

Debate: Should academics collaborate with digital companies to improve young people's mental health?

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Understanding the digital world is vital if we want to improve children's and young people's mental health in the 21st century. With 6 in 10 UK 8–11-year-olds, rising to 9 in 10 teenagers, using social media (Ofcom, 2022), the importance in their lives – and for their mental health – of digital environments underpinned by large social media and gaming companies is substantial (Odgers & Jensen, 2020). However, the blueprint for how to research youth mental health, taken from a pre-digital era, breaks down when applying it to this new digitalised – and privatised – world.

While young people's online activities are constantly tracked, the data are generally accessible only to researchers employed by digital companies, where they are used mainly to promote commercial interests and optimise algorithms to increase revenue and engagement. Two problems arise: it is difficult to obtain data for independent research on youth well-being in relation to social media and gaming; and the implementation of evidence-based recommendations to improve digital platforms needs the cooperation of digital companies (or a very strong regulatory hand).

With both data ownership and design decisions firmly in the hands of digital companies, academics face a dilemma. Some hold that academics should not collaborate with companies as this will compromise their intellectual independence, professional reputation and public credibility. Some even argue that they should try to ensure that their work is not used for political or tactical reasons by industry in ways that counter public values (Nutley, Walter, & Davies, 2007). The implication is that academics must find research methodologies and forms of intervention to improve youth mental health in a digital world that remain independent (financially and in other ways) of the companies who profit from digital technologies and unconstrained by non-disclosure agreements.

Others, by contrast, argue that academics should collaborate with companies precisely to gain the high-quality data needed to test the efficacy of proposed improvements to widely used platforms in situ and to develop digital interventions that can be implemented at the necessary scale. Funding bodies increasingly demand such collaboration, requiring statements of external partners, industry boards and pathways to impact. The advantages include sharing specialist skills, co-designing feasible and effective interventions and expanding opportunities for research funding.

Both these contrasting positions are advocated with conviction and at times each stands in critical judgement of the other. Yet the question of collaboration with industry remains largely a matter for individuals to determine for themselves. Academics have not found a collective space in which to debate the options, weigh the alternatives, learn from the experiences of others, utilise power in collectives or evolve best practices. Nor, for the most part, have their academic institutions offered them constructive guidance. Little is said in ethical review guidelines, for instance, beyond declaring sources of research funding. Academic journals do not generally distinguish publications originating independently or from within digital companies, other than noting conflicts of interest. Nor do doctoral or other professional training programmes include much attention to these questions.

One likely reason for this silence is the lack of consensus among academics. Hence, we call for explicit debate and deliberation. In the social sciences and humanities, collaboration is often regarded with suspicion, as a form of conflict of interest or collusion, borne from the fear that the academic will be the weaker partner and thus vulnerable to co-option by powerful industry in ways that compromise their values, independence and standards of research. After all, the academy, in its ideal incarnation at least, is trusted precisely for its independence of thought and uncompromising commitment to truth-seeking and public values.

In the natural and computational sciences, however, academic/industry collaboration is common and often strongly encouraged – seen pragmatically as the best way of working cooperatively to share and harness access to specialist expertise, opportunities and funding and to develop a training pipeline for the many students that will eventually work in industry and in the academy. Most major research universities now invest in applied innovation centres that are built to bridge the worlds of academia and industry. Spin out companies are encouraged, even expected throughout certain academic faculties such as Engineering, bringing industry and research closer together. The end result of these investments is a fluid border between industry and academia with the goal of enriching the quality of both ideas and people as innovations flow back and forth. Increasingly, young researchers across multiple disciplines are looking for a closer link to industry, to advance their career development and facilitate practical impact.

The position of mental health researchers appears to be somewhere in between. It has long been common for those working in clinical research to navigate research funding, intellectual property and conflicts of interest with pharmaceutical companies, often with formal guidelines in place, especially when it comes to clinical care and service delivery. There has been less debate about collaboration with the big tech platforms but given concerns about the sheer scale of funding (Campaign for Accountability, 2018) and the low standards of some industry research (Kamenetz, 2021), it behoves us to be careful. A 2021 open letter to Meta urged it to commit to transparency regarding its own research, as well as contributing to independent research conducted by the academy, with appropriate oversight (See <https://www.oii.ox.ac.uk/news-events/news/meta-must-do-better-global-experts%E2%80%AFcall%E2%80%AFfor-zuckerberg-to-act-on-adolescent-wellbeing%E2%80%AF/>).

Certain research questions are difficult to pursue without engaging the platforms – for instance, direct experimentation with services (“A/B testing”) to identify what genuinely mitigates risk or helps young users. Other research questions would benefit from access to digital operations – for instance, to identify whether social media algorithms promote extreme content by “pushing” vulnerable users down a “rabbit hole” through risky designs (5Rights Foundation, 2021) or check on industry claims about what helps mental health (for example, Newton, 2021), although it may be held that critical scrutiny of platform operations is precisely best done ‘from outside.’

Gaining access to data held by platforms is proving fraught and, thus far, largely unsuccessful. Social Science One, a collaboration between Facebook and academics affiliated with Harvard University designed to facilitate the sharing of platform data with researchers, appears to have come to little, despite the public fanfare on its launch (See <https://socialscience.one/blog/public-statement-european-advisory-committee-social-science-one> – for a more recent effort, see <https://independenttechresearch.org/manifesto-the-coalition-for-independent-technology-research/>). In the European Union, the new Digital Services Act requires that very large platforms share data with researchers so they can examine how online risks evolve, though any benefits are yet to materialise (See https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-services-act-ensuring-safe-and-accountable-online-environment_en). Given the extraordinary potential of big data insights, efforts to benefit the academy will surely continue (Levi & Rajala, 2020).

Building consensus on research directions is urgent given the needs and clear benefits for the millions of children who spend much of their days on digital platforms, including to seek mental health-related information, support and services (Orben & Przybylski, 2019). Evidence-based digital mental health interventions are now available (Hollis, Livingstone, & Sonuga-Barke, 2020), and we know that young people experiencing mental health symptoms are the most likely to search for and use digital mental health resources (Rideout, Fox, Peebles, & Robb, 2021). However, these tools have not yet been optimally designed to meet the unique needs of children and adolescents (Odgers, Schueller, & Ito, 2020). Given the urgent need and high potential for

positive impact, it is vital to ensure that academic research retains its integrity and high standards and for its outcomes positively to benefit children and young people. Therefore, we propose that the question should not be whether but why and under what conditions should academics collaborate with digital companies.

The rationale for collaboration seems to us the least developed among mental health researchers, although this is surely key, and should be carefully weighed before constructing a research bid. We might hazard, for the purposes of debate, that research designed to identify problems linked to digital engagement should be conducted independently, while research designed to develop interventions to improve young people’s mental health could be conducted collaboratively. But both should adhere to open science principles which allow for transparency, replication and ultimately research and interventions that benefit young people.

The conditions for collaboration are better developed: there are many precedents for requiring transparency in partnerships and processes, along with accessibility of data, methods and results, to allow for independent verification of results. In addition to the academic standards of research ethics and peer reviewed research, those of open science offer a useful guide in navigating this difficult space. The task, we suggest, is to encourage our universities, research funders, professional bodies, journal publishers and so forth to develop or extend professional or institutional guidance and codes of practice to encompass the principles and practice of academic/industry collaboration.

We invite readers of *CAMH* to join the debate.

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