

This is a repository copy of Towards an evidence-base for student wellbeing and mental health : definitions, developmental transitions and data sets.

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/151542/

Version: Accepted Version

Article:

Barkham, M. orcid.org/0000-0003-1687-6376, Broglia, E. orcid.org/0000-0003-2137-8187, Dufour, G. et al. (5 more authors) (2019) Towards an evidence-base for student wellbeing and mental health : definitions, developmental transitions and data sets. Counselling and Psychotherapy Research, 19 (4). pp. 351-357. ISSN 1473-3145

https://doi.org/10.1002/capr.12227

This is the peer reviewed version of the following article: Barkham, M, Broglia, E, Dufour, G, et al; on behalf of the SCORE Consortium. Towards an evidence-base for student wellbeing and mental health: Definitions, developmental transitions and data sets. Couns. Psychother. Res. 2019; 00: 1–7., which has been published in final form at https://doi.org/10.1002/capr.12227. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



Towards an evidence-base for student wellbeing and mental health:

Definitions, developmental transitions, and data sets

Michael Barkham¹

Emma Broglia^{2,5}

Géraldine Dufour³

Mark Fudge⁴

Louise Knowles⁵

Alan Percy⁶

Afra Turner⁷

Charlotte Williams⁸

on behalf of the SCORE Consortium*

¹ Department of Psychology, University of Sheffield

² British Association for Counselling & Psychotherapy

³ University Counselling Service, University of Cambridge

⁴ Student and Academic Services, Keele University

⁵ University Counselling Service, University of Sheffield

⁶ The Counselling Service, University of Oxford

⁷ Student Counselling Service, Kings College London

⁸ The Counselling Service, Birkbeck College, London

* Student Counselling Research Outcomes & Evaluation Consortium

Abstract

Against a background of huge changes in the world of university and college students since the turn of the millennium, together with a multitude of reports on student mental health/wellbeing, this article argues that the field of student mental health is hampered by the imprecise use of terms, a rush to action by universities in the absence of a robust evidence base, and a lack of overall coordination and collaboration in the collection and use of data. In response, we argue for clearer and consistent use of definitions of and differentiations between student wellbeing and mental health, for a longitudinal approach to the student body that captures their developmental transitions to and through university, and a strategic and systematic approach to the use of bona fide measures in the collection of data on wellbeing and also on the process of outcomes in embedded university counselling services. Such a co-ordinated approach will provide the necessary evidence-base upon which to develop and deliver appropriate support and interventions to underpin and enhance the quality of students' lives and learning while at university or college.

Keywords: Student mental health; wellbeing; university embedded counselling services; transitions; outcome measures

Towards an evidence-base for student wellbeing and mental health:

Definitions, developmental transitions, and data sets

The mental health of students in national and international higher education (HE) settings is recognised as an important public health issue (e.g., Brown, 2016; Holm-Hadulla & Koutsoukou-Argyraki, 2015; also see comprehensive review by Sharp & Theiler, 2018). And a range of organisations in Australia (Orygen, The National Centre of Excellence in Youth Mental Health, 2017), Canada (Beckett, Bertolo, MacCabe, & Tulk, 2018), and the US (American College Health Association, 2018) have produced reports raising concerns about students' wellbeing and mental health, in addition to reports and surveys published in the UK – for example, The Insight Network and Dig-in (2018) – and also recent special issues of journals devoted to student mental health (see Brown, 2018; Cuijpers et al., 2019a). And in the UK, key initiatives have included funding from UK Research and Innovation to support a research network focusing specifically on student mental health (see Student Mental Health Research Network; SMarTeN, https://www.smarten.org.uk/) as well as a 2018 government-initiated directive to establish a University Mental Health Charter (https://www.studentminds.org.uk/charter.html).

In the UK, the student's world has changed radically since the millennium with the advent, amongst other things, of tuition fees in 1998 and their subsequent rise to current levels (Universities and Colleges Admissions Service, 2017), the advent of widening participation (e.g., Woodrow, 2000), and the early signs of student debt and its relation to mental health (e.g., Cooke, Barkham, Audin, Bradley, & Davy, 2004). And over time, there has been a steady increase in demand for student counselling services (e.g., Thorley, 2017) together with a parallel trend to outsourcing counselling services in the HE sector (see Lightfoot, 2018) and closures of some counselling services in further education (see Caleb, 2014). But against the tensions and debates surrounding such issues, it has been the national attention on student suicides that has particularly sharpened the focus of late (see Clarke, Mikulenaite, & de Pury, 2018). Set against this background, the present article provides a perspective focusing on three specific aspects. First, we argue for greater clarity in *definitions* as the blurring in terminology along the wellbeing-mental health continuum is problematic. Second, we consider the need for a clear focus on the *developmental transitions* of pupils from school, or elsewhere for those mature students returning to university or starting later in life to study. And, third, we argue for the strategic and co-ordinated collection of quality *data sets* to provide an evidence-based approach to student mental health and wellbeing and for such an evidence base to inform service and policy decisions.

Definitions: Psychological wellbeing and mental health

In order to shape services that are fit for purpose, there first needs to be clarity regarding terminology and a differentiated focus of effort. There is a danger that using generic terms that attempt to capture the full range of student issues and experiences actually conflate substantially different student populations (see Hewitt, 2019). Much of the initiative and effort in recent years has focused on student wellbeing, which can be viewed as a population-based term targeting positive feelings about oneself and reflecting an inner capacity – a resourcefulness - to deal with the pressures and challenges of student life and learning. Examples of such programmes have centred on resilience and/or mindfulness in university settings and have been carried out in the US (e.g., Ramasubramanian, 2017) and the UK (e.g., Galante et al., 2017; Roulston, Montgomery, Campbell, & Davidson, 2018). But while programmes focusing on wellbeing are logical as part of a co-ordinated approach to the overall health of students, it has been argued by some prominent figures that various aspects, such as wellbeing campaigns, raise demands and place existing resources under strain (e.g., see Arie, 2017). Crucially, wellbeing programmes alone are not designed to address mental health issues experienced by those students most at risk. In contrast to wellbeing, mental health issues and psychological distress pertain to a subgroup of the student population where specific issues are having a negative impact on the person (e.g., excessive worry, panic, depression, isolation, etc.) and who do not feel they have the inner capacity to address these experiences.

Data on student wellbeing and mental health is informative but also problematic. In the UK, the Student Academic Experience Survey (Neeves & Hillman, 2018, 2019) utilised four wellbeing items designed by the Office for National Statistics (ONS) and referred to as the ONS4 (ONS, 2018a) tapping four key areas: life satisfaction, (things in a person's life that are) worthwhile, happiness, and low anxiety. The data over successive years show students' wellbeing to be lower than a comparative sample of age-matched non-students but having stabilised with the exception of low levels of anxiety. While such comparative data is useful, reliance on single item questions and a focus for rating happiness and low anxiety in relation to 'yesterday' raises methodological concerns. Further data from the UK has reported mental health issues to be rising from 0.4% in 2007-8 (Equality Challenge Unit, 2014), to 1.3% in 2013-14 (Equality Challenge Unit, 2017), and to 2.5% in 2016-17 (Advance HE, 2018), an almost 6-fold increase over this time period. But in another survey focusing on loneliness, 45.5% of a student sample reported mental health as one of their top three concerns (Trendence UK, 2019). Again, while the results provide a perspective, the use of the term mental health issues and the fact that the sample comprised 1615 students drawn from 103 universities – a theoretical mean of 15 students per institution – gives rise to concerns about the sampling frame and generalisability of the findings. However, a much larger annual survey comprising a sample of 37,544 UK students from 140 institutions reported 21% of students endorsed an item stating that they had been diagnosed with a mental health condition, presumably at some point in their life (The Insight Network and Dig-In, 2019). It also reported that 3.9% of students reported developing a mental health condition (not diagnosis) while at university.

While the trend of all these accounts points to a rise in the awareness and occurrence of mental health within the student population, three observations are worth noting. First, all samples are self-selecting, and it may be that students who complete such surveys – irrespective of their responses – are not representative of the wider population of students. Even the larger sample of 37,544 from the Insight Network and Dig-In survey only represents approximately 1.6% of the UK student population. Second, each survey uses different terms: wellbeing, psychological distress,

mental health issues, mental health condition, and mental health diagnosis. And third, all the surveys utilise single-item indices, including the ONS4, to draw conclusions about differing aspects of students' lives as opposed to employing a bona fide psychological measure.

Hence, the field is populated with a multitude of disconnected survey-based reports yielding differing estimates of student wellbeing/mental illness with no strategy for linking and combining data. And then there are poorly designed polls of students' health and resulting rates of mental health issues reported in the national press (Arie, 2017). The result is pressure on universities to respond with a rush to action by implementing policies and actions that are well-intended but not necessarily evidence-based (Nunez-Mulder, 2018).

A different approach has been taken in the WHO World Mental Health International College Student (WMH-ICS) initiative which takes its starting point the collection, analyses and dissemination of epidemiological information using bona fide instruments on student mental health and targeting a defined sampling frame of students (see Cuijpers et al., 2019b). Based on a sample of 13,984 students with a weighted mean response rate of 45.5%, Bruffaerts et al. (2019) reported the lifetime prevalence of depression and anxiety to be 21.2% and 18.6% respectively. These rates were closely mirrored in the prevalence rates for the past 12-month prevalence for depression and anxiety (18.5% and 16.7% respectively). For students meeting a lifetime or 12-month prevalence criteria for any mental health disorder, 19.8% and 11.3% received treatment. In an earlier study in this major initiative, Auerbach et al. (2016) concluded that these psychological problems resulted from a complex set of risk factors including academic stress, financial strain, exposure to adverse life events, difficulties transitioning towards independence, difficult cultural adjustment for international students, and other pressures. Poor mental health was, in turn, associated with disability and lower academic achievement and the potential escalation in risk of suicide in vulnerable individuals.

Suicide is, by definition, the single worst indicator regarding student mental health. There is understandable concern about student suicide rates that have instigated multiple initiatives at local university and national levels (e.g., Batterham, Calear, & Christensen, 2013; Farrell, Kapur, While, Appleby, & Windfuhr, 2016). As disturbing as this phenomenon is, however, results derived from the ONS show that between the 12 months ending July 2013 and the 12 months ending July 2016, HE students in England and Wales had a significantly lower suicide rate (per 100,000) compared with the general population of similar ages: 2.8 vs. 6.7 (age >20); 4.9 vs. 8.7 (21-24); 6.1 vs. 9.2 (25-29); and 6.0 vs. 12.9 (> 30) (ONS, 2018b). Hence, prevalence rates of mental health using *diagnostic* tools suggest students are akin to age-matched adults and the rates of suicide show they are *proportionately* less vulnerable as compared with matched age groups. However, student suicides draw heightened media attention that is not shared when such events occur to young adults not at university.

Developmental transitions

Given the state of evidence, what is absent is the collection of high-quality data using bona fide measures that differentiate between wellbeing and mental health and that are then considered beside both contextual and historical data. Such data would help progress our understanding of student mental health and enable the design and resourcing of evidence-based interventions and support systems that are strategically joined up in order to address student mental and psychological health.

The evidence that many of the issues experienced by university students pre-date their entry to university/college suggests that a generic diathesis-stress model (Monroe & Simons, 1991) provides a useful framework for delivering a joined-up approach to student mental health. One logical consequence of this model is that there needs to be a strategic focus on student health *prior* to university. Research efforts need to move back into 6th form colleges, further education establishments, and other varied routes into universities including the workplace for mature applicants and place the process of developmental transition at the centre of any national student mental health and wellbeing strategy. Joining up research between these varied routes into universities enables this transition to be investigated. Such preparatory work is crucial as it is known from a UK cohort study that while levels of psychological distress rise on entering university and then

fluctuate during the course of the time at university, on average they never return to pre-university levels (Bewick, Koutsopoulou, Miles, Slaa, & Barkham, 2010).

The focus on this pre-transition to university stage is, particularly in relation to younger people, a public health issue and programmes can focus on the promotion of good mental health among young people in general (e.g., Sommers-Flanagan, Barrett-Hakanson, Clarke, & Sommers-Flanagan, 2000). In the UK, the Scottish government has committed to additional new counsellors for schools, colleges and universities (Scottish Government, 2018) while the Welsh government has a track record of investing in school counselling along with the use of standard outcome measurement (Welsh Government, 2013). And once at university or college, there is evidence from meta-analytic studies for the effectiveness of cognitive behavioural therapy and mindfulness interventions for depression and anxiety in students (Huang, Nigatu, Smail-Crevier, Zhang, & Wang, 2018) as well as evidence for the sustainability of effects for interventions addressing these conditions but less so for interventions promoting positive wellbeing (Winzer, Lindberg, Gulbrandsson, & Sidorchuk, 2018). In the UK, a randomised controlled trial comparing mindfulness with usual support for students at a single UK university showed a moderate advantage to a mindfulness intervention in relation to relieving student exam stress (Galante et al., 2018).

Admirable as such initiatives are, they remain unconnected to the wider sampling data frame of students that may benefit from support if there were a policy of gathering information on wellbeing via bona fide measures at the transition into university and throughout the course of a student's university career. This then leads to questions about policies and strategies for obtaining high-quality data in relation to student wellbeing and mental health.

Data sets: implementation and utilisation

The differentiation of wellbeing and mental health together with the need for a focus on developmental transitions lead to the need to obtain high-quality data on a systematic scale in order for universities and student mental health support services to focus their limited resources in the best way possible.

Wellbeing in the student population and its measurement: Longitudinal cohort studies

The Evidence-based Practice Unit at University College London have published guidance on measuring student wellbeing and cite two candidate measures (Evidence-based Practice Unit, n.d): the Warwick-Edinburgh Mental Wellbeing Scale (Tennant et al., 2007) and the GP-CORE (Sinclair et al., 2005). The former is a 14-item measure originally developed with students but now used in population surveys. All items are positively worded. The latter also comprises 14 items and was developed for students and used in a large student wellbeing study (e.g., Bewick et al., 2010). Items focus on experiences and not problems with a mix of positive and negative items. But the selection of a measure also needs to be combined with strategic implementation whereby students are enabled to respond to such measures prior to starting their course so as to capture the nature and impact of this major developmental transition as well as at key intervals throughout their time at university. As noted earlier, the Welsh Government mandates the use of standard outcome measures, principally the YP-CORE (Twigg, Barkham, Bewick, Mulhern, & Cooper, 2009) in order to provide annual reports on the effectiveness of independent school counselling (for example, see Statistical First Release, 2019).

Student mental health, counselling and its measurement

The differentiation between wellbeing and mental health requires differing measures for the latter, with a focus on the adoption of bona fide instruments in student counselling services. A survey carried out by Broglia, Millings, and Barkham (2018) comprising data from 65 UK HE student counselling services that found less than half (47%) of services used a bona fide outcome measure and a further 47% did not use a validated clinical measure although 15% used their own assessment or feedback form. The final 6% did not report on their use of clinical outcome measures. These data suggest that of those services that replied, approximately one-third did not use a validate outcome measure. University counselling services should aspire to implement and collect a minimum pre- and post-counselling data set as a component of good practice. In short, it is difficult to defend services that use no outcome measures in a context where such procedures are mandated in the UK National

Health Service (NHS). Embedded student counselling services could then claim a national evidencebase, be transparent regarding their individual effectiveness, and provide collective data at a national level.

A major contribution to designing and implementing a minimum outcome data set in counselling can be seen in the US initiative of the Center for Collegiate Mental Health (Castonguay et al., 2011). There is no need for the development of any new measures as there are sufficient bona fide outcome measures to propose that all services select their *preferred* measure and from which commonly-derived indices of change (i.e., walk across tables) can be devised to make comparisons between differing measures (see Leach et al., 2006). For assessment, measures include the CORE-OM (Evans et al., 2002) and CCAPS-34 (or CCAPS-62; for UK data, see Broglia, Millings & Barkham, 2017). *Co-ordination with NHS services and session-by-session outcome measurement*

In the UK, there is now a clear aspiration to establish more effective ways of co-ordinating university and NHS provision of mental health services for students (see NHS, 2019). And within the NHS, the Improving Access to Psychological Therapies (IAPT) initiative has had a major impact on shaping the delivery of services, particularly for primary care (Clark, 2011). But one feature of the IAPT delivery model has been the implementation and collection of a minimum data set for *all* patients at *all* sessions attended. While IAPT services are mandated to use the PHQ-9 (Kroenke et al., 2001) and the GAD-7 (Spitzer, Kroenke, Williams, & Löwe, 2006) for depression and anxiety respectively, other generic measures are also available (e.g., the CORE-10; Barkham et al., 2013). Decisions need to be informed by a balance between interfacing with the NHS while also retaining the selection and implementation of measures that acknowledge the specialist setting of students being seen with university embedded counselling services.

Towards an agenda in support of evidence-based student wellbeing and mental health

In summary, on the basis of adopting clear distinctions between student wellbeing and mental health, three areas of activity and research need to be carried forward: (1) a strategic approach to measuring wellbeing that captures developmental transitions prior to and across the

course of university; (2) agreement on a unified approach to counselling measurement that includes session-by-session measurement using bona fide measures; and (3) the collation of data in support of the effectiveness of embedded counselling services and their coordination with NHS service provision.

Epilogue

On 5 June 2019, the UK Office for Students announced £6m – £14.5m when valued with matched funding – focusing on finding innovative ways to combat the rise in student mental health issues and initiate a step-change in student support across the country (Office for Students, 2019). A week earlier, on 30 May 2019, the New Zealand government published *The Wellbeing Budget* (New Zealand Government, 2019) in which the 2019/20 economic planning for the country will be premised on principles and policies of wellbeing rather than specifically productivity and performance. While the former national initiative provides a welcomed approach to address some of the specific issues concerning student suicide, identification of risk, and the coordination of student services for mental health, the latter international event signals a fundamental reorienting of economic priorities at the highest level of a national government wherein rather than just measuring wellbeing, it is placed at the heart of economic decision-making and planning.

References

Advance HE (2018). Equality and higher education: Students statistical report 2018.

https://www.advance-he.ac.uk/news-and-views/Equality-in-higher-education-statisticalreport-2018

- American College Health Association (2018). *American College Health Association-National College Health Assessment II: Reference Group Executive Summary* (Spring 2018). Silver Spring, MD: American College Health Association.
- Arie, S. (2017). Simon Wessely: "Every time we have a mental health awareness week my spirits sink". *BMJ*, 358, j4305. https://doi.org/10.1136/bmj.j4305
- Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G.... Bruffaerts, R. (2016).
 Mental disorders among college students in the World Health Organization World Mental
 Health Surveys. *Psychological Medicine*, *46*, 2955–2970.
 https://doi.org/10.1017/S0033291716001665
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P....Kessler, R. C., & WHO
 WMH-ICS Collaborators. (2018). WHO World Mental Health Surveys International College
 Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127, 623-638. https://doi.org/10.1037/abn0000362
- Barkham, M., Bewick, B.M., Mullin, T., Gilbody, S., Connell, J., Cahill, J.... Evans, C. (2013). The CORE-10: A short measure of psychological distress for routine use in the psychological therapies. *Counselling & Psychotherapy Research, 13*, 3-13.

https://doi.org/10.1080/14733145.2012.729069

- Batterham, P. J., Calear, A. L., & Christensen, H. (2013). Correlates of suicide stigma and suicide literacy in the community. *Suicide and Life-Threatening Behavior*, 43, 406-417. https://doi.org/10.1111/sltb.12026
- Beckett, H., Bertolo, S., MacCabe, K., & Tulk, L. (2018). *Policy paper: Student health & wellness*. Toronto: Ontario Undergraduate Student Alliance.

https://d3n8a8pro7vhmx.cloudfront.net/ousa/pages/80/attachments/original/1521831542/St udent_Health_and_Wellness_2018_document.pdf?1521831542

- Bewick, B., Koutsopoulou, Z., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education, 35*, 633-645. https://doi.org/10.1080/03075070903216643
- Broglia, E., Millings, A., & Barkham, M. (2017). The Counseling Center Assessment of Psychological Symptoms (CCAPS-62): Acceptance, feasibility, and initial psychometric properties in a UK student population. *Clinical Psychology and Psychotherapy, 24*, 1178–1188. https://doi.org/10.1002/cpp.2070
- Broglia, E., Millings, A., & Barkham, M. (2018). Challenges in addressing student mental health in embedded counselling services: A survey of UK higher and further education institutions.
 British Journal of Guidance and Counselling, 46, 441–455.
 https://doi.org/10.1080/03069885.2017.1370695
- Brown, J. S. L. (2018). Student mental health: Some answers and more questions. *Journal of Mental Health, 27,* 193-196. https://doi.org/10.1080/09638237.2018.1470319
- Brown, P. (2016). *The invisible problem? Improving students' mental health*. Higher Education Policy Institute: HEPI Report 88. http://www.hepi.ac.uk/2016/09/22/3592/
- Bruffaerts, R., Mortier, P., Auerbach, R., Alonso, J., Benjet, C., Cuijpers, P... Kessler, R. (2019). Lifetime and 12-months treatment for mental disorders and suicidal throught and behaviors among first year college students. *International Journal of Methods in Psychiatric Research, 28*, e1764. https://doi.org/10.1002/mpr.1764.

Caleb, R. (2014). Uni counselling services challenged by growing demand. The Guardian. https://www.theguardian.com/higher-education-network/blog/2014/may/27/studentsmental-health-risk-cuts-nhs-services.

- Castonguay, L. G., Locke, B. D., & Hayes, J. A. (2011). The Center for Collegiate Mental Health: An example of a practice-research network in university counseling centers. *Journal of College Student Psychotherapy*, *25*, 105-119. https://doi.org/10.1080/87568225.2011.556929
- Clark, D. M. (2011). Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: The IAPT experience. *International Review of Psychiatry, 23*, 318–327. https://doi.org/10.3109/09540261.2011.606803
- Clarke, N., Mikulenaite, G., & de Pury, J. (2018). *Suicide Safer universities*. Universities UK/Papyrus. https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2018/guidance-foruniversities-on-preventing-student-suicides.pdf
- Cooke, R., Barkham, M., Audin, K., Bradley, M., & Davy, J. (2004). Student debt and its relation to student mental health. Journal of Further and Higher Education. 28, 53-66. https://doi.org/10.1080/0309877032000161814
- Challenge Unit (2014). Equality in higher education: Statistical report: Part 2: Students. https://www.ecu.ac.uk/publications/equality-higher-education-statistical-report-2014/
- Cuijpers, P., Auerbach, R. P., Benjet, C., Bruffaerts, R., Ebert, D. D., Karyotaki, E., & Kessler, R. C.
 (2019a). Introduction to the special issue: The WHO World Mental Health International College Student (WMH-ICS) initiative. *International Journal of Methods in Psychiatric Research, 28,* e1762. https://doi.org/10.1002/mpr.1762
- Cuijpers, P., Auerbach, R. P., Benjet, C., Bruffaerts, R., Ebert, D. D., Karyotaki, E., & Kessler, R. C.
 (2019b). The WHO World Mental Health Surveys International College Student (WMH-ICS)
 initiative: An overview. International Journal of Methods in Psychiatric Research, *28*, e1761.
 https://doi.org/10.1002/mpr.1761
- Equality Challenge Unit (2014). Equality in higher education: Statistical report 2014 Part 2: Students. https://www.ecu.ac.uk/wp-content/uploads/2014/11/ECU_HE-statsreport_student_v19.pdf

- Equality Challenge Unit (2017). Equality in higher education: Students statistical report 2017. https://www.ecu.ac.uk/publications/equality-in-higher-education-statistical-report-2017/
- Evans, C., Connell, J., Barkham, M., Margison, F., McGrath, G., Mellor-Clark, J., & Audin, K. (2002). Towards a standardised brief outcome measure: Psychometric properties and utility of the CORE-OM. *British Journal of Psychiatry*, 180, 51-60. https://doi.org/10.1192/bjp.180.1.51
- Evidence-based Practice Unit (n.d). *Wellbeing measurement framework for colleges*. https://www.corc.uk.net/media/1507/college-measures_310317_forweb.pdf
- Farrell, S., Kapur, N., While, D., Appleby, L., & Windfuhr, K. (2016). Suicide in a national student mental health patient population, 1997–2012. *Crisis, 38*, 82-88. https://doi.org/10.1027/0227-5910/a000412
- Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A... Jones, P. B. (2017).
 Effectiveness of providing university students with a mindfulness-based intervention to increase resilience to stress: a pragmatic randomised controlled trial. *Lancet Public Health, 3*: e72–81. https://doi.org/10.1016/S2468-2667(17)30231-1
- Hewitt, R. (2019). *Measuring well-being in higher education*. Higher Education Policy Institute, HEPI Policy Note 13. https://www.hepi.ac.uk/wp-content/uploads/2019/05/Policy-Note-13-Paper-May-2019-Measuring-well-being-in-higher-education-8-Pages-5.pdf
- Holm-Hadulla, R. M., & Koutsoukou-Argyraki, A. (2015). Mental health of students in a globalized world: Prevalence of complaints and disorders, methods and effectivity of counseling, structure of mental health services for students. *Mental Health & Prevention, 3*, 1-4. https://doi.org/10.1016/j.mhp.2015.04.003
- Huang, J., Nigatu, Y. T., Smail-Crevier, R., Zhang, X., & Wang, J. (2018). Interventions for common mental health problems among university and college students: A systematic review and meta-analysis of randomized controlled trials. *Journal of Psychiatric Research*, *107*, 1-10. https://doi.org/10.1016/j.jpsychires.2018.09.018

- Kroenke, K., Spitzer, R. L., & Williams, J.B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*, 606–613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x
- Leach, C., Lucock, M., Barkham, M., Stiles, W.B., Noble, R., & Iveson, S. (2006). Transforming between Beck Depression Inventory and CORE-OM scores in routine clinical practice. *British Journal of Clinical Psychology, 45,* 153-166. https://doi.org/10.1348/014466505X35335
- Lightfoot, L. (2018). Universities outsource mental health services despite soaring demand. The Guardian. https://www.theguardian.com/education/2018/jul/17/universities-outsource-mental-health-services-despite-soaring-demand
- Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life stress research: implications for the depressive disorders. *Psychological Bulletin, 110*, 406-425. https://doi.org/10.1037/0033-2909.110.3.406

NHS. (2019). The NHS long term plan. https://www.longtermplan.nhs.uk/

- Neves, J., & Hillman, N. (2018). 2018 student academic experience survey. Advance HE, Higher Education Policy Institute. HEPI No. 108. https://www.hepi.ac.uk/2018/06/07/2018-studentacademic-experience-survey/
- Neves, J., & Hillman, N. (2019). 2019 student academic experience survey. Advance HE, Higher Education Policy Institute. HEPI No. 117. https://www.hepi.ac.uk/wpcontent/uploads/2019/06/Student-Academic-Experience-Survey-2019.pdf
- New Zealand Government (2019). The wellbeing budget: 30 May 2019.

Treasury.govt.nz/publications/wellbeing-budget/wellbeing-budget-2019

- Nunez-Mulder, L. (2018). Researcher cautions against initiatives to reduce student suicide that lack evidence. *BMJ*, 362, k3969. https://doi.org/10.1136/bmj.k3969
- Office for National Statistics (2018a). *Surveys using our four personal well-being questions*. https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/ methodologies/surveysusingthe4officefornationalstatisticspersonalwellbeingquestions

- Office for National Statistics. (2018b). Estimating suicide among higher education students, England and Wales: Experimental statistics: Estimates of suicides among higher education students by sex, age and ethnicity. The author, 25th June 2018 release.
- Office for Students (2019). Innovation, partnership and data can help improve student mental health in new £14m drive. https://www.officeforstudents.org.uk/news-blog-and-events/press-andmedia/innovation-partnership-and-data-can-help-improve-student-mental-health-in-new-14m-drive/
- Orygen, The National Centre of Excellence in Youth Mental Health. (2017). *Under the radar: The mental health of Australian university students.* Melbourne: Orygen, The National Centre of Excellence in Youth Mental Health.
- Ramasubramanian, S. (2017). Mindfulness, stress coping and everyday resilience among emerging youth in a university setting: a mixed methods approach. *International Journal of Adolescence and Youth, 22*, 308-321. https://doi.org/10.1080/02673843.2016.1175361
- Roulston, A., Montgomery, L., Campbell, A., & Davidson, G. (2018). Exploring the impact of mindfulnesss on mental wellbeing, stress and resilience of undergraduate social work students. *Social Work Education, 37*, 157-172.

https://doi.org/10.1080/02615479.2017.1388776

- Scottish Government (2018). *Delivering for today, investing in tomorrow: The government's* programme for Scotland 2018-19. https://www.gov.scot/publications/delivering-todayinvesting-tomorrow-governments-programme-scotland-2018-19/
- Sharp, J., & Theiler, S. (2018). A review of psychological distress among university students: Pervasiveness, implications and potential points of intervention. *International Journal for the Advancement of Counselling, 40*, 193-212. https://doi.org/10.1007/s10447-018-9321-7
- Sinclair, A., Barkham, M., Evans, C., Connell, J., & Audin, K. (2005). Rationale and development of a general population well-being measure: Psychometric status of the GP-CORE in a student

sample. British Journal of Guidance & Counselling, 33, 153-174.

https://doi.org/10.1080/03069880500132581

- Sommers-Flanagan, R., Barrett-Hakanson, T., Clarke, C., & Sommers-Flanagan, J. (2000). A psychoeducational school-based coping and social skills group for depressed students. *Journal for Specialists in Group Work, 25*, 170-190. https://doi.org/10.1080/01933920008411460
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166,* 1092–1097. https://doi.org/10.1001/archinte.166.10.1092
- Statistical First Release (March 2019). *Counselling for children and young people 2017/18.* Statistics for Wales, Welsh Government. https://gov.wales/sites/default/files/statistics-and-research/2019-03/counselling-for-children-and-young-people-2017-18-494.pdf

Student Mental Health Research Network; SMaRteN, https://www.smarten.org.uk/

Student Minds (2018). The University Mental Health Charter.

https://www.studentminds.org.uk/charter.html).

- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., ... & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes, 5*, 63. https://doi.org/10.1186/1477-7525-5-63
- The Insight Network and Dig-in (2019). University student mental health survey 2018: A large scale study into the prevalence of student mental illness within UK universities. https://assets.website-

files.com/561110743bc7e45e78292140/5c7d4b5d314d163fecdc3706_Mental%20Health%20R eport%202018.pdf

Thorley, C. (2017). *Not by degrees: Improving student mental health in the UK's Universities*. Institute for Public Policy Research. http://www.ippr.org/research/publications/not-by-degrees.

Trendence UK (2019). Only the lonely - loneliness, student activities and mental wellbeing at university. https://wonkhe.com/blogs/only-the-lonely-loneliness-student-activities-andmental-wellbeing/

- Twigg, E., Barkham, M., Bewick, B.M., Mulhern, B., & Cooper, M. (2009). The YP-CORE: Development and validation of a young person's version of the CORE-OM. *Counselling and Psychotherapy Research, 9,* 160-168. https://doi.org/10.1080/14733140902979722
- Universities and Colleges Admissions Service (2017). Undergraduate tuition fees and student loans. https://www.ucas.com/ucas/undergraduate/finance-and-support/undergraduate-tuition-feesand-student-loans
- Welsh Government (2013). Statutory guidance to Welsh local authorities on the provision of independent counselling services. https://gov.wales/sites/default/files/publications/2018-03/statutory-guidance-to-welsh-local-authorities-on-the-provision-of-independentcounselling-services.pdf
- Winzer, R., Lindberg, L., Gulbrandsson, K., & Sidorchuk, A. (2018). Effects of mental health interventions for students in higher education are sustainable over time: a systematic review and meta-analysis of randomized controlled trials. https://doi.org/10.7717/peerj.4598

Woodrow, M. (2000). *Widening Participation What's it really all about?* http://www.brad.ac.uk/admin/conted/action/context/mwabout.html