Commentary

AI and Mental Health – A Policy Gap?

Michael Baber[1], Barbara Baker[1], Karen Rollins[1], Sophie Izzard[1], Nehali Humane[1]

1. Health Action Research Group, United Kingdom

The clinical potential of AI to assist mental health, in particular to help diagnose and treat mental disorders, is increasingly well-researched. However, the wider long-term implications of AI for mental health are less well-researched and raise important policy questions. These include how best to address the potentially harmful effects of social media algorithms, of doomscrolling and technostress, and how to ensure the mental health impact of AI on employment is positive rather than negative.

The impact of social media algorithms encouraging eating disorders, self-harm and suicide has already been well publicised. The role of AI in increasing anxiety, for instance through doomscrolling and technostress, is also now being researched. There's also good evidence that job loss is harmful for mental health and evidence that fear of job loss may also be harmful. The pace and nature of change generated by AI can be an issue too, as well as ethical and data privacy concerns.

The need for policy to address risks arising from AI has been recognised internationally, as illustrated by the EU's 2024 AI Act. However, progress elsewhere has been erratic and, as yet, the implications of AI for mental health do not appear to have featured significantly in policy making. This is an important gap that needs to be filled. In the UK there's currently a policy deficit in this area, only partially addressed by the Online Safety Act. In addition, recent government policy decisions affecting employers have the potential unintended consequence of incentivizing some to use AI to replace staff, with knock-on mental health implications.

There's currently also no powerful national public health government agency in the UK. This leaves a public health policy vacuum regarding the implications of AI for the nation's health. It will be important to identify those most at risk and to develop strategies and policies to prepare for and cope with the changes ahead. This is important to enable the positive effects of AI to be achieved, while minimising risk. Re-creating a powerful national public health body and ensuring a mental health impact assessment for all proposed AI-related policies would be two useful first steps. Helping create a coalition of willing countries and international bodies to ensure the pursuit of AI is not at the expense of mental health would be another.

 doi.org/10.32388/HI59YF.2

Correspondence: papers@team.qeios.com — Qeios will forward to the authors

AI – A potential threat to mental health?

The clinical potential of AI to assist the diagnosis and treatment of mental disorders, is increasingly well-researched. For example, the efficacy of AI-based chatbots in alleviating depressive and anxiety symptoms was reported in a 2024 analysis of 18 randomised controlled trials.[1] Other examples researched include avatar therapy for patients with psychosis, AI animal-like robots to help patients with dementia, and digital game interventions for young people with mental health conditions.[2]

However, the wider long-term implications of AI for mental health raise important policy questions.

Harmful Direct Effects

An example is social media algorithms which have led users to content encouraging eating disorders, self-harm and suicide. The suicide of Molly Russell is a well-publicised example. The Coroner's report made specific reference to the role played by social media algorithms.[3] Meanwhile research by the Center for Countering Digital Hate in the US reported that popular AI tools such as ChatGPT generated harmful eating disorder content in response to 41% of a total of 180 prompts. This included advice on achieving a "heroin chic" aesthetic and images for "thinspiration".[4] Even more harmful is the allegation that OpenAI was responsible for the suicide of teenagers in Florida and California. In the California example the parents discovered their son had confided his suicidal thoughts and plans to an AI chatbot. The chatbot not only discouraged him from seeking help from his parents but offered to write his suicide note.[5] The potential to create disinformation, fake news or fake images is another risk factor, contributing to global instability and mental health risks, as seen in the Southport riots in the UK in 2024.

AI algorithms also facilitate doomscrolling, i.e. the addictive consumption of negative news through social media. It is suggested that this has a range of negative mental health effects including stress, anxiety and emotional exhaustion.[6] AI algorithms can increase social media use, in principle potentially increasing social contacts but, in practice, sometimes resulting in loneliness and social isolation. For example, a study with a sample of first year university students at three UK universities found that the students who had spent the most time online in the sixth form were three times as likely to feel lonely at

university.[7] This has mental health implications, as there is growing evidence that loneliness is associated with the onset of depression and other common mental health problems.[8]

There has been a partial policy response, through the Online Safety Act (2023).[9] This places new duties on social media companies and search services, to make them more responsible for the safety of users on their platforms, in particular children. For example, encouraging or assisting serious self-harm is now a criminal offence, and the Act also requires providers to specifically consider how algorithms could impact users' exposure to illegal content as part of their risk assessments. To seek to ensure implementation Ofcom has been designated the independent regulator of online safety.

However, campaigners say the legislation doesn't go far enough. For example, The Molly Rose Foundation, which focuses on suicide prevention for young people, says, "We are astonished and disappointed there is not one single targeted measure for social media platforms to tackle suicide and self-harm material that meets the criminal threshold in today's codes despite this being a priority harm.'[10]

Knock-on effects

The speed with which AI is being adopted has led to the hypothesis that the resulting technostress is positively associated with both anxiety and depression.[11]

One of the most important knock-on effects of AI is on employment. This is important because being in employment (as opposed to being unemployed) generally has a protective effect in relation to depression, psychological distress and general mental health.[12] In principle AI can help automate repetitive tasks, freeing workers to undertake more interesting work, with potential benefits for mental health and wellbeing, and there is some evidence for this. For example, research in manufacturing in China suggested positive mental health effects where AI is used to improve processes and the working environment rather than displacing workers.[13]

However, where AI replaces staff, this increases mental health risks. A 2017 study in four European countries, including the UK, looked at the effects on mental health of downsizing. Where employees were internally redeployed and supported through their career change process this appeared to result in no increased risk of psychological ill health. However, unemployment as a result of downsizing increased the risk of anxiety and depression.[14] Where those affected are the lowest skilled (who may struggle to

find alternative employment) this may also widen health inequalities, with further mental health implications.

Even if people are currently employed, fear of potential job losses due to AI is a further risk factor, as is also the case where the pace and nature of AI-facilitated changes at work increase pressure on staff. For example, research reported in 2024 described 'cognitive dissonance in banking employees amid the Artificial Intelligence Revolution.'[15]

Some occupations are currently less at risk than others. For instance, AI doesn't yet have the ability to cut hair, although it can take on ancillary roles in hairdressing, such as appointment management. However, creative occupations more generally are not immune from risk. The 2023 strike by US screenwriters and actors, was partly due to concerns that unregulated use of AI could replace them. Problems can also arise for new staff joining an organisation increasingly reliant on AI. For instance, it is estimated that AI could automate up to 95% of accountants' tasks, particularly repetitive bookkeeping and data analysis. This means junior accountants may struggle to gain experience if lower-level tasks are automated.[16]

A 2020 US Study reported, 'AI is currently substituting for humans in a subset of tasks but it is not yet having detectable aggregate labor market consequences.'[17] This suggests job loss is less of an issue than some had anticipated. However, evidence from the UK in 2025 suggests that AI is resulting in job losses in a range of different occupations, without sufficient alternative jobs being created, resulting in the growth of casual, low skilled gig economy work for recent graduates.[18] The job insecurity and inconsistent income associated with working in the gig economy has potential mental health implications for a generation already reporting a higher prevalence of mental ill health.

An example of job loss was reported by City AM in June 2025. The four biggest accountancy firms in the UK were not only cutting the jobs of existing staff but cutting back on graduate recruitment. This was due to Generative AI tools like ChatGPT increasingly being used to automate administrative tasks usually performed by entry- level employees.[19] Jobs are also at risk in other occupations. For instance, 2025 also saw the broadcaster Sky planning 2000 job losses, as it replaces human call centre staff with AI chatbots. [20] Overall, McKinsey report that, over the last three years, job ads have dropped by 38% for roles with high exposure to AI.[21]

From a policy perspective, one potential concern here is the unintended consequences of measures in other fields that may unwittingly increase the risk of AI displacing staff. As an example, the UK government's Employment Rights Bill is currently going through Parliament. Once it becomes law it will

remove the qualifying period for claiming unfair dismissal, for taking parental leave and for taking paternity leave as well as other measures to increase employment rights.[21] This is well-intentioned. However, it coincides with an increase in the National Living Wage three times higher than inflation and with the well-publicised increases in employer National Insurance (NI) payments. As the Oxford University Centre for Business Taxation has observed, the increases in NI payments mean that, 'over time, workers are likely to face wage cuts or job losses'.[22] The government's three measures are collectively driving up employer costs while increasing employee rights. One unintended effect may therefore be to incentivize employers to increase their use of AI to replace staff, to avoid the increasing costs and legal implications of employing staff.

Much analysis of AI includes a focus on ethical and data privacy concerns and these are clearly relevant where AI is used in the diagnosis and treatment of mental ill-health. An ethical focus is also relevant where, as illustrated earlier, the way AI works increases the risk of mental harm and in particular suicide.

Public Health Policy Implications

The need for policy to address the risks arising from AI has been recognised internationally. However, a number of limitations have emerged. For example, The US Executive Order of 2023 aimed to ensure, 'Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence'[23] However, this has since been rescinded by President Trump, with his Winning the Race Action Plan. This aims to deregulate AI to facilitate, 'unquestioned and unchallenged global technological dominance.'[24]

The EU's 2024 AI Act is intended to achieve adoption of 'human-centric and trustworthy' AI within the single market. However, analysis suggests a number of limitations. One is difficulty fully understanding what has been described as, 'a difficult read, even for lawyers.'[25] Another is identified in an article by the Yale Journal of Law and Technology. The Act was reportedly watered down, following strong lobbying by big tech companies and member states. The result, according to this analysis, is, 'An overreliance on self-regulation, self-certification, weak oversight and investigatory mechanisms, and far-reaching exceptions for both the public and private sectors.'[26]

How best to regulate AI has been the subject of much research. For instance, a 2025 systematic review identified three main strategies: AI-focused overhauls of existing regulation, the introduction of novel AI regulation, and the omnibus approach.[27] It also contrasted the different purposes of regulation, from seeking to strengthen government control in China, to market-driven in the US, and a focus on

government oversight and regulation in Europe, with transparency a recurring theme. However, the implications of AI for mental health do not appear to have been a significant focus for any of the regulatory approaches. This suggests that a focus on the mental health implications is now needed in both research and policy making.

In 2023 the previous UK government hosted what it described as the world's first AI Safety Summit, 'bringing industry, academia, and civil society together with 28 leading AI nations and the EU to agree the Bletchley Declaration'. It described this as, 'a landmark commitment to share responsibility on mitigating the risks of frontier AI, collaborate on safety and research, and to promote its potential as a force for good in this world'.[28] However, there is currently no AI Act in the UK. In contrast to the EU and closer to the current US approach, the government's pro-business, pro-growth approach was outlined in a press release early in 2025, which declared, 'Artificial intelligence will be unleashed across the UK to deliver a decade of national renewal, under a new plan announced today.' (The AI Opportunities Action Plan).

AI and AI-facilitated social media operate internationally, across borders. This means that international action to avoid the mental health risks of AI is needed. This is a significant challenge. 'Big Tech' companies are difficult to control and, as already identified, individual countries have different interests and different visions for AI. However, the consequences if international cooperation cannot be achieved are major. As a recent Policy Exchange report has noted, 'What makes this moment particularly crucial, and makes the challenge for governments critical, is the unprecedented pace of innovation... as traditional institutions are not currently equipped to keep pace with a rapidly arriving future.'[29]

A particular concern in the UK is the lack of a strong public health voice when it comes to AI policy. In 2013 (when the government transferred local public health staff from the NHS to local authorities) public health's focus was still very much on physical health, through services such as smoking cessation and obesity prevention. Eleven years later mental health has become an increasing issue. The policy focus therefore needs to be on mental as well as physical health, while the rise of AI (including through social media) requires action at a national and international rather than purely local level. For example, implementation of the Online Harms Act needs to be closely monitored and further regulation considered to keep pace with AI's development.

Public Health England previously had a national role and voice and would have been potentially well placed to respond to the health policy issues arising from AI. However, it was disbanded by the government in 2021 and by early 2024 the Health Services Journal was reporting 'huge concerns' about

the effective dismantling of its partial successor, the Office for Health Improvements and Disparities. [30] At a time when the need for a national focus and response to AI and mental health is becoming ever clearer, the national public health voice has been drastically reduced. The current Labour government may offer some hope but its mental health policy focus is currently primarily clinical - to give patients greater choice, autonomy, enhanced rights and support and appoint more mental health professionals for early diagnosis and treatment, rather than considering the underlying causes of mental health problems and considering emerging risks, such as AI, in order to develop relevant preventative policies.[31]

Within the UK itself it is therefore time to recreate a powerful national public health body. This could reinvigorate public health's national policy role to complement its current local authority-based work – with the implications of AI for employment and the mental health implications at the forefront. A starting point would be a review, in partnership with occupational health experts, of which sectors and which jobs are already affected by AI, which are most likely to be affected over the next ten years, and the mental health implications. This should include any demographic groups or communities at particular risk. From these reviews, strategies and policies can be developed to prepare for and cope with the changes ahead and prevent or mitigate risk for the mental health of those most vulnerable. In this way the positive effects of AI can be achieved, while minimising risk.

A further positive step would be to ensure mental health impact assessment for all proposed AI-related policies. More broadly the UK should consider helping put together a 'coalition of the willing' – national governments and international bodies who recognise the importance of ensuring the pursuit of AI is not at the expense of mental health.

References

1. ^*Zhong W, Luo J, Zhang H (2024). "The Therapeutic Effectiveness of Artificial Intelligence-Based Chatbots in Alleviation of Depressive and Anxiety Symptoms in Short-Course Treatments: A Systematic Review and Meta-Analysis." J Affect Disord. https://www.sciencedirect.com/science/article/abs/pii/S016503272400661X.*
2. ^*Baber M, Baker B (2025). "AI-Based Treatment of Psychological Conditions: The Potential Use, Benefits and Drawbacks." Explor Digit Health Technol. **3**. doi:10.37349/edht.2025.101143.*
3. ^*H.M. Coroner Mr Andrew Walker (2022). "Regulation 28 Report to Prevent Future Deaths." North London Coroner's Report. https://www.judiciary.uk/wp-content/uploads/2022/10/Molly-Russell-Prevention-of-future-deaths-report-2022-0315_Published.pdf.*

4. ^Center for Countering Digital Hate (2024). "AI and Eating Disorders, How Generative AI is Enabling Users to Generate Harmful Eating Disorder Content." Center for Countering Digital Hate. https://counterhate.com/wp-content/uploads/2023/08/230705-AI-and-Eating-Disorders-REPORT.pdf.
5. ^Chatterjee R (2025). "Their Teenage Sons Died by Suicide. Now, They Are Sounding an Alarm About AI Chatbots." npr. https://www.npr.org/sections/shots-health-news/2025/09/19/nx-s1-5545749/ai-chatbots-safety-openai-meta-characterai-teens-suicide.
6. ^Türk-Kurtça T, Kocatürk M (2025). "Beyond the Scroll: Exploring How Intolerance of Uncertainty and Psychological Resilience Explain the Association Between Trait Anxiety and Doomscrolling." Personality and Individual Differences. doi:10.1016/j.paid.2024.112919. https://www.sciencedirect.com/science/article/abs/pii/S0191886924003799.
7. ^Baber M, Haas J, Ji E et al. (2022). "The Student Mental Health Crisis, a Fresh Perspective." Health Action Research Group. https://www.healthactionresearch.org.uk/assets/documents/student-mental-health-a-fres.
8. ^Mann F, Wang J, Pearce E et al. (2022). "Loneliness and the Onset of New Mental Health Problems in the General Population." Soc Psychiatry Psychiatr Epidemiol. https://pmc.ncbi.nlm.nih.gov/articles/PMC9636084/.
9. ^Department for Science, Innovation and Technology (2024). "Online Safety Act: Explainer." Department for Science, Innovation and Technology. https://www.gov.uk/government/publications/online-safety-act-explainer/online-safety-act-explainer.
10. ^Chudy E (2024). "Campaigners Vow to 'Keep Fighting' for Young People as Online Safety Act 'Fails to Go Far Enough'" The Big Issue. https://www.bigissue.com/news/social-justice/campaigners-ofcoms-online-safety-act/#:~:text=Campaigners%20have%20claimed%20Online%20Safety,_harm%20and%20suicide%20material%20online%E2%80%9D.
11. ^Litan D-E (2025). "Mental Health in the "Era" of Artificial Intelligence: Technostress and the Perceived Impact on Anxiety and Depressive Disorders—An SEM Analysis." Front Psychol. https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2025.1600013/full.
12. ^van der Noordt M, IJzelenberg H, Droomers M et al. (2014). "Health Effects of Employment: A Systematic Review of Prospective Studies." Occup Environ Med. https://oem.bmj.com/content/71/10/730.
13. ^Yang S, Liu K, Gai JH et al. (2022). "Transformation to Industrial Artificial Intelligence and Workers' Mental Health: Evidence from China." Front Public Health. https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.881827/full.

14. ^*Andreeva E, Brenner MH, Theorell T et al. (2017). "Risk of Psychological Ill Health and Methods of Organisational Downsizing: A Cross-Sectional Survey in Four European Countries." BMC Public Health. **17**(1). doi:10.1186/s12889-017-4789-3.*

15. ^*Sachdeva C, Gangwar VP, Grover V et al. (2024). "Cognitive Dissonance in Banking Employees: Exploring Factors Amid the Artificial Intelligence Revolution." 2024 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS). https://www.proceedings.com/content/073/073757webtoc.pdf.*

16. ^*Jin H, Jin L, Qu C et al. (2022). "The Impact of Artificial Intelligence on the Accounting Industry." Adv Soc Sci Educ Hum Res. https://www.atlantis-press.com/proceedings/ichssr-22/125974557.*

17. ^*Acemoglu D, Autor D, Hazell J (2021). "AI and Jobs: Evidence from Online Vacancies." NBER Working Paper 28257. https://shapingwork.mit.edu/wp-content/uploads/2023/10/Acemoglu-et-al-Dec-2020.pdf.*

18. ^*Dawid T (2024). "The Rise of the Gig Economy: Benefits, Drawbacks, and Future Prospects." J Econ Econ Educ Res. https://www.abacademies.org/articles/the-rise-of-the-gig-economy-benefits-drawbacks-and-future-prospects-17297.html.*

19. ^*Koopman S (2025). "Big Four Slash Graduate Jobs as AI Takes on Entry Level Work." City AM. https://www.cityam.com/big-four-slash-graduate-jobs-as-ai-takes-on-entry-level-work/.*

20. ^*Thomas D (2025). "Sky Cuts 2,000 Jobs as It Moves More Customer Services Online." Financial Times. https://www.ft.com/content/96bcbbc6-27aa-4a71-ac04-46ad64dba933.*

21. ^[a], [b]*Allas T, Goodman A (2025). "Not Yet Productive, Already Disruptive: AI's Uneven Effects on UK Jobs and Talent." McKinsey & Company. https://www.mckinsey.com/uk/our-insights/the-mckinsey-uk-blog/ai-uneven-effects-on-uk-jobs-and-talent.*

22. ^*UK government (2024). "Factsheet: Employment Rights Bill Overview." UK government. https://assets.publishing.service.gov.uk/media/6752f32a14973821ce2a6cc2/employment-rights-bill-overview.pdf.*

23. ^*Executive Office of the President (2023). "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence." Federal Register. https://www.federalregister.gov/documents/2023/11/01/2023-24283/safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence.*

24. ^*The White House (2025). "Winning the Race AMERICA'S AI ACTION PLAN." The White House. https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf.*

25. ^*Almada A, Petit N (2025). "The EU AI Act: Between the Rock of Product Safety and the Hard Place of Fundamental Rights." Common Market Law Review. https://cadmus.eui.eu/server/api/core/bitstreams/a2b2cb20-eb1d-54a4-8170-5c0ce37ac8c0/content.*

26. ^*Wachter S (2025). "Limitations and Loopholes in the EU AI Act and AI Liability Directives: What This Means for the European Union, the United States, and Beyond." Yale J Law & Technol. https://yjolt.org/limitations-and-loopholes-eu-ai-act-and-ai-liability-directives-what-means-european-union-united.*

27. ^*Sloane M, Wüllhorst E (2025). "A Systematic Review of Regulatory Strategies and Transparency Mandates in AI Regulation in Europe, the United States, and Canada." Data & Policy. https://www.cambridge.org/core/journals/data-and-policy/article/systematic-review-of-regulatory-strategies-and-transparency-mandates-in-ai-regulation-in-europe-the-united-states-and-canada/A1BE4A34845C2C9227382053ECD1938A.*

28. ^*Department for Science, Innovation & Technology (2024). "A Pro-Innovation Approach to AI Regulation: Government Response." Department for Science, Innovation & Technology. https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response.*

29. ^*de Minckwitz E (2025). "Government in the Age of Superintelligence." Policy Exchange. https://policyexchange.org.uk/wp-content/uploads/Government-in-the-Age-of-Super-Intelligence-1.pdf.*

30. ^*West D (2024). "National Agency 'Decimated' in DHSC Restructure." HSJ. https://www.hsj.co.uk/policy-and-regulation/exclusive-national-agency-decimated-in-dhsc-restructure/7036541.article.*

31. ^*Department of Health and Social Care (2024). "Mental Health Bill 2025: Fact Sheet." Department of Health and Social Care. https://www.gov.uk/government/publications/mental-health-bill-2025-fact-sheet.*

Declarations

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.