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Zendle, David ORCID logoORCID:  
<https://orcid.org/0000-0003-0279-6439> and Bowden-Jones,  
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## EDITORIALS

# Is excessive use of social media an addiction?

We don't yet know, and social media companies must help us find out

David Zendle *lecturer*<sup>1</sup>, Henrietta Bowden-Jones *psychiatrist and honorary lecturer*<sup>2</sup>

<sup>1</sup>York St John University, UK; <sup>2</sup>Imperial College London, UK

Huge numbers of people use social media, such as Instagram, Facebook, and Snapchat. Some 77% of internet users in the UK have a social media profile,<sup>1</sup> and one recent study estimates that 20% of adolescents may use social media for at least five hours every day.<sup>2</sup> These levels of exposure to social media have led to considerable concern over whether its excessive use should be considered a distinct form of behavioural addiction, and clinically treated as such.<sup>3</sup>

Some of the available evidence supports this position. Excessive social media use has been linked to symptoms typically associated with substance use disorders and behavioural addictions. For example, it has been shown to coincide with higher levels of social anxiety<sup>4</sup> and depressive symptoms.<sup>5-7</sup> Furthermore, when describing interactions with social media, people commonly report experiences that mirror widely used criteria for establishing addiction<sup>8</sup>—for example, the inability to reduce their use of social media despite wanting to, or the experience of withdrawal symptoms when they are unable to access social media.<sup>5</sup>

## Proceed with caution

Social media addiction is not currently recognised in either the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition, (DSM-V) or the *International Classification of Diseases*, 11th edition. Given the evidence outlined above, it may seem reasonable to support the pathologising of excessive social media use in a similar fashion to excessive gambling or alcohol use. We believe, however, that caution is warranted before defining “social media addiction” as a disorder. The inclusion of gambling disorder in the DSM-V was prompted by substantial evidence of parallels between disordered gambling behaviours and substance addictions.<sup>9 10</sup> A similarly clear cut body of evidence does not yet exist for disordered social media use.

The literature on social media addiction overwhelmingly relies on self reported measures of both addiction and usage, rather than clinical diagnoses of the former and direct behavioural measures of the latter. For example, the Bergen Facebook addiction scale assesses the presence of withdrawal symptoms by asking participants questions such as: “How often during the past year have you become irritable if you have been prohibited from using Facebook?”<sup>11</sup> When it comes to understanding the

prevalence of excessive social media use, this may be problematic. Little consensus exists regarding either how social media addiction should be measured or what actually are the specific cut-off points on a questionnaire to consider a person addicted.<sup>12</sup> Indeed, analysis of the diagnostic accuracy of a prominent internet addiction questionnaire estimated that it may report false positives as often as 91% of the time.<sup>13</sup>

Complicating things further are the lack of high quality longitudinal studies in the social media addiction literature. This contrasts with research into disordered gambling, which commonly employs longitudinal designs. This has allowed researchers to understand the causes, effects, and progression of problem gambling,<sup>14-17</sup> and draw specific parallels between gambling and other addictions, such as substance use disorders.<sup>18</sup> Without this information, it is hard to understand whether excessive social media use mirrors other addictions in both its aetiology and its response to treatment.

## Known unknowns

Understanding the course of compulsive social media use will be helpful to clinicians working in mental health. We don't know as yet whether intense social media use can lead to psychological distress and even psychiatric illness—such as depression and anxiety—or whether people who are more likely to find the use of social media compulsive are the ones with predisposing traits towards these presentations and the accompanying low self esteem and insecurities we may see clinically.

The duration of compulsive behaviours on these platforms and the extent of the subsequent harm experienced in relation to academic, social, and work related pursuits is also unclear.

How do we tackle all these uncertainties? To begin with, funding organisations such as the Economic and Social Research Council and the Medical Research Council need to recognise the importance of funding large scale, preregistered longitudinal studies on the effects of social media. Similarly, treatment based on small scale research should be made available to assess the need in the community for this type of intervention, the types of activities that are proving compulsive, and the most effective treatment interventions.

In the long run, using industry data will be the most effective way to understand how problematic the excessive use of social media is. The companies who profit from social media hold vast repositories of behavioural data regarding the interactions of their users. Facebook alone, for example, holds hundreds of petabytes of such information.<sup>19</sup> While social media companies profit to the tune of billions of dollars per year from these datasets,<sup>20</sup> researchers are forced to rely on small samples of error prone self reported data to work out what the effects of this commerce might be on society. Schemes like the Social Data Science Accelerator<sup>21</sup> allow social media companies to share their data with researchers. It is of vital importance that governments and policymakers encourage these companies to do so.

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