



Report:

What works to tackle mental health inequalities in higher education?

Alix Robertson, Ellie Mulcahy and Sam Baars (Centre for Education and Youth, CfEY)

Commissioned by The Centre for Transforming Access and Student Outcomes in Higher Education (TASO)

May 2022

1. EXECUTIVE SUMMARY

Overview of this report

This report explores the factors affecting student mental health in higher education (HE) and provides an analysis of the interventions used to support them. We review the existing evidence base for the effectiveness of different interventions and the quality of that evidence base. We then identify the interventions that appear to be most effective alongside those that show promise. Through consultation with sector stakeholders, we also consider the approaches that Higher Education Providers (HEPs) are currently taking, how they evaluate their work, and the barriers and facilitating factors behind effective delivery.

Research has found that HE students experience higher levels of psychological distress than the general population (Bore et al., 2016); however, some student groups are more likely to experience poor mental health than others. In this report, we begin by examining the evidence on groups of students at greater risk of experiencing poor mental health. We then explore the literature on predictive or protective factors affecting the well-being of HE students and look at the available evidence on the most effective measures for improving student mental health.

After the evidence review, we examine the findings of a mixed-methods consultation. Key stakeholders were invited to complete a survey and participate in five online roundtable discussions. These were structured around four types of HEP – further education (FE) colleges, Russell Group universities, post-1992/metropolitan universities, and small and specialist HEPs – plus a final group including sector-representative bodies and third-sector organisations. We also interviewed two students and three stakeholders who were unable to attend the roundtables.

Evidence review findings

- The evidence suggests that the following groups of students are at greater risk of suffering from poor mental health:
 - students from households of low socioeconomic status
 - students from Black, Asian and Minority Ethnic (BAME) backgrounds
 - mature students
 - lesbian, gay, bisexual, transgender, queer/questioning and other (LGBTQ+) students
 - care-experienced students
- These at-risk groups also experience poorer HE outcomes, including lower entry rates, higher dropout rates, lower attainment and a reduced likelihood of progressing into employment or further study. Combined with trends that indicate that poor mental health has a detrimental impact on HE outcomes for all students, this suggests that mental health issues may exacerbate disparities in HE outcomes for these groups.
- Male students and those from BAME backgrounds are less likely to declare a mental health issue; the wider evidence base and male suicide rates suggest this may be due to underreporting rather than lower prevalence.
- Our review of the available evidence on interventions to support student mental health revealed Type 1 (narrative), Type 2 (empirical) and Type 3 (causal) evidence, primarily of medium strength. Around one-fifth of the evaluative studies that we identified provided strong causal evidence of impact, and these studies tended to focus on psychological and mindfulness-based interventions.
- Across these two types of intervention, improvements are evidenced in relation to students':
 - empathy
 - positive mood
 - self-efficacy
 - self-compassion
 - anxiety
 - depressive symptoms.
- The majority of the evidence is focused on interventions that support student mental health in general; however, examples of targeted support for specific at-risk groups. Peer mentoring has an emerging evidence base, showing signs of promise, as reflected in the consultation with sector stakeholders.

Main themes from the review and sector consultation

The evidence review and consultation revealed a number of key themes around supporting students' mental health and well-being in HE:

1 Personalisation

Personalised support can increase the impact of online interventions, but the evidence base suggests that these types of interventions are rarely tailored to individual students.

2 Universal and targeted support

There are tensions between universal and targeted approaches to providing mental health support. While there is some evidence that effects are greater for interventions targeted at young people presenting with clinical symptoms, practitioners feel there is preventative value in providing universal services.

3 A whole-institution approach

HEPs recognise the need for a whole-institution approach, but face a number of barriers to its delivery, including securing buy-in from all staff members and a need for upskilling in mental health and well-being support. This type of approach is viewed as challenging to evaluate and was not represented in the literature.

4 Institutional constraints

The size, course offer and student characteristics of HEPs affect the support they are able to offer and evaluate, with both FE and small or specialist providers highlighting particular challenges regarding funding and resources in implementing wide-ranging services. While smaller institutions may find it easier to implement personalised support, larger HEPs tend to provide a wider range of services for students to choose from.

5 Links to HE outcomes

HEPs find it difficult to demonstrate causal links between the mental health and well-being support they provide, and student outcomes such as attainment and retention. This is reflected in the existing evidence base, where links between mental health interventions and HE outcomes are seldom measured.

Recommendations

- Psychological and mindfulness-based interventions appear to have the strongest underlying evidence base. However, more longitudinal studies are needed to establish the longer-term impact of

these interventions on students' mental health and well-being, and on HE-specific outcomes such as attainment, retention and progression. These interventions should also be tailored more closely to specific student groups and their needs, as they then appear to have greater success.

- More causal studies are needed to examine interventions supporting the mental health and well-being of at-risk groups, in particular the experiences of students who are BAME, LGBTQ+, mature or care-experienced.
- Further work should be completed to evaluate peer-led interventions, beyond the evaluative work considered in this review, as these approaches are often used with specific at-risk groups and show emerging evidence of promise.
- More research focusing on interventions that encourage male and BAME students to disclose and seek support would be valuable, as the evidence review revealed that these students are less likely to declare a mental health condition through UCAS applications, while the consultation suggested that particular challenges exist in encouraging Black males to seek support.
- Research based on techniques such as discourse analysis should explore how the framing and language around mental health and well-being interventions could be adjusted to reduce stigma and facilitate disclosure.
- The Covid-19 pandemic has fuelled a significant growth in online and blended mental health interventions, including app-based tools and some supported by artificial intelligence. Further research is required to understand how students in particular subgroups accessed and experienced these interventions during the pandemic, and the impact of such interventions on students' mental health, well-being and HE outcomes.
- Future work could also examine the disconnect identified by consultation participants between the services that students request and their uptake of these interventions.
- A mismatch between the evidence obtained from the review and the services delivered by HEPs indicates a lack of robust evaluation and published reports by institutions. Feedback during the consultation on the challenges of conducting evaluation suggests that further guidance is needed in this respect. In addition, existing practice within HEPs needs to be pooled to maximise impact and better serve students.

2. INTRODUCTION

Understanding and supporting the mental health and well-being of young people is more important than ever in the context of the fallout from a global pandemic and a rapidly changing jobs market. Before the Covid-19 pandemic, mental health concerns were already rising in the UK, with support services becoming increasingly stretched. This evidence review identifies, summarises and synthesises evidence on the work that HEPs are doing to understand and address the factors influencing the mental health and well-being of young people in HE.

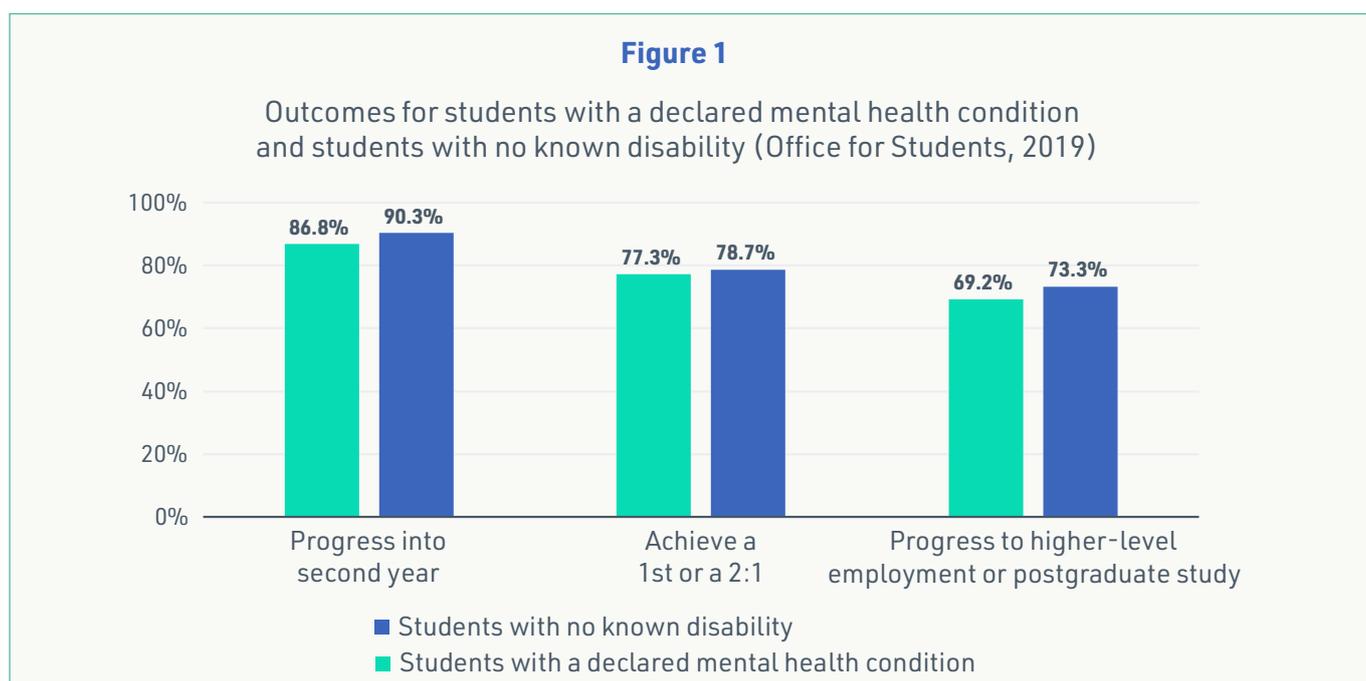
The proportion of HE students disclosing a mental health issue to their university rose sixfold between 2010 and 2020, reaching 4.2% (Office for Students, 2020). However, wider research suggests that mental health issues are underreported and that the true rate of poor student mental health is considerably higher (Hubble & Boulton, 2021). A 2018 survey of undergraduates in the UK found that one-fifth of students had a mental health diagnosis, one-third had experienced serious psychological issues that they felt needed professional help, and nine in 10 had struggled with feelings of anxiety (Pereira et al., 2019).

The experience of mental health issues is, in turn, associated with negative HE outcomes. Data from the Office for Students (2019) found that students with a declared mental health condition are more likely to drop out, less likely to achieve a first or upper second class degree, and less likely to secure high-level employment or progress to postgraduate study (see Figure 1).

Research suggests that some groups of students are more likely than others to experience poor mental health, including students from BAME backgrounds, students from households of low socioeconomic status, mature students, LGBTQ+ students and care-experienced students. Given that these groups also experience poorer HE outcomes, it may be that poor mental health compounds other HE inequalities. Therefore, this review aimed to understand which measures are most effective in supporting student mental health, with particular regard to at-risk groups of students.

This study begins by reviewing the evidence on groups of students at greater risk of experiencing poor mental health. It then explores the literature on the predictive or protective factors affecting the well-being of HE students and examines the available evidence on what works in improving student mental health. These findings are organised by intervention type; against each, we discuss the type of evidence available, the strength of this evidence, and whether any studies were focused on specific at-risk groups, although overall there is a paucity of evidence regarding interventions targeted at these groups. The review uses the World Health Organisation's (2018) definition of mental health, incorporating mental well-being in addition to mental health disorders from a clinical perspective.

Following the evidence review, we explore the findings of a mixed-methods consultation in which we invited key stakeholders from different types of HEP to complete a survey and participate in one of five online roundtable consultations. We also interviewed two students and three stakeholders who were unable to attend the roundtables.



3. METHODOLOGY FOR EVIDENCE REVIEW

We conducted a rapid review of academic literature examining the impact of interventions to improve students' mental health and reduce equality gaps in HE. The review included literature exploring factors that may trigger or exacerbate mental health issues, and how mental health issues may further drive existing HE inequalities. The evidence was categorised according to TASO's typology of evidence (see Annex B).

We conducted a search for suitable literature using the Education Resources Information Centre (ERIC). Our review was aimed at finding evidence to answer the research questions below. These were derived from the findings of a review of student mental health interventions conducted by the What Works Centre for Wellbeing (Worsley, Pennington & Corcoran, 2020).

1. What are the links between student mental health and HE experiences and outcomes (including access, retention, well-being and attainment)?
2. What mental health interventions are currently available in HEPs?
 - a. When, in the student life cycle, are these available?
 - b. Are preventative interventions available?
 - c. What is the rate of uptake of interventions?
 - d. Does uptake vary across demographic groups?

3. Where are there gaps in service provision?
 - a. To what extent do interventions on offer differ by provider?
4. What is the impact of available interventions on mental health?
 - a. What is the impact of preventative interventions on mental health?
 - b. Is there variation in the efficacy of these interventions across different demographic groups?
 - c. What is the long-term, indirect impact of these interventions on access, retention, attainment and progress?
 - d. Is efficacy affected by when students access these interventions?
 - e. What is the strength of the evidence of impact? Where are there gaps in evidence?
5. What is best practice in encouraging the positive disclosure of mental health needs or issues?
 - a. Does disclosure lead to improved access to services?
6. Which HE factors impact student well-being, or commonly precede or exacerbate student mental health issues?

Guided by these research questions, we followed the procedure outlined in Table 1. Search terms and inclusion and exclusion criteria can be found in Annexes C and D respectively.

Table 1: Rapid evidence review procedure

Stage	Activity
1. Establishing review parameters	We clarified and confirmed search terms and screening criteria in collaboration with Transforming Access and Student Outcomes in HE (TASO), based on the research questions.
2. Searches	<p>We conducted searches in ERIC using pre-specified search syntax. We logged the total number of search results and limited inclusion to the first five pages of results, to produce the initial longlist of evidence.</p> <p>For each search, we first ran the search without Group 4 terms (see Annex C) to find literature covering all groups/general population. We then ran the same search including Group 4 terms in order to explore the same research question with a focus on specific target groups.</p> <p>We removed any duplicate titles.</p> <p>We recorded all search result metadata.</p>
3. Screening	We filtered the longlist titles and reviewed article abstracts using inclusion and exclusion criteria (see below) to produce the final set of literature.
4. Cataloguing	We recorded full metadata for the final set of literature, including evidence-ranking schema.
5. Analysis	<p>We analysed literature that met the relevance and quality-inclusion criteria in full to build a quantitative and qualitative picture of the evidence base.</p> <p>In our analysis, we distilled broad categories of measures used by FE and HE institutions and summarised evidence for each programme type. Within the summaries, we captured the characteristics of successful interventions, how impact varies according to student characteristics, the context of the research (e.g. type of institution, country and mental health issues discussed) and any gaps in support or evidence that the research identified.</p>

Limitations

This review initially found limited evidence of interventions targeted at specific demographic groups. As a result, we carried out further targeted searches

using other databases, such as Google Scholar, to find additional sources of evidence in these areas.



4. OVERVIEW OF THE LITERATURE

Our initial search produced a longlist of 661 pieces of literature. After applying the inclusion and exclusion criteria, this was reduced to a shortlist of 46 studies. We subsequently identified and included a further 83 studies through additional searches. These provided more detail on at-risk groups, making a total of 129 studies.

Table 2: Taxonomy of evidence

	Emerging	Medium evidence	Strong evidence
Type 1: narrative	Capturing qualitative data through interviews or focus groups with a small, targeted sample	Capturing qualitative data through interviews or focus groups with a medium-sized sample and some thematic analysis of findings	Capturing qualitative data through interviews with a medium-sized sample, conducting thematic analysis to extract latent themes and using methods to ensure the validity of findings (e.g. inter-rater testing; participant verification)
Type 2: empirical enquiry	Using quantitative data collection (e.g. surveys) to capture attitudes towards a programme	Using quantitative data to capture attitudes or experiences before or after a programme, but without a control or comparison group	Using pre- and post-intervention quantitative data to assess change in a validated instrument, but without the use of a comparison group
Type 3: causal	A quasi-experimental study design with a small sample, quantitative pre- and post-intervention data and a result that is only statistically significant after multiple corrections	A randomised controlled trial design with a small sample, quantitative pre- and post-intervention outcome data on a relevant construct and a statistically significant result with a small to medium effect size Alternatively, a systematic review, which shows a general trend towards the positive effects of a particular programme	A randomised controlled trial design with a large sample, quantitative pre- and post-intervention outcome data captured for a relevant construct and a statistically significant result with a large effect size Alternatively, a meta-analysis or systematic review showing statistically significant results with medium to large effect sizes

Intervention-focused studies

Fifty-seven of the 129 studies from our evidence review focused on mental health and well-being interventions, while the remaining 72 studies either provided context around what leaves certain groups of young people at greater risk of facing mental health or well-being challenges, or explored protective and predictive factors associated with student mental health.

Of the 57 studies that explored mental health and well-being interventions, the majority provided medium evidence of the programmes' effectiveness (38 studies). Fourteen studies offered strong evidence and five emerging evidence. From our analysis, the strength of the evidence was usually undermined by a lack of control or comparison groups and/or a lack of baseline data. Sample sizes for some studies were also small. This overall issue of evidence strength points to the

The remainder of this section gives a general characterisation of the literature we summarised for this review.

Studies by evidence type and strength

We applied the Office for Students'/TASO's taxonomy of evidence to the screened literature, classifying studies as narrative, empirical enquiry or causal, as well as emerging, medium or strong. These terms are defined in Table 2.

need for additional robust research to show that specific programmes have a demonstrable causal impact in improving mental health and well-being outcomes in order that we may better understand what works in improving students' mental health and well-being in HE.

The findings highlight many of the challenges associated with conducting causal studies. A truly causal study requires the random assignment of study participants to at least one condition where an intervention is received and a control group who do not receive this intervention. In practice, randomised assignment is challenging; furthermore, HEPs often struggle with ethical questions around denying an intervention to students who may benefit from it. This challenge and the lack of relevant studies highlight a need for greater support, guidance and funding for causal programme evaluations.

Table 3: Evidence type and strength for intervention-focused studies

Strength	Evidence type			Total
	Narrative	Empirical enquiry	Causal	
Strong	0	3	11	14
Medium	6	19	13	38
Emerging	2	2	1	5
Total	8	24	25	57



5. CONTEXT: PREVALENCE, AND PREDICTIVE AND PROTECTIVE FACTORS

This section summarises the literature that identifies groups at greater risk of mental health issues and the protective and predictive factors associated with student mental health.

Prevalence of mental health issues in disadvantaged/ underrepresented groups

Research suggests that some groups of students are more likely than others to experience poor mental health, and UCAS declaration data shows disparities in the proportion of students with different characteristics who declare a mental health condition, as shown in Table 4.

Table 4: Groups most/least likely to declare a mental health condition

Characteristic	Group(s) most likely to declare	Group(s) least likely to declare
Gender	Women (4.7%)	Men (2.1%)
Age	21–24 years (7%)	18-year-olds (2.3%)
Ethnicity	Mixed (4.3%) White (4.3%)	Black (1.5%) Asian (1.5%)
POLAR4 region¹	Quintile 1 (4.6%)	Quintile 5 (3.2%)
Sexual orientation	Bisexual (15.6%) Gay women/lesbians (15.2%)	Heterosexual (2.6%)
Experience of care	Declared 'in care' on UCAS application (9.2%)	No care experience declared (3.5%)

Source: UCAS, 2020

Given the link between poor mental health and HE continuation, attainment and progression outcomes – where groups at risk of poor mental health also have poor outcomes in comparison to their peers – mental health issues may be exacerbating these outcome inequalities. This highlights the importance of mental health support in addressing disparities in HE outcomes.

This section describes the groups of students more likely to experience poor mental health and whether these groups also experience progression and attainment inequalities.

Due to low rates of disclosure, we do not rely solely on UCAS data to explore rates of poor mental health, drawing instead on the wider academic and 'grey' literature.

Gender

Female students are more than twice as likely as male students to declare a mental health condition through UCAS (UCAS, 2020). Other research with young people aged 11–19 found that females are three times more likely to report an experience of depression and anxiety than males (Patalay & Fitzsimons, 2021). However, given that in the general population men

report lower levels of life satisfaction, are more likely to die by suicide and are less likely to seek psychological help (NHS, 2020; Office for National Statistics, 2017; Office for National Statistics, 2020), this disparity is potentially because men are less likely to report a mental health issue rather than less likely to experience one. Indeed, female university students hold more positive attitudes towards seeking help than male university students (Sheu & Sedlacek, 2004).

There are also considerable gender differences in HE participation and attainment rates, but trends are complex. Women are more likely to progress to HE than men, more likely to complete their degree, and more likely to achieve a 1st or 2:1 degree. However, women are less likely to be in 'highly skilled' employment just after graduation, and the average graduate earning premium is significantly higher for men than women (HEPI, 2020; Hubble, Bolton & Lewis, 2021).

While existing research on gender and mental health in HE suggests that more needs to be done to ensure that male students feel they can seek help and to support the high number of women reporting distress, gender disparities in HE entry and outcomes are complex and cannot be directly or entirely attributed to mental health inequalities.

¹ POLAR (Participation of Local Areas classification) is a UK-wide area-based measure that classifies geographical areas according to the proportion of young people living in them who participate in higher education (HE) by the age of 19.

Age

Mature students, defined as those who start HE aged 21 or older, are more likely to declare a mental health condition through UCAS than their younger peers. The declaration rate is highest for 21- to 24-year-olds and 25- to 29-year-olds, at 7% and 5.9% respectively, compared to 2.1% among 18-year-olds. Research on mature learners' experience in HE found that they face a variety of challenges that may have a detrimental impact on their mental health, including social isolation, relationship tensions, financial strain and a lack of institutional support for their caring responsibilities (Hume et al., 2021; Pennacchia et al., 2018). However, there is a lack of robust studies in the wider evidence base specifically exploring the mental health of mature HE learners.

Mature learners' progression to HE has fluctuated over recent years, with a general decline in the past decade followed by a recent upswing (Office for Students, 2020). The Office for Fair Access identifies mature learners as a key widening participation target group. However, those that do enter HE are more likely to drop out and less likely to attain a 1st or a 2:1 in their degree.

While these trends are likely to be driven by a complex set of factors, higher rates of mental health issues may contribute to existing outcome inequalities for mature learners.

Ethnicity

Although the declaration of mental health issues through UCAS is more common among White students and students of mixed ethnicity compared to Black and Asian students, this is likely due to underreporting among students from BAME backgrounds. Research has found that people from BAME backgrounds are more likely to experience poor mental health but less likely to access support (UCAS, 2020).

When people from BAME backgrounds do seek mental health support, they are more likely to be prescribed medication or detained, while their White counterparts are more likely to be offered cognitive and talking therapies (MIND, 2013). Two-thirds of ethnic minority HE students with a mental health condition report experiencing discrimination from healthcare professionals (MIND, 2013).

A 2021 study found that three-quarters of Black students reported that racism had some level of impact on their mental health, with some feeling distressed in their HE accommodation. Particular problems identified included:

- experiences of microaggressions in accommodation
- a lack of diversity among accommodation staff

- a sense that accommodation is allocated in a racially segregated way
- a lack of policies and procedures relating to racism in accommodation or a lack of awareness of or trust in these policies.

A perceived lack of support and difficulties in finding counsellors with either the lived or professional experience to understand the impact of racism on mental health compound these issues; as a result, students turn to family and Black peers for support instead (Stoll et al., 2021).

As with gender, HE outcomes by ethnicity are complex. Some BAME groups have higher HE entry rates than their White counterparts, including Chinese, Indian and Black African pupils. However, once in HE, Black students have the highest dropout rates and are least likely to achieve a first or upper second class degree. Post-graduation, White graduates have the highest employment rate of all ethnic groups (Hubble, Bolton & Lewis, 2021). Arday (2018) highlighted how the complex interaction between ethnicity, mental health and low attainment in the context of HE is 'interwoven against a backdrop of institutional racism' (p.4). BAME (especially Black) students' experience of discrimination and isolation in HE may lead to poor outcomes both directly and via poor mental health as a mediating factor.

A PhD dissertation by Warner (2019), looking specifically at the relationship between racial microaggressions, sense of belonging, coping strategies and psychological well-being among 155 African American doctoral students in the US, found that every participant had experienced at least one racial microaggression in their doctoral programme within the previous six months. The most common types were related to environment and assumptions of inferiority. However, the results suggested that racial microaggressions did not significantly predict psychological well-being in this sample

Socioeconomic status

The evidence base on the relationship between student socioeconomic status (SES) and mental health outcomes is mixed, with some studies suggesting a link between low-SES and poor mental health and well-being, while others have found no association between SES and diagnosable mental health disorders.

Ibrahim, Kelly and Glazebrook (2013) conducted an online survey of 923 undergraduate students and found that students who lived in deprived areas were more likely to report depressive symptoms than their peers in higher-SES areas. Similarly, a correlational study of

undergraduate students at a London-based Russell Group university found that students with higher scores on a mental well-being scale were more likely to receive financial support from their parents, less likely to need a student loan and less likely to be in debt than those who had lower well-being scores (Benson-Egglenton, 2019).

Recent studies have also found that students from low-SES backgrounds have suffered greater impacts on their mental health during the Covid-19 pandemic than their counterparts. A survey of 600 UK students found that, while lockdowns negatively affected the mental health of all students, those who faced food and housing insecurity had lower levels of mental well-being than their peers (Defeyter et al., 2021).

In contrast, other studies, including those based on the two Longitudinal Studies of Young People in England cohorts, have found no association between SES and diagnosable mental health conditions among undergraduates (Lewis, McCloud & Callender, 2021).

The data on HE outcomes for students from low-SES backgrounds is less ambiguous. Students formerly eligible for free school meals are more likely to drop out of their course, less likely to attain a first or upper second class degree, and less likely to progress to graduate employment or postgraduate study (Office for Students, 2020).

Whether mental health acts as a mediator between student SES and academic outcomes remains unclear. Other factors associated with being from a low-SES background – such as needing to work alongside study or having lower prior attainment – also contribute to poor outcomes. However, experience of poorer mental health may compound the impact of these factors.

Lesbian, gay, bisexual, transgender, queer/questioning and other (LGBTQ+) students

LGBTQ+ adults in the general population are significantly more likely to experience poor mental health than the non-LGBTQ+ population, particularly among younger and older populations (Bachmann & Gooch, 2018; McManus et al., 2016; Macrory, 2016; Office for National Statistics, 2021; Semlyen et al., 2016).

LGBTQ+ youth may be at an even higher risk of poor mental health than adults, with studies finding higher rates of depression and anxiety and a greatly increased risk of self-harm and suicide (Miranda-Mendizábal et al., 2017; Muehlenkamp et al., 2015; Robinson & Espelage, 2011; Semlyen et al., 2016). A survey of more than 7,000 young people in the UK aged 16–25 found that LGBTQ+ young people were more likely than heterosexual, cis-gendered young people to

seek medical help for depression and anxiety (42% compared to 29%), to self-harm (52% compared to 35%) and to have thought about suicide (44% compared to 26%) (Ussher et al., 2016). As reflected in UCAS declarations, studies with university students have found that these trends persist in HE student populations (Gnan et al., 2019; Johnson et al., 2013; Kerr, Santurri & Peters, 2013).

Studies investigating the risk factors behind LGBTQ+ students' poor mental health have found that experiencing discrimination is associated with mental health issues and suicide risk (Espelage, Merrin & Hatchel, 2018; Gnan et al., 2019; Woodford et al., 2018). LGBTQ+ students are likely to be subject to these negative experiences while at university: a survey of more than 5,000 LGBTQ+ university students found that such students, especially transgender students, experienced negative comments and attacks from staff and other students and did not feel safe or able to report discrimination in their institution (Bachmann & Gooch, 2018).

Ridner et al. (2016) conducted a cross-sectional web-based survey of undergraduate students in the US, finding that heterosexual males reported higher levels of well-being than women or those who were LGBTQ.

Although data on HE outcomes is limited to LGB students, trends suggest that these students experience worse outcomes on some measures. Statistics from the Office for Students show that LGB students and students who are neither LGB nor heterosexual (reported as 'other') are less likely to continue into their second year of university than heterosexual students (Office for Students, 2019). Although LGB students are more likely than heterosexual students to obtain a first or upper second class degree, students reporting their sexual orientation as 'other' are considerably less likely to do so than heterosexual students, a gap of 6.9 percentage points.

Care experience – experience of children's social care, including past or present status as a Child Looked After, past or present status as a Child in Need and/or on a Child Protection Plan

Care-experienced young people are more likely to have poor mental health (Bazalgette, Rahilly & Trevelyan, 2015; Sanders, 2020). Research has found that 45% of looked-after children, and more than 70% of children in residential care, have a mental health disorder, and care-experienced young people are at least four times more likely to attempt suicide in adulthood than their non-care-experienced peers (Smith, 2017). Although

UCAS declaration rates are much lower for this group, care-experienced students are more likely than other students to declare that they have a mental health issue – 9.2% compared to 3.5% (UCAS, 2020).

The challenges that care-experienced young people face while in HE – such as struggling to find accommodation, the threat of homelessness and having to repeatedly explain their experiences in order to access support – can harm their mental health (Stevenson et al., 2020). In turn, studies on the educational experiences of care-experienced young people have found that poor mental health is often cited as a factor limiting their ability to progress to HE or making the transition challenging (Harrison, 2017).

It appears, therefore, that mental health may play a contributory role in the poor HE outcomes of care-experienced young people. This group is underrepresented in HE: around one in ten looked-after children progress to HE by the age of 19, compared to nearly half of other school students (Office for Students, 2019). They are particularly underrepresented in high-tariff institutions, with only 1% of care-experienced students progressing to high-tariff universities, compared to 11% of their peers (Department for Education, 2020).

While most widening participation activity for care-leavers focuses on access to HE, large disparities also exist in terms of continuation and attainment. Care-experienced students who do progress to HE have a continuation rate 5.6 percentage points lower than their peers, with only 86.7% progressing to their second year, although this gap has decreased in recent years (Office for Students, 2020, 2021). Studies of care-experienced students cite emotional and mental health issues as factors driving students to consider dropping out of their course (Stevenson et al., 2020; Harrison, 2017).

The HE attainment gap is even starker, with only 68.2% of care-experienced students achieving a first or upper second class degree compared to 80.3% of other students (Office for Students, 2019).

Pinkney and Walker (2020) found that the success of care-experienced young people in HE depends on a range of factors. They reported that young people benefit from support 'characterised by ... knowledge of the young person', rather than 'unspecified and generalised help'. In addition, the research emphasised that supportive adults need to be non-judgemental, trusted, available and responsive in providing practical help as well as emotional support.

In summary, some groups of students are at greater risk of experiencing poor mental health and mental health disorders than others. These at-risk groups also have poorer outcomes in HE in terms of entry rates, likelihood of dropout, attainment and progression to employment or postgraduate study. In some cases, poor mental health may exacerbate existing inequalities.

Predictive and protective factors affecting mental health in HE

Our review retrieved 22 papers exploring predictive or protective factors affecting the well-being of HE students. One of these is a systematic review, one is causal (Demirbatir, 2015) and 20 are empirical enquiries. The systematic review is mixed-methods, while all other studies are primarily quantitative.

Predictive factors affecting mental health and well-being in HE

A rapid mixed-methods systematic review of the factors influencing the mental health of university and college students in the UK conducted by Campbell et al. (2020) included 39 primary studies undertaken in the UK and published between 2010 and 2020.

The review revealed a wide range of factors associated with poor mental health, including:

- Exposure to childhood trauma before university
- Experience of over-controlling parenting styles, which can influence the ability of young people to adapt to change
- Previous mental illness, a family history of poor mental health or existing mental health conditions
- Low levels of mental health literacy
- Poor help-seeking behaviour
- Poor social skills
- Negative self-perception.

A number of studies from the review looked at the impact of students' character traits and outlook on mental health and well-being. Traits and perspectives that predicted positive mental health and well-being included:

- Gratitude, followed by hope, optimism and life satisfaction (Kardas et al., 2019)
- Unconditional self-acceptance, perfectionism and perceived good income levels (Bingöl & Batik, 2019)
- Endorsing love (giving and receiving love and care), hope (optimism), curiosity (seeking new experiences) and zest (vitality and enthusiasm) (Koch et al., 2020)

- Establishing identity, achieving competence, mature interpersonal relationships and managing emotions (Midili, 2013)
- High emotional and bounce-back resilience (Bore et al., 2016)
- Satisfaction of three basic psychological needs (autonomy, competence and relatedness) (Akbağ & Ümmet, 2017)
- Proactive personality (a personal characteristic that leads individuals to take the initiative in driving forward changes to achieve a goal) (Eşkisu, 2021).

Perspectives that predicted negative mental health and well-being included:

- Searching for meaning in life (specifically amongst Mexican-American students who may struggle with issues such as insecure immigration status (Vela et al., 2016)).

Broader findings included:

- Demirbatir (2015) found significant relationships between psychological well-being, happiness and educational satisfaction. However, educational satisfaction was not related to students' academic achievement.
- Usher and McCormack (2021) found that age, gender, nationality, financial/work status, years of PhD study and attending postgraduate student events significantly impacted (both positively and negatively) the self-confidence, motivation and mental health and well-being status of Australian PhD students.
- Geertshuis (2019) found that emotional well-being was important in shaping active engagement in learning in a study of mature part-time learners. It also determined affective and academic outcomes, with depression particularly influencing feelings of not belonging, thoughts of leaving and lower overall satisfaction.
- Lane (2020) found that ego resilience (our ability to adapt and thrive amid stress and transition) was the strongest predictor of psychological well-being, followed by identifying 'emerging adulthood'² as a time of negativity and instability (which was negatively correlated with psychological well-being). In contrast, identifying emerging adulthood as a time of experimentation and possibility was the second biggest predictor of life satisfaction, after social support. Alongside this, the study found that

Facebook usage positively predicted psychological well-being and life satisfaction, with a small effect, even after controlling for other predictor variables.

Protective factors affecting mental health in HE

Protective factors affecting mental health in HE included:

- A sense of belonging and a supportive social network (Campbell et al., 2020);
- A stress mindset or the 'thoughts and beliefs individuals hold regarding the consequences of stress on health and well-being' (Wegmann, 2018, p. 2), with a low negative stress mindset able to boost resilience, including amongst those with adverse childhood experiences (Long, 2018);
- Work-life balance – sources of stress such as finances, academic workload and isolation or loneliness can have a negative impact on well-being, while good relationships with peers, faculty and advisers and an academic programme with a positive overall climate can positively impact a student's quality of life (Yusuf, Saitgalina & Chapman, 2020);
- Social media – quality online interactions can have a positive mental health impact, leading to increased positive mood and well-being. In contrast, dwelling on negative information can lead to more depressive thoughts (Sacco, 2018);
- Implementing pre-departure strategies before attending HE, such as developing expectations about being away or setting up a support network (Alharbi & Smith, 2019);
- Social support from family, friends and other special people (Ates, 2016).

The impact of Covid-19

Our review was conducted against the backdrop of two years of Covid-related disruption to HE, the student experience and, more broadly, young people's lives and transitions. The evidence base on the nature and impact of this disruption on students' mental health is growing rapidly, although much of the evidence base is currently based on grey literature and does not evaluate the impact of interventions to support student mental health. Against the emerging nature of the evidence base in this area, our search strategy produced one empirical study that discussed how the Covid-19 pandemic has affected student

² Emerging adulthood is defined as a period of life distinct from both adolescence and adulthood, and includes experiences such as 'a prolonged period of identity exploration ... significant demographic and relational instability ... subjectively feeling in between adolescence and adulthood, and idealistic thinking about future possibilities' (Lane, 2020: pp.158–9).

mental health (Lee, Jeong & Kim, 2021). This quantitative study focused on the undergraduate experience and presented medium evidence. It did not focus specifically on the 'at-risk' demographic groups previously identified in this report but gave some indication of the impact of the pandemic on

certain groups. The research found that stress, anxiety and depression were significant among US college students following the pandemic, with female, rural, low-income and academically underperforming students particularly vulnerable to these issues.



6. INTERVENTIONS TO SUPPORT STUDENT MENTAL HEALTH

PSYCHOLOGICAL INTERVENTIONS INCLUDING COGNITIVE-BEHAVIOURAL INTERVENTIONS

Intervention outline

Psychological interventions, such as cognitive-behavioural therapy, focus on changing the thoughts and behaviours that contribute to a person's distress. More specifically, they address the relationships between cognitions, feelings and behaviours (Beck, 1974). Individuals learn to identify negative automatic thoughts and subject these to reality testing.

Key findings

There is substantial causal and empirical evidence linking psychological interventions with improved mental health outcomes for HE students.

- Meta-analyses have found evidence of the positive impact of psychological interventions on depression, generalised anxiety disorder, eating disorders, social and emotional skills, self-perceptions and emotional distress.
- Individual controlled trials have found evidence of the positive impact of psychological interventions, tailored to student needs, on emotional intelligence, empathy, positive mood, subjective well-being, positive affect, self-efficacy and life satisfaction. Lower levels of depression and stress were also found.
- Empirical studies have found limited evidence of the positive impact of psychological interventions as a preventative or early intervention when treating depression and anxiety disorders in HE students. However, studies did show that psychological interventions can be tailored to support specific groups such as those who have experienced sexual assault or those who identify as LGBTQ+.

Type and strength of the evidence

Type and strength of the evidence	Evidence type			Total
	Narrative	Empirical	Causal	
Strong	0	1	3	4
Medium	0	2	4	6
Emerging	0	0	0	0
Total	0	3	7	10

Analysis

Meta-analyses

A meta-analysis by Huang et al. (2018) of 51 randomised controlled trials (RCTs) found strong causal evidence that CBT-based interventions are effective in treating both depression and generalised anxiety disorder, producing moderate effect sizes. Meanwhile, Conley et al. (2013) conducted a meta-analysis that found medium causal evidence for the impact of CBT on students' social and emotional skills, self-perception and emotional distress. Similarly, Barnett et al. (2021) identify medium causal evidence for the treatment of anxiety, depression and eating

disorders, including both indicated interventions (for those displaying symptoms) and selective interventions (for those at risk). However, the authors drew attention to how few interventions are adapted to student-specific concerns and the limited evidence on the impact of these adaptations on students' mental health outcomes.

Few studies featured in the meta-analyses examine the longer-term impacts of psychological interventions; however, Winzer et al. (2018) found strong causal evidence that the impact of CBT can be sustained for at least three months, particularly for interventions designed to reduce symptoms of depression and anxiety in students.

Individual controlled trials

Three individual causal studies looked at psychological or CBT-based interventions; one presented strong evidence and two medium evidence. The three studies looked at the undergraduate experience and focused primarily on quantitative methods.

Schoeps, de la Barrera and Montoya-Castilla (2020) examined the impact of an emotional development intervention programme specifically designed to support the subjective well-being of undergraduate university students in Spain. The results showed that the intervention programme significantly increased emotional intelligence, empathy and positive mood, as well as subjective well-being, in the short-term. Effects did not vary significantly according to demographic variables or the initial intensity of emotional symptoms.

Hirshberg (2017) investigated whether well-being skills training designed to cultivate core competencies would support the development of undergraduate trainee teachers. The results showed that such training cultivated effective teaching behaviours and mindfulness while reducing implicit race bias. The study also suggested improved self-efficacy, healthy emotionality and a reduction in implicit negative affect. The majority of these effects persisted over a five-to-seven-month follow-up period and intervention participants were more resilient to developing psychological symptoms and teaching-related burnout during the most demanding period of the training programme.

Goodmon et al. (2016) examined the influence of a positive psychology course on undergraduate student well-being, depressive symptoms and stress in a repeated-measure, non-equivalent control design study. Compared to the control group, the positive psychology class 'exhibited higher levels of overall happiness, life satisfaction, and positive approaches to life and lower levels of depression and stress post-course' (Goodmon et al., 2016, p. 235). The study does not identify the specific course components responsible for these benefits.

Empirical studies

One empirical study (Reavley & Jorm, 2010) found limited evidence that face-to-face CBT-based interventions are effective in preventing or intervening early with depression and anxiety disorders in HE students, as part of a review of mental health interventions targeting anxiety, depression and alcohol misuse.

Graham (2019) employed a cross-sectional study that examined the impact of multiple university-affiliated sexual assault resources on the mental health outcomes of undergraduate sexual assault survivors. The study found that the most highly rated and used resource was the campus 'victim's advocate', an on-site counsellor providing affirming, empowering and confidential support for victims/survivors, through a non-judgemental, therapeutic approach.

Impact on at-risk groups

Empirical studies

Hall et al. (2019) present medium empirical evidence on the intervention 'Being Out With Strength' (BOWS), an eight-session, small-group, CBT-based intervention to reduce depression among LGBTQ young people. BOWS primarily focuses on internalised oppression as the intervention target, as research shows this significantly contributes to depression in LGBTQ people (Hall et al., 2019, p.2). Although the efficacy of the intervention was not assessed, the findings demonstrated demand and deemed the intervention acceptable for the target population, although not for youth who were experiencing confusion or questioning their sexual identity. The researchers noted that while including mixed groups of LGBTQ youth could be beneficial, transgender people 'face specific stressors related to their socially stigmatized gender identity', and suggest that transgender youth may benefit from having their own BOWS group to address transgender-specific mental distress (Hall et al., 2019, p.10). The study suggests that BOWS could be incorporated into the psychoeducational support offered by colleges and universities.

MINDFULNESS-BASED INTERVENTIONS

Intervention outline

Mindfulness involves 'knowing directly what is going on inside and outside ourselves, moment by moment'.³ The practice is grounded in ancient Eastern and Buddhist philosophy. Mindfulness interventions are characterised by control of attention, awareness of the present moment, acceptance and non-judgemental thoughts (Kabat-Zinn, 2003).

³ NHS (no date) Mindfulness. Available from: <https://www.nhs.uk/mental-health/self-help/tips-and-support/mindfulness/>

Key findings

Eleven studies from our review examined the impact of meditation and mindfulness strategies on well-being. Many of the studies presented in this section were also identified in the previous section on CBT-based interventions, as the meta-analyses we draw on in this review tend to consider the effects of both CBT and mindfulness-based interventions.

- Meta-analyses have found strong causal evidence that mindfulness is effective in treating depression and anxiety, and emerging causal evidence was found for a positive impact on eating disorders, social and emotional skills, self-perception and emotional distress.
- There is also evidence that the positive effects of these interventions can be sustained post-intervention, particularly for interventions designed to reduce the symptoms of depression and anxiety.

- Individual controlled trials have found that mindfulness-based interventions can decrease anxiety and depression, and improve mood, satisfaction with life and self-compassion. They also indicate that the ability to implement mindfulness can be mediated by ethnicity, country of birth, English as a first language, overall health and age.
- Empirical studies have found that mindfulness can support the development of skills for looking after personal well-being and improve outlook on life, relationships with others and compassion.
- Practising mindfulness regularly appears to be key to its success as an intervention, and techniques can also be tailored to support specific issues associated with race and sexuality.

Type and strength of the evidence

Strength	Evidence type			Total
	Narrative	Empirical	Causal	
Strong	0	1	5	5
Medium	0	2	2	4
Emerging	1	1	0	2
Total	1	3	7	11

Analysis

Meta-analyses

Three of our meta-analyses also feature in the What Works Centre for Wellbeing review of review-level evidence on interventions to improve the mental health and well-being of college and university students (Worsley, Pennington & Corcoran, 2020). These pieces of literature focus primarily on anxiety and depression, but generally draw on studies that do not have sufficient representation of marginalised groups to be able to make specific causal claims about them.

The meta-analysis conducted by Huang et al. (2018) found strong causal evidence that mindfulness-based interventions are effective for both depression and generalised anxiety disorder, producing moderate effect sizes. As with CBT, while interventions based on mindfulness were found to be effective, other interventions – such as art and exercise – had the highest effect sizes for both depression and generalised anxiety disorder among college and university students.

Meanwhile, Conley et al. (2013) found medium causal evidence for the impact of mindfulness interventions on students' social and emotional skills, self-perception and emotional distress, and Barnett et al. (2021) also presented medium causal evidence for the effectiveness of mindfulness interventions on anxiety, depression and eating disorders. As with CBT-based interventions, the impact was observed for both indicated interventions (those displaying symptoms) and selective interventions (those at risk).

Winzer et al. (2018) included 10 RCTs of mindfulness-based interventions in their meta-analysis, which is notable for considering the longer-term impacts. The authors found strong causal evidence that the effects of these interventions can be sustained for at least three months post-intervention, particularly for interventions designed to reduce the symptoms of depression and anxiety.

Individual controlled trials

The trial-based studies we identified found that mindfulness has a positive impact on anxiety. Individually, they also looked at the positive impact of mindfulness on life satisfaction, self-compassion, depression and stress.

Spruin et al. (2021) used an RCT to compare mindfulness with the effects of a therapy dog and a student adviser on anxiety and well-being. The research found that all three treatments produced a 'significant decrease in student anxiety', with the largest improvements seen by the dog therapy group and the mindfulness group (Spruin et al., 2020, p.15).

Tang et al. (2021) examined a college mindfulness seminar curriculum for first-year undergraduate students, using a comparison group who had registered for an introductory psychology seminar. The mindfulness seminar taught students the theory behind the practice as well as the techniques involved, with opportunities to practice. Participants in the mindfulness seminar exhibited overall positive changes in most aspects of psychological well-being – including anxiety, satisfaction with life and self-compassion – when compared to the psychology seminar students. The mindfulness group also had a smaller increase in depressive symptoms.

Empirical studies

The two empirical studies in this section found that mindfulness had a positive impact on students' ability to look after their own well-being, and boosted other skills such as reflective thinking and gratitude.

Stewart-Brown et al. (2018) used a mixed-methods approach to examine a mindfulness and well-being programme at a UK medical school. The programme had a small positive impact on students' attitudes towards mindfulness and their development of well-being skills, and protected the mental health of the minority of students who practised mindfulness regularly.

Crowley and Munk (2017) explored a 15-week meditation course that incorporated techniques from the Buddhist and mindfulness traditions. The study found that meditation practice impacted students' outlook on life and relationships with others in three key areas: mindfulness, psychological well-being and compassion. The majority of students reported an increase in reflective thinking, peace and gratitude, and a decrease in stress.

Impact on at-risk groups

Individual controlled trial

El Morr et al. (2020) conducted an RCT with undergraduate students at a Canadian university to examine the effectiveness of an eight-week virtual community mindfulness intervention for stress, anxiety and depression. The study found that country of birth had significant effects on depression, anxiety and mindfulness, with students born outside Canada having significantly higher depression and anxiety and lower mindfulness than students born in Canada. Ethnicity and English as a first language had significant effects on mindfulness only, with students who were not White and those whose first language was not English experiencing lower mindfulness scores. Across all participants, the intervention significantly reduced depression and anxiety scores, and significantly increased mindfulness, compared to controls. However, the report acknowledges a need to develop mental health services to assist new immigrants to the country. It adds that future programmes might involve adaptive cultural and racialised components and focus on addressing language barriers or using multilingual mindfulness interventions.

Empirical studies

Hwang and Chan (2019) conducted a pilot study that developed and evaluated the benefits of an eight-session peer-led compassionate meditation programme aimed to support Asian American students experiencing race-related stress. Compassionate meditation, derived from Buddhism, focuses on the desire to remove harm and suffering and cultivate compassion – or deep, genuine sympathy – for those experiencing misfortune. Sessions included psychoeducation on race-related incidents, practice with guided meditations, and practice with cognitive-behavioural coping techniques. This study had a small sample size, but the results found decreases in symptoms of the participants' general distress, depression, anxiety and PTSD. By the end of the programme, fewer students were clinically depressed.

Narrative studies

A Master's Project by Madden (2021) proposed a design for a 10-week mindfulness-based resiliency programme for LGBTQ+ college students, facilitated as a partnership between university counselling services and a campus LGBTQ+ resource centre. This study suggested that the proposed programme would be most beneficial for first-year queer and trans students and that participants could be identified through their participation in programmes offered by the campus LGBTQ+ resource centre, other social justice centres, and their use of campus mental health resources.

RECREATION PROGRAMMES

Intervention outline

Recreation programmes include activities such as yoga, Tai Chi (meditative martial arts), music and writing, exercise and animal therapy interventions.

Key findings

Eleven studies, using a mixture of quantitative and qualitative methods, are discussed in this section.

- One meta-analysis found that interventions including art and exercise had a strong impact on both depression and anxiety.
- A controlled trial found that writing about gay-related stress improved gay students' openness

about their sexual orientation, as well as identifying a significant relationship between sleep quality, exercise and well-being.

- Empirical evidence shows that regular exercise contributes positively to individuals' psychological well-being. LGB adults who participated in any exercise reported better mental health over time.
- Involvement in extracurricular activities was found to reduce negative psychological health outcomes, such as depression, stemming from underrepresented students' experiences of discrimination. This, in turn, had a positive impact on attainment.
- Music was found to have a statistically significant effect on trait anxiety and psychological well-being, while individuals taking part in group writing activities reported greater resilience, confidence and sense of community.

Type and strength of the evidence

Strength	Evidence type			Total
	Narrative	Empirical	Causal	
Strong	0	2	2	4
Medium	2	4	1	7
Emerging	0	0	0	0
Total	2	6	3	11

Analysis

Meta-analyses

The meta-analyses explored previously made limited reference to recreation programmes, although Huang et al. (2018) found that interventions including art and exercise had the highest effect size for both depression and generalised anxiety disorder among college and university students.

Individual controlled trials

Exercise

In a PhD dissertation, Sterba (2013) used archival data gathered from 418 undergraduate students to examine the combined effects of sleep and exercise on students' emotional well-being, including social anxiety, depression and eating concerns. The research found significant relationships between sleep quality and all three emotional distress variables, while exercise frequency was only predictive of decreased social anxiety when controlling for quality sleep. Women

in the sample displayed more markers of emotional distress across all three mental health variables.

Empirical studies

Exercise

Ilhan and Otman (2020) looked at the psychological well-being and happiness levels of university students in Turkey who regularly took part in swimming and fitness activities. The findings suggested that regular exercise contributed positively to psychological well-being, especially for men. However, no comparison group was used to examine the results for students who exercised less. Ersöz (2017) also examined the relationship between exercise and self-efficacy, depression and psychological well-being for college students in Turkey. The results showed higher self-efficacy and psychological well-being and lower depression in those who exercised regularly compared with those who did not.

Hartman, Evans and Anderson (2017) used a qualitative study to explore the efficacy of a large leisure education programme in the United States, which incorporated activities such as running, dancing and hunting. The findings showed that leisure education courses improved and developed autonomy, problem-solving, stress management and confidence, contributing to higher well-being overall.

Music

One empirical enquiry study from Turkey investigated the effect of listening to classical music on anxiety and well-being. Osmanoglu and Yilmaz (2019) found that listening to classical music for 60 days (every day on schedule) had a statistically significant effect on trait anxiety⁴ and psychological well-being scores. Average psychological well-being scores showed significant improvements in 'positive relations with others', 'environmental mastery', 'personal growth', 'purpose in life' and 'self-acceptance'. Overall, anxiety was reduced and subjective well-being increased, although the researchers added that 'music can only be used as a supporting method alongside different applications' (Osmanoglu & Yilmaz, 2019, pp. 22–23).

Narrative studies

Writing

Two narrative papers explored the use of writing as a strategy to boost students' well-being through supportive group work and the sharing of challenging experiences.

Farnsworth (2021) used narrative inquiry with 16 female participants on a teacher training programme to encourage rural pre-qualified teachers to explore their resilience through writing stories focused on an obstacle they had faced. The results showed that writing helped participants to recognise both internal and external sources of resilience used to overcome obstacles. The external resources of extended families and religion helped students to mediate trauma, while internal resources of courage, curiosity and perseverance heightened self-insight, affirmed students' experiences and enabled them to challenge power inequities in relationships, create connections with others and increase their empathy for peers and future students.

A collaborative autoethnography by Doody et al. (2017) in Canada explained how four doctoral scholars used a peer writing group as a means to foster well-being alongside their work, identifying similar benefits to Farnsworth (2021). Initially formed to support

motivation and momentum, this group evolved into weekly sessions, alternating between writing and reviewing each other's work. The participants described the peer writing group as 'an integral and essential facet of our individual and collective well-being as doctoral scholars', reporting that it had boosted their confidence, provided a greater sense of legitimacy and fostered 'community, collaboration, balance, motivation, and momentum' (Doody et al., 2017: p.154).

Impact on at-risk groups

Individual controlled trial

Pachankis and Goldfried (2010) tested the impact of an expressive writing intervention for gay college students in the United States on outcomes related to psychosocial functioning. Seventy-seven participants were asked to write for 20 minutes each day for three consecutive days and were randomly assigned the task of writing about either the most stressful/traumatic gay-related event in their lives or a neutral topic. The results showed that participants who wrote about gay-related stress reported significantly greater openness around their sexual orientation three months after writing than those who wrote about a neutral topic. The intervention was particularly beneficial for participants who wrote about more severe stress or trauma, and improved overall psychological functioning for individuals with lower levels of social support, suggesting that it was especially valuable for those who lacked opportunities to discuss gay-related stress with their peers.

Empirical studies

Pharr et al. (2021) looked at exercise as a mitigator of poor mental health among 6,371 LGB adults in the United States, with findings mirroring those of the causal evidence relating to wider populations considered above. Although this study was not specifically HE-focused, it found that LGB adults who participated in any exercise reported almost one day less of poor mental health in the past 30 days than LGB adults who did not exercise.

An empirical study by Billingsley and Hurd (2019) explored the potential of involvement in extracurricular activity to counter and protect against the negative effects of perceived discrimination on academic performance among underrepresented college students. The students involved were from historically underrepresented racial or ethnic groups, first-generation college students and/or economically

4 Trait anxiety is triggered because of a person's predisposition to react anxiously to events, in contrast to state anxiety, which is triggered by a stressful situation.

disadvantaged families, within a predominantly White institution. They found that discrimination indirectly predicted lower attainment over time, via greater depressive symptoms. Conversely, early extracurricular activity involvement indirectly predicted higher attainment over time, via fewer depressive symptoms. They concluded that promoting involvement in extracurricular activity may be effective in facilitating academic success by countering negative psychological health outcomes stemming from underrepresented students' experiences of discrimination.

SETTING-BASED INTERVENTIONS

Intervention outline

Setting-based interventions recognise that health is determined by an individual's environmental, economic, social, organisational and cultural circumstances. They aim to improve the environment in which a person lives, studies or works (Worsley et al., 2020). In an HE setting, this involves structural changes such as educational policies and approaches,

strategies to improve the built environment, and academic- and curriculum-based strategies, such as changing a grading system (Worsley et al., 2020).

Key findings

Five studies are detailed in this section: four empirical studies and a systematic review.

- The systematic review found that changes in the way students are taught and assessed, such as using two-interval grading systems and reducing contact hours, are effective in supporting student mental health and well-being, including reducing depression, anxiety and stress.
- Empirical studies found that educational policies can moderate associations between social background and well-being.
- Teaching practices, such as facilitating support from instructors and peers and recognising that students have commitments outside their studies, had the potential to improve well-being, as did course planning, which also had the potential to improve retention.

Type and strength of the evidence

Strength	Evidence type			Total
	Narrative	Empirical	Causal	
Strong	0	0	0	0
Medium	0	4	1	5
Emerging	0	0	0	0
Total	0	4	1	5



Analysis

Systematic review

Fernandez et al. (2016) conducted a systematic literature review of setting-based interventions to promote mental health at university. The most promising strategies included changes in how students are taught and assessed. Examples included studies by Rohe et al. (2006), Bloodgood et al. (2009) and Reed et al. (2011), which found that students who were assessed using two-interval grading systems (pass/fail) had greater well-being, while those assessed with interval-based systems experienced higher levels of stress. Slavin et al. (2014) introduced a series of curriculum changes with the aim of reducing stress and mental health problems, including a two-interval pass/fail system, a 10% reduction in contact hours, learning communities for students, faculty staff with common interests, and a required course based on mindfulness and resilience in the curriculum. The researchers found lower levels of depression, anxiety and reported stress in students.

Empirical studies

Analysis of data from the European Social Survey (ESS) by Högberg (2019) found that educational policies can moderate the association between social background, as measured by the father's social class, and well-being. This study revealed that inequalities are smaller in countries where educational policies are more inclusive, while the moderating impact of education policies was mediated by individual-level education, activity status and income.

Three further studies consider specific approaches to course design and pedagogy. A qualitative study by Stanton et al. (2016) in Canada identified a bidirectional relationship between learning and well-being. Important themes identified by students included experiences of social connection, such as peer support and relational rapport with teachers, being invited to give regular feedback, professors' willingness to adapt to students' needs and challenges, and a sense of making a valued contribution.

Stanton et al. (2016) concluded that finding opportunities to enhance well-being through course planning and design had the potential to 'create a positive feedback loop that would ultimately be beneficial to both well-being and learning' (p. 93), which in turn may improve retention.

Lane et al. (2018) used 'appreciative inquiry' at a research-intensive university in Canada to investigate which teaching practices positively influenced student well-being. The findings highlighted three themes as important teaching elements that promote student well-being, echoing those identified by Stanton et al. (2016): belonging and social inclusion, learning well and recognising the 'whole student' – that is, that students have lives outside their studies.

Impact on at-risk groups

None of the studies identified in this section outline the impact of setting-based interventions on specific at risk-groups.

TECHNOLOGY-BASED INTERVENTIONS

Intervention outline

These interventions use technology to provide mental health and well-being support, for example through mobile phone apps and computer settings. They often include aspects of psychological interventions such as CBT.

Key findings

- Meta-analyses and systematic reviews provide emerging causal evidence of the impact of tech-based interventions on student mental health, including depression, anxiety, stress, sleep problems and symptoms of eating disorders.
- Individual controlled trials present strong, medium and emerging evidence of the impact of tech-based interventions for treating insomnia, depression and anxiety, as well as benefiting general health, energy, productivity and emotional well-being.
- Empirical studies present evidence of improvements in depression, anxiety and well-being, while a narrative study presented emerging evidence of the mental health impacts of a gamification approach to activities that promote belonging and well-being.

Type and strength of the evidence

Strength	Evidence type			Total
	Narrative	Empirical	Causal	
Strong	0	0	3	3
Medium	1	1	7	9
Emerging	0	1	1	2
Total	1	2	11	14

Analysis

Meta-analyses and systematic reviews

Harrer et al. (2019) presented medium causal evidence from a meta-analysis of 48 RCTs, examining the impact of online psychological interventions on depression, anxiety, stress, sleep problems and eating disorder symptoms in university students. Their review found small positive effects on depression and stress. Conley et al. (2016) considered the differential impact of interventions delivered through technology on students without presenting problems (universal interventions) and those with mild to moderate subclinical problems (indicated interventions). The authors found medium causal evidence of impact on both types of students, with larger effect sizes for indicated interventions.

Individual controlled trials

Morris et al. (2015) presented strong, causal evidence of the efficacy of two commercially available internet-based CBT (iCBT) programmes for treating insomnia and anxiety among UK undergraduate students. The interventions 'Insomnia Relief' and 'Anxiety Relief' are unguided, internet-delivered self-help programmes featuring CBT components broken into modules. The study found a significant reduction in anxiety and increase in sleep quality for those who completed the anxiety programme, alongside increased sleep quality for those who completed the insomnia programme.

McCloud et al. (2020) presented emerging causal evidence of the impact of the CBT-based mobile app 'Feel Stress Free' on university students who self-identified as experiencing symptoms of anxiety or depression. The self-guided app incorporates behavioural relaxation activities, mood tracking, and thought-challenging minigames. Participants were randomised to six weeks of intervention or control, unblinded. The study found preliminary evidence that the app reduced depression and anxiety symptoms after six weeks; greater reductions in depression and anxiety symptoms were observed in the intervention group compared with the control group after an additional four weeks.

In another study of an app-based intervention, Ponzo et al. (2020) tested the efficacy and sustained effects of the mobile app 'BioBase', using a paired wearable device, on anxiety and well-being in university students with elevated levels of anxiety and stress. BioBase aims to increase individuals' well-being by combining elements of mindfulness, biofeedback interventions (such as diaphragmatic breathing exercises), CBT and behavioural activation theory. Data on physical activity, sleep quality and heart rate are collected via the wearable device and made available to individuals using the app. Individuals are also able to log their mood in the moment, and reflect on their entries at a later date to gain insights into longer-term patterns of emotion. Participants were encouraged to use BioBase daily and complete at least one course of therapeutic content. The research found that a four week intervention with the BioBase programme significantly reduced anxiety and increased perceived well-being, with sustained effects at a two-week follow-up. A significant reduction in depression levels was also found following a four week period of using BioBase.

Lee and Jung (2018) conducted a causal study at a Canadian university with undergraduate students who were instructed to use the 'DeStressify' app five days per week for four weeks. The app contains a core plan that delivers mindfulness-based exercises through audio, video or text. The app was shown to reduce trait anxiety and improve general health, energy and emotional well-being. Productivity was also improved between baseline and post-intervention measurements.

Nguyen-Feng et al. (2017) presented strong, causal evidence of the impact of an online mindfulness intervention on self-reported measures of stress, anxiety and depression. A total of 365 college students in the United States, randomly allocated to the intervention, reported significant decreases in all four outcomes compared to a control group.

Koydemir and Sun-Selişik (2015) presented causal evidence of the impact on well-being of an online strengths-based intervention for first-year college

students. The intervention consisted of five modules over eight weeks, including activities such as identifying goals, building awareness of emotions, positive communication and how to seek support. The findings revealed significant improvements in the well-being of the intervention group over the control group. The researchers observed that the use of technology to deliver interventions enabled more individuals to be reached, making programmes more cost-effective and sustainable.

Empirical studies

Lattie et al. (2019) presented medium empirical evidence that interventions such as iCBT are effective in improving depression, anxiety and well-being. The review captured a broad range of evidence, some of which was emerging, and the authors noted that further research is needed on the factors influencing students' longer-term engagement with tech-based interventions, such as accessibility and usability.

Oti and Pitt (2021) addressed this question of engagement in their scoping review of 23 studies of user-centred approaches to developing online mental health interventions for HE students. Their review suggests that engagement with tech-based interventions can be improved through personalisation, user interface design, ensuring privacy and security, and drawing on peer and professional support.

Impact on at-risk groups

Systematic reviews

Becker and Torous (2019) presented medium causal evidence from a narrative review of RCTs of short-term CBT- and mindfulness-based online interventions. The authors found positive short-term effects on anxiety, depression and sleep among female university students, but limited evidence of longer-term impact. As with Conley et al. (2016), Becker and Torous found that personalised support during online interventions had a positive impact on engagement, adherence and completion rates, which are often low for these forms of intervention.

Schueller et al. (2019) conducted a review of current examples of digital mental health interventions for certain marginalised and under-served groups, including ethnic and racial minorities, rural populations, individuals experiencing homelessness, and sexual and gender minorities. The interventions were either specifically designed for marginalised populations, with a culturally sensitive approach, or existing interventions that had been tailored to fit the needs of the target population. While none of the studies in this review focused specifically on HE, overall the authors found that the evidence suggests some promise for the feasibility and acceptability of digital mental health interventions for these specific groups, although large-scale efficacy testing and scaling potential are still lacking.

Individual controlled trials

Craig et al. (2021) examined the preliminary efficacy of AFFIRM Online, an eight-session manualised affirmative cognitive-behavioural group intervention, with a group of participants who had a range of sexual and gender identities. Compared to the control group, AFFIRM Online participants experienced significantly reduced depression. They also showed improvements in their appraisal of stress as a challenge, having the resources to meet challenges, active coping, emotional support, instrumental support, positive framing and planning. Participants also reported high acceptability in terms of the feasibility of the intervention.

Narrative studies

One study presented medium narrative evidence of the mental health impacts of a gamification approach to incentivising student participation at a post-1992 institution in activities that promote belonging and well-being. Bamford and Heugh (2020) drew on positive feedback from focus groups from a student population with a high proportion of BAME and disadvantaged students, who took part in a pilot programme delivered through a virtual learning environment. The programme included 'missions' and prizes for completing activities such as peer mentoring, volunteering, participation in community projects and acting as student reps or welcome ambassadors.

PSYCHOEDUCATIONAL INTERVENTIONS

Intervention outline

Psychoeducational interventions provide information to students on a number of topics, including stress, coping and ways to relax.

Key findings

We identified four studies evidencing the impact of psychoeducational interventions: two meta-analyses, one individual controlled trial and one empirical study.

- The meta-analyses found evidence of the positive impact of psychoeducational interventions on depression and anxiety, sustained post-intervention, and also a positive impact on eating disorders.
- The individual controlled trial found a decrease in participants' external locus of control, while the empirical study noted improvements in students' knowledge of how to maintain good mental health and well-being.

Type and strength of the evidence

Strength	Evidence type			Total
	Narrative	Empirical	Causal	
Strong	0	0	1	1
Medium	0	2	1	3
Emerging	0	0	0	0
Total	0	2	2	4

Analysis

Meta-analyses

A meta-analysis by Winzer et al. (2018) of interventions promoting mental health and preventing mental ill-health included five psychoeducational RCTs. The authors found strong causal evidence that the effects of these interventions can be sustained for at least three months post-intervention, particularly for interventions designed to reduce the symptoms of depression and anxiety.

Meanwhile, Barnett et al. (2021) found medium causal evidence for the effectiveness of psychoeducational interventions on anxiety, depression and eating disorders – in both indicated interventions (for those displaying symptoms) and selective interventions (for those at risk).

Empirical studies

Edwards, Interthal and McQueen (2021) explored how simple activities within the curriculum can improve the mental health and well-being of undergraduate students. The activities tested students' responses to minor stress, encouraged them to recognise and address their own negative emotions, and provided frameworks and coping strategies. Students also used a framework of resilience to explore their daily life and coping strategies and understand how different aspects of resilience could be utilised to improve their well-being.

The activities trialled showed an improvement in students' knowledge of how to maintain good mental health and well-being, except for the resilience framework, which produced the least pronounced improvements in knowledge. Students felt that relationships with staff were important in terms of developing the confidence to disclose mental health issues, while aspects of welfare previously controlled by parents or carers were often identified as requiring attention, such as creating a sense of belonging. Students felt that they needed support with balancing their academic and social lives and building friendships and support networks.

Impact on at-risk groups

Individual controlled trials

Jones et al. (2018) examined the effectiveness of a psychoeducational group-counselling intervention with 20 undergraduate college students who identify as being of African descent and attend historically Black colleges and universities. The 'Claiming Your Connections' curriculum is designed to reduce stress and enhance psychosocial competence (locus of control and active coping), with a focus on Black feminism. The results revealed that, after the 10-week group programme, participants decreased their external locus of control significantly compared to the control

group, indicating a belief that they, rather than external forces, had control over the outcome of events in their lives. The difference remained statistically significant after control variables were taken into account, and the researchers noted that changing the locus of control can help to mediate the effects of stress. However, the results showed statistically insignificant changes in perceived stress and active coping.

EDUCATIONAL/FEEDBACK INTERVENTIONS

Intervention outline

Educational/feedback interventions provide individuals with feedback about their symptoms and suggest coping methods such as self-help and help-seeking.

Key findings and type and strength of the evidence

This section examines one Type 2 empirical study with medium evidence that looked at undergraduate experiences. It found that reflecting on learning can help students to tackle challenges.

Analysis

Empirical study

Davis and Hadwin (2021) found a relationship between well-being and successful learning, reporting that a high level of psychological well-being 'may be advantageous for students regulating their learning, or vice versa'. The study explored the impact of an undergraduate elective course on learning strategies for university success. The course taught the theory, research and practice of strategic learning, motivation and behaviour. The findings revealed that students who reported that they always attained their goals also reported higher overall psychological well-being, while individuals' patterns of psychological well-being and academic engagement over time were found to potentially affect their regulatory responses to challenge (or vice versa). The researchers suggested that a process of reflecting on learning may help students to realise when they are not fully engaged in their courses, not attaining their goals, or are experiencing low psychological well-being. This realisation could, in turn, make them more able to select a course of action to tackle their problems.

ACCEPTANCE AND COMMITMENT THERAPY INTERVENTIONS

Intervention outline

Acceptance and commitment therapy is 'an empirically-based contextual CBT that combines acceptance and mindfulness-based strategies to reduce the influence of fear and avoidance of difficult psychological experiences (e.g., thoughts, feelings, images, memories)⁵.

Key findings and type and strength of the evidence

This section looks at two Type 2 studies with medium evidence, finding that acceptance and commitment therapy interventions are associated with benefits for student well-being, time and effort management, and academic performance and persistence, as well as slight decreases in stress levels.

Empirical studies

Asikainen, Kaipainen and Katajavuori (2019) used a mixed-methods study to examine the experiences and effects of a seven-week pilot course based on acceptance and commitment therapy in Finland, which was integrated into university studies to promote students' well-being and skills in managing stress and time. The results showed that students' well-being and time management skills increased over the course, while their stress levels decreased slightly. The majority of the students reported having acquired stress management skills, which had affected their studies.

Impact on at-risk groups

Empirical studies

Sandoz, Kellum and Wilson (2017) conducted a small study to assess the effect of an acceptance and commitment therapy intervention on 14 undergraduate students identified as being at risk of academic failure. The participants were part of a selective academic support programme for students with academic merit who also came from low-income families. The students involved demonstrated significant improvements in academic performance, with increased attainment for 86% of the group. Participants also exhibited academic persistence, with 64% meeting the criterion to continue in the academic support programme and 57% having earned their degree at the six-year follow-up.

⁵ BABCP (no date) Acceptance and commitment therapy (ACT). Available from: <https://babcp.com/Membership/Special-Interest-Groups/ACT>

PEER MENTORING AND SUPPORT

Intervention outline

Peer mentoring, in which participants receive support from peers (who in some cases have prior experience of similar challenges) rather than professionals, is recognised in the sector as an emerging and effective intervention for mental health and well-being.

Key findings and type and strength of the evidence

We identified six studies based on peer mentoring approaches, five of which were directly targeted at at-risk groups, namely care-experienced and BAME students.

- One study presented strong causal evidence, whilst the remaining studies presented medium empirical and emerging or medium narrative evidence.
- The individual controlled trial in this section found evidence of a positive impact on hope, self-determination and mental health empowerment, alongside improved post-secondary educational outcomes.
- The empirical studies suggest improvements in mental health and well-being, alongside the affirmation of diverse views, whilst the narrative studies indicate positive outcomes for serious and persistent mental illness.

Analysis

Narrative studies

Kirsch et al. (2014) presented medium narrative evidence exploring a range of existing population-based interventions, including student-to-student support programmes. They found a small but generally positive body of research on peer-to-peer programmes for students with serious and persistent mental illness. The researchers reported that 'students will turn to each other for help long before they will turn to professionals' (Kirsch et al., 2014, p.6).

Impact on at-risk groups

Narrative studies

Grier-Reed (2013) presented medium narrative evidence from a study of the African American Student Network, an informal networking group at a university in the US. The group functions as a culturally sensitive therapeutic intervention for Black students on predominantly White campuses, emulating the group processes involved in therapy and counselling. The authors suggested that these forms of intervention may have therapeutic benefits for at-risk students.

Pottinger et al. (2021) presented medium narrative evidence, based on feedback from BAME participants in a weekly discussion space or 'wobble room', designed to allow staff and students to virtually discuss university policies to support students during the Covid-19 pandemic. The limited data presented in the study suggests that student discussion spaces may help students to understand university policies, voice their concerns and reduce distress.

Individual controlled trials

Geenen et al. (2015) presented strong causal evidence from an RCT of the 'Better Futures' summer institute, involving 67 young people in the US in foster care with mental health problems. The summer institute was designed to improve post-secondary preparation and participation through individual peer coaching and mentoring workshops, delivered by near-peers who are attending university and have shared experiences around foster care and/or mental health. The authors found evidence of significant gains relating to hope, self-determination, mental health empowerment, and post-secondary educational outcomes, compared to a control group.

Empirical studies

Daddow et al. (2020) found medium empirical evidence of the efficacy of an extracurricular programme called 'Finding Common Ground', which aimed to enable respectful interfaith and cross-cultural dialogue among students in an Australian university. A total of 28 participants from a range of backgrounds and disciplines discussed a variety of topics over the course of five weekly sessions. The programme had a positive impact on students' well-being and cross-cultural learning while revealing the vulnerabilities of diverse and international university students and the interventions that seem to support them. Participants cited challenges with making friends or integrating with students in the formal

learning environment, for example, due to linguistic or cultural barriers, and felt that the programme had helped them to build relationships and establish a sense of belonging. Researchers observed significant mutual support for mental health and well-being among the group, alongside the affirmation of diverse views.

Stoll et al. (2021) developed and examined 'Black Students Talk', a peer support group run for and by Black students. The authors found that Black students

felt validated by the support and experienced it as a respite from unsupportive university communities. The authors concluded that mental health support must be underpinned by training, reflective practice, supervision, access to resources and professional development in order to ensure best practice. Specifically, they argued that more work needs to be done to ensure that peer support facilitators are 'compassionate, flexible, open, honest, and casual' (Stoll et al., 2021, p.2).



7. CONSULTATION WITH STAKEHOLDERS

METHODOLOGY

Rationale and research questions

Guided by the findings from the evidence review, we conducted a mixed-methods consultation, inviting key stakeholders to complete a survey and, where possible, participate in online roundtable discussions. We also interviewed two students and three stakeholders who were unable to attend the roundtables.

The following research questions guided our enquiry:

1. What are the links between student mental health and HE experiences and outcomes (including access, retention, well-being and attainment)?
2. What mental health interventions, including preventative interventions, are currently available in HE institutions?
 - a. When, in the student life cycle, are these available?
 - b. What is the rate of uptake of interventions?
 - c. Does uptake vary across demographic groups?
3. Where are there gaps in service provision?
 - a. To what extent do the interventions on offer differ by provider?
4. What is the impact of the available interventions on students' mental health?
 - a. Is there any variation in the efficacy of these interventions across different demographic groups?
 - b. What are the long-term, indirect impacts of these interventions on access, retention, attainment and progress?
 - c. Does impact vary depending on when students access these interventions?
 - d. What is the strength of the evidence of impact? Where are there gaps in the evidence?
5. What is best practice in encouraging positive disclosure of mental health needs or issues?
 - a. Does disclosure lead to improved access to services?
6. Which institutional factors impact student mental health, or commonly precede or exacerbate student mental health issues?

The consultation aimed to gain more detailed, practice-based insights into the themes from the evidence review. The roundtables and interviews also allowed us to further explore areas where the evidence review had provided less detail, particularly in relation to support for at-risk groups of students.

SAMPLE

We purposively recruited consultation participants representing a wide range of practices from across the HE sector. To this end, we established a sampling frame to target organisations or individuals. We sought participants based on:

- relevant sector expertise
- relevance to a wide range of consultation groups (see Table 7)
- existing relationships with TASO and CfEY
- institution activity – individuals with expertise in particular areas, or who are undertaking particularly effective or innovative work on mental health support, alongside a wider sample of institutions, in order to collect data on a range of mental health support.

We identified more than 70 target participants for the consultation roundtables, whom we contacted by email and telephone through existing contact information and publicly available information on websites. The roundtables were also promoted via social media channels. Information on those signing up was gathered using a Google form on which participants also gave their informed consent to take part and for their data to be used as part of the research report and other outputs. Participants were given the opportunity to read the research project's full data and privacy notice. Target participants who were unable to attend were sent the survey via email.

Participants were drawn from four types of HEP, with a final group drawn from relevant sector-representative bodies and third-sector organisations, for instance, mental health charities (see Table 5).

Table 5: Consultation roundtable participants from the four types of institution or organisation

Type of institution or organisation	Total number of roundtable participants	Total number of survey respondents
Russell Group universities	2	2
FE colleges	8	4
Post-92/metropolitan universities	7 ⁶	5
Small, specialist providers	9	10
Other organisations	5	8
TOTAL	31	29

The practitioners covered a range of roles including professors, psychotherapists, researchers, heads of student services, including student health and well-being services, academic leads and coaches, clinical directors, heads of partnerships and policy experts.

Methods

Participants were invited to one of five remote consultation sessions based on which of the five target institutions or organisations they worked at (see Table 5 above). The consultation roundtables were carried out online and ranged between one and two hours, while interviews were conducted by phone and ranged between 30 minutes and one hour. All participants consented to be recorded.

Each session began with a briefing on the research and a recap of our ‘consent and right to withdraw’ protocol. We then adopted a ‘captive audience’ approach to collecting survey data, asking participants to spend the first 10 to 15 minutes of the session completing a short online survey. This ensured that any questions from the participants could be fielded and guaranteed the collection of quantitative data to supplement our wider consultation. See Annex E for the full survey.

After completing the survey, participants then engaged in the consultation roundtable discussion, which was guided by a set of questions and discussion points based on our research themes (see Annexes F and G for the full scripts). We ensured that this question schedule was only loosely structured to enable novel insights and lines of enquiry to be followed in these discussions.

Roundtable attendees also used the mapping tool Miro to record further detail on their responses. A similar structure was followed in each session to allow comparative analysis, although some questions were tailored to ensure relevance to the institution or organisation type. The stratification of consultation

participants by group allowed us to compare delivery and evaluation practice in different types of institution.

We carried out semi-structured interviews with two current HE students who had experienced periods of poor mental health and had accessed mental health support within their HEP. In these interviews, we asked questions about the interventions or support available to them, the accessibility of support and any gaps in services or efficacy. We also conducted three interviews with stakeholders who were unable to attend the consultation roundtables (one from a post-1992/metropolitan university Students’ Union, one from a representative body for small and specialist HE providers, and one from a specialist HE provider).

The survey data was aggregated for quantitative analysis. The focus group sessions were recorded and then professionally transcribed for thematic analysis.

Data analysis

We cleaned and analysed the survey data to produce descriptive statistics on providers’ practices. We analysed transcripts from the sessions using inductive thematic coding. This approach was selected to allow us to be reactive to the findings of the consultations, rather than predetermining the themes that participants would cover in their responses. We also triangulated the themes identified in the transcripts with the survey findings.

Limitations

Due to limited participation from Russell Group universities in our consultation, our characterisation of their practice may be less representative than for other types of institution.

⁶ One participant in this group also attended the FE consultation, as their work spanned both types of organisation.

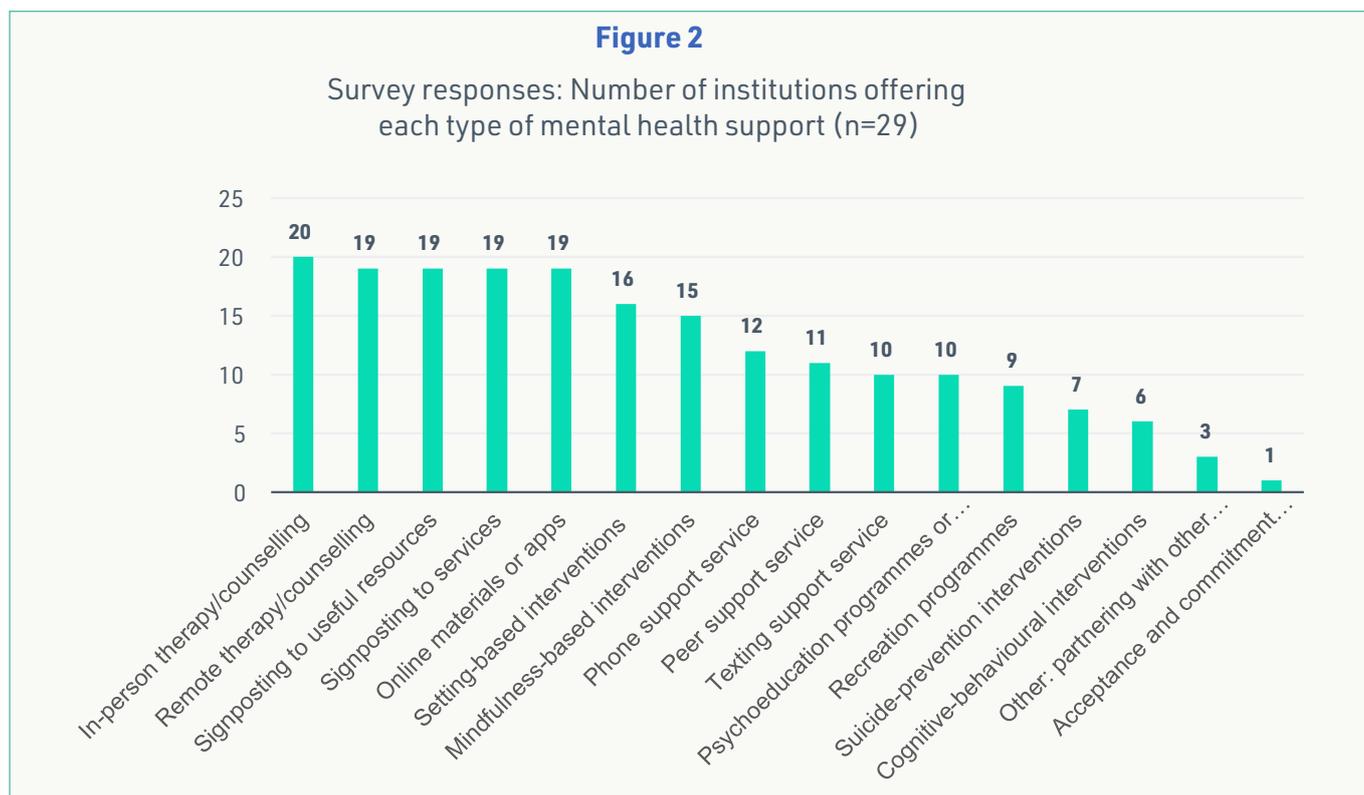
CONSULTATION FINDINGS

Mental health and well-being interventions currently available in HEPs

Current support offered, uptake and referrals

The most commonly offered interventions were in-person and remote therapy/counselling, and signposting to resources and services (see Figure 2),

although online resources, setting-based interventions (such as academic support) and mindfulness were also common. Almost all survey respondents said that their institutions offered interventions throughout the student life cycle or 'whenever students are in need' or 'crisis'. While one-third of institutions highlighted that they provide interventions upon students first joining the institution, all but one of these reported that interventions continued to be available throughout the students' time with them.

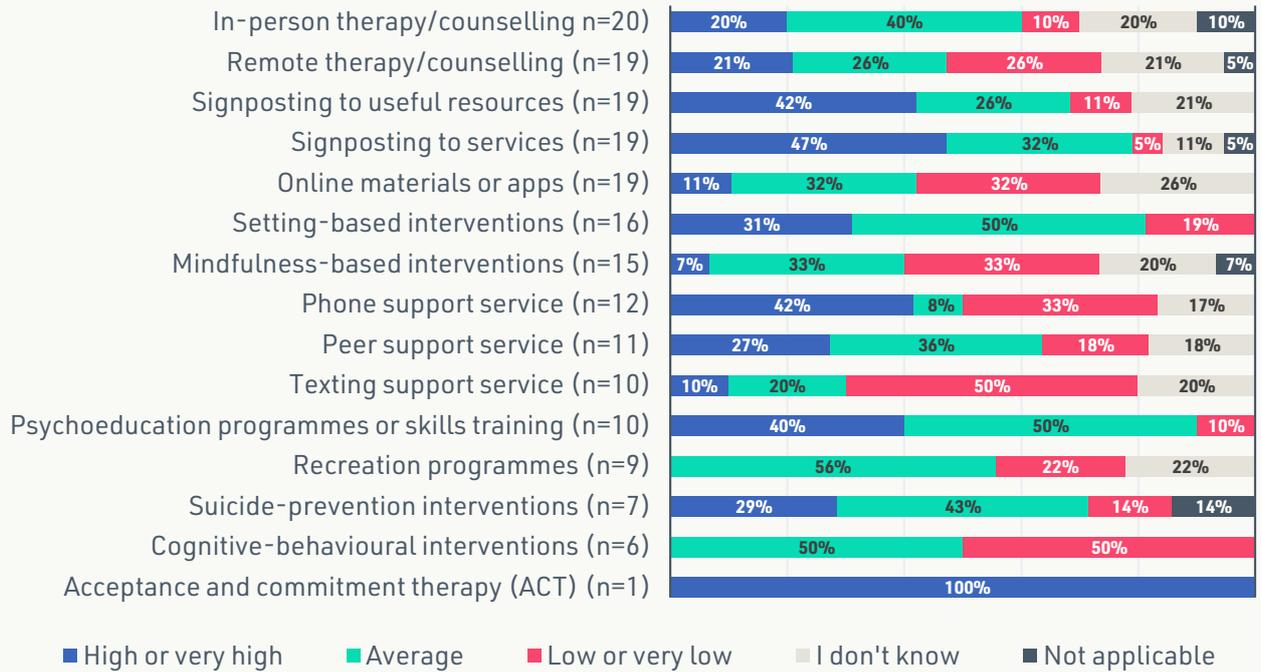


The reported rate of uptake for each intervention varied between institutions and different intervention types (see Figure 3). Among those interventions offered by at least ten providers, mindfulness interventions and texting support services had the lowest reported uptake, with between one-third and

one-half of survey respondents reporting a low uptake. Signposting services, setting-based interventions and psychoeducational programmes were most commonly reported to have high or at least average uptake among all groups of students (see Figure 3).

Figure 3

Survey responses: Rate of uptake of interventions currently offered (n=29)

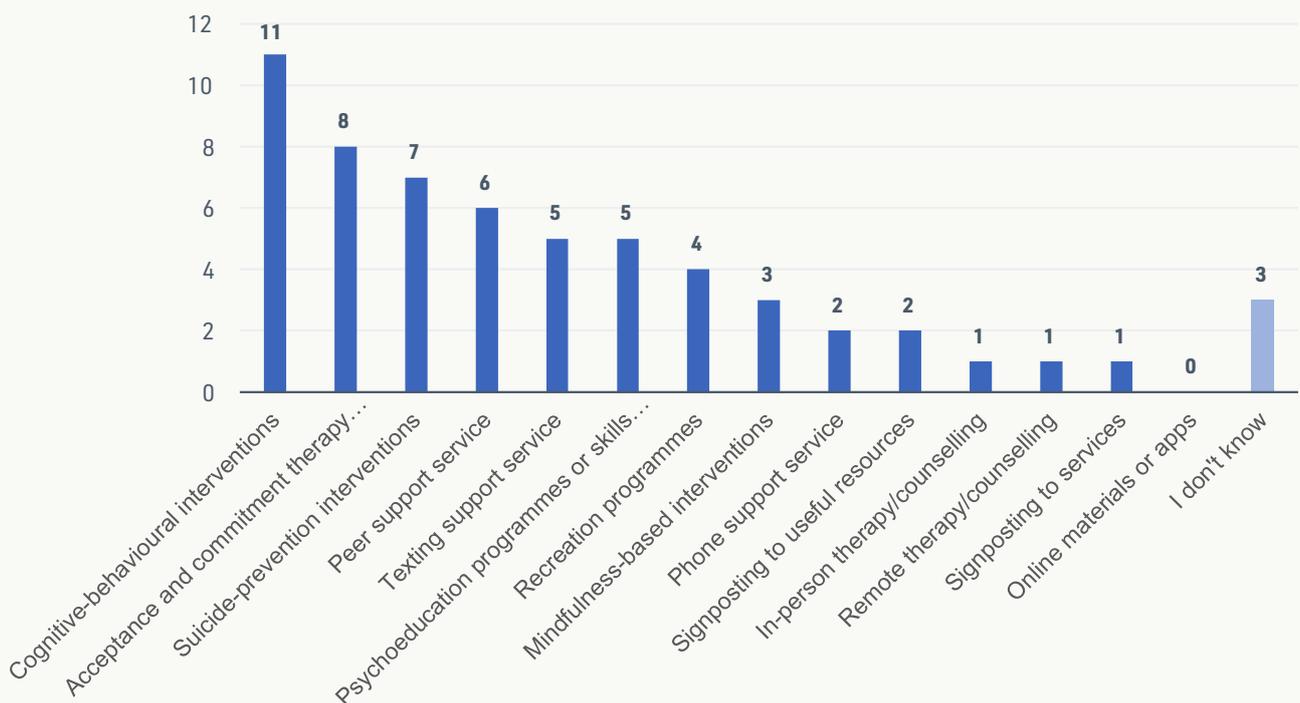


When asked whether they would like to offer interventions that they do not currently offer, almost all (22) survey respondents specified at least one service they would like to add to their offer. Practitioners most commonly wished to offer interventions that were

offered by very few providers (see Figure 3), including cognitive-behavioural interventions, acceptance and commitment therapy and suicide-prevention support (see Figure 4).

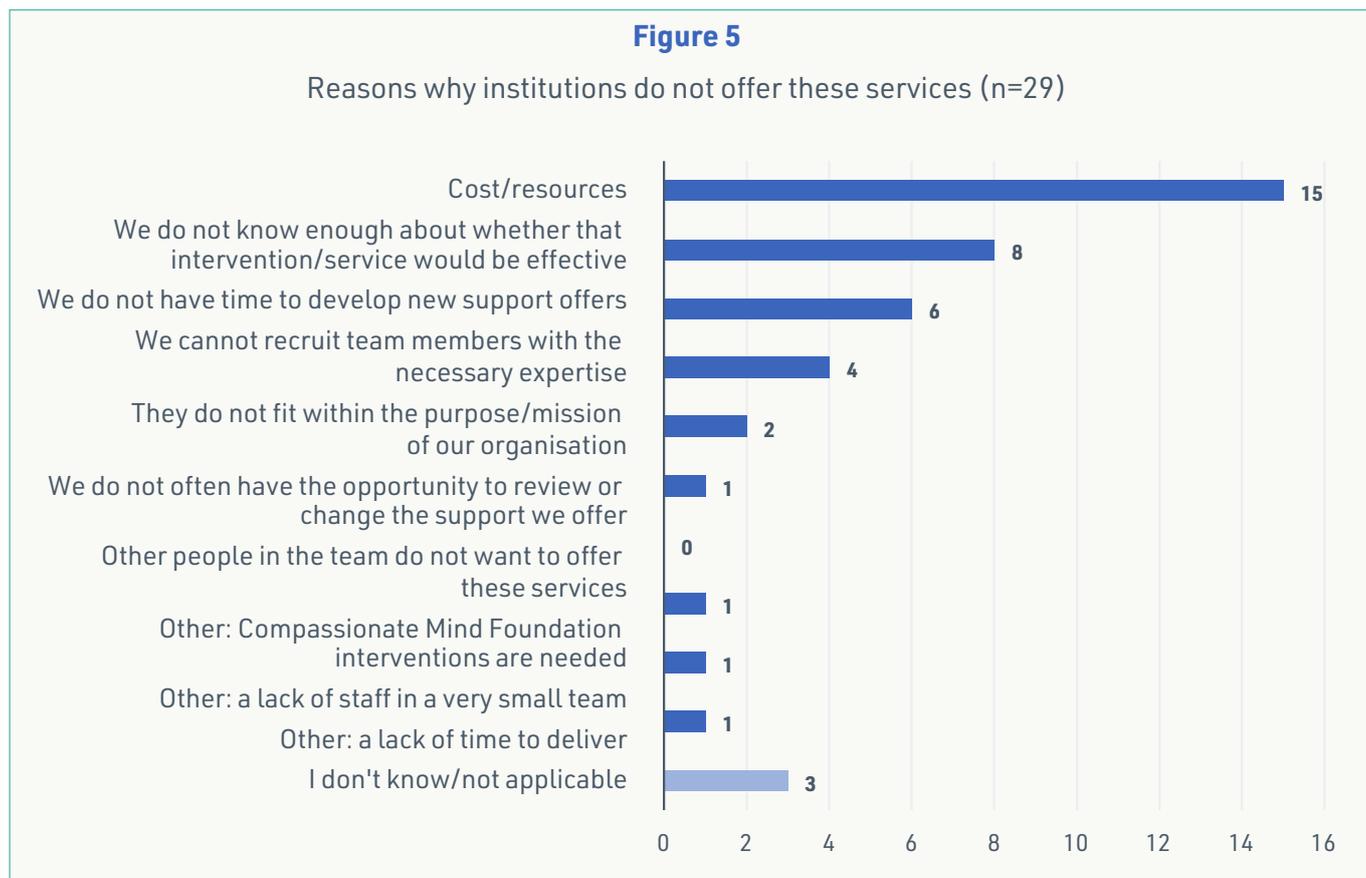
Figure 4

Survey responses: Services and support that practitioners would like their institution to offer that they currently do not (n=29)



The most common barriers to offering these interventions were cost and resource, selected by half of the survey respondents, and a lack of knowledge

regarding the likely efficacy of the intervention, highlighting the need for more accessible, robust evidence of impact (see Figure 5).



Most HEPs responding to the survey (17 of 21) said that they refer students to external organisations. Some non-HEP organisations we surveyed received referrals from HEPs; however, others did not as they did not provide support directly to students. HEPs commonly refer students if they do not provide the type of support needed or if a student's needs are more severe than they can manage. Three providers – an FE college, a Russell Group university and a post-1992 university – said they refer students because their services are oversubscribed and they have insufficient capacity. Survey respondents reported making referrals for support to a wide range of external organisations, including:

- Child and Adolescent Mental Health Services (CAMHS) and the NHS
- Third-sector organisations specialising in mental health support, including national charities such as Mind and YoungMinds, and smaller local charities
- Organisations that provide support for specific at-risk groups, including LGBT young people, and refugees and migrants

- Organisations that provide specialist support in response to mental health stressors such as sexual assault and violence, domestic violence, forced marriage, homelessness and bereavement.

Promoting general well-being

Expanding on the support they detailed in the survey, the roundtable participants across all consultation groups highlighted the support they provide for general student well-being. This included interventions such as:

- Health checks
- Gym memberships
- Recreational and social activities such as sports, yoga, nature walks, movie nights, quizzes and cooking workshops
- Use of therapy animals

One student interviewee commented specifically on the use of a therapy dog, which she had found very helpful. General well-being and recreational interventions often included preventative approaches to looking after

well-being, such as advice on sleep hygiene, self-esteem and how to maintain a good work-life balance. In certain cases, this support was targeted at at-risk groups that might face barriers to access, for example offering subsidised gym memberships to certain groups. One university also has a social prescribing programme, offering activities to which vulnerable students are referred if they have faced particular challenges. Participants in the non-HE consultation highlighted that targeting these types of activities at students who do not drink can help with their integration during the induction period at university.

Using technology

Given that a high number of survey respondents mentioned offering online or technology-based interventions, this was further discussed in the roundtable. Participants across all consultation groups gave examples of mental health and well-being support being delivered through technology, including:

- Subscriptions to the platform 'Togetherall', an online community where people can support each other anonymously to improve mental health and well-being
- Virtual learning environment resources and information on university websites or via the Student Minds website
- Nightline or other internal helplines.

One post-1992/metropolitan university participant reported using an app focused on anxiety support, and one small specialist HEP participant had their own in-house app that included a section on well-being support. However, a Russell Group university participant felt that apps were variable in quality and utility:

"We have trialled a number of different apps and interventions. Interestingly they don't get a great take-up. I think the students who like them really like them, but it's difficult to get students to use them. ... My suspicion would be that people who are into mental health apps are probably finding whatever's good in the App Store rather than going through the university."

Consultation participant, Russell Group university

The adverse effect of Covid-19 on mental health

Covid-19 has increased anxiety, stress and loneliness

Many roundtable participants highlighted the impact of the Covid-19 pandemic on students' mental health. Across the different types of HEP and other organisations, practitioners said that students had experienced higher anxiety, stress and loneliness, driven by the uncertainty and disruption to learning that the pandemic had caused.

"We've seen it across the board – anxiety, depression, loneliness, the amount of students coming to us presenting with suicidal ideation and self-harm. Eating disorders are a lot higher because students have had to find other ways to cope with everything in terms of the disruption to life in general, but definitely the disruption to schooling and what that's meant in terms of ... the developmental experiences that they've lacked."

Consultation participant, Russell Group university

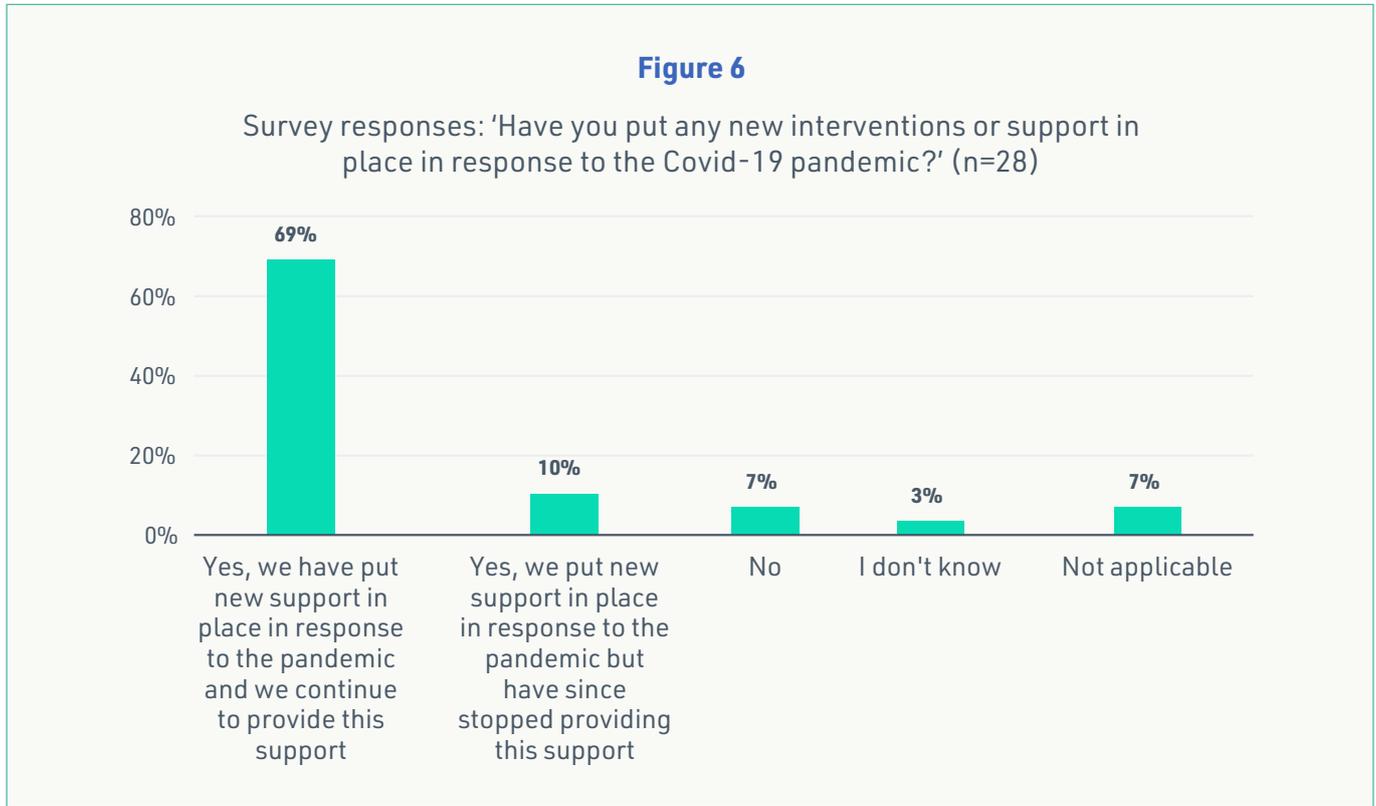
In the non-HE roundtable, an employee of 'Shout', a free 24/7 text support service, reported that demand for its services had doubled by the end of 2020, with the increase among students needing help in line with the general population. Anxiety around workload, exams and isolation were commonly cited as problems. Around one-third of students contacting the service cited anxiety, while students experiencing depression and suicidal ideation were also common.

Practitioners working in FE, Russell Group and post-1992/metropolitan institutions highlighted how students had missed developmental experiences, both educational and social, resulting in more challenging transitions. One FE practitioner felt that college students presented as similar to Year 9 pupils, with some lacking social skills and never having taken part in a formal assessment, a challenge that one of the student interviewees also noted.

HEPs' responses to the pandemic

In response to the impact of the pandemic, most HEP and other mental health organisations we surveyed (79%) put additional support in place to support students' mental health and the majority of those that

did so continue to provide this support (see Figure 6). Those who stated explicitly in the survey that they did not provide any new support included one small specialist institution and a large Russell Group institution.



Ensuring that students were able to access online provisions was challenging. FE practitioners found it harder to develop rapport with students in online interventions. In contrast, some of the Russell Group, post-1992/metropolitan university, and small or specialist HEP roundtable participants had seen increased uptake of support services and more regular attendance when support was offered online. At one university, the Students' Union lobbied for the university to maintain the availability of digital counselling after the pandemic, as it was more accessible to students. However, face-to-face provision is also highly valued. One participant from the non-HE roundtable explained that a student survey by Shout had found that while 75% of students wanted a text-based service, 72% wanted face-to-face interactions.⁷

Covid-19 has widened existing inequalities

The roundtable participants identified groups of students whose mental health was more likely to be negatively impacted by the Covid-19 pandemic. As most of these groups are those that were already

at greater risk of experiencing mental health issues, the pandemic is likely to have widened inequalities.

Practitioners working in FE and post-1992/metropolitan universities reported that young carers, victims or witnesses of domestic violence, and students from low socioeconomic backgrounds were more likely to suffer decreased well-being during the pandemic. They explained that young carers had to manage the additional worry of infecting the person they were caring for, which further limited their freedom. Instances of domestic violence were understood to have increased during the pandemic, particularly in lockdown, while socioeconomically disadvantaged students had particularly struggled with digital poverty, which created additional stress.

Russell Group and post-1992/metropolitan university roundtable participants also commented that international students had struggled during the pandemic, some due to separation from families, while others who visited family faced uncertainty around whether they would be able to return to the UK to continue their studies.

⁷ Mental Health Innovations and Shout (2021) Supporting student mental health. London, Mental Health Innovations. Available from: <https://shout.ams3.cdn.digitaloceanspaces.com/mentalhealthinnovations/media/documents/Student-reportV4.pdf>

Practitioners highlighted that LGBT students had faced greater challenges with mental health during the pandemic, particularly where they did not feel safe expressing their sexuality or gender at home.

A representative from UCAS highlighted that the organisation's 2021 data showed a slight decrease in the number of men disclosing a mental health condition, while the number of disclosures from women increased significantly.

Participants across the Russell Group and post-1992/metropolitan university consultations also felt that students were presenting to services with more severe or complex needs, including suicidal ideation and self-harm.

Impact of Covid-19 on students studying particular courses

Practitioners also raised concerns about students on specific courses. Nursing students and trainee teachers studying in post-1992/metropolitan institutions faced choices that placed a strain on their mental health. Many student nurses were given the choice to opt-in to caring for Covid-19 patients at the height of the pandemic, which created a divide within cohorts between those who chose to do so and those who did not. One practitioner highlighted that a number of teaching students did not want to go into their school placements because they were worried about the pandemic or were unable to do so because they were vulnerable.

Similarly, practitioners from specialist institutions highlighted that students studying subjects relating

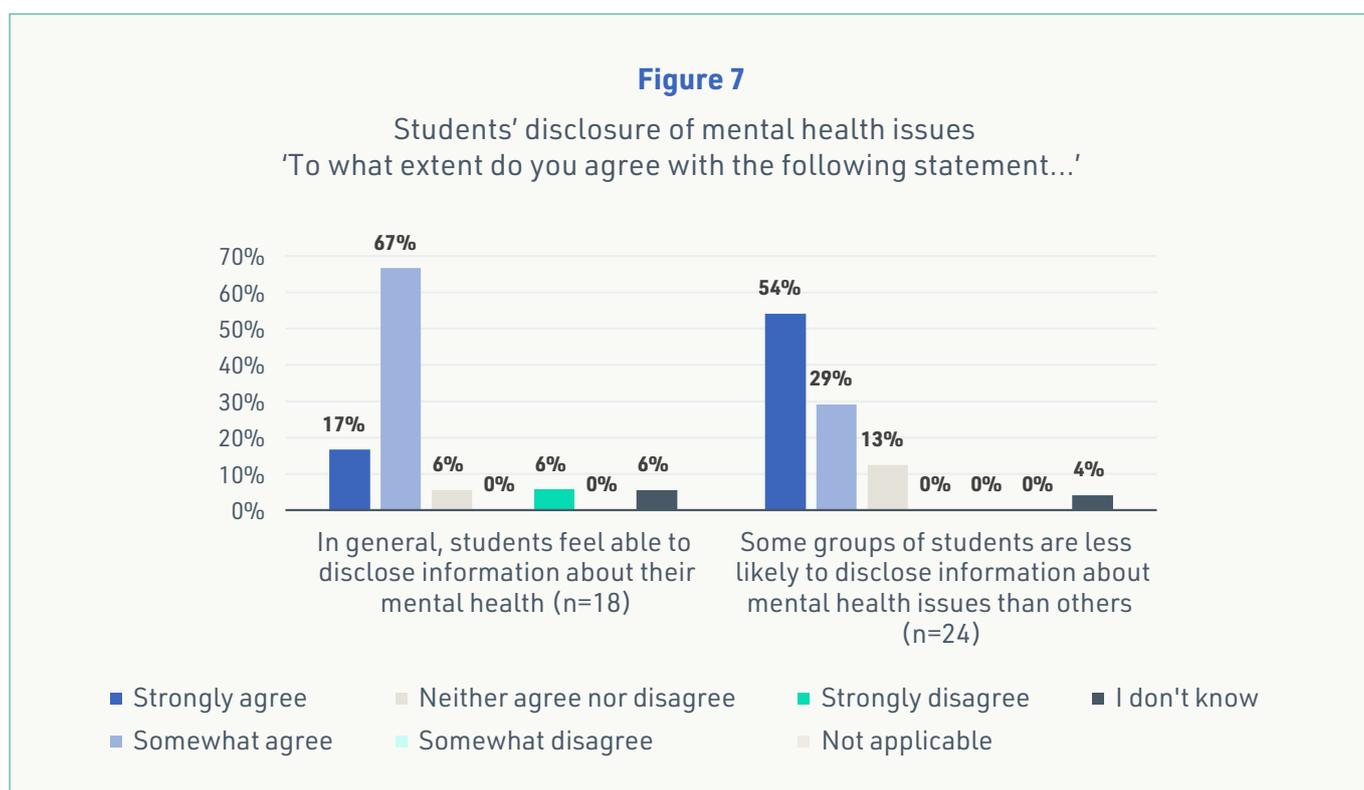
to industries that had been hard hit by the pandemic experienced disruption, which impacted their mental health. For example, students at a media training school had been unable to use specialist equipment and the school was unable to host the usual networking events to support their career progression.

The overarching message was that Covid-19 had widened existing inequalities, leaving already at-risk groups feeling lonely and more vulnerable to mental health struggles.

Disclosure

As mentioned earlier in the report, UCAS data shows that around 50% of students do not disclose an existing mental health issue in their HE application. We were also interested in whether HEPs use this UCAS disclosure data to target mental health support. Just under half of all practitioners responding to the survey said that they use UCAS disclosure data, which was lower than expected. Those that did reported using the data either to target mental health support or in other ways, such as identifying students who are already accessing external support, making reasonable adjustments to study plans, or offering a consultation with a Mental Health Adviser.

While 73% of practitioners responding to the survey agreed that students felt able to disclose information about their mental health, 83% agreed that some groups of students are less likely to disclose mental health issues than others (see Figure 7).



Expanding on these findings during the roundtable, practitioners identified specific barriers that may stop some students from disclosing mental health challenges or make disclosure more difficult.

Stigma

Participants across the consultation explained that a number of at-risk groups may struggle with the stigma surrounding the disclosure of mental health issues. This included BAME young people, who sometimes lack trust in large institutions because of concerns around institutional racism, and LGBTQ+ young people, who may not have disclosed their identity publicly, making them reluctant to speak openly about their experiences. Male and international students were also identified as being reluctant to disclose their mental health challenges because of stigma.

Participants felt the framing of mental health and well-being interventions can help when trying to reach students affected by the stigma around mental health. Sometimes framing interventions as more generally focused on all-round well-being can make them more appealing to students.

Cultural barriers

Refugees, asylum seekers and international students may face language or cultural barriers in accessing mental health support. Some students come to UK HEPs from countries where speaking openly about mental health and well-being is not widely accepted.

One of the student interviewees, an international student, explained how she felt mental health issues were treated differently at home from at her university:

“Everyone in our university, they promote mental health so much that we don’t feel restricted. We don’t feel judged at all ... back in India, people mostly judge you ... they mark it as [a] weakness. But here, I was quite happy to see the way they were dealing with everything. They were telling us about how to cope [with] all this stuff.”

Student interviewee

Wanting a fresh start

Roundtable participants said that care-experienced young people are sometimes reluctant to access support because they want a ‘fresh start’ when they start university and to be treated as other students are. This again points to the framing of support for specific groups.

Feeling that services are not available to their group

Participants said that mature, postgraduate and research students sometimes did not see student mental health and well-being services as being ‘for them’. Some feel their experiences and challenges are different from those of undergraduate or younger students; they can therefore become isolated. This was also felt to be true for students who are regularly on placement and may feel that student well-being services do not understand the nature of the stressors of their particular course, and commuter students who can experience isolation or lack a sense of belonging at university because they spend less time on campus. This points to the importance of support at different transition points in a student’s journey.

Family pressure

Roundtable participants suggested that socioeconomically disadvantaged young people can feel under financial pressure to be successful on their course and are, therefore, reluctant to disclose mental health challenges for fear of having to take time out of their studies. They may have concerns about losing funding, or having to support themselves financially during a year out. Similarly, students who are the first in their family to study at a higher level may feel under more pressure to complete their course successfully and are therefore reluctant to admit to facing challenges.

Fear of losing future opportunities

Some roundtable participants said that students on high-tariff or vocational courses were fearful of disclosing mental health issues in case this affected their ability to take part in work placements or future employment opportunities.

Mental health and well-being support for at-risk groups

At-risk groups

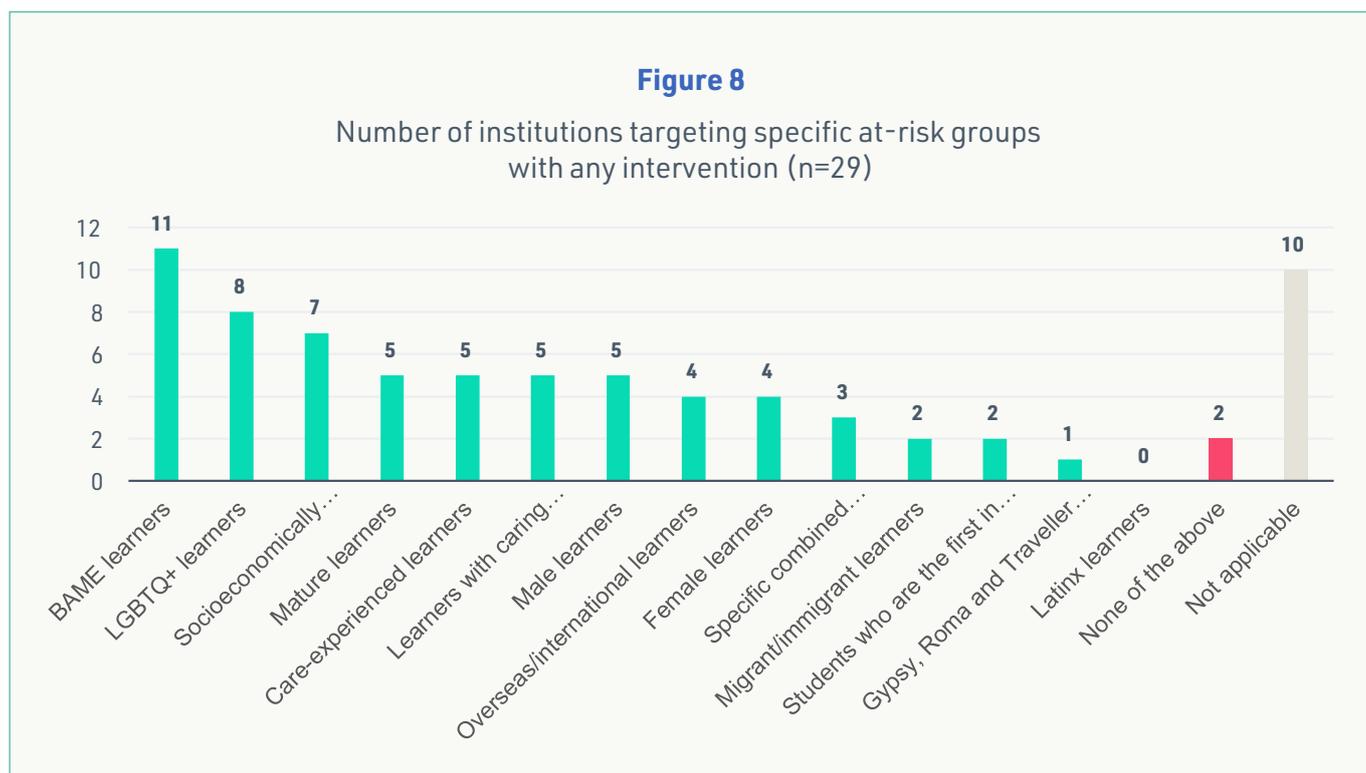
The roundtable participants were aware of the at-risk groups identified in the evidence review, but also highlighted a number of additional groups vulnerable to mental health challenges. These included:

- Refugees and asylum seekers
- Parents or carers
- International students
- Postgraduate or research students
- Commuter students

- Students regularly on placement
- Trauma sufferers
- Students on creative courses
- Students from military families
- Returning students.

Targeting and support

Two-thirds of the institutions surveyed targeted at least one specific at-risk group (see Figure 8). Learners who are BAME, LGBTQ+ or from socioeconomically disadvantaged backgrounds were the most commonly targeted groups.



Survey respondents were also asked about the rate of uptake for all interventions by specific at-risk groups. Around one-half of respondents either did not know whether uptake among these groups was higher or lower than the average, or said this was not applicable to their setting due to the small numbers of these groups within their student population. Those respondents who did have this information suggested that uptake was higher than average among female learners, those with caring responsibilities and care-experienced learners, and lower than average among male, BAME, mature, international and Gypsy, Roma and Traveller (GRT) learners, aligning with disclosure rates.

During the roundtable, participants were asked to provide further details about the interventions they target at specific groups and shared examples of such support.

Two practitioners working in post-1992/metropolitan universities explained that they provide specific support for care-experienced students that includes a well-being focus. Their institutions provided a designated point of contact to care-experienced students who can signpost and refer to other services as appropriate. For one provider, this was also available to estranged students or student carers.

Four organisations gave examples of tailored support for BAME groups. One Russell Group university was working on increasing engagement from male BAME students through a peer support initiative delivered by the Students' Union. However, engagement with this intervention was low, both in-person and online.

One provider has a 'Justice, Equity, Diversity and Inclusion' programme especially for Black and global majority students within its business school, offering students workshops, mentoring, conferences, events and networking opportunities. The programme also incorporates a safe space to discuss mental health and well-being, including topics such as 'racial trauma', and has also hosted an interfaith suicide-prevention conference.

Another provider offers an 'Equity' programme aimed at providing personal and professional development opportunities for BAME students, including specific workshops and peer-led sessions on mental health and well-being. The university also works closely with a BAME-led community-based charity that provides culturally appropriate mental health and well-being support.

Student Space, the collaborative mental health programme established by the charity Student Minds to support students through the pandemic, has collaborated with the non-profit organisation Black

People Talk to offer online workshops co-designed and facilitated by Black students. The Student Minds website has also hosted videos from King's College London's Students' Union's Black Students Talk, a peer support group that provides spaces for Black students to meet, share and learn how to manage their mental health and well-being.

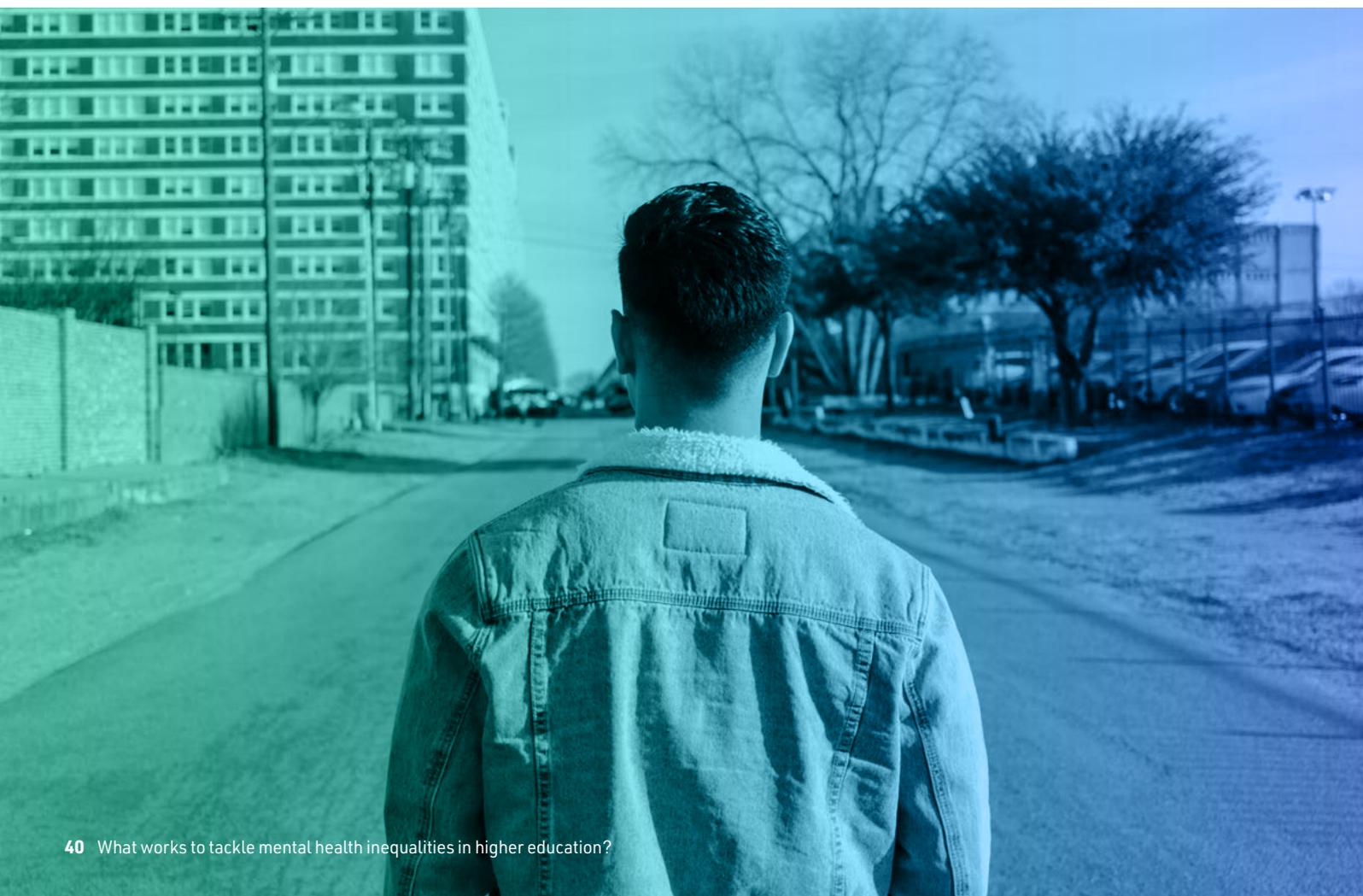
Factors influencing how HEPs target and support at-risk groups

The consultation roundtables invited participants to explain the factors that influenced whether, and how, they could provide support for at-risk students.

Targeting must account for intersectionality

Practitioners working in post-1992/metropolitan universities, small and specialist HEPs and non-HE organisations highlighted that, when targeting at-risk groups, institutions must consider intersectional identities. They stressed the importance of understanding how a student identifies when trying to engage them in different interventions, to ensure the support is relevant to the challenges they are facing.

Furthermore, one practitioner explained that where students fit into more than one at-risk group, or have multiple identities that may affect the likelihood of them disclosing mental health issues, it can be difficult to target them effectively. Targeting should supplement an inclusive approach.



While many HEPs involved in the consultation targeted some support and interventions at specific at-risk groups of students, practitioners highlighted the challenges in targeting interventions. Practitioners from larger institutions stressed that non-targeted interventions remain important because some students do not wish to be targeted based on their identity or background. In addition, non-HEP participants cautioned that a focus on targeting specific groups will not necessarily create an inclusive environment for marginalised students:

“Genuine inclusivity doesn’t mean putting on specific things for specific groups of students, necessarily ... if you were getting your inclusivity stuff right you would probably need a lot less of that specific work.”

Consultation participant, mental health charity

Providers’ approaches to addressing challenges around targeting and creating an inclusive approach differed, primarily based on institution size. Larger institutions tended to offer a wide range of mental health interventions and make them available to all students, sometimes directing particular students to the most appropriate support. In small and specialist HEPs, efforts were made to support students as befitting their challenges as individuals, rather than targeting support at them as a member of an at-risk group. For instance, a number of the small specialist providers made calls directly to students to check on their well-being, especially during the pandemic when students were isolating.

“We know every student really well. We can tell over a teaching unit if there’s something wrong with them, we will ring them up.”

Consultation participant, small and specialist provider

Practitioners suggested that this personalised approach is more suited to small institutions, as a smaller student population made it easier to target support to individual students. One representative explained that, unlike large HEPs, small and specialist providers have often been “designed entirely around the type of students they recruited” and the “diversity within their student bodies has a direct relationship to the type of institution that they are”.

Personalised support is seen by small, specialist institutions as particularly important in addressing inequalities in HE outcomes, as these providers often work with groups of students who traditionally have higher dropout rates or do not go on to study in HE, such as those from first- or second-generation migrant communities.

Support for at-risk groups is sometimes determined by funding

FE practitioners said that colleges generally aimed to provide support to all students, rather than targeting particular groups. One roundtable participant explained that where support is offered to at-risk groups, this is often led by public funding available for providing extra support to students with those particular characteristics, such as care experience.

Support for specific groups is often peer-led

Participants in the FE, Russell Group and post-1992/ metropolitan university roundtables highlighted the success of peer-led support for at-risk students in addressing challenges around encouraging disclosure and students feeling ‘singled out’ by targeting.

Participants found that some groups of at-risk students found it easier to reach out to peers for support, and many providers had developed peer mentoring services as a result. These networks helped to reach students who felt unsure about seeking more formal support, including BAME students and postgraduate students. HEPs offer training to students who act as peer mentors, both to equip them with skills to provide support but also to support them in look after their own well-being.

Practitioners shared examples of this type of support:

- One Russell Group university had hired a member of staff through the Students’ Union specifically to coordinate peer support across the university and tailor it across different departments.
- Another university assigned student well-being ambassadors to other students who were struggling.
- One university had facilitators in place to help students by providing peer support.
- One Students’ Union used an informal buddy scheme to help students who were feeling isolated and lonely and also used student volunteers to run their own ‘nightline’ for students to call if they needed help. Each of the union’s societies had a committee member focused specifically on welfare support.

One student interviewee described how her role as a peer supporter had also helped her when she experienced her own mental health challenges. Talking to others in the peer support team informally helped her to accept that it was normal to experience emotional challenges and that there were always ways to work through them. She added that receiving peer support also made her feel more equipped to deliver it to others. As an international student far from home, she found this network valuable, particularly during the Covid-19 pandemic.

Another student interviewee explained that support from a close friend had been vital to him in coming out as gay and talking about his experiences. He described the friend, who is also gay, as an “anchor” whom he could trust and “the only person that I can truly be myself with”. He had never attended the targeted support that the university’s LGBTQ+ society provided.

Targeted advisers are effective in supporting at-risk groups

Some Russell Group and post-1992/metropolitan university roundtable participants described using targeted advisers or coaches. A number of HEPs across the different groups used academic mentors or coaches, who were allocated to students and more aware of the specific challenges of different courses. Others used targeted advisers to provide support for specific at-risk groups of students, such as estranged students, students who are parents or carers, and refugees and asylum seekers. In one case, this process involved a targeted induction for students in these groups, allowing them to make connections with others before the main induction period and in a less pressured environment. In line with the findings of the evidence review, practitioners highlighted that relationships with staff were important in providing this type of targeted support.

Both student interviewees described help from mentors as particularly beneficial in facilitating their access to wider support. One explained how a period of mental health challenges had made attendance at classes difficult for her. Her personal tutor noticed this and called her directly to offer guidance, including helping her to contact the student support team. Another student, the first in his family to attend university, had experienced a relationship breakdown that had brought up family trouble from the past. The impact of these experiences on his mental health led him to become withdrawn; again, a personal academic tutor noticed and conversations with his tutor enabled him to access the well-being team and gain counselling support.

One participant in the non-HE roundtable discussion said that using specialist mentors to provide “pseudo therapeutic or practical day-to-day management” was an effective strategy in supporting student mental health and well-being.

Gaps in support

During roundtable discussions, participants across the different institution types identified a range of gaps in mental health support in HE.

Preventative approaches need more funding

Participants in the Russell Group, post-1992/metropolitan university and small and specialist HEP consultations highlighted the importance of developing preventative mental health and well-being support alongside more reactive interventions. Participants in the non-HE consultation also identified a disconnect between government emphasis on the need for early intervention and preventative approaches to mental health support, while funding tends to continue to be focused on more reactive services and interventions.

Support during transition points

Participants in the FE and post-1992/metropolitan universities consultation said that more support was needed for students at transition points. While some good practice existed at different transition points, there was an overall lack of joined up thinking between practitioners, leading to gaps in a student’s journey or experience. This could happen, for example, when a student is moving into or out of a placement yet needs their mental health and well-being support to remain consistent across the university and workplace environments, and to be provided by someone who understands the contexts they are both learning and working in. One participant in the FE consultation felt that neurodivergent⁸ learners would benefit from mental health support during the FE/HE transition when many receive their diagnoses.

Support across age ranges

Participants in the FE consultation said that gaps in support were sometimes age-related. For example, students often miss out on support when they are reaching the age of transition between different levels of services. They may be too young to be referred to adult mental health services, but old enough that child mental health services are reluctant to offer support, because by the time they reach the top of the waiting list they will be too old to access the service.

Support for students who are discharged from Accident & Emergency (A&E) back into university accommodation

Participants in the Russell Group universities consultation raised concerns about a disconnect between NHS services and university provision, where a student may access urgent NHS care services and then return to university without information about their experiences being passed on to university staff so that ongoing support can be put in place.

Trauma-informed support

Participants in the FE consultation reported a general lack of trauma-informed support available within their institutions. However, other HE institutions were working to become 'trauma-informed universities'.⁹

Challenges in providing support

Roundtable participants identified a range of challenges, many of which were specific to their institution types.

FE colleges

- **Long waiting lists.** Participants said the services they were able to provide are often oversubscribed and it is difficult to meet demand.
- **Funding.** Funding in FE is a long-term problem. A recent National Audit Office report found that, as of February 2020, the government was intervening in nearly half of colleges with the aim of preventing or addressing financial difficulty.¹⁰
- **Age group.** Participants said that FE staff are often working with individuals who are in the liminal state between childhood and adulthood. This can affect how they understand their own mental health and well-being and how they respond to interventions.
- **Poor data from schools.** Participants said feeder schools were inconsistent in the data they shared with colleges, making it harder to identify students in need of support.
- **Past experiences.** Students who have experienced inadequate support in the past are less likely to seek support again.

Post-1992/metropolitan universities

- **Streamlining support.** While participants recognised the need for mental health and well-being support to be embedded across the work of a university, ensuring that systems and processes are streamlined, consistent and joined up can be logistically challenging, especially when trying to cater for a range of needs.

Russell Group universities

- **A disconnect between the support students say they want and the support they actually use.** One participant reported that it is not uncommon for students to request a particular type of support, but then not engage with it or fail to attend sessions. This could be because of a reluctance or lack of experience or understanding in how to take a proactive approach to looking after mental health, and this challenge may best be tackled with early advice, information and psychoeducation. For example, straightforward conversations with students who are presenting with problems such as sleep disorders or anxiety can uncover lifestyle issues, such as consuming too much caffeine, which can be adjusted to help the problem.
- **The student life cycle.** Some Russell Group universities have particularly short and intense terms. Participants said that external support services did not always understand this, and tried to contact students during breaks when they could not be reached at the university. Missing this correspondence can lead to removal from waiting lists.

"I think there's something about student life cycles being so condensed... basically students are with us for 1,000 days if you're on a three-year degree. So a six-month wait effectively could take out the whole of your second year."

Consultation participant, Russell Group university

⁸ Neurodivergence refers to divergence in mental or neurological function from what is considered typical or normal. The term is frequently used to refer to conditions such as autism or attention deficit hyperactivity disorder (ADHD).

⁹ Trauma-informed practice is a strengths-based approach that aims to understand, recognise and respond effectively to the impact of trauma on individuals.

¹⁰ National Audit Office (2020) Financial sustainability of colleges in England. Available from: <https://www.nao.org.uk/press-release/financial-sustainability-of-colleges-in-england/>

Small and specialist HEPs

- **Fewer resources than large institutions.** Small and specialist providers highlighted a lack of resources, including funding shortages, as a challenge, as small and specialist providers often receive less public funding than other types of HEP.
- **Feeling shut out of sector-wide initiatives in HE.** Small and specialist HEP participants said they find they are often overlooked by sector-wide initiatives such as the work of the National Union of Students (NUS) or Student Minds.
- **Having links to larger universities.** This can make it unclear who is responsible for providing support. In some cases, larger partner universities are geographically distant from the small and specialist providers, making it impossible for students at the smaller providers to access the partner university's on-campus support for mental health and well-being. Where services have moved online, some universities have not made them available to students in partner small and specialist higher education institutions due to capacity.
- **Smaller student populations.** This can make it less financially viable to fund large-scale or expensive interventions, and harder to run services such as peer mentoring, because students work so closely together.
- **Limited transferability.** Participants in the small and specialist HEP consultation discussed the difficulties in translating interventions that work in large universities into smaller settings. One consultation participant noted that smaller HEPs needed more advice and guidance on how to make certain interventions financially and practically viable in their setting and with small cohorts. They also found it harder to broker partnerships with local mental health and well-being services as they do not have the same status as larger universities.

"The mental health focus just becomes more and more and more diluted, particularly the smaller that you get ... every initiative that they try is often based on what a larger provider would do, and I think if I was to say there's another gap, it's: 'What's the solution for small providers?' It's what works in these spaces. It's how, and they are constantly asking each other: 'How do I tweak this so that it can be successful?'"

Consultation participant, small and specialist provider

Non-HE

- **Information sharing.** Participants said that concerns or confusion around the General Data Protection Regulation (GDPR) sometimes resulted in information not being shared effectively, both within institutions and with external bodies such as the NHS, accommodation providers or families.

Common challenges

Participants across the consultation groups identified challenges around the provision of mental health and well-being support by academic tutors:

- **Viewing academic skills and well-being skills as contradictory.** Participants reported that academics sometimes feel that approaches to supporting student well-being can dilute the academic integrity of their studies. In some cases, they are reluctant to implement changes such as reducing workload to decrease student stress. Some members of staff are reluctant to become involved in providing mental health and well-being support as they do not see it as part of their role, which can hinder the implementation of a whole-institution approach. This was a more prominent challenge for larger institutions.
- **Academic staff feeling ill-equipped to support mental health.** Student Minds conducted research looking into the role that academic staff play in providing mental health and well-being support. It found that even where staff were willing to provide support, they often did not feel well prepared to do so. Staff reported that this aspect of their role also negatively impacted their own mental health and well-being. Consultation participants described providing training for staff in offering well-being support, which in some cases was successful, but reported that not all staff were willing to take on this responsibility.

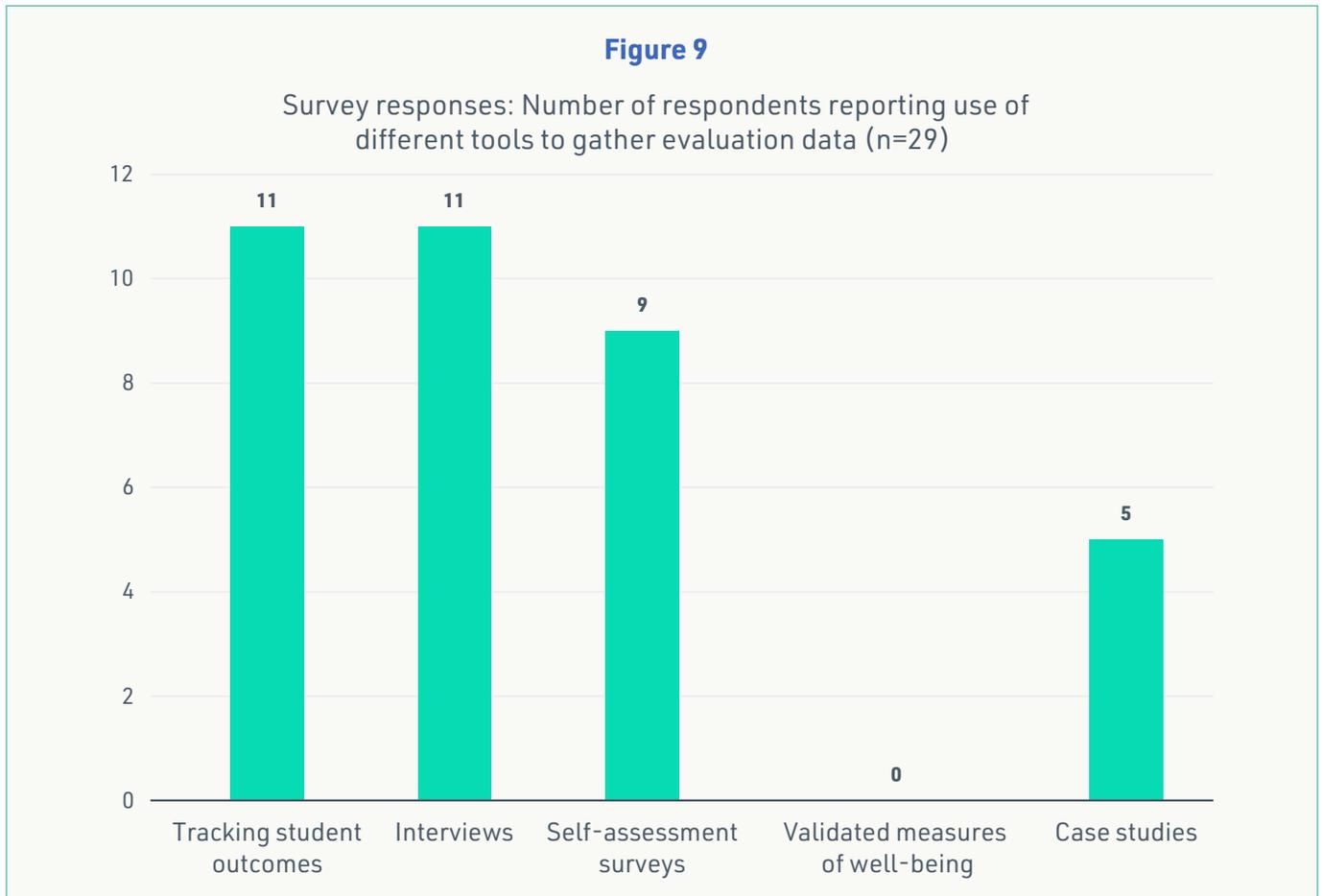
Evaluation

What HEPs are doing and why

The survey asked respondents how often they collected data on each intervention type. Many respondents reported that although evaluation data was collected for a particular intervention, they did not know how often this occurred. In some cases, evaluation data was not collected at all. Among the

small proportion of respondents who did know how often evaluation data was collected, frequency ranged from weekly to annually.

The methods most commonly used to collect evaluation data included tracking student outcomes and conducting interviews (see Figure 9). Respondents also reported using a range of other tools and methods, including tracking attendance and retention, and feedback surveys.

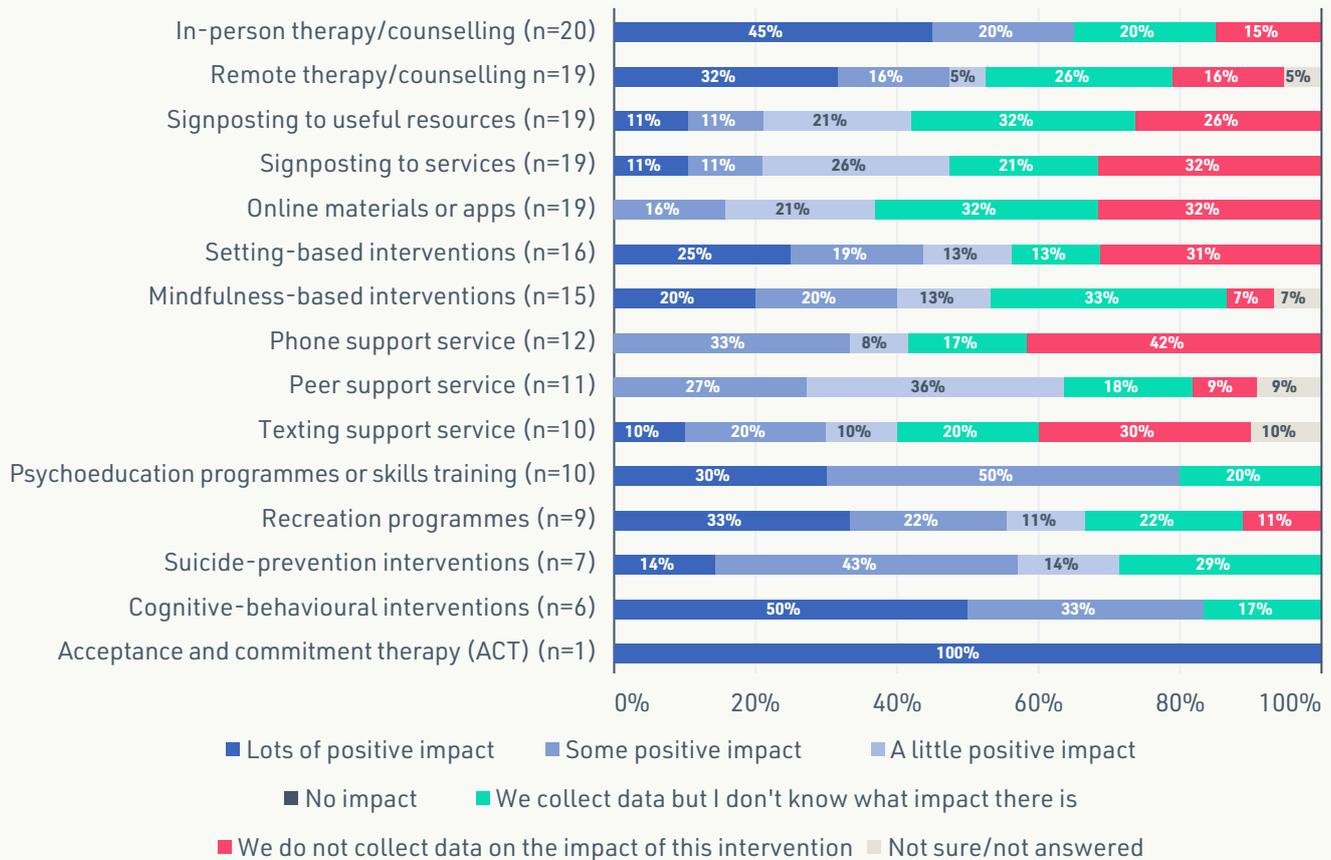


Respondents' views on whether evaluations suggested that interventions were having an impact were mixed (see Figure 10). In one-half to one-third of cases, depending on the type of intervention evaluated, either data was not collected or respondents did not know whether data suggested impact. However, no respondents reported that their data indicated an absence of impact. Where respondents knew whether data indicated an impact, the findings aligned with the evidence review: respondents reported that

mindfulness and therapy had a significant or some positive impact. Setting-based interventions were also reported to have a positive impact, while the impact of signposting interventions was reported to be slightly weaker, although still generally positive. Other interventions, such as CBT and suicide-prevention interventions, were also reported to have a positive impact, but as only a small number of institutions offer these interventions the trends must be carefully interpreted.

Figure 10

Survey responses: 'For each of the programmes you offer, please select how much impact on supporting students' mental health you believe the programme is having'



The roundtable participants discussed the evaluations they conducted in further detail and primarily described carrying out empirical evaluations. They gave a number of examples of their evaluation methods, including:

- Student feedback surveys/questionnaires
- Case studies
- Clinical Outcomes in Routine Evaluation 10 (CORE-10)
- Mental health/well-being surveys
- Pre- and post-therapy scores
- Qualitative student feedback (interviews/informal conversations/reflective blogs)
- Theories of Change for activities
- Conversations between mental health and well-being teams and academic teams to discuss themes/successes/barriers/referrals
- Trials

- Validated outcome measurement
- An evaluation dashboard

Qualitative student feedback was most common, followed by both student feedback surveys or questionnaires and mental health or well-being surveys.

Challenges with evaluation

In the roundtables, a number of themes emerged regarding challenges with conducting evaluation and the reasons why providers do not evaluate interventions or evaluate them in a particular way.

Providers' lack of resources and skills to support evaluation

A number of consultation participants highlighted that a lack of resources and skills make carrying out large-scale evaluations challenging.

"I just don't think that student services are set up to do that level of robust research ... If we want to produce really robust types of research then that requires a level of statistical skill that just isn't there.

Consultation participant, Russell Group university

Participants also suggested that where evaluations were carried out, data was sometimes analysed or interpreted incorrectly due to a lack of expertise. One respondent gave examples of practitioners over-generalising findings or suggesting that small differences in groups were meaningful when they were not.

Institution size determines evaluation practice

Larger institutions are better able to carry out robust evaluations due to their greater resources and larger student populations. One participant highlighted that small and specialist providers struggle to evaluate interventions robustly as small datasets make it difficult to identify strong trends and data protection concerns pose a barrier to publishing findings.

"What I always say is we can make a really big impact on the small number of students that we have and we can probably demonstrate on an individual basis, but we couldn't do that externally because of data protection."

Consultation participant, small and specialist provider

Challenges with capturing student voice

Participants in the FE college and post-1992/ metropolitan university roundtables felt that it was important to gather data on students' perspectives regarding the forms of support they found most helpful. However, some practitioners explained that while gathering students' views is important, practitioners must take into account that students often find it difficult to judge their own progress accurately; therefore, collecting and sharing practitioners' perspectives is also important. Practitioners also stressed the need to be wary of more engaged students becoming the "loudest voices", because they are more likely to attend focus groups or join committees.

"It's a real danger that their particular experiences, although very valuable, become very dominant. So I think it's really important to make sure you get a diverse range of voices and really try and reach beyond that and hear ... the seldom-heard voices within this."

Consultation participant, post-92 university

Establishing causality is challenging

Participants also raised the difficulty of attempting to establish causal links between interventions and mental health outcomes.

Two participants working in non-HE organisations suggested that, in the mental health space, Type 3 evidence should not necessarily be valued more highly than other types of evidence. One participant said that while RCTs are "crucially important in establishing a causal evidence base", their "record in mental health compared to physical health is much spottier and a lot less reliable", and there are gaps between the evidence available in some high-level literature and what is actually happening on the ground.

Participants also mentioned that aspects of Type 3 evaluation felt either logistically challenging or inappropriate for work with university students. A Russell Group university practitioner said that the length of the student life cycle made it challenging to conduct studies, as the timeframe of study is relatively short and students are difficult to access either for intervention or evaluation during intense assessment periods and long holidays.

Establishing impact on HE outcomes

Although practitioners were exploring disparities between different groups of students – in terms of retention, degree outcomes and graduate outcomes beyond graduation – intending to improve attainment and progression through mental health support, participants generally felt that establishing causal links between the impact of mental health or mental health interventions and HE outcomes was challenging. For instance, one practitioner explained that particular mental health issues, such as eating disorders, are associated with positive HE outcomes, and there is a danger that this could be interpreted as the impact of an intervention.

“Students with eating disorders tend to be very high achievers. But the intervention hasn’t necessarily affected their academic attainment, but it might have kept them alive... I think you’d need a really large,

probably national-level dataset to be able to draw robust conclusions.”

Consultation participant, Russell Group university



8. DISCUSSION

The consultation process highlighted that HEPs are aware of, and engaged with, many of the types of support for student mental health and well-being that we identified in the evidence review. Support is often made available to the student body as a whole, with students who seek help then directed to the services best suited to their needs. There is an awareness in the sector of the need for a 'whole-institution approach' that was not explored in the literature, but various factors limit the implementation of this approach, including resources and the skills and motivations of the staff involved.

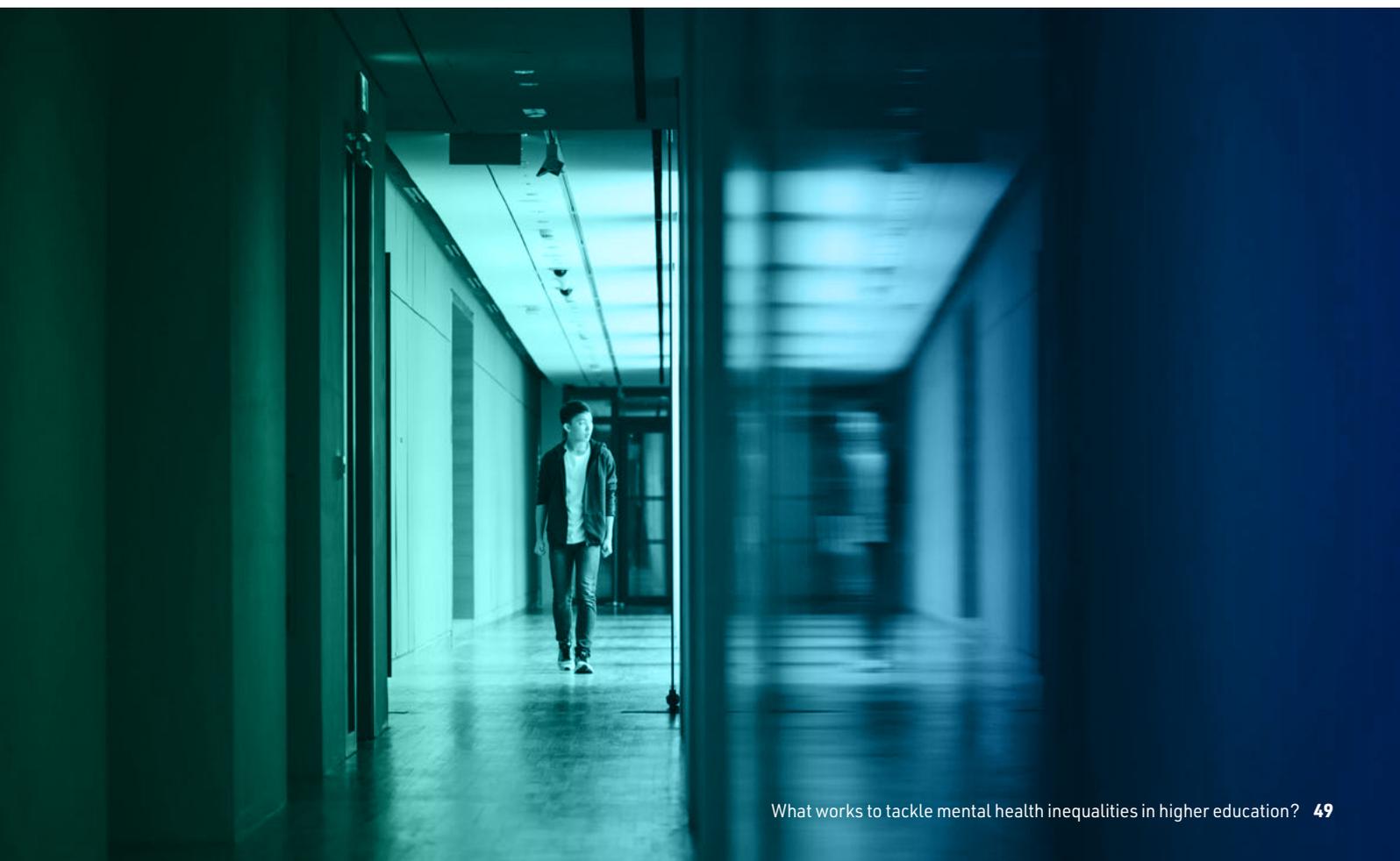
The discussion with stakeholders reinforced evidence in the literature review about the groups of students at greater risk of facing mental health challenges, but also gave additional detail around barriers to disclosure. Factors such as stigma, cultural barriers, family pressure and students' fears of losing out on future opportunities need to be taken into account when providing and promoting mental health interventions. Stakeholders also highlighted that some students, such as postgraduates, do not seek out or access support because they see such services as being more suited to other groups of students, such as undergraduates.

The consultation revealed additional examples of targeted interventions that had a more limited presence in the existing evidence base. Students with

certain characteristics, such as care experience, may have access to additional funding and support that is not available to other groups, such as students who are BAME or LGBT. Support for these groups is often provided by peer-led services which can effectively overcome barriers relating to stigma and trust. The review found emerging evidence suggesting that peer mentoring interventions can have a positive impact on well-being and are in demand among at-risk groups who may feel unable to engage with institution-led support. However, practitioners in the consultation highlighted the need for careful consideration in relation to the support and training that peer supporters receive.

The experiences of small and specialist providers are underrepresented in the literature, possibly due to their inability to meet the thresholds for robust evaluation. These institutions feel distant from the rest of the sector and struggle to deploy large-scale, universal interventions for their students. However, their close relationships with their smaller student populations can make it easier to provide personalised support, which can be harder for larger institutions to offer.

HEPs generally carry out Type 2 evaluations of their mental health and well-being support and identify a range of challenges that restrict them from carrying out Type 3 work. As a result, they find it challenging to prove causal links between their interventions and wider HE outcomes.



9. CONCLUSIONS

Tailored approaches

Tailored approaches to CBT, mindfulness and peer support interventions show promise in supporting students from at-risk groups. Personalised support can also increase the impact of online interventions, but the evidence base suggests that these types of interventions are rarely tailored to individual students.

Universal and targeted support

Tensions exist between targeted and universal approaches to providing mental health support. There is some evidence that effects are greater for interventions targeted at young people presenting with clinical symptoms. Until all HEPs are 'inclusive by design', and while there is an evident disparity in outcomes between different student groups, HEPs need to be able to support those most at-risk of mental health issues. However, practitioners feel there is preventative value in providing universal services.

A whole-institution approach

HEPs recognise the need for a whole-institution approach, but face a number of barriers to delivering this, including securing buy-in from all staff members and a need for upskilling in mental health and well-being support. This type of approach is viewed as challenging to evaluate and was not represented in the literature.

Institutional constraints

The size, course offer and student characteristics of HEPs affect the support they are able to offer and evaluate, with both FE and small or specialist providers highlighting particular challenges with the funding and resources needed to implement wide-ranging services.

While smaller institutions can find it easier to implement personalised support, larger HEPs tend to provide a wider range of services from which students may choose.

Links to HE outcomes

HEPs find it difficult to demonstrate causal links between the mental health and well-being support they provide and student outcomes such as retention and progression.

This is also reflected in the existing evidence base, where links between mental health interventions and HE outcomes are seldom measured.

10. RECOMMENDATIONS

- Psychological and mindfulness-based interventions appear to have the strongest underlying evidence base. However, more longitudinal studies are needed to establish the longer-term impact of these interventions on students' mental health and well-being, and on HE-specific outcomes such as attainment, retention and progression. These interventions should also be tailored more closely to specific student groups and their needs, as they then appear to have greater success.
- More causal studies are needed to examine interventions supporting the mental health and well-being of at-risk groups, in particular the experiences of students who are BAME, LGBTQ+, mature or care-experienced.
- Further work should be completed to evaluate peer-led interventions, beyond the evaluative work considered in this review, as these approaches are often used with specific at-risk groups and show emerging evidence of promise.
- More research focusing on interventions that encourage male and BAME students to disclose and seek support would be valuable, as the evidence review revealed that these students are less likely to declare a mental health condition through UCAS applications, while the consultation suggested that particular challenges exist in encouraging Black males to seek support.
- Research based on techniques such as discourse analysis should explore how the framing and language around mental health and well-being interventions could be adjusted to reduce stigma and facilitate disclosure.
- The Covid-19 pandemic has fuelled a significant growth in online and blended mental health interventions, including app-based tools and some supported by artificial intelligence. Further research is required to understand how students in particular subgroups accessed and experienced these interventions during the pandemic, and the impact of such interventions on students' mental health, well-being and HE outcomes.
- Future work could also examine the disconnect identified by consultation participants between the services that students request and their uptake of these interventions.
- A mismatch between the evidence obtained from the review and the services delivered by HEPs indicates a lack of robust evaluation and published reports by institutions. Feedback during the consultation on the challenges of conducting evaluation suggests that further guidance is needed in this respect. In addition, existing practice within HEPs needs to be pooled to maximise impact and better serve students.



11. REFERENCES

- Akbağ, M. & Ümmet, D. (2017) Predictive Role of Grit and Basic Psychological Needs Satisfaction on Subjective Well-Being for Young Adults. Online Submission, 8 (26), 127–135.
- Alharbi, E. & Smith, A. (2019) Studying away and well-being: A comparison study between international and home students in the UK. *International Education Studies*, 12 (6), 1–19.
- Arday, J. (2018) Understanding mental health: what are the issues for black and ethnic minority students at university? *Social Sciences*, 7 (10), 196.
- Asikainen, H., Kaipainen, K. & Katajavuori, N. (2019) Understanding and promoting students' well-being and performance in university studies. *Journal of University Teaching & Learning Practice*, 16 (5), 2.
- Ates, B. (2016) Perceived Social Support and Assertiveness as a Predictor of Candidates Psychological Counselors' Psychological Well-Being. *International Education Studies*, 9 (5), 28–39.
- Bachmann, C. L. & Gooch, B. (2018) LGBT in Britain: Health report. Stonewall Group.
- Bamford, J. & Heugh, S. (2020) Enhancing student wellbeing and student belonging in university through a gamification approach to rewarding and recognising extracurricular activities. In: *Wellbeing in higher education*. London, SEDA.
- Barnett, P., Arundell, L. L., Saunders, R., Matthews, H. & Pilling, S. (2021) The efficacy of psychological interventions for the prevention and treatment of mental health disorders in university students: a systematic review and meta-analysis. *Journal of Affective Disorders*. 280, 381–406.
- Bazalgette, L., Rahilly, T. & Trevelyan, G. (2015) Achieving emotional wellbeing for looked after children: a whole system approach. NSPCC.
- Beck, J. S. (1964) *Cognitive Therapy: Basics and Beyond*. New York, Guildford Press.
- Becker, T. D. & Torous, J. B. (2019) Recent developments in digital mental health interventions for college and university students. *Current Treatment Options in Psychiatry*. 6 (3), 210–220.
- Benson-Eggleton, J. (2019) The financial circumstances associated with high and low wellbeing in undergraduate students: a case study of an English Russell Group institution. *Journal of Further and Higher Education*. 43 (7), 901–913.
- Billingsley, J. & Hurd, N. (2019) Discrimination, mental health and academic performance among underrepresented college students: the role of extracurricular activities at predominantly White institutions. *Social Psychology of Education*. 22 (2), 421–446.
- Bingöl, T. Y. & Batik, M. V. (2019) Unconditional Self-Acceptance and Perfectionistic Cognitions as Predictors of Psychological Well-Being. *Journal of Education and Training Studies*, 7 (1), 67–75.
- Bore, M., Pittolo, C., Kirby, D., Dluzewska, T. & Marlin, S. (2016) Predictors of psychological distress and well-being in a sample of Australian undergraduate students. *Higher Education Research & Development*, 35 (5), 869–880.
- Campbell, F., Blank L., Baxter S., Cantrell A., Blackmore C., Booth A., & Goyder E. (2020) Factors that influence mental health of university and college students in the UK: A rapid mixed methods systematic review.
- Chase, N. D. (1999) Parentification: An overview of theory, research, and societal issues. *Burdened children: Theory, research, and treatment of parentification*, 3–33.
- Conley, C. S., Durlak, J. A. & Dickson, D. A. (2013) An evaluative review of outcome research on universal mental health promotion and prevention programs for higher education students. *Journal of American College Health*, 61 (5), 286–301.
- Conley, C. S., Durlak, J. A., Shapiro, J. B., Kirsch, A. C. & Zahniser, E. (2016) A meta-analysis of the impact of universal and indicated preventive technology-delivered interventions for higher education students. *Prevention Science*, 17 (6), 659–678.
- Craig S. L., Leung V. W. Y., Pascoe R., Pang N., Iacono G., Austin A., Dillon F. (2021) AFFIRM Online: Utilising an Affirmative Cognitive-Behavioural Digital Intervention to Improve Mental Health, Access, and Engagement among LGBTQA+ Youth and Young Adults. *Int J Environ Res Public Health*. 18 (4), 1541.
- Crowley, C. & Munk, D. (2017) An examination of the impact of a college level meditation course on college student well being. *College Student Journal*. 51 (1), 91–98.
- Daddow, A., Cronshaw, D., Daddow, N. & Sandy, R. (2020) Hopeful cross-cultural encounters to support student well-being and graduate attributes in higher education. *Journal of Studies in International Education*, 24 (4), 474–490.

- Davis, S. K. & Hadwin, A. F. (2021) Exploring differences in psychological well-being and self-regulated learning in university student success. *Frontline Learning Research*, 9 (1), 30–43.
- Defeyter, M. A., Stretesky, P.B., Long, M. A., Furey, S., Reynolds, C., Porteous, D., Dodd, A., Mann, E., Kemp, A., Fox, J. & McAnallen, A. (2021) Mental well-being in UK higher education during Covid-19: Do students trust universities and the government? *Frontiers in Public Health*, 9, 436.
- Demirbatir, R. E. (2015) Relationships between psychological well-being, happiness, and educational satisfaction in a group of university music students. *Educational Research and Reviews*, 10 (15), 2198–2206.
- Department for Education (2020). Widening participation in higher education.
- Doody, S., McDonnell, M., Reid, E. & Marshall, S. C. (2017) Doctoral peer writing groups as a means of promoting well-being. *LEARNing Landscapes*, 10 (2), 145–157.
- Downs, A., Boucher, L. A., Campbell, D. G. & Polyakov, A. (2017) Using the WHO-5 well-being index to identify college students at risk for mental health problems. *Journal of College Student Development*, 58 (1), 113–117.
- Edwards, E. R., Interthal, H. & McQueen, H. A. (2021) Managing your mind: how simple activities within the curriculum can improve undergraduate students' mental health and well-being. *New Directions in the Teaching of Physical Sciences*, 16 (1), 1.
- El Morr, C., Ritvo, P., Ahmad, F. & Moineddin, R. (2020) Effectiveness of an 8-week web-based mindfulness virtual community intervention for university students on symptoms of stress, anxiety, and depression: randomized controlled trial. *JMIR Mental Health*, 7 (7), e18595.
- Ersöz, G. (2017) The role of university students' general self-efficacy, depression and psychological well-being in predicting their exercise behavior. *Journal of Education and Training Studies*, 5 (3), 110–117.
- Eşkisü, M. (2021) The Role of Proactive Personality in the Relationship among Parentification, Psychological Resilience and Psychological Well-Being. *International Online Journal of Education and Teaching*, 8 (2), 797–813.
- Espelage, D. L., Merrin, G. J. and Hatchel, T. (2018) Peer victimization and dating violence among LGBTQ youth: The impact of school violence and crime on mental health outcomes. *Youth violence and juvenile justice*, 16 (2), 156–173.
- Farnsworth, M. (2021) Story as advocacy: preservice teachers discover resilience, purpose, and identities of well-being. *International Journal of Emotion*, 13 (1), 20–34.
- Fernandez, A., Howse, E., Rubio-Valera, M., Thorncraft, K., Noone, J., Luu, X., Veness, B., Leech, M., Llewellyn, G. & Salvador-Carulla, L. (2016) Setting-based interventions to promote mental health at the university: a systematic review. *International Journal of Public Health*, 61 (7), 797–807.
- Geenen, S., Powers, L. E., Phillips, L. A., Nelson, M., McKenna, J., Wings-Yanez, N., Blanchette, L., Croskey, A., Dalton, L. D., Salazar, A. & Swank, P. (2015) Better futures: a randomized field test of a model for supporting young people in foster care with mental health challenges to participate in higher education. *The Journal of Behavioral Health Services & Research*, 42 (2), 150–171.
- Geertshuis, S.A. (2019) Slaves to our emotions: Examining the predictive relationship between emotional well-being and academic outcomes. *Active Learning in Higher Education*, 20 (2), 153–166.
- Gnan, G. H., Rahman, Q., Ussher, G., Baker, D., West, E. & Rimes, K. A. (2019) General and LGBTQ-specific factors associated with mental health and suicide risk among LGBTQ students. *Journal of Youth Studies*, 22 (10), 1393–1408.
- Gooch, B. & Bachmann, C. (2018) *LGBT in Britain – University Report*. Stonewall.
- Goodmon, L. B., Middleditch, A. M., Childs, B. & Pietrasiuk, S. E. (2016) Positive psychology course and its relationship to well-being, depression, and stress. *Teaching of Psychology*, 43 (3), 232–237.
- Graham, A. C. (2019) An examination of the use of university-affiliated sexual assault resources and the well-being of women who experience sexual assault during college. *Ann Arbor, MI, ProQuest LLC*.
- Grier-Reed, T. (2013) The African American student network: an informal networking group as a therapeutic intervention for Black college students on a predominantly White campus. *Journal of Black Psychology*, 39 (2), 169–184.
- Guan, S. S. A., Xie, H. & Boyns, D. (2020) Sleep, stress, or social support? Exploring the mechanisms that explain the relationship between student recreation center use and well-being. *Journal of American College Health*, 68 (2), 124–131.

- Hall, W. J., Rosado, B. R. & Chapman, M. V. (2019) Findings from a feasibility study of an adapted cognitive-behavioural therapy group intervention to reduce depression among LGBTQ (lesbian, gay, bisexual, transgender, or queer) young people. *Journal of Clinical Medicine*, 8 (7), 949.
- Harrer, M., Adam, S. H., Baumeister, H., Cuijpers, P., Karyotaki, E., Auerbach, R. P., Kessler, R. C., Bruffaerts, R., Berking, M. & Ebert, D. D. (2019) Internet interventions for mental health in university students: a systematic review and meta-analysis. *International Journal of Methods in Psychiatric Research*. 28 (2), e1759.
- Harrison, N. (2017) Moving on up: Pathways of care leavers and care-experienced students into and through higher education. NNECL. University of the West of England.
- Hartman, C. L., Evans, K. E. & Anderson, D. M. (2017) Promoting adaptive coping skills and subjective well-being through credit-based leisure education courses. *Journal of Student Affairs Research and Practice*, 54 (3), 303-315.
- Hewitt, R. (2020) Mind the gap: gender differences in higher education. Higher Education Policy Institute.
- Hillman, N. & Robinson, N. (2016). *Boys to Men: The underachievement of young men in higher education – and how to start tackling it*. Oxford: Higher Education Policy Institute.
- Hirshberg, M. J. (2017) Well-being training for preservice teachers. Madison, WI, The University of Wisconsin-Madison.
- Högberg, B. (2019) Educational policies and social inequality in well-being among young adults. *British Journal of Sociology of Education*. 40 (5), 664-681.
- 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.
- Hubble, S., Bolton, P. & Lewis, J. (2021) House of Commons Library: Briefing Paper Number 9195, 2 June 2021: Equality of access and outcomes in higher education in England.
- Hume, S., Styrnol, M. & Gongadze, S. (2021) Evidence Review: Supporting access and student success for mature learners. Transforming Access and Student Outcomes in Higher Education.
- Hwang, W.-C. & Chan, C. P. (2019). Compassionate meditation to heal from race-related stress: A pilot study with Asian Americans. *American Journal of Orthopsychiatry*, 89 (4), 482-492.
- Ibrahim, A. K., Kelly, S. J. & Glazebrook, C. (2013) Socioeconomic status and the risk of depression among UK higher education students. *Social psychiatry and psychiatric epidemiology*, 48 (9), 1491-1501.
- Ilhan, A. & Otman, N. (2020) Analysis of psychological well-being and happiness levels of university students who do swimming and fitness. *African Educational Research Journal*, 8, 273-278.
- Johnson, R.B., Oxendine, S., Taub, D.J. & Robertson, J. (2013) Suicide prevention for LGBT students. *New Directions for Student Services*, 2013 (141), 55-69.
- Jones, L., Ahn, S., Quezada, N. & Chakravarty, S. (2018) Enhancing counseling services for Black college women attending HBCUs. *Journal of Ethnic & Cultural Diversity in Social Work*, 29 (4), 325-340.
- Kabat-Zinn, J. (2003) Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10 (2), 144-156.
- Kardas, F., Zekeriya, C. A. M., Eşkisü, M. & Gelibolu, S. (2019) Gratitude, hope, optimism and life satisfaction as predictors of psychological well-being. *Eurasian Journal of Educational Research*, 19 (82), 81-100.
- Kerr, D.L., Santurri, L. & Peters, P. (2013) A comparison of lesbian, bisexual, and heterosexual college undergraduate women on selected mental health issues. *Journal of American College Health*, 61 (4), 185-194.
- Kirsch, D., Pinder-Amaker, S., Morse, C., Ellison, M., Doerfler, L. & Riba, M. (2014) Population-based initiatives in college mental health: students helping students to overcome obstacles. *Current Psychiatry Reports*, 16 (12), 525.
- Koch, J. M., Murrell, L., Knutson, D. & Federici, D. J. (2020) Promoting Students' Strengths to Cultivate Mental Well-Being: Relationships between College Students' Character Strengths, Well-Being, and Social Group Participation. *Journal of College and University Student Housing*, 47 (1), 10-27.
- Koydemir, S. & Sun-Selışık, Z. E. (2015) Well-being on campus: testing the effectiveness of an online strengths-based intervention for first year college students. *British Journal of Guidance & Counselling*, 44 (4), 434-446.
- Lane, K., Teng, M. Y., Barnes, S. J., Moore, K., Smith, K. & Lee, M. (2018) Using appreciative inquiry to understand the role of teaching practices in student well-being at a research-intensive university. *Canadian Journal for the Scholarship of Teaching and Learning*, 9 (2).

- Lane, J. A. (2020) Attachment, Ego Resilience, Emerging Adulthood, Social Resources, and Well-Being Among Traditional-Aged College Students. *Professional Counselor*, 10 (2), 157–169.
- Lattie, E. G., Adkins, E. C., Winquist, N., Stiles-Shields, C., Wafford, Q. E. & Graham, A. K. (2019) Digital mental health interventions for depression, anxiety, and enhancement of psychological well-being among college students: systematic review. *Journal of Medical Internet Research*, 21 (7), e12869.
- Lee, J., Jeong, H. J. & Kim, S. (2021) Stress, anxiety, and depression among undergraduate students during the COVID-19 pandemic and their use of mental health services. *Innovative Higher Education*, 46 (5), 519–538.
- Lee, R. & Jung, M. (2018) Evaluation of an mHealth app (DeStressify) on university students' mental health: pilot trial. *JMIR Mental Health*, 5 (1), e2.
- Lewis, G., McCloud, T. & Callender, C. (2021) Higher education and mental health: analyses of the LSYPE cohorts: Research report: May 2021. Government Social Research.
- Long, A.C. (2018) Effect of stress mindset and adverse childhood experiences on college students' academic success and psychological well-being. Mississippi State University.
- McCloud, T., Jones, R., Lewis, G., Bell, V. & Tsakanikos, E. (2020) Effectiveness of a mobile app intervention for anxiety and depression symptoms in university students: randomized controlled trial. *JMIR mHealth and uHealth*. 8 (7), e1541.
- McManus, S., Bebbington, P. E., Jenkins, R. & Brugha, T. (2016) Mental health and wellbeing in England: The adult psychiatric morbidity survey 2014. NHS digital.
- Macrory, I. (2016) Measuring National Well-being: Life in the UK, 2016. Office for National Statistics, Newport.
- Madden, L. A. (2021) Cultivating Resilience in LGBTQ+ College Students Through Mindfulness-Based Practices. *Culminating Experience Projects*. 32.
- Midili, G. (2013) *The College Experience: Protective Factors and Psychological Well-Being*. ProQuest LLC, Ann Arbor, MI.
- Mind (2013). *Mental health crisis care: commissioning excellence for Black and minority ethnic groups: A briefing for Clinical Commissioning Groups*.
- Miranda-Mendizábal, A., Castellví, P., Parés-Badell, O., Almenara, J., Alonso, I., Blasco, M.J., Cebrià, A., Gabilondo, A., Gili, M., Lagares, C. & Piqueras, J. A. (2017) Sexual orientation and suicidal behaviour in adolescents and young adults: systematic review and meta-analysis. *The British Journal of Psychiatry*, 211 (2), 77–87.
- Morris, J., Firkins, A., Millings, A., Mohr, C., Redford, P. & Rowe, A. (2015) Internet-delivered cognitive behavior therapy for anxiety and insomnia in a higher education context. *Anxiety, Stress, & Coping*. 29 (4), 415–431.
- Muehlenkamp, J. J., Hilt, L. M., Ehlinger, P. P. & McMillan, T. (2015) Non-suicidal self-injury in sexual minority college students: a test of theoretical integration. *Child and adolescent psychiatry and mental health*. 9 (1), 1–8.
- Nguyen-Feng, V. N., Greer, C. S. & Frazier, P. (2017) Using online interventions to deliver college student mental health resources: evidence from randomized clinical trials. *Psychological Services*, 14 (4), 481.
- NHS 2020, Mental Health Act Statistics Annual Figures. NHS.
- Office for National Statistics (2017) *Personal well-being in the UK: October 2016 to September 2017*.
- Office for National Statistics (2020) *Suicides in England and Wales: 2019 registrations*.
- Office for National Statistics (2021) *Coronavirus and depression in adults, Great Britain: January to March 2021*. Office for National Statistics.
- Office for Students (2020) *Differences in student outcome further characteristics: The impacts of care experience, free school meal eligibility, parental higher education, sexual orientation, socioeconomic background, estrangement and household residual income on outcomes in higher education*.
- Office for Students (2019) *Equality, diversity and student characteristics data*.
- Office for Students (2021) *Consistency needed: Care experienced students and higher education*.
- Office for Students (2021) *Improving opportunity and choice for mature students*.
- Osmanoglu, D. E. & Yilmaz, H. (2019) The effect of classical music on anxiety and well-being of university students. *International Education Studies*, 12 (11), 18–25. doi:10.5539/ies.v12n11p18
- Oti, O. & Pitt, I. (2021) Online mental health interventions designed for students in higher education: a user-centered perspective. *Internet Interventions*, 26, 100468.
- Pachankis, J. E. & Goldfried, M. R. (2010) Expressive writing for gay-related stress: psychosocial benefits and mechanisms underlying improvement. *Journal of Consulting and Clinical Psychology*, 78 (1), 98–110.

- Patalay, P. & Fitzsimons, E. (2021) Psychological distress, self-harm and attempted suicide in UK 17-year-olds: prevalence and sociodemographic inequalities. *The British Journal of Psychiatry*, 1–3.
- Pennacchia, J., Jones, E. and Aldridge, F. (2018) Barriers to learning for disadvantaged groups. Report of qualitative findings. Government Social Research. Learning and Work Institute, Department for Education, UK.
- Pereira, S., Reay, K., Bottell, J., Walker, L., Dzikiti, C., Platt, C. & Goodrham, C. (2019) University Student Mental Health Survey 2018: A large scale study into the prevalence of student mental illness within UK universities. Insight Network, London UK.
- Pharr, J. R., Flatt, J. D., Chien, L. C., Kachen, A. & Olakunde, B. O. (2021) Exercise as a mitigator of poor mental health among lesbian, gay, and bisexual adults. *Journal of Physical Activity and Health*, 18 (5), 548–556.
- Pinkney, S. and Walker, G. (2020) 'It was me, but it was them that helped me': Exploring the issues for care experienced young people within higher education. *Children and Youth Services Review*, 108, 104576.
- Ponzo, S., Morelli, D., Kawadler, J. M., Hemmings, N. R., Bird, G. & Plans, D. (2020) Efficacy of the digital therapeutic mobile app Biobase to reduce stress and improve mental well-being among university students: randomized controlled trial. *JMIR MHealth and UHealth*, 8 (4).
- Pottinger, S., Hui, A., Little, J. C., Chavda, S., Orbih, P. & Johnson, S. (2021) Promoting students from ethnic minorities as change agents through the development of a Black, Asian and minority ethnic (BAME) virtual wobble room. *The Journal of Educational Innovation, Partnership and Change*, 7(1).
- Reavley, N. & Jorm, A. F. (2010) Prevention and early intervention to improve mental health in higher education students: a review. *Early Intervention in Psychiatry*, 4 (2), 132–142.
- Ridner, S. L., Newton, K. S., Staten, R. R., Crawford, T. N. & Hall, L. A. (2016) Predictors of well-being among college students. *Journal of American College Health*, 64 (2), 116–124.
- Robinson, J. P. & Espelage, D. L. (2011) Inequities in educational and psychological outcomes between LGBTQ and straight students in middle and high school. *Educational Researcher*, 40 (7), 315–330.
- Sacco, G.R. (2018) Social media and smartphone usage in college students: Associations with perceived relationship quality, depressive cognition, mood, and well-being. University of Delaware.
- Sanders, S. (2020) Care experience children and young people's mental health. Iriss. Available from: www.iriss.org.uk/resources/esss-outlines/care-experienced-children-and-young-peoples-mental-health
- Sandoz, E. K., Kellum, K. K. & Wilson, K. G. (2017) Feasibility and preliminary effectiveness of acceptance and commitment training for academic success of at-risk college students from low income families. *Journal of Contextual Behavioral Science*, 6 (1), 71–79.
- Schoeps, K., de la Barrera, U. & Montoya-Castilla, I. (2020) Impact of emotional development intervention program on subjective well-being of university students. *Higher Education*, 79 (4), 711–729.
- Schueller, S., Hunter, J., Figueroa, C. & Aguilera, A. (2019) Use of digital mental health for marginalized and underserved populations. *Current Treatment Options in Psychiatry*, 6 (3), 243–255.
- Semlyen, J., King, M., Varney, J. & Hagger-Johnson, G. (2016) Sexual orientation and symptoms of common mental disorder or low wellbeing: combined meta-analysis of 12 UK population health surveys. *BMC Psychiatry*, 16 (1), 1–9.
- Sheu, H. B. & Sedlacek, W. H. (2004) An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. *Measurement and Evaluation in Counseling and Development*, 37 (3), 130–143.
- Smith, N. (2017) *Neglected Minds: A report on mental health support for young people leaving care.* Barnardo's.
- Spruin, E., Dempster, T., Islam, S. & Raybould, I. (2021) The effects of a therapy dog vs mindfulness vs a student advisor on student anxiety and well-being. *Journal of Further and Higher Education*, 54 (5), 588–600.
- Stanton, A., Zandvliet, D., Dhaliwal, R. & Black, T. (2016) Understanding students' experiences of well-being in learning environments. *Higher Education Studies*. 6(3), 90–99.
- Sterba, A. M. (2013) The relationship of sleep and exercise to salient indicators of college student emotional well-being. Memphis, TN, The University of Memphis.
- Stewart-Brown, S., Cader, M., Walker, T., Janjua, S., Hanson, E. & Chilton, A. M. (2018) Experiences with a universal mindfulness and well-being programme at a UK medical school. *Health Education*.

- Stevenson, J., Baker, Z., Harrison, N., Bland, B., Jones-Devitt, S., Donnelly, A., Pickering, N. & Austen, L. (2020) Positive impact? What factors affect access, retention and graduate outcomes for university students with a background of care or family estrangement? Sheffield Hallam University.
- Stoll, N., Yalipende, Y., Babatunde, A. & Smithies, D., 2021. Black Students Talk: Mental Health Peer Support for Black University Students in the UK. Black People Talk. Student Minds. Student Space.
- Tang, R., Broderick, P. C., Bono, T., Dvoráková, K. & Braver, T. S. (2021) A college first-year mindfulness seminar to enhance psychological well-being and cognitive function. *Journal of Student Affairs Research and Practice*, 58 (4), 437–451.
- UCAS (2020) Starting the conversation: UCAS report on student mental health.
- Unite Students (2022) Living Black at University. Halpin.
- Usher, W. & McCormack, B. A. (2021) Doctoral Capital and Well-Being amongst Australian PhD Students: Exploring Capital and Habitus of Doctoral Students. *Health Education*, 121 (3) 322–336.
- Ussher, G., Baker, D., Delacour, M., Dye, C., Furlong, T., Scott, P. & West, E. (2016) Youth chances: integrated report.
- Vela, J. C., Lu, M. T. P., Lenz, A. S., Savage, M. C. & Guardiola, R. (2016) Positive psychology and Mexican American college students' subjective well-being and depression. *Hispanic Journal of Behavioral Sciences*, 38 (3), 324–340.
- Warner, R. C. (2019) The Role of Racial Microaggressions, Belongingness, and Coping in African American Psychology Doctoral Students' Well-Being. Doctoral dissertation, Marquette University.
- Wegmann, J. S. (2018) The Moderating Effects of Stress Mindset on Well-Being Doctoral dissertation, State University of New York at Binghamton.
- Winzer, R., Lindberg, L., Guldbbrandsson, K. & Sidorchuk, A. (2018) Effects of mental health interventions for students in HE are sustainable over time: a systematic review and meta-analysis of randomized controlled trials. *PeerJ*. 6, e4598.
- Woodford, M. R., Weber, G., Nicolazzo, Z., Hunt, R., Kulick, A., Coleman, T., Coulombe, S. & Renn, K. A. (2018) Depression and attempted suicide among LGBTQ college students: Fostering resilience to the effects of heterosexism and cisgenderism on campus. *Journal of College Student Development*, 59 (4), 421–438.
- World Health Organization (2018) Mental health: strengthening our response. Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
- Worsley, J., Pennington, A. & Corcoran, R. (2020) What interventions improve college and university students' mental health and wellbeing? A review of review-level evidence. What Works Centre for Wellbeing.
- Yusuf, J. E., Saitgalina, M. & Chapman, D. W. (2020) Work-life balance and well-being of graduate students. *Journal of Public Affairs Education*, 26 (4), 458–483.



12. ANNEXES

Annex A – Glossary of terms

Annex B – TASO typology of evidence

Annex C – Evidence review search terms

Annex D – Evidence review inclusion and exclusion criteria

Annex E – Sector consultation survey

Annex F – Roundtable discussion script (HE participants)

Annex G – Roundtable discussion script (non-HE participants)

Annex H – Student interview script

TASO

Transforming Access
and Student Outcomes
in Higher Education

Evidence Quarter
Floor 4, Albany House
94-96 Petty France
London SW1H 9EA

info@taso.org.uk
taso.org.uk

TASO is an independent charity that aims to improve lives through evidence-based practice in higher education (HE). We support HE professionals through research, toolkits and evaluation guidance on what works best to eliminate equality gaps. We inform practitioners of the best available evidence and produce new evidence on the most effective approaches. TASO is an affiliate 'What Works' centre and is part of the UK Government's What Works Movement.