health-risk behaviour content on social media) resulted in increased alcohol, drug, tobacco, electronic nicotine delivery system use, gambling, sexual risk, anti-social, unhealthy dietary and multiple risk behaviours.
- Exposure to health-risk behaviour content on social media was the most harmful aspect of social media use, especially in relation to alcohol use and unhealthy dietary behaviour.
- We found that social media may have negligible harmful influences, and potentially even positive influences, on physical activity.
- The harmful influence of social media on alcohol use was greater in young people under 16 compared to those 16 years or older, whilst the opposite was found for sexual risk behaviour.
- When we looked at the different types of content viewed, for alcohol use, we found that exposure to user-generated content was more harmful than exposure to marketer-generated content.
- Social media's impact on tobacco use was more harmful in low-middle income countries compared to high-income countries.
- Evidence for causality was limited for all health-risk behaviours excluding unhealthy dietary behaviour.

What next?

- With most research conducted in the global North, we suggest policy makers fund more research in low- and middle-income countries.
- We know that many of the risk behaviours investigated in the review can be experimental during adolescence and that their influence on health may vary. The funding of longitudinal research which tracks young people into adulthood would help study this. Similarly, investment into well-conducted randomised trials would also give more robust evidence than currently available.
- Our review adds weight to calls for policy which encourages social media corporations to share data with researchers, the development of generalisable validated measures of social media use, and the use of social media data donation, to facilitate comparability across studies.
- As social media use may have a beneficial influence on young people's physical activity, further research on this outcome would allow policy makers to potentially harness the benefits social media may present on the health of young people.

As safeguards for a digital world are still evolving (e.g. the UK Online Safety Bill), a
multi-sector approach to securing adolescent online safety is needed. This includes
digital-literacy school education and resource provision to parents, educators
and health professionals to improve understanding of the different aspects and
characteristics of social media use and the potential risks/benefits they present to
young people's health.

Link to paper

Social media use and health risk behaviours in young people: systematic review and meta-analysis

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Authors

Amrit Kaur Purba, Rachel Thomson, Paul Henery, Anna Pearce, Marion Henderson and Srinivasa Vittal Katikireddi.

Contact

Dr Amrit Kaur Purba, MRC/CSO Social and Public Health Sciences Unit Tel: 0141 353 7500 Email: <u>A.Purba.1@research.gla.ac.uk</u> X (previously Twitter) handle: <u>@AmritKPurba</u> ORCID ID: <u>0000-0003-2214-6804</u>

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