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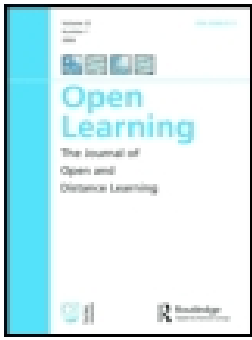
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Mental health in distance learning: a taxonomy of barriers and enablers to student mental wellbeing

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ABSTRACT

Student mental health is a critical issue in higher education. It is understood that higher education can act to trigger or exacerbate mental health difficulties, but research in this area has focused primarily on campus environments, identifying stressors such as halls of residence. Since distance learning students disclose mental health issues at a higher rate than campus students, and completion and progression gaps are on a par with the sector, the barriers and enablers to mental wellbeing in distance learning must be understood. This paper reports on a qualitative study that investigated barriers and enablers to mental wellbeing and study success that students experienced in distance learning. Fifteen distance learning students and five tutors were interviewed using narrative enquiry; students told their own stories and tutors told stories of students they had supported. Barriers and enablers were identified across different aspects of study, skills-development and the distance learning environment, and are presented in a taxonomy of barriers and enablers that suggest a range of implications for distance learning educators and policy developers.

KEYWORDS

Mental health; wellbeing; higher education; distance learning; inclusive design; UDL

Introduction

There has been much discussion around student mental health in higher education in recent years, as research shows that mental health difficulties have a serious effect on students' attainment, progression and study outcomes (Evans et al., 2018; Hughes & Spanner, 2019; Sick et al., 2019; Thorley, 2017). Students experiencing mental health difficulties are less likely to complete and/or pass a course or module (Mojtabai et al., 2015; Richardson, 2015), more likely to drop out of university (Brown, 2016; Mojtabai et al., 2015; Richardson, 2015), and less likely to attain higher grades (Eisenberg et al., 2009). Additionally, students are more likely to experience or develop mental health problems than non-students, implying that studying and university culture is a significant contributing factor (Brown, 2016; Ribeiro et al., 2018; Tinklin et al., 2005; Winzer et al., 2018).

There are many interventions in place to support students experiencing mental health issues, with an increasing number aiming to proactively promote wellbeing or prevent

mental health crises. However, the persistent attainment and progression gaps (Office for Students, 2019), and increasing demand for student counselling and mental health services (P.J. Jones et al., 2018) imply that these interventions are not sufficiently tackling the problem, and a more holistic approach is needed (Hughes & Spanner, 2019). Furthermore, these interventions, or the administrative processes required to access them, tend to be of an 'in person' nature, assuming students are physically based on a campus (Barr, 2014; Brown, 2016). With an increasing number of students taking part in distance learning, it is critical to identify suitable interventions for remote learners, and in order to do this, it is necessary to understand the barriers and enablers to mental wellbeing that students in a distance learning environment experience.

This paper presents the findings from a study aiming to identify barriers and enablers to mental wellbeing in distance learning. Barriers and enablers were identified through interviews with students (N = 16) and tutors (N = 5) in a large UK distance learning institution; these were mapped to a taxonomic wheel. This taxonomy clearly demonstrates that both barriers and enablers to student mental wellbeing in study reside throughout learning environments and study experiences, and supports the contention that holistic approaches are needed to support student mental wellbeing (Hughes & Spanner, 2019).

Mental health in higher education

This section reviews some of the current literature relevant to the issue of student mental wellbeing. However, firstly, and importantly, a note on terminology. For this study, we adopt the World Health Organisation (WHO) definition of mental health:

a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (WHO, 2014).

We use the terms mental health and mental wellbeing in this paper with slightly different connotations; we use mental health as a broad term that can signify positive mental health, mental health as a societal issue, or can prefix a difficulty, issue, problem or condition. We use mental wellbeing to describe the positive state described in the WHO definition. Finally, we include both 'common' mental health issues, such as depression or anxiety, and also more 'severe' issues, such as schizophrenia or psychosis, in our definition of mental health conditions (Davies, 2013).

Mental health is a worldwide concern (Lozano et al., 2012), and there is an increasing awareness of the need to take a proactive approach to mental illness prevention and mental health promotion, as well as treatment, recovery and rehabilitation (Davies, 2014; WHO, 2013). This combined proactive and responsive approach has been well received in higher education, and various white papers have arisen supporting the need for a greater emphasis on proactive approaches (Houghton & Anderson, 2017; Hughes & Spanner, 2019).

Traditionally, higher education institutions have adopted a reactive approach to wellbeing and mental health issues; with responsibility for reacting to issues when they arise being placed on the student support team and mental health counsellors (P.J. Jones et al., 2018). However, an increasing number of studies are documenting an emergent, more proactive approach, focusing on mental health promotion through interventions, such as

resilience-building programmes (Holdsworth et al., 2018; McAllister et al., 2018), sports-based programmes (Vella et al., 2019), mindfulness activities (Al-Ghalib & Salim, 2018; Galante et al., 2018), mental health literacy programmes (Kern et al., 2017), peer support (Byrom, 2018) and meditation (Crowley & Munk, 2017). However, while the studies we cite here conclude that these interventions have the potential to be beneficial, they concede that greater understanding and wider adoption are needed. For example, Holdsworth et al. argue for an embedded, rather than therapeutic approach:

to support the development of resilience, curriculum structure and content should incorporate complex problem-based activities which are industry focused and are underpinned by a supportive learning environment (Holdsworth et al., 2018).

In spite of this shift towards a proactive approach, many of the interventions in higher education continue to position mental health issues as a problem belonging to an individual, rather than identifying causes or triggers in the environment. For example, when investigating high levels of student 'distress during the examination period,' Galante et al.'s approach was to provide an 8-week mindfulness course, rather than identify and mitigate the causes of the distress (Galante et al., 2018). However, it is increasingly recognised that there are systemic triggers inherent within higher education that have a negative effect on student mental wellbeing (Tinklin et al., 2005). For example, Ribeiro et al. found in a systematic review that 'psychological suffering is inherent in academic life' (Ribeiro et al., 2018), and Jenkins et al. identified that 'negative role models', as well as course-specific issues with placements and assessment, were 'major stressors' for students (Jenkins et al., 2018). Markoulakis and Kirsch performed a systematic review to locate areas where students experienced mental health difficulties, and found areas included the 'learning environment', 'difficulties with their studies', 'structural difficulties imposed by the university', and 'academic outcomes' (Markoulakis & Kirsh, 2013). On a larger scale, a dataset analysis of 80,509 students in the USA, UK and Canada found that 'academic distress', including 'academic performance, pressure to succeed, and postgraduation plans', was the most unique predictor of anxiety in university students (P.J. Jones et al., 2018).

It stands to reason that barriers to mental wellbeing that reside within the higher education culture, systems, structures and learning environments may be addressed through intervention in these areas (Hughes & Spanner, 2019). Furthermore, there is evidence that inclusive design practices such as Universal Design for Learning (UDL) that focus on flexibility and student agency in learning (Rose & Meyer, 2002) can be beneficial for student mental health (Griful-Freixenet et al., 2017; Miller & Lang, 2016). However, this recognition that the issue of mental health in higher education does not reside solely in the student is not yet commonplace in the higher education mental health literature or practice.

In addition to this, there is a lack of research on students' mental wellbeing in a distance learning environment. The majority of the literature on student mental health focuses on a campus-based university environment, but evidence shows that the UK's 200,000+ distance learning students are just as likely to experience mental health issues that impact on their learning (Barr, 2014; Richardson, 2015). For example, in 2017–18, 7.8% of the students studying at the Open University in the UK disclosed a mental health condition, compared to the UK HE average of 2.02% (Higher Education Statistics Agency, 2017), and there is

a – 16 percentage point gap in module completion for students (The Open University, 2019), compared to the sector average of –3.4 percentage points (Office for Students, 2019). In spite of this, barriers to wellbeing in distance learning students remain under-researched (Richardson, 2015), and with the current pivot to online teaching, there is a clear need for empirical research that can inform interventions, and ensure distance learning environments engender mental wellbeing.

Our review of the literature indicates that studying at university can have a detrimental effect on the wellbeing and mental health of some students. Whilst there is some agreement that higher education institutions need to be proactive in how they both promote wellbeing and mental health and seek to prevent poor wellbeing and mental health experiences; practices are not yet widespread or systemic in higher education. Furthermore, little attention has been paid to the experience of students studying with distance education universities and the specific implications this might have for the kinds of proactive practices that distance learning institutions might adopt. The study reported in this paper seeks to address this gap in knowledge by investigating the barriers and enablers to the mental wellbeing student experience in distance learning.

Methods

In order to address our research questions, a study was conducted at the Open University (OU), a large, distance learning institution in the UK with over 16,000 students disclosing a mental health issue. The study is modular, OU students study predominantly online or via books, and are supported in their learning by a tutor, regular tutorials, and peer interactions. Performance is assessed via coursework and an end of module assessment of some kind; approximately 40% of the modules use an exam for this. There is a free online mental health support service for students in need, and teams of educational advisors, student support staff, and disability support staff are trained to support students in distress.

The study aimed to capture narratives about barriers and enablers to mental wellbeing students experience during the study. To do this, we interviewed students and associate lecturers (tutors); OU tutors are frequently the first point of contact for students, and we considered their ‘collective social expertise’ (Suoranta & Moisio, 2006) could add additional insight.

In order to capture narratives from students and tutors, we used convenience sampling to recruit 21 volunteers to the study, 16 students and 5 tutors. The students were:

- 10 female, 6 male
- 13 white British, 2 Black British, 1 white European
- 14 undergraduate, 2 postgraduate
- studying social sciences (N = 10), arts (N = 2), business (N = 2), and science (N = 2)

15 of the students had disclosed a mental health condition to the university; the other had severe depression and anxiety but did not formally disclose it.

The tutors taught courses on computing, maths and statistics, chemistry, health and social care and arts and humanities. All had over 10 years' experience and had supported multiple students with mental health issues.

Twenty-one semi-structured interviews were carried out. Interviews ranged from 30 to 90 minutes, resulting in over 19 hours of interview data. Students were asked to share their study experiences and related life experiences, and tutors were asked to share their experience of supporting students experiencing mental health issues. Interviews were recorded and transcribed. Thematic Analysis (Braun & Clarke, 2006) was used to identify emerging themes of barriers and enablers. The emerging themes are detailed in the following section. Approval was given by the institution's ethics committee for this research.

Results

The data were interrogated inductively in NVivo for examples of barriers and enablers to mental wellbeing and success in the study. Barriers were defined as anything that had caused or triggered an issue with mental health; enablers were defined as anything that facilitated a sense of wellbeing. All 21 participants spoke about both barriers and enablers; students recounted those they had experienced themselves, and tutors discussed those their students had experienced.

In total, 60 themes were identified, consisting of 155 sub-themes and 783 coded references. Both barriers and enablers were then clustered into three overall categories and 10 sub-categories (Braun & Clarke, 2006). The coding structure is shown in Figure 1.

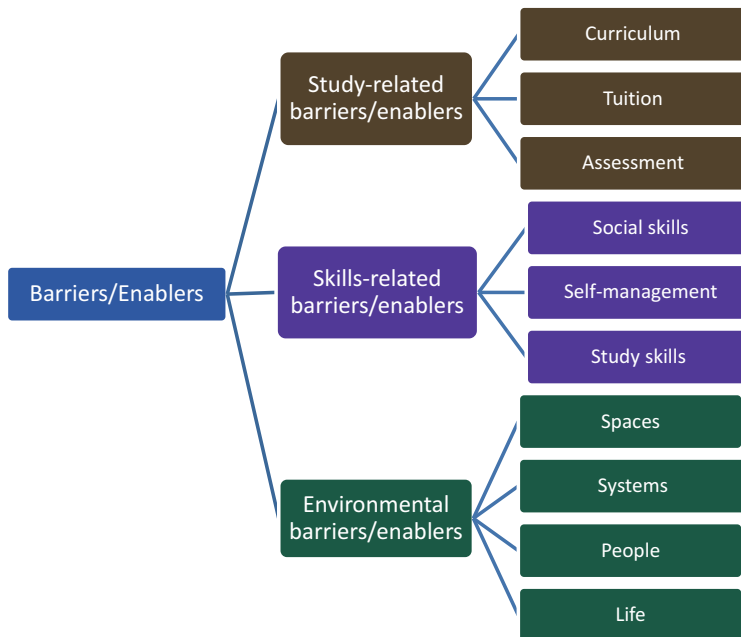


Figure 1. Coding classifications.

Themes from each category are discussed in turn. When quoting directly from our participants we assign a code to enable readers to distinguish between participants (student 1–16; tutor 1–5).

Study-related barriers and enablers

Study-related barriers and enablers occurred within student's studies, in terms of curriculum, tuition and assessment.

The curriculum was a source of both barriers and enablers; 18 of the 21 participants described barriers it presented, and 16 gave examples of enablers within it. Recurrent themes included curriculum content, curriculum design (including use of technology), and types of activities within the curriculum (i.e. groupwork). For example, student 7's mental health issues were triggered by distressing curriculum content. She talked about how trigger warnings did not help:

obviously there is warnings not to read them but I'm quite stubborn, I will read everything that they tell me in module materials ... but it did trigger me for a couple of weeks.

Student 8 experienced a trigger for suppressed trauma:

I didn't remember it until starting this course ... But then it just, kind of, everything came back. So yeah, it did affect me.

Curriculum design was critical; students and tutors both highlighted workload as a barrier: *'Even perceived workload. So, the student's almost like a panic mode; too much to do, can't cope!'* (tutor 1). Structure, routine and flexibility within curriculum design were recurrent enablers, for example, student 10 said flexibility in choosing his study days helped because he could not *'consistently say every day I'm going to be fine.'*

Activities within the curriculum could be challenging, collaborative activities in particular were mentioned by 6 participants. Student 6 said *'I don't like anything where I have to interact with people.'* However, forums were highlighted as an enabler; student 1 said *'there's a lot of support as well, you know, on the forums.'*

In the tuition category, tutors were mentioned both positively and negatively. They were enablers if *'they genuinely, genuinely care'* (student 10), they were *'full of enthusiasm'* (student 1), if *'I knew I had her support'* (student 1), if they had *'enthusiasm and commitment'* (student 13), or if they were *'very kind and not patronizing'* (student 14). Student 13 summed it up:

So the tutors make a massive difference, and the enthusiasm and the commitment of the tutors and the face-to-face tutorials and the kind of free flow dialogue, a discussion that you get in a face-to-face environment that you don't get in the online environment.

However, tutors were seen as a barrier if they were *'really not helpful'*, if they *'told off'* the student (student 14), if they were *'stern'* (student 15) or if students were given *'different advice from your tutor and the moderators'* (student 14).

Within the theme of assessment, participants talked about a range of issues including deadlines, exams, extensions, feedback, scores, marking, presentations, technology, assessment clarity, exam skill development, and tutor support. In this section, we focus on three of these: exams, feedback and unclear assessment instructions.

Exams were exclusively mentioned as a barrier. Students mentioned how both the exam itself and the preparation for the exam could act as a trigger for mental health issues; student 9 recounted her experiences of *'panic attacks'* in *'these massive exam halls'* and student 2 talked about how being *'worried'* and not feeling *'prepared'* for the exam led her to feel *'I can't do this'*, triggering her depression and leading her to defer her module.

Negative feedback, and the fear of negative feedback, were highlighted as barriers. One tutor recounted an experience with a student about fear of feedback:

He said, if I were going through particularly difficult week and there was something there that have the potential to perhaps derail me, always having to be really careful with myself, I might not open it because what am I going to do if I discover that is really, really critical? Yeah, like what do I do after that? Yeah. It's a terrifying idea (tutor 5).

Her response to this was to develop a relationship based on trust: *'you can trust me not to cut it to ribbons'* (tutor 5).

Unclear assessment instructions or criteria were extremely triggering for students. One tutor recounted an experience with a student who:

if she didn't understand the instructions . . . she would get in touch in an incredible panic. And she disclosed that she was feeling suicidal on a number of occasions (tutor 5).

One student talked about how assessment wording could trigger attacks of panic or anxiety for her:

Assessments being kind of clearly worded is important . . . Each time you look at a question, I just go into a complete panic because it doesn't make sense to me (student 14).

Skills-related barriers and enablers

Skills-related barriers and enablers related to areas where a lack of skills caused distress or a barrier, and acquirement or confidence in skills were seen as an enabler. This category was broken down into study skills, social skills, and self-management skills.

Social skills refer to how students related to other people in their courses. Barriers were primarily in terms of communication, not asking for help, and fear of participating in forums and tutorials. Participation was mainly related to anxiety. For example, student 3 said *'I was never really able to fully participate because of my anxiety issues and panic attacks and things like that.'* Tutors flagged not asking for help as a frequent barrier from their perspective; tutor 4 said *'they also don't ask for help. I've noticed that a lot.'* This was corroborated by students; student 15 said *'it takes a lot for me to ask for help'*, and student 7 said *'it is hard to reach out to your tutor.'*

Study skills were both a key enabler when present, and a clear barrier when not. Tutor 1 told the story of a student where *'it wasn't a problem with the material, it was needing help learning how to study effectively . . . Once we'd addressed those, that student flew.'* Student 1 also referenced this; *'in the early days people were trying to work out how to study. That's my experience of it.'* Student 2 gave specific examples of learning how to take notes and how to revise, student 3 talked about learning to concentrate for longer, and student 7 talked about learning time management skills. All three students talked about the barrier it

created for them until they learned these skills, and how their increasing confidence in these skills helped their mental health.

Other students talked about skills they had learned that had a positive impact on the study and mental health. Student 1 said she had learned, before a study session, to *'just go for a walk, take that time out every day, just go and look at the trees'*, and that had a significant impact on her study success and her wellbeing. Student 2 talked about how she breaks *'activities down into tasks'*, and student 13 talked about learning how to detach; *'you need to get to a point where you need to go, right. Stop. Walk away.'* Student 15 talked about learning to prioritise: *'I kind of go, what do I need to know right now? ... Do I need to know that right now?'* Students 12 and 3 used music to *'keep me feeling human'* and motivate them to study. These skills were learned through studying, but all had a positive impact on their lives and their wellbeing.

Self-management skills related to positive behaviours, students' confidence and sense of identity, and how they managed their mental health. Students' sense of identity could be a barrier or enabler. Student 10 talked about not belonging: *'I felt very out of place, I felt very alone'* and student 3 talked about having no hope: *'I was really like considering suicide because I thought, you know, there's just no hope, you know?'* However, an important aspect of identity was recognising growth and success. Student 14 said *'you've got to celebrate achievements, every distinction, you've got to take that minute to go, oh my God, look at me, I did that!'* When asked what helped their mental wellbeing most in the study, student 6 said *'the sense of achievement I get when I've got a good score'*, and student 3 said *'I feel like you keep evolving and you know that literally every year you're gonna evolve. Yeah. That's how it feels. So amazing.'* They also talked about how the identity of being a student helped their mental health, with comments like: *'The OU has been eye opening and making me understand more about who I am, as a person'* (student 2). One student said:

It has increased my confidence, doing this. And it's given me so much self-respect. It's been tough, the last module was really tough, but I got through it. That was me, someone who can't, I can't face people in the street sometimes. Getting through it. (Student 14)

Another aspect of identity related to perfectionism and managing expectations of themselves. Student 2 talked about how this impacted on her depression:

'I have to tell myself it's okay, you cannot always get high marks. But to me, as an achiever ... I self-analysed myself, I over-thought, there could have been tipping points where I made my, my depression worse.' (Student 2)

Managing mental health was a barrier for many, with issues such as depression (students 2, 11, 12 and 7, tutor 5), anxiety (students 10, 14 and 3, tutor 3) mood swings (students 2, 15 and 16, tutor 1), psychosis (students 4 and 6), and other mental health issues (students 13, 11, 15 and 5) presenting barriers to wellbeing and study. However, positive behaviours, such as hobbies, volunteering or raising awareness of causes also emerged as key enablers in managing mental health. Taking part in positive activities provided *'escapism'*, *'made me feel like a real person'* (student 10) and had a substantial impact on wellbeing. Souvenirs, reminders and outputs from positive activities were also mentioned as beneficial for sustaining mental wellbeing, including photo albums (*'to sort of treasure'* – student 10) and social media pages (*'I'm currently producing a Facebook page, and it's being rolled out. Which makes me feel whole again, because I feel like I'm helping people.'* – student 11).

Environmental barriers and enablers

Environmental barriers and enablers are broken down into four sub-categories: Spaces (both physical and virtual, including social media, classroom environments, VLE and isolation in learning), Systems (university systems, policies and administrative processes), People (both in the university environment and more generally, such as family) and Life (general life events that impact on learning).

An interesting interplay in the themes around spaces was that there was a fine line between the distance environment being a barrier or an enabler. 'Isolation' was a clear barrier for students, with 12 references from 6 students; e.g., student 2 said she dropped out of the study because *'I didn't know anybody else that was studying. It was all done remotely, and you didn't have that link.'* However, face-to-face learning environments were also a barrier, with 13 references from 4 students. Student 3 talked about the effect on her anxiety and her learning, saying:

I couldn't be in those massive rooms. Yeah. And it wasn't to do with the amount of people in the room or whatever it was. It was just being in a big room was horrible ... I couldn't sit in class without getting like a panic attack ... I couldn't learn in the classroom. I couldn't concentrate or actually, um, stay calm and be receptive to learning things.

In this case, distance was an enabler: student 10 said: *'the decision I came to is, right, studying from home would be beneficial to me because I could like cope with that.'* Furthermore, 6 participants referred to distance learning communities as an enabler; student 14 commented on taking *'pride in the community of people I've met, particularly the people who do the volunteering and stuff with the students association.'*

Social media was generally seen as a positive space. Students acknowledged there were issues, student 9 said *'The Facebook groups are a good source of support, but I suppose that you can compare yourself to the people on that as well, can't you?'* but student 10 said *'the two closest friends I have, I've met on social media.'*

University systems, structures and administrative processes were strongly felt as both barriers and enablers, and could have a substantial impact on a student's mental health and study success. Administrative processes were a barrier, with examples given around disability disclosure (student 16: *'Maybe I was stubborn, I thought I don't have to sign up for that'*), reasonable adjustments (student 16: *'I didn't manage to see there was a deadline'*) and other support (tutor 5: *'they've sent her the forms and she hasn't sent them back. That'd be entirely typical'*).

University rules and evidence requirements were also a barrier, especially around deferral processes. Student 11 and student 1 both had deferrals declined in traumatic circumstances, which caused mental health difficulties for them both. Tutors also talked about the speed of processes and the quality of disclosure information being a problem. Policies and systems could be enablers, however. Enablers included credit transfer (*'Made things a bit less stressful, that time in [place] wasn't wasted'* – student 10), the OU's open entry system (*'They didn't actually judge you like based on more prior grades or anything! Like they actually just gave you a chance!'* – student 3) and reasonable adjustments made by the university (*'they actually printed out the whole of the course syllabus on PDF for me!'* – student 4).

Communication from the institution was a barrier for many. Student 2 talked about the need for proactive communication signposting what support students could access,

saying *'They do not know what support people can give them with mental health on studies'*. Student 3 also talked about the need for proactive pastoral care, saying:

if every three months or every two months the university could be aware of students that have mental health problems, or like they could maybe just give like a, a check-up or maybe just an email just to see if everything's going okay.

People clearly had the power to be a positive or negative influence on study or wellbeing. Peers were generally an enabler; student 9 said *'I do really, really enjoy engaging with students. Yeah. That's always really helpful.'* However, peers were felt to be a barrier if students felt they were *'being really judged and disliked'* (student 10), and this could have a long-lasting impression; student 11 said *'one person on there being horrible, and it still sticks with me'*.

General life circumstances had enormous potential to be barriers. Barriers included work, bereavement, family or relationship issues, illness, pregnancy and maternity, and also background issues such as economic status and coming to terms with sexuality. The only enablers listed related to time and support; student 1 talked about having time to study, saying *'I was very lucky because for the last module I was able not to work, so that made a massive difference'* and student 2 talked about being supported through difficult life circumstances by the student support team: *'I did talk through my options with the OU. I had some support there and I just decided to go for the next presentation.'*

Discussion

A wide range of barriers and enablers were identified in the interviews, and these could be mapped to a number of areas in the university or study experience. As there were relationships between themes (i.e. between assessment and study skills, or between study spaces and curriculum), the barriers and enablers are represented as a taxonomic wheel in [Figure 2](#). This figure classifies where barriers reside within distance learning, it maps them to diametrically corresponding enablers, and indicates relationships between adjacent barriers and enablers.

It can be seen from this model that barriers and enablers to mental wellbeing reside within and throughout distance learning environments and aspects of the study, as well as within the skillsets and capabilities of the students. This supports and builds on Tinklin et al.'s work about barriers inherent within higher education (Tinklin et al., 2005), and work by Markoulakis and Kirsh identifying barriers in the learning environment, studies, structures and academic outcomes (Markoulakis & Kirsh, 2013).

A key finding of this study is that barriers and enablers were found in the majority of themes, implying that aspects of the study can be both barriers or enablers for mental wellbeing and study success, depending on who is experiencing them and how. Crucially, this implies that there is potential for many of the barriers students experience to become enablers; for example, assessment feedback was a barrier for students when it was negative, but was an enabler when it was constructive and took place in an environment of trust. Similarly, lack of study skills was a barrier, but confidence in study skills was an enabler. This presents an interesting contrast to individualistic interventions, such as aiming to reduce assessment-related stress with a mindfulness intervention (Galante et al., 2018), implying instead that the assessment design could require investigation.

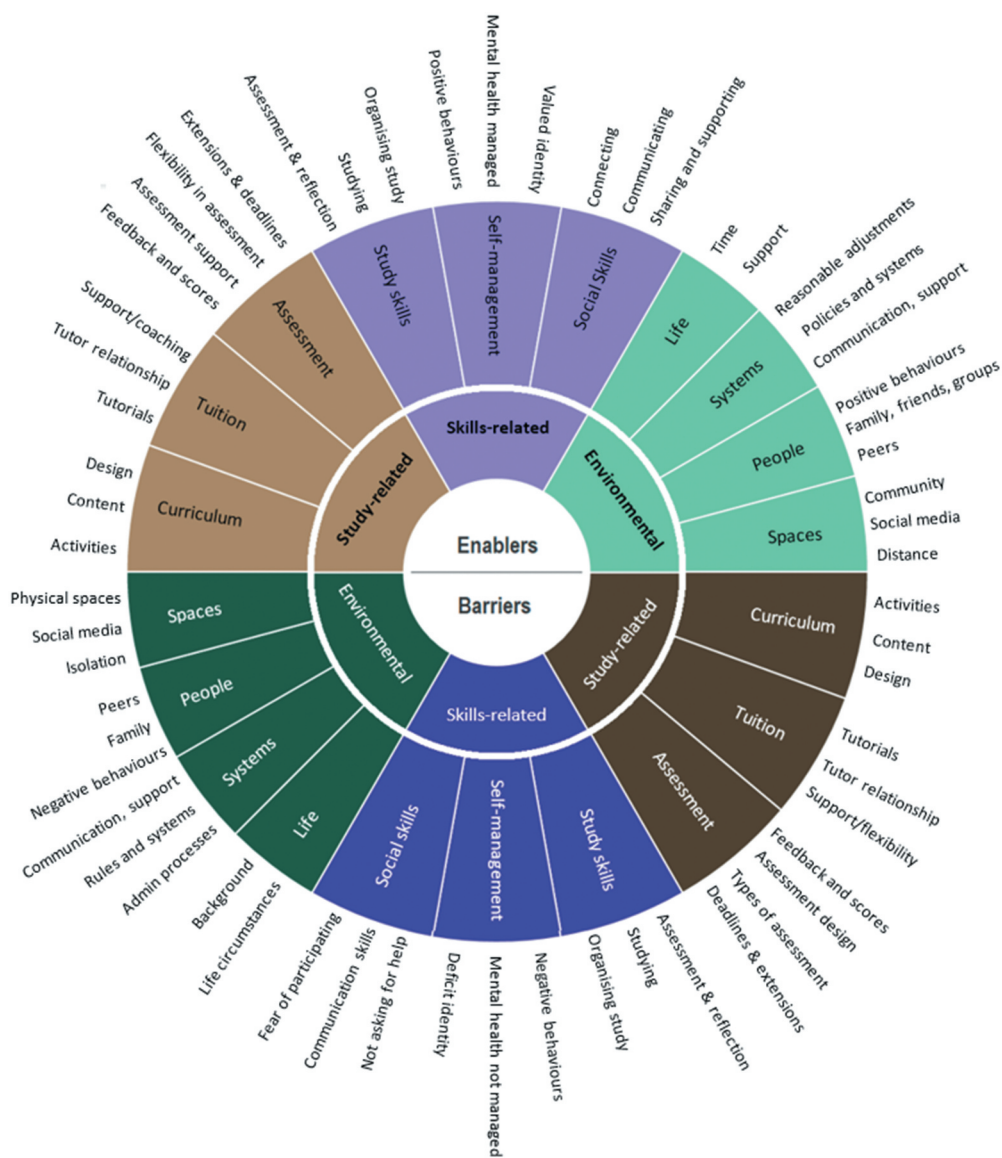


Figure 2. Taxonomic wheel of barriers and enablers to mental wellbeing in distance learning.

While management of mental health is essential, a key implication for practice is that universities also need to critically examine other areas of practice, such as curriculum, assessment and tuition, and explore inclusive design practices to ensure these support mental wellbeing (Griful-Freixenet et al., 2017; Miller & Lang, 2016). In particular, universities should endeavour to ensure that curriculum content is engaging and that challenges such as collaborative activities and distressing content are scaffolded with suitable support; that assessment instructions are clearly worded and assessment strategies move away from exams. Finally, universities need to recognise how crucial the tutor role is for

student wellbeing and ensure tutors are supported to develop skills to help decrease student anxiety and enhance trust.

Additionally, in investigating skills-related barriers and enablers, this study has highlighted a crucial link between mental wellbeing and students' confidence in study skills, as well as the close relationship between study skills and managing their mental health. This represents a clear implication for practice, supporting the contention that resilience should be taught in the curriculum (Holdsworth et al., 2018) and that explicitly teaching, practising and recognising success in study skills can have a positive impact on mental health (Barrable et al., 2018).

University systems and administrative processes also require further investigation, as they represented clear environmental barriers to wellbeing. Studies have found a relationship between university administrative processes and student stress in distance learning (Coughlan & Lister, 2018), and that students' difficulties can be exacerbated when they are required to tackle onerous paperwork in order to access support (E. Jones et al., 2020). A clear implication for practice is for universities to overhaul their administrative processes and systems, such as disability disclosure, deferral and extenuating circumstances processes, to decrease administrative load on students and ensure processes are user-centred and supportive, to enhance student wellbeing.

A final implication for practice relates to the distance learning environment, particularly the intersection between isolation and distance. Isolation was invariably seen as a barrier, while distance and community were enablers to mental wellbeing. Studies on mental health communities outside of higher education support the relationship between online communities and mental health, finding, for example, benefits such as 'greater social connectedness, feelings of group belonging . . . personal empowerment and providing hope' (Naslund et al., 2016). A key implication for designers of online spaces, therefore, is to consider how these spaces can avoid isolation and become communities that support student wellbeing.

Limitations and future work

There were several limitations to this work. As a qualitative study, the relatively small number of participants makes it difficult to know how representative they were of the larger cohort. There are plans to address this via a survey to a larger number of students in a later stage of this study, but this will, by necessity, be reported in a subsequent paper. Another limitation is that the study took place within one distance learning institution, and it is difficult to know the extent to which findings apply to other universities. Further work to investigate this more fully or in different contexts would be beneficial.

This study is the first stage of a larger project. This stage aimed to identify barriers and enablers; the next stage focuses on collaboratively designing solutions. Following the analysis of the interview data and the identification of themes, students and staff in different roles were brought together in a series of events to identify solutions or interventions to mitigate these. The data from these events and the evaluation of piloted solutions will be detailed in subsequent publications.

Conclusion

This study has shown that barriers and enablers to mental wellbeing in distance learning are inherent throughout different aspects of higher education, and posits a taxonomic model that represents this. This indicates that therapeutic and individualistic approaches to mental health, while important, are not sufficient to facilitate student mental wellbeing. Findings suggest that universities need to tackle barriers where they reside, including exploring inclusive design practices for curricula and assessment, explicitly teaching study skills, designing systems, and processes that do not cause undue stress and designing learning spaces to be communities. By adopting a holistic approach to mental health in this way, distance learning can begin to be truly conducive to student mental wellbeing.

Disclosure statement

The authors declare no conflict of interest

Notes on contributor

Kate Lister is a lecturer in education, specialising in mental wellbeing, accessibility and inclusive pedagogy. *Jane Seale* is a professor of education whose research interests lie at the intersections between disability, technology and inclusion. *Chris Douce* is a senior lecturer in computing and communication, specialising in accessibility in distance learning and web technologies.

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