New Ideas in Psychology 69 (2023) 101010

Contents lists available at ScienceDirect

New Ideas in Psychology

journal homepage: www.elsevier.com/locate/newideapsych

Are mental health awareness efforts contributing to the rise in reported mental health problems? A call to test the prevalence inflation hypothesis

Lucy Foulkes [a,*], Jack L. Andrews [b]

[a] University of Oxford, Oxford, UK
[b] University New South Wales, Sydney, Australia

A B S T R A C T

In the past decade, there have been extensive efforts in the Western world to raise public awareness about mental health problems, with the goal of reducing or preventing these symptoms across the population. Despite these efforts, reported rates of mental health problems have increased in these countries over the same period. In this paper, we present the hypothesis that, paradoxically, awareness efforts are contributing to this reported increase in mental health problems. We term this the *prevalence inflation hypothesis.* First, we argue that mental health awareness efforts are leading to more accurate reporting of previously under-recognised symptoms, a beneficial outcome. Second, and more problematically, we propose that awareness efforts are leading some individuals to interpret and report milder forms of distress as mental health problems. We propose that this then leads some individuals to experience a genuine increase in symptoms, because labelling distress as a mental health problem can affect an individual's self-concept and behaviour in a way that is ultimately self-fulfilling. For example, interpreting low levels of anxiety as symptomatic of an anxiety disorder might lead to behavioural avoidance, which can further exacerbate anxiety symptoms. We propose that the increase in reported symptoms then drives further awareness efforts: the two processes influence each other in a cyclical, intensifying manner. We end by suggesting ways to test this hypothesis and argue that future awareness efforts need to mitigate the issues we present.

1. Introduction

Over the past decade, there have been extensive efforts in the Western world to improve public understanding about mental health problems (defined here as mental disorders and their subclinical symptoms). For example, in the UK, there have been charity campaigns promoted on television, radio and online (Sampogna et al., 2017); interventions within schools, universities and workplaces (Bolinski et al., 2020; Wagner et al., 2016; Werner-Seidler et al., 2017); and many disclosures from celebrities and other public figures about their own experience of these difficulties (Franssen, 2020; Hoffner, 2019). We refer to these collective activities as 'mental health awareness efforts', and they have been at least partly successful in terms of reducing stigma (Sampogna et al., 2017), improving mental health literacy (Schomerus et al., 2012) and increasing help-seeking intentions (Henderson et al., 2017).

Over the same time period, reported rates of mental health problems, including anxiety, depression, eating disorders and self-harm, have increased (Collishaw, 2015; McManus et al., 2019; Richter et al., 2019; Santomauro et al., 2021; Vizard et al., 2020). There is some evidence that this follows an existing trend observed over the preceding decades (Collishaw et al., 2004). There are many proposed explanations for the increase in mental health problems, including increased use of social media (Orben, 2020), the impact of austerity (Knapp, 2012), increased income inequality (Patel et al., 2018), increased academic pressure in young people (Högberg, 2021) and the multitude of hardships brought about by the Covid-19 pandemic (Saunders et al., 2021).

Here we present the hypothesis that, paradoxically, awareness efforts are an additional factor contributing to the recent rise in mental health problems. Moreover, we argue that the relationship between these two constructs is bidirectional. Increased rates of mental health problems understandably drive more awareness efforts, but the awareness efforts themselves might lead to increased reporting and experiencing of symptoms, as we describe below. We therefore propose that mental health problems and awareness efforts are affecting each other in a cyclical, intensifying manner (see Fig. 1). We term this the *prevalence inflation hypothesis*.

2. The prevalence inflation hypothesis

We propose that awareness efforts are contributing to a rise in mental health problems via two mechanisms, which we term *improved recognition* and *overinterpretation*. *Improved recognition* refers to how awareness efforts may be leading to better recognition and more accurate reporting

* Corresponding author. Anna Freud National Centre for Children and Families, London, UK.
E-mail address: l.foulkes@ucl.ac.uk (L. Foulkes).

https://doi.org/10.1016/j.newideapsych.2023.101010
Received 9 November 2022; Received in revised form 23 January 2023; Accepted 26 January 2023
Available online 10 February 2023

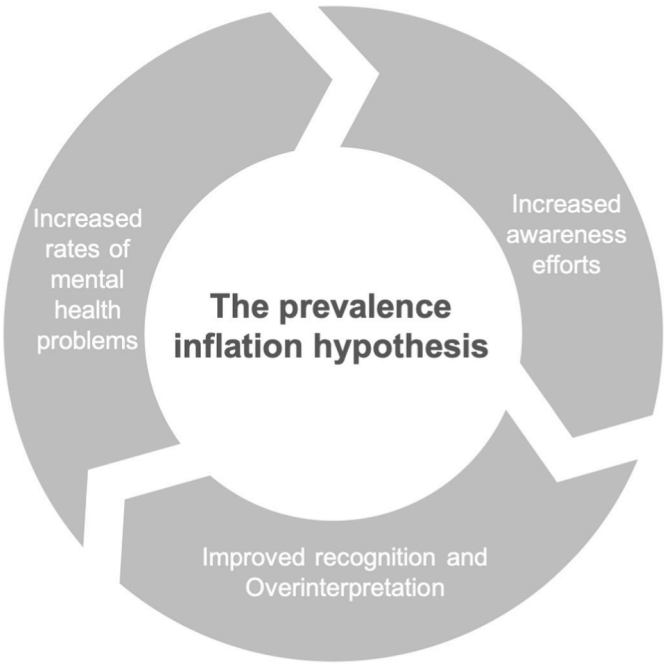

Fig. 1. A schematic illustration of the prevalence inflation hypothesis. The hypothesis describes the cyclical way in which the increase in reported rates of mental health problems might lead to increased mental health awareness-raising efforts, which in turn leads to two processes, *improved recognition* and *overinterpretation,* that lead to increased reported rates of mental health problems. *Improved recognition* describes how awareness efforts have provided some individuals with the ability to better identify and report previously under-reported mental health problems. *Overinterpretation* describes how awareness efforts have led some individuals to overpathologise common psychological experiences, leading in some cases to changes in self-concept and behaviour that ultimately become a self-fulfilling prophecy, leading to further increases in rates of mental health problems. Note: There are many relevant factors contributing to the recent increased in mental health problems that not represented in this figure; we are proposing here that awareness efforts are one additional factor.

of mental health problems. This is a beneficial outcome, and is indeed a primary goal of awareness campaigns (Kelly et al., 2007). In contrast, *overinterpretation* is problematic and refers to how awareness efforts may be leading people to misinterpret milder and more transient forms of distress as mental health problems. Below we describe each of these components in turn, but focus our attention in particular on over-interpretation. We then consider the potential negative consequences of overinterpretation and review the growing body of evidence that indicates these consequences are already occurring.

2.1. Improved recognition

It is possible that, as a result of the reduced stigma and improved mental health literacy resulting from awareness efforts, individuals are now reporting and seeking help for mental health problems that always existed in previous generations but were not recognised or disclosed (Richter et al., 2019). This has been highlighted as one relevant factor contributing to the increase in symptoms reported in cohort studies (Najman et al., 2021) and the international increase in antidepressant prescriptions over the past decade (Iacobucci, 2019). Improved recognition is a fundamental goal of awareness efforts and is beneficial for several reasons: it might lead to more help-seeking and treatment for individuals who need it, provided the help is available (Henderson et al., 2017); it might ultimately help reduce rates of deaths from suicide (Pirkis et al., 2019); and it might provide more accurate prevalence rates of mental health problems, which can influence policy and funding decisions (Wellcome Global Monitor Project, 2020). Improved recognition should therefore be a continued goal of mental health awareness efforts.[1]

2.2. Overinterpretation

The second component of our hypothesis, *overinterpretation,* is reason for concern, and returns us to the idea of a spectrum of mental health problems. This proposes that awareness efforts are leading some individuals to unnecessarily consider milder or more transient psychological difficulties as mental health problems that require labelling, reporting and treating – i.e. problems of living that were not previously considered mental health problems, and still should not be. The concept of overinterpretation is not new: other academics have argued that that there is an increasing and unhelpful tendency for individuals to perceive negative thoughts, emotions or behaviours to be symptoms of mental disorder, and to perceive themselves as being vulnerable to psychological harm (Beeker et al., 2021; Conrad & Slodden, 2012; Haslam, 2016; Haslam et al., 2020; McNally, 2016; Scott, 2006). What we are proposing here is that, for some people, mental health awareness efforts are directly contributing to this overinterpretation of psychological distress.

Indeed, awareness efforts arguably *encourage* overinterpretation. Some campaigns specifically encourage individuals to notice, label, and seek help for negative psychological experiences, and promote the use of psychiatric terminology (for example, the World Health Organisation's 'Depression: Let's talk' campaign in 2017; Rethink's 'From psychosis to … ' campaign in 2022) (Henderson et al., 2017; Rethink. Urgent campaign launches to, 2022; Thornicroft et al., 2016; World Health Organisation, 2017). Campaigns might therefore be actively contributing to the so-called 'psychiatrisation' of everyday suffering and distress that has become increasingly common in recent years (Brinkmann, 2014). Other campaigns promote the idea that disclosing one's mental health problems in this way is brave and admirable (Kosyluk et al., 2021; Rochlen et al., 2005). These are important messages, since shame and stigma remain significant barriers to help-seeking (Ali et al., 2020; Clement et al., 2015; Eigenhuis et al., 2021). However, these messages also mean that interpreting and describing one's difficulties as a mental health problem might now have social value and therefore be desirable for some individuals. This could explain why mental health problems are now sometimes glamorised or romanticised, particularly on social media (e.g. quotes about depression on aesthetically-appealing backgrounds are widely shared); this phenomenon has been highlighted by a number of cultural commentators (Bine, 2013; Jadayel et al., 2017; Rick, 2016; Williams, 2019). Considering these factors, we hypothesise that awareness efforts may be leading to an increased and excessive tendency to interpret negative psychological experiences as mental health problems.

Furthermore, we hypothesise that overinterpretation creates new mental health problems, or increases the severity of existing ones. A number of academics have theorised that, when an individual interprets and labels their psychological experiences as a mental health problem, this can bring these symptoms into existence in a manner of a self-fulfilling prophecy (Scheff, 1974; Tekin, 2011; Tsou, 2007). We define 'self-fulfilling prophecy' here as the phenomenon by which an

[1] The *improved recognition* component of our hypothesis makes an assumption that there is a threshold between difficulties that should be described and treated as a problem and those that should not. However, we recognise that this threshold and the implied binary between illness and health is ambiguous and contested (and indeed some scholars argue that the concept of psychiatric illness or disorder is always unhelpful). Nonetheless, we argue that despite this ambiguity, there are still some distressing mental health problems that were once ignored or under-reported and are now, as a result of mental health awareness efforts, rightly and helpfully better recognised – this is what we are capturing in our *improved recognition* component.

inaccurate belief about a person (either held by themselves or others) can lead to that belief becoming reality (Biggs et al., 2011). For example, in his labelling theory devised in the 1960's and 1970's, the sociologist Howard Becker argued that labelling someone who commits a crime as 'deviant' can become self-fulfilling because it affects the way other people treat the individual but also how the individual understands themselves (Becker, 1974; Fine, 1977). The theory of looping effects, by the philosopher Ian Hacking, is also relevant (Hacking et al., 1996). Hacking proposed that when scientists and other professionals classify an individual into a specific category, including a mental disorder, that individual begins to change their behaviour and self-concept in line with the diagnosis they have been given (Hacking et al., 1996). Professionals observe these changes, and make revisions to their classifications, creating a feedback loop that constructs classes of people that did not exist before; Hacking refers to this process as 'making up people' (Hacking, 2007).

We propose that a similar labelling process is now happening via *self*-diagnosis, which then contributes to overinterpretation: because of awareness efforts, individuals might more readily label themselves as having a mental health problem. It is already well-known that individuals do not rely exclusively on clinicians to determine whether they have a specific diagnosis; they combine clinical opinion with several sources of information, including social media, the internet and newspaper articles, to reach their own conclusion about their mental health symptoms (Callard, 2014; Lane, 2020; Strong et al., 2015). Clinicians report that patients are increasingly coming to consultations with their own hypothesised diagnosis, based on what they have learnt from the internet or documentaries (Chan & Sireling, 2010; Lane, 2020; Strong et al., 2015). We propose here that, as awareness efforts increase, so too will rates of self-diagnosis. For some individuals, their self-diagnosis will be accurate (i.e. this would fall under 'improved recognition' in our hypothesis), and can offer benefits such as increased self-understanding, a reduction in self-stigma and access to treatment (Lane, 2020; Richardson & Tracy, 2015). But for others, self-diagnosis might lead to overinterpretation, which could end up exacerbating an individual's symptoms.

To illustrate how self-diagnosis and overinterpretation could lead to this self-fulfilling prophecy, we use here the hypothetical example of anxiety. Anxiety is a dimensional construct, ranging from a mild, transient emotion to a chronic, disabling psychiatric condition (Lebeau et al., 2012). It is therefore reasonable to hypothesise that, as a result of awareness efforts, some individuals will erroneously interpret milder experiences of anxiety as a mental health problem or anxiety disorder, i.e. as something that is further along the anxiety 'spectrum' than it truly is. This could then affect that individual's self-concept and behaviour: the individual believes that they 'have anxiety' or are 'an anxious person' that cannot engage in certain behaviours (e.g. going to a party, completing a school assignment or giving a work presentation) because of their anxiety, and therefore avoids those activities. However, it is well-established that avoiding activities in this manner maintains and exacerbates anxiety (Borkovec et al., 2004). Conceptualising milder symptoms as a more severe form of anxiety, including an anxiety disorder, might therefore not only make the individual *report* more anxiety, it might actually make them *experience* more anxiety in the long-term, because of how this conceptualisation affects their self-concept and behaviour.

3. Existing evidence of possible overinterpretation

There is some existing evidence that learning about psychiatric concepts and language might indeed increase mental health problems. For example, two randomised control trials (RCTs) found that psychological debriefing, a form of brief group therapy given in the aftermath of a traumatic event, can increase symptoms of PTSD relative to other therapies or no-treatment groups (Bisson et al., 1997; Mayou et al., 2000). Some researchers have speculated that this may be because participants are taught about possible trauma symptoms, heightening their expectation, awareness and reporting of any negative psychological experiences (Litz et al., 2002; Rose et al., 2002). In addition, a meta-analysis and RCT both demonstrated that teaching adolescents cognitive behavioural therapy (CBT) principles in school-based interventions led to an increase in internalising symptoms relative to control groups who do not receive the intervention (Andrews et al., 2022; Guzman-Holst et al., 2022); and a recent large-scale trial found that mindfulness lessons led to an increase in depressive symptoms in adolescents who had elevated levels of mental health problems at baseline (Montero-Marin et al., 2022).

Qualitative studies also indicate that mental health interventions can lead to increased distress in some people (Bastounis et al., 2017; Foulkes & Stapley, 2022; Rozental et al., 2017). For example, adolescents who completed a school programme based on CBT, designed to prevent depression, said that trying to identify negative thoughts in class made them feel low, even when they had initially felt positive (Garmy et al., 2015). In another study evaluating the same programme, one participant said: 'I mean, it's like you start thinking like that … that you have low [thoughts] because they bring it up all the time, negative thoughts and that you should change that all the time. But those who sort of have positive [thoughts], they start thinking negative in the end' (Lindholm & Zetterqvist Nelson, 2015). Lastly, some adults who experience symptom deterioration while receiving internet-based CBT report that the therapy made them feel worse because of the insight it offered into their difficulties – for example, they found it unhelpful to be made more aware of their condition and what might have contributed to it, or found it stressful to be told how to manage their condition when they felt unable to implement this (Rozental et al., 2017). Together, this research indicates that at least some individuals experience an increase in mental health symptoms as a result of learning about these symptoms.

There is also some relevant experimental evidence that covertly telling people they are experiencing symptoms leads them to subsequently report more of those symptoms (Baumann et al., 1989; Merckelbach et al., 2011). In one study, half of participants were informed (inaccurately) that they had elevated blood pressure and half were told their blood pressure was in the normal range. Ten minutes later, the group who received the false information reported that they experience more symptoms commonly associated with high blood pressure (e.g., headaches, feeling flushed), relative to the group who were told their blood pressure was normal (Baumann et al., 1989). In another study, participants were asked to report the degree to which they experience certain symptoms, such as low mood and fatigue, and the researchers then shared covertly inflated scores with half of the participants. One week later, participants who had not noticed this artificial inflation in their scores reported higher symptoms relative to their baseline score, compared to those who did not have their symptoms artificially inflated (Merckelbach et al., 2011).

These findings are relevant for understanding potential harmful consequences of awareness efforts because, almost by definition, awareness efforts educate people about potential symptoms and encourage them to notice and report them. If people are repeatedly told that mental health problems are common and that they might experience them – and this is especially true for young people who frequently receive mental health information in schools – then it makes sense that they might start to interpret any negative thoughts and feelings through this lens. For some individuals, the psychoeducation aspect of interventions or psychological therapy is extremely helpful, and enables them to access vital support and treatment. But if there is evidence from other contexts that learning about mental health problems sometimes causes or exacerbates distress, then it is a reasonable (and urgent) hypothesis that exactly the same phenomenon is taking place on a much wider scale as a result of mental health awareness efforts.

The final element of the prevalence inflation hypothesis is that the relationship between prevalence inflation and mental health awareness efforts is bidirectional. As the prevalence of mental health problems

increases, organisations such as public health bodies, charities and schools understandably respond by disseminating more awareness-raising information to help individuals identify difficulties and access support. But these efforts themselves might lead to an increase in prevalence rates via the mechanisms described above. Furthermore, we propose that the relationship between the two constructs is not only cyclical but escalates: as prevalence rates increase, awareness efforts increase in response, but then prevalence rates increase further as a result and the cycle continues. In the final section of this paper, we consider what needs to happen next.

4. Next steps

A critical next step is that the prevalence inflation hypothesis is empirically tested. Although it is not possible to definitively assess the *causal* relationship between awareness efforts and prevalence of symptoms on a societal scale, it would be possible to at least assess whether the two are related over time in society – for example, by demonstrating that mental health terminology has been used more frequently in newspapers or social media (an indicator of awareness efforts) in the time period that rates of mental health problems have increased (Anderson et al., 2020; Stupinski et al., 2022). It would also be possible to assess the directional relationship between the two constructs in a smaller population, e.g. to measure whether a mental health awareness campaign is associated with a subsequent increase in symptoms in a contained setting, such as a school (Andrews et al., 2022; Guzman-Holst et al., 2022; Montero-Marin et al., 2022), and equally to track whether increases in symptoms are associated with subsequent increases in awareness efforts.

A number of quantitative approaches could be used to test the relationship between mental health awareness and mental health symptoms. Where ethical and feasible, future studies could compare mental health outcomes in individuals who receive awareness-raising information (e.g. they have been exposed to an awareness campaign) with those who do not (e.g. not exposed to the campaign), ideally via RCTs. Within these trials, ecological momentary assessment methods could track in detail how individuals respond to such information across time. Experimental designs could be used to manipulate information provided to participants, for example in mock campaign materials, to then assess the short-term impact on variables such as state anxiety. Lastly, quantitative work could include naturalistic work to assess the real-world impact of mental health awareness information disseminated online. For example, researchers could use data extracted from the social media platforms Twitter or Reddit to examine whether self-reports of mental health problems increase following the launch of a public awareness campaign or a celebrity disclosure of mental health problems.

Future studies should also attempt to empirically assess and examine the existence of overinterpretation. For example, qualitative methodology would allow researchers to explore how individuals interpret and understand the information promoted in awareness efforts such as school mental health lessons or public campaigns. In particular, this methodology can be used to explore how awareness efforts affect individuals' self-understanding of their own negative psychological experiences and the language they use to describe such experiences, including self-diagnosis. If such studies find that at least some individuals report that awareness efforts made them more inclined to interpret their milder symptoms of distress as a mental health problem, for example, this could be considered evidence of overinterpretation.

It will also be critical to assess whether there are demographic variables and other individual differences that predict susceptibility to overinterpretation from awareness efforts. For example, there is speculation that adolescents are more susceptibility to iatrogenic harm from psychological therapy (adverse effects from the treatment itself) than adults (Mercer, 2017; Hayes & Za'ba, 2022). Adolescents are more prone to rumination (Zimmermann & Iwanski, 2014) and peer influence (Steinberg & Monahan, 2007), and may be more susceptible to media messaging (Pechmann et al., 2005), all of which could reasonably increase susceptibility to overinterpretation from awareness efforts. It is particularly important to assess this as adolescents are often the focus of concern with regard to the reported increase in mental health problems, and therefore often the target for awareness efforts – and possibly less likely to be able to opt out of these efforts, for example when they are run in schools. Indeed, if adolescents believe that it is typical of their demographic to experience mental health problems, they may feel inclined or pressured to behave in a manner that conforms to this, akin to the phenomenon of stereotype threat (Shapiro & Neuberg, 2007). It will also be important to test the prevalence inflation hypothesis in different countries, and different regions within those countries, to assess the impact of different demographic variables (e.g. population density, community resources, healthcare, income inequality).

Our final suggestion is to consider the outcomes and consequences of improved recognition and overinterpretation when designing and implementing mental health awareness efforts. Overinterpretation should be considered a potential adverse effect from campaigns and interventions that aim to increase awareness and mental health literacy, and there should be an established protocol for measuring and reporting such adverse effects, as there is from clinic-based psychological treatments (Hayes & Za'ba, 2022; Duggan et al., 2014). If empirical evidence emerges that mental health awareness efforts can indeed lead to overinterpretation, then there is an urgent need for evidenced-based guidance for how to continue such efforts in various settings (e.g. schools, social media campaigns) while minimising the risk of harm.

5. Conclusion

In this paper, we have presented the prevalence inflation hypothesis. This states that efforts to raise awareness about mental health problems are inadvertently leading to an increase in reported rates of mental health problems. We propose that this occurs via two mechanisms, which we term *improved recognition* and *overinterpretation*. Improved recognition describes how awareness efforts have led some individuals to better recognise and report their previously under-reported mental health problems. In contrast, overinterpretation is problematic, and describes how awareness efforts have led some individuals to over-pathologise common psychological experiences. In some cases, this has become a self-fulfilling prophecy: interpreting difficulties as a mental health problem can lead to changes in self-concept and behaviour that ultimately exacerbate symptoms and distress. Lastly, the prevalence inflation hypothesis states that the relationship between mental health awareness efforts and increasing rates of mental health problems is cyclical and escalating. This is an urgent hypothesis that requires empirical testing, and careful research efforts are needed to understand how future awareness campaigns can minimise the occurrence of overinterpretation.

Authors' contributions

Both authors contributed equally to the conceptualisation and writing (original draft, review, editing) of this manuscript.

Declaration of competing interest

The authors declare no conflict of interest.

Data availability

No data was used for the research described in the article.

Acknowledgements

The authors would like to thank Dr Ola Demkowicz and Prof Argyris Stringaris for their helpful comments on an earlier draft of this

manuscript. LF is a Prudence Trust Research Fellow (grant ID: CQR02370).

References

Ali, K., et al. (2020). What prevents young adults from seeking help? Barriers toward help-seeking for eating disorder symptomatology. *International Journal of Eating Disorders, 53*, 894–906.

Anderson, C., Robinson, E. J., Krooupa, A.-M., & Henderson, C. (2020). Changes in newspaper coverage of mental illness from 2008 to 2016 in England. *Epidemiology and Psychiatric Sciences, 29*, Article e9.

Andrews, J. L., et al. (2022). Evaluating the effectiveness of a universal eHealth school-based prevention programme for depression and anxiety, and the moderating role of friendship network characteristics. *Psychological Medicine*, 1–10. https://doi.org/10.1017/S0033291722002033

Bastounis, A., Callaghan, P., Lykomitrou, F., Aubeeluck, A., & Michail, M. (2017). *Exploring students' participation in universal, depression and anxiety, prevention programmes at school: A meta-aggregation* (Vol. 9, pp. 372–385). School Mental Health.

Baumann, L. J., Cameron, L. D., Zimmerman, R. S., & Leventhal, H. (1989). Illness representations and matching labels with symptoms. *Health Psychology, 8*, 449–469.

Becker, H. S. (1974). Labelling theory reconsidered 1. In *Deviance and social control*. Routledge.

Beeker, T., et al. (2021). Psychiatrization of society: A conceptual framework and call for transdisciplinary research. *Frontiers in Psychiatry, 12*, Article 645556.

Biggs, M. (2011). Self-fulfilling prophecies. In P. Bearman, & P. Hedström (Eds.), *The oxford handbook of analytical sociology*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199215362.013.13.

Bine, A.-S. (2013). *Social Media is Redefining 'Depression. The Atlantic*. https://www.theatlantic.com/health/archive/2013/10/social-media-is-redefining-depression/280818/.

Bisson, J. I., Jenkins, P. L., Alexander, J., & Bannister, C. (1997). Randomised controlled trial of psychological debriefing for victims of acute burn trauma. *British Journal of Psychiatry, 171*, 78–81.

Bolinski, F., et al. (2020). The effect of e-mental health interventions on academic performance in university and college students: A meta-analysis of randomized controlled trials. *Internet Interventions, 20*, Article 100321.

Borkovec, T. D., Alcaine, O., & Behar, E. (2004). Avoidance theory of worry and generalized anxiety disorder. *In Generalized Anxiety Disorder: Advances in research and practice*, 77–108.

Brinkmann, S. (2014). Languages of suffering. *Theory & Psychology, 24*, 630–648.

Callard, F. (2014). Psychiatric diagnosis: The indispensability of ambivalence. *Journal of Medical Ethics, 40*, 526–530.

Chan, D., & Sireling, L. (2010). 'I want to be bipolar'…a new phenomenon. *Psychiatrist, 34*, 103–105.

Clement, S., et al. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*, 11–27.

Collishaw, S. (2015). Annual Research Review: Secular trends in child and adolescent mental health. *Journal of Child Psychology and Psychiatry, 56*, 370–393.

Collishaw, S., Maughan, B., Goodman, R., & Pickles, A. (2004). Time trends in adolescent mental health: Time trends in adolescent mental health. *Journal of Child Psychology and Psychiatry, 45*, 1350–1362.

Conrad, P., & Slodden, C. (2012). The medicalization of mental disorder. In *Handbook of the sociology of mental health*. Springer.

Duggan, C., Parry, G., McMurran, M., Davidson, K., & Dennis, J. (2014). The recording of adverse events from psychological treatments in clinical trials: Evidence from a review of NIHR-funded trials. *Trials, 15*, 335.

Eigenhuis, E., et al. (2021). Facilitating factors and barriers in help-seeking behaviour in adolescents and young adults with depressive symptoms: A qualitative study. *PLoS One, 16*, Article e0247516.

Fine, B. (1977). Labelling theory: An investigation into the sociological critique of deviance. *Economy and Society, 6*, 166–193.

Foulkes, L., & Stapley, E. (2022). Want to improve school mental health interventions? Ask young people what they actually think. *Journal of Philosophy of Education, 56*, 41–50.

Franssen, G. (2020). The celebritization of self-care: The celebrity health narrative of Demi Lovato and the sickscape of mental illness. *European Journal of Cultural Studies, 23*, 89–111.

Garmy, P., Berg, A., & Clausson, E. K. (2015). A qualitative study exploring adolescents' experiences with a school-based mental health program. *BMC Public Health, 15*, 1074.

Guzman-Holst, C., Zaneva, M., Chessell, C., Creswell, C., & Bowes, L. (2022). Research review: Do antibullying interventions reduce internalizing symptoms? A systematic review, meta-analysis, and meta-regression exploring intervention components, moderators, and mechanisms. *Child Psychology Psychiatry jcpp.* , Article 13620. https://doi.org/10.1111/jcpp.13620

Hacking, I. (1996). The looping effects of human kinds. In D. Sperber, D. Premack, & A. J. Premack (Eds.), *Causal cognition* (Vols. 351–383). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198524021.003.0012.

Hacking, I. (2007). Kinds of people: Moving targets. *Proceedings of the British Academy, 151*, 285–318.

Haslam, N. (2016). Concept creep: Psychology's expanding concepts of harm and pathology. *Psychological Inquiry, 27*, 1–17.

Haslam, N., et al. (2020). Harm inflation: Making sense of concept creep. *European Review of Social Psychology, 31*, 254–286.

Hayes, D., & Za'ba, N. (2022). What metrics of harm are being captured in clinical trials involving talking treatments for young people? A systematic review of registered studies on the ISRCTN. *Counselling and Psychotherapy Research, 22*, 108–129.

Henderson, C., Robinson, E., Evans-Lacko, S., & Thornicroft, G. (2017). Relationships between anti-stigma programme awareness, disclosure comfort and intended help-seeking regarding a mental health problem. *British Journal of Psychiatry, 211*, 316–322.

Hoffner, C. A. (2019). Responses to celebrity mental health disclosures: Parasocial relations, evaluations, and perceived media influence. In *Communicating mental health: History, contexts, and perspectives 125–146*. Lexington Books/Rowman & Littlefield.

Högberg, B. (2021). Educational stressors and secular trends in school stress and mental health problems in adolescents. *Social Science & Medicine, 270*, Article 113616.

Iacobucci, G. (2019). NHS prescribed record number of antidepressants last year. *BMJ, l1508*. https://doi.org/10.1136/bmj.l1508

Jadayel, R., Medlej, K., & Jadayel, J. J. (2017). Mental disorders: A glamorous attraction on social media. *Journal of Teaching and Education, 7*, 465–476.

Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Medical Journal of Australia, 187*.

Knapp, M. (2012). Mental health in an age of austerity. *Evidence-Based Mental Health, 15*, 54–55.

Kosyluk, K., et al. (2021). Challenging the stigma of mental illness through creative storytelling: A randomized controlled trial of this is my brave. *Community Mental Health Journal, 57*, 144–152.

Lane, R. (2020). Expanding boundaries in psychiatry: Uncertainty in the context of diagnosis-seeking and negotiation. *Sociology of Health & Illness, 42*, 69–83.

Lebeau, R. T., et al. (2012). A dimensional approach to measuring anxiety for DSM-5: Dimensional measurement of anxiety for DSM-5. *International Journal of Methods in Psychiatric Research, 21*, 258–272.

Lindholm, S. K., & Zetterqvist Nelson, K. (2015). Apparently I've got low self-esteem": Schoolgirls' perspectives on a school-based public health intervention. *Children & Society, 29*, 473–483.

Litz, B. T., Gray, M. J., Bryant, R. A., & Adler, A. B. (2002). Early intervention for trauma: Current status and future directions. *Clinical Psychology: Science and Practice, 9*, 112–134.

Mayou, R. A., Ehlers, A., & Hobbs, M. (2000). Psychological debriefing for road traffic accident victims: Three-year follow-up of a randomised controlled trial. *British Journal of Psychiatry, 176*, 589–593.

McManus, S., et al. (2019). Prevalence of non-suicidal self-harm and service contact in england, 2000–14: Repeated cross-sectional surveys of the general population. *The Lancet Psychiatry, 6*, 573–581.

McNally, R. J. (2016). The expanding empire of psychopathology: The case of PTSD. *Psychological Inquiry, 27*, 46–49.

Mercer, J. (2017). Evidence of potentially harmful psychological treatments for children and adolescents. *Child and Adolescent Social Work Journal, 34*, 107–125.

Merckelbach, H., Jelicic, M., & Pieters, M. (2011). Misinformation increases symptom reporting: A test – retest study. *JRSM Short Reports, 2*, 1–6.

Montero-Marin, J., et al. (2022). School-based mindfulness training in early adolescence: What works, for whom and how in the MYRIAD trial? *Evidence-Based Mental Health, 25*, 117–124.

Najman, J. M., et al. (2021). Does the millennial generation of women experience more mental illness than their mothers? *BMC Psychiatry, 21*, 359.

Orben, A. (2020). Teenagers, screens and social media: A narrative review of reviews and key studies. *Social Psychiatry and Psychiatric Epidemiology, 55*, 407–414.

Patel, V., et al. (2018). Income inequality and depression: A systematic review and meta-analysis of the association and a scoping review of mechanisms. *World Psychiatry, 17*, 76–89.

Pechmann, C., Levine, L., Loughlin, S., & Leslie, F. (2005). Impulsive and self-conscious: Adolescents' vulnerability to advertising and promotion. *Journal of Public Policy and Marketing, 24*, 202–221.

Pirkis, J., et al. (2019). Suicide prevention media campaigns: A systematic literature review. *Health Communication, 34*, 402–414.

Rethink. Urgent campaign launches to increase awareness of psychosis. https://www.rethink.org/news-and-stories/news/2022/03/urgent-campaign-launches-to-increase-awareness-of-psychosis/, (2022).

Richardson, E., & Tracy, D. K. (2015). The borderline of bipolar: Opinions of patients and lessons for clinicians on the diagnostic conflict. *BJPsych Bulletin, 39*, 108–113.

Richter, D., Wall, A., Bruen, A., & Whittington, R. (2019). Is the global prevalence rate of adult mental illness increasing? Systematic review and meta-analysis. *Acta Psychiatrica Scandinavica, 140*, 393–407.

Rick, M. (2016). Why are we romanticising mental illness? *The Tab*.

Rochlen, A. B., Whilde, M. R., & Hoyer, W. D. (2005). The real men. Real depression campaign: Overview, theoretical implications, and research considerations. *Psychology of Men and Masculinity, 6*, 186–194.

Rose, S. C., Bisson, J., Churchill, R., & Wessely, S. (2002). Psychological debriefing for preventing post traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*. https://doi.org/10.1002/14651858.CD000560

Rozental, A., Magnusson, K., Boettcher, J., Andersson, G., & Carlbring, P. (2017). For better or worse: An individual patient data meta-analysis of deterioration among participants receiving Internet-based cognitive behavior therapy. *Journal of Consulting and Clinical Psychology, 85*, 160–177.

Sampogna, G., et al. (2017). The impact of social marketing campaigns on reducing mental health stigma: Results from the 2009–2014 time to change programme. *European Psychiatry, 40*, 116–122.

Santomauro, D. F., et al. (2021). Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *The Lancet, 398*, 1700–1712.

Saunders, R., Buckman, J. E. J., Fonagy, P., & Fancourt, D. (2021). Understanding different trajectories of mental health across the general population during the COVID-19 pandemic. *Psychological Medicine*, 1–9. https://doi.org/10.1017/S0033291721000957

Scheff, T. J. (1974). The labelling theory of mental illness. *American Sociological Review, 39*, 444.

Schomerus, G., et al. (2012). Evolution of public attitudes about mental illness: A systematic review and meta-analysis: Evolution of public attitudes. *Acta Psychiatrica Scandinavica, 125*, 440–452.

Scott, S. (2006). The medicalisation of shyness: From social misfits to social fitness. *Sociology of Health & Illness, 28*, 133–153.

Shapiro, J. R., & Neuberg, S. L. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators, mediators, consequences, and interventions. *Personality and Social Psychology Review, 11*, 107–130.

Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology, 43*, 1531–1543.

Strong, T., Ross, K. H., & Sesma-Vazquez, M. (2015). Counselling the (self?) diagnosed client: Generative and reflective conversations. *British Journal of Guidance and Counselling, 43*, 598–610.

Stupinski, A. M., et al. (2022). Quantifying changes in the language used around mental health on twitter over 10 Years: Observational study. *JMIR Ment Health, 9*, Article e33685.

Tekin, Ş. (2011). Self-concept through the diagnostic looking glass: Narratives and mental disorder. *Philosophical Psychology, 24*, 357–380.

Thornicroft, G., et al. (2016). Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *The Lancet, 387*, 1123–1132.

Tsou, J. Y. (2007). Hacking on the looping effects of psychiatric classifications: What is an interactive and indifferent kind? *International Studies in the Philosophy of Science, 21*, 329–344.

Vizard, T., Sadler, K., Ford, T., et al. (2020). *Mental health of children and young people in England 2020, Wave 1 follow-up to the 2017 survey*.

Wagner, S., et al. (2016). Mental health interventions in the workplace and work outcomes: A best-evidence synthesis of SystematicReviews. *The International Journal of Occupational and Environmental Medicine, 7*, 1–14.

Wellcome Global Monitor Project. (2020). *The role of science in mental health: Insights from the Wellcome Global Monitor*.

Werner-Seidler, A., Perry, Y., Calear, A. L., Newby, J. M., & Christensen, H. (2017). School-based depression and anxiety prevention programs for young people: A systematic review and meta-analysis. *Clinical Psychology Review, 51*, 30–47.

Williams, A. Z. (2019). *We need to stop making mental illness look cool on social media*. i-D Vice.

World Health Organisation. (2017). Depression: Let's talk. http://www.emro.who.int/world-health-days/world-health-day-2017/depression-lets-talk.html.

Zimmermann, P., & Iwanski, A. (2014). Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations. *International Journal of Behavioral Development, 38*, 182–194.