Likelihood of kids and young people smoking and vaping linked to social media use

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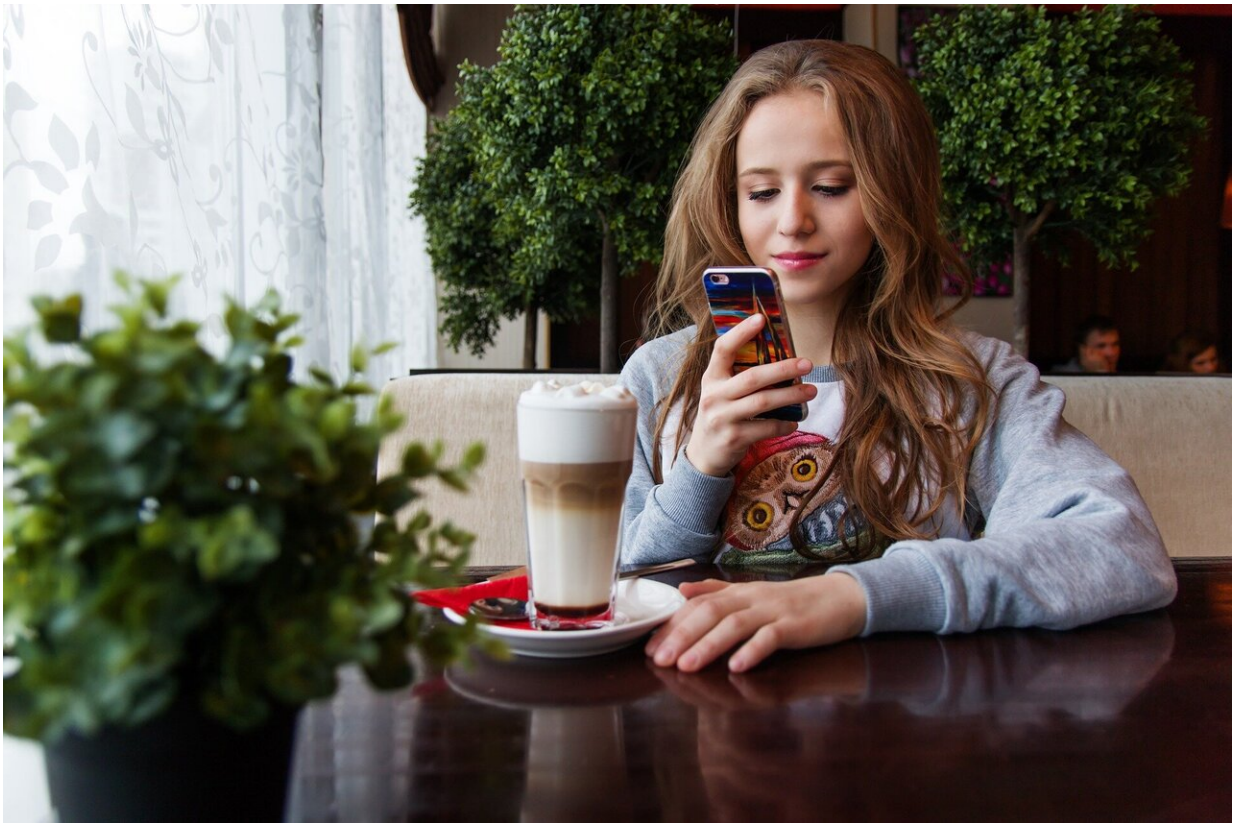

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The more time spent on social media, the greater the likelihood that children and young people will both smoke and/or vape, suggests research published online in the respiratory journal *Thorax*.

Clocking up a weekday tally of seven or more hours was associated with a more than a doubling in risk among 10 to 25-year-olds, the findings indicate, reinforcing concerns about the marketing clout of these platforms, say the researchers.

The existing body of research on social media use and smoking and vaping mostly concerns the U.S., so to better assess the situation in the UK, the researchers drew on data from 10 to 25-year-olds taking part in the UK Household Longitudinal Study 2015–21.

Participants were asked to report their normal weekday social media use as well as current cigarette smoking and vaping activity.

Among 10,808 participants with a total of 27,962 reported observations, just over 8.5% reported current cigarette smoking in at least one survey, and 2.5% reported current vaping. Just over 1% reported dual use.

Analysis of the responses showed that cigarette smoking, vaping, and dual use were all more common among participants reporting heavier social media use.

Just 2% of those who said they didn't use social media reported current cigarette smoking compared with nearly 16% of those who said they spent seven or more hours/weekday on it.

Similarly, current vaping ranged from less than 1% among non-users of social media to 2.5% among those spending seven or more hours on it every weekday.

The likelihood of smoking, vaping, and dual use also rose in tandem with the amount of time spent on social media.

Those who said they spent less than one hour/day on social media were

92% more likely to be current smokers than those who said they spent no time on it, while those clocking up seven or more hours/day were more than 3.5 times as likely to be current smokers.

And those who said they spent one to three hours a day on social media were 92% more likely to report current vaping than those who said they spent no time on it.

And those spending seven or more hours/day on social media were nearly three times as likely to report current vaping than those who said they didn't spend any time on these platforms.

Heavier social media use was associated with a greater likelihood of dual use. Those reporting spending one to three hours/day on it were more than three times as likely to be dual users as those who said they didn't spend any time on social media.

But those spending seven or more hours/day on social media were nearly five times as likely to both smoke and vape.

The findings were independent of other factors associated with a heightened risk of smoking and vaping, including age, sex, household income, and parental smoking and vaping.

When the analysis was broken down by sex and household income, similar associations emerged for smoking, but not for vaping. Males, those under the legal age of sale, and those from higher income households were more likely to vape.

This is an observational study, and as such, no firm conclusions can be drawn about causal factors. The researchers also acknowledge that the study relied on self reported data, and that they didn't have any information on the social media platforms used, or how they were being

used. But they proffer some explanations for their findings.

"First, and most straightforwardly, there is evidence that the corporations behind cigarette smoking and vaping make use of social media to advertise and promote their products," write the researchers.

"This includes direct advertising which is algorithmically targeted and the use of paid social media influencers who present smoking and vaping as a fashionable and desirable activity. Greater time spent on social media is likely to increase exposure to these forms of influence," they explain.

"Second, social media use has been shown to have features in common with reward-seeking addictive behavior. High social media use may increase susceptibility to other addictive behaviors like smoking," they add.

"Third, as a space that is largely unsupervised by parents/caregivers, social media use may encourage behaviors that are transgressive, including cigarette smoking and vaping."

They conclude, "The companies that own social media platforms have substantial power to modify exposure to material that promotes smoking and vaping if they choose to or are compelled to. Voluntary codes seem unlikely to achieve this, and the introduction and enforcement on bans on material that promote this should be considered.

"In general, we think that algorithms should not be promoting products to individuals that they cannot legally buy. Legislation and enforcement around this and other corporate determinants of health concerns should be considered a core part of online safety and child protection."

In a linked editorial, Dr. Kim Lavoie of the University of Montreal,

voices concerns about the popularity of e-cigarettes and vaping products among young people.

Aside from the addictive nature of nicotine and the relative affordability and accessibility of these products, "the answer may lie in the subtle and creative ways e-cigarette manufacturers have managed to reach, and entice, youth into taking up vaping," which include social media, she suggests.

"The policy implications of this paper are important, particularly as they pertain to regulation of advertising and algorithms targeting under-age users," she writes.

More information: Association of time spent on social media with youth cigarette smoking and e-cigarette use in the UK: a national longitudinal study, *Thorax* (2024). DOI: 10.1136/thorax-2023-220569

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