

Enhancing Student Wellbeing: The Impact of Mindfulness Exercises on Subject-Based Anxiety in Further Education

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Abstract

This action research study explored the impact of introducing short, simple mindfulness exercises in a Further Education (FE) classroom on students' levels of subject-based anxiety. With a growing awareness of student mental health challenges in post-pandemic education, this study aimed to investigate whether brief mindfulness practices could positively influence students' experience of learning in core skills classes. Data was gathered via anxiety self-rating scores and qualitative feedback from both students and staff. The findings suggest a noticeable reduction in self-reported anxiety and qualitative themes pointing to increased emotional regulation and readiness to learn. These outcomes support the use of mindfulness as a low-cost, accessible strategy for enhancing student wellbeing in FE settings.

Keywords

Mindfulness, Subject-Based Anxiety, Further Education, Emotional Regulation, Student Wellbeing

Introduction

Students in Further Education (FE) in the UK continue to face increased mental health challenges in the wake of the Covid-19 pandemic. Several studies have highlighted rising levels of anxiety, as well as reductions in motivation, confidence, and sense of belonging among both college and university learners (International Public Policy Observatory, 2021; Johnston, 2021; Maguire et al., 2022).

Subject-based anxiety is a common yet often under-addressed issue affecting many FE learners. Defined as a fear of not knowing enough, appearing inadequate, or failing in front of others, this form of anxiety can create a cycle of avoidance and further damage self-esteem (Ehmke and Schuster, 2024). Lecturers often observe this in students' body language—disengagement, avoidance of eye contact, withdrawal, or disruptive behaviour to mask discomfort. Many FE learners have experienced disrupted schooling or struggled with core skills such as literacy and numeracy. As a result, they often bring anxiety and shame into the classroom environment.

As educators, it is crucial to recognise how this affects learning. Putwain and Daly (2014) demonstrated that subject-based anxiety impairs working memory and self-confidence—two key factors essential for academic success. Addressing this issue requires not only curriculum adjustments but also affective, relational, and environmental support strategies.

This action research project aimed to test a low-cost, time-efficient intervention: brief mindfulness exercises at the start of lessons. The focus was to explore whether such a practice could reduce students' feelings of subject-related anxiety, promote emotional regulation, and support greater presence and readiness for learning. Evidence suggests that mindfulness-based interventions in school settings can improve attention, emotional regulation, and psychological well-being (Zenner, Herrnleben-Kurz and Walach, 2014).

Review of Literature

Research into anxiety in young people in education shows clear evidence of the impact that anxiety can have on the brain and a student's ability to learn (NHS, 2023; Ehmke & Schuster, 2024). Studies have shown that when a young person is experiencing anxiety, they may display behavioural challenges and find it harder to self-regulate or meet expectations (Terlizzi & Zablotsky, 2024; Putwain & Daly, 2014). This can often lead to being perceived as disinterested or as a disruption to learning.

The Mental Health Foundation Scotland's Thriving Learners report (Maguire et al., 2022) found that around 33% of college students reported a diagnosed mental health condition. Many also reported not knowing where to turn for support. This is consistent with the YoungMinds (2021) Covid-19 report, which found that many learners were still struggling with motivation and feeling like they didn't belong.

Mindfulness means paying attention, with acceptance, in the present moment (Mind, 2021). Research has shown that mindfulness can help with anxiety, focus, and wellbeing, and allows young people to become more aware of their emotions, thoughts and behaviours. It is a widely used and evidence-based intervention across health and education settings, with NICE recommending its use for mild and moderate depression (Mind, 2021).

In education settings, mindfulness is shown to reduce anxiety and improve wellbeing (MiSP, 2012). The MYRIAD research study, led by the University of Oxford (2022), highlighted the importance of a supportive ethos and adult relationships in embedding mindful approaches in schools. When done well, mindfulness helped students cope with stress and build resilience, with benefits to the whole school community.

Methodology

Participants

Students from a range of core skills classes at an FE college were invited to take part in a 10-week mindfulness trial. A total of 67 students participated, most of whom were aged 16–19 and studying core skills such as ICT, English, Communication, Maths, and Numeracy as part of a broader vocational programme in areas including Animal Care, Land and Environment, Science, and Construction.

Intervention

The intervention consisted of 15 short, trauma-informed mindfulness exercises (each under 5 minutes), delivered weekly over 10 weeks at the start of class. Examples included: gratitude practice, 5-4-3-2-1 grounding, simple breath awareness and colouring.

Data Collection

- Quantitative: Students self-rated their anxiety levels at Week 1 and Week 10 using a 0–10 scale (0 = no anxiety; 10 = extreme anxiety).
- Qualitative: Feedback was collected from students and lecturers using Microsoft Forms. Students were asked about how the exercises made them feel, and lecturers were asked what they observed.

Ethical Considerations

Following BERA guidelines, participation was voluntary, anonymous, and ungraded. Students could opt out at any time, and mindful exercises were optional.

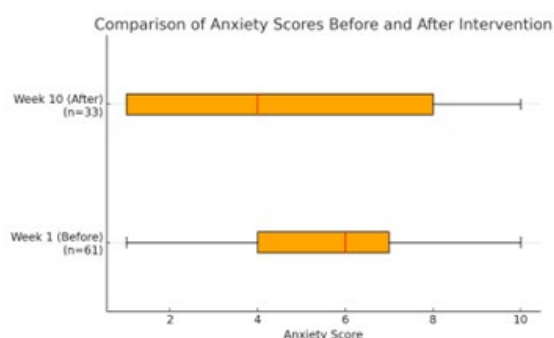
Findings

Descriptive Summary Statistics from Week 1 and Week 10 Data

Students enrolled in a core skills course participated in a 10-week mindfulness programme. They self-rated their current anxiety levels on a scale from 0 (no anxiety) to 10 (extreme anxiety) at Week 1 and again at Week 10.

Q: On a scale of 1 to 10, how would you rate your anxiety level now? (0 being none and 10 being extreme).

The following data for week 1 and 10 is summarised in table 1, with the associated boxplot shown.

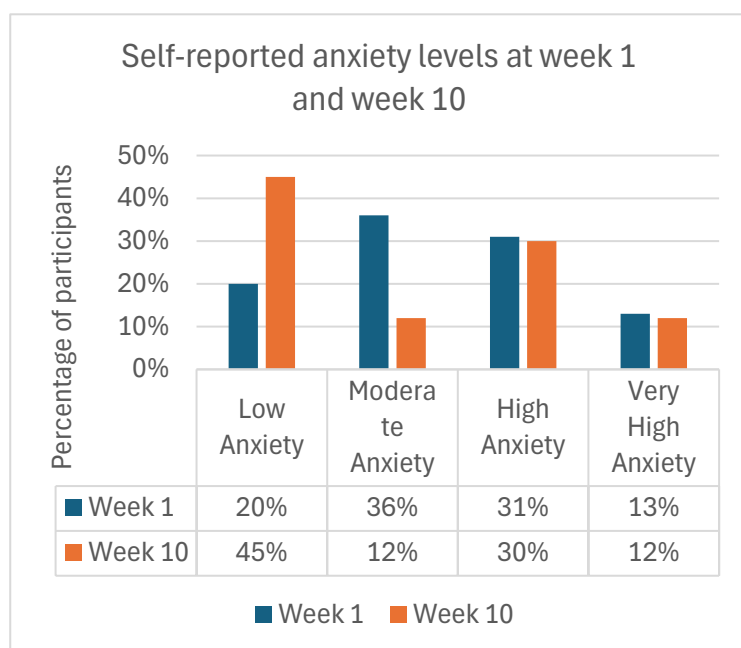


| Measure | Week 1 | Week 10 |
|---------------------|--------|---------|
| Range | 9 | 9 |
| Mode | 7 | 1 |
| Median | 6 | 4 |
| Lower Quartile | 4 | 1 |
| Upper Quartile | 7 | 8 |
| Interquartile Range | 3 | 7 |

Overall, the majority of students reported reduced levels of anxiety following the 10-week mindfulness programme. The most frequently reported anxiety score (the mode) decreased markedly from 7 to 1, and the median score also declined from 6 to 4. These reductions indicate a genuine and meaningful shift in self-reported anxiety levels across the group, suggesting that the mindfulness sessions had a positive overall impact.

However, it is important to note that the data became more dispersed by the end of the programme. The interquartile range (IQR) more than doubled, highlighting that although many students experienced significant improvements, not all benefited equally. A portion of the cohort continued to report high levels of anxiety, indicating varied individual responses.

To gain clearer insight into these variations, anxiety scores were grouped into four broader categories. This categorical analysis, summarised in Table 2, offers a more accessible and intuitive view of the distribution of outcomes.



The biggest positive shift occurred in students with moderate anxiety, many of whom likely moved to the low anxiety group. High and very high anxiety groups showed only minor reductions, suggesting more intensive or tailored support might be needed for this subgroup.

Discussion and limitations

The data collected over the 10-week mindfulness intervention shows some promising signs that students' self-reported anxiety levels decreased. The median score dropped from 6 in week 1 to 4 in week 10, and the most common rating shifted dramatically from 7 to 1, suggesting a noticeable movement towards the lower end of the anxiety scale.

When grouped into categories, the proportion of students reporting low anxiety increased from 20% to 45%, while moderate anxiety dropped from 36% to 12%. These shifts point to a clear trend - for many students, the intervention appears to have had a positive anxiety-reducing effect.

However, it's quite important to be cautious in how we interpret these findings. The number of participants reduced from 61 to 33 by the end of the intervention, meaning nearly half of the original group didn't complete the week 10 rating. This introduces the potential for attrition bias: the students who stayed may have been more engaged or more likely to benefit. As a result, the week 10 data may not accurately reflect the experience of the full cohort.

A second and important key limitation is that the data was not paired. We didn't track individual changes over time, so we can only comment on overall general trends rather than personal shifts. With paired data, we could have provided stronger statistical evidence of change within individuals. While the direction of this change is positive, the interquartile range (IQR) increased from 3 to 7, telling us that although many students did report lower anxiety by the end, the outcomes were more mixed. Some students may have improved significantly, but others remained highly anxious or even reported higher levels than before.

All this is to say that there are encouraging signs that the mindfulness sessions had a positive impact on anxiety for several students. The drop in median and shift in

mode provide a clear signal, and the increase in low-anxiety responses supports this. However, limitations in the data - particularly the drop in participants and lack of paired analysis - mean that the findings should be interpreted with care.

These results can be seen as an exploratory indication of impact, and they point towards the value of mindfulness as a potential support strategy, especially when paired with more robust data collection methods in future studies.

Some students did not notice a change, and one student commented that the activities made them feel uncomfortable or silly. However, the majority described feeling "calmer," "more focused," "ready to learn," or "less worried" after doing the exercises. Some also mentioned applying the techniques at other times, such as in exams, when anxious at home, or when facing conflict.

Staff also commented positively. Common themes were increased focus, better relationships in the group, and a more respectful and calm start to class. Several lecturers noted how this became a helpful ritual that built emotional safety in groups where some students struggled with attention or felt overwhelmed easily. One class said it was "their favourite part of the week."

The findings suggest that regular short mindfulness exercises can reduce anxiety levels in the classroom and increase students' emotional readiness to learn. Most students rated themselves as feeling less anxious over time, and lecturers reported improvements in group dynamics and focus. These benefits are particularly valuable in FE settings, where time is tight, and students often arrive carrying complex emotional needs.

The variation in student response suggests that while mindfulness is beneficial for many, it is not a one-size-fits-all solution. Student agency and choice remain critical, particularly for those who may have trauma histories or feel

vulnerable when asked to close their eyes or focus inward.

The study had limitations: response rates declined over time, and the design did not allow for pairing of individual student data across the term. Future research might use paired t-tests, expand to a control group, or look at specific demographics to explore where mindfulness has the most impact.

Conclusion

This small-scale action research suggests that short mindfulness exercises can make a meaningful difference in reducing anxiety and improving classroom readiness in FE students. The approach is low-cost, easy to implement, and can be adapted flexibly for different groups. Given the rising rates of mental health difficulties among learners, educators may benefit from incorporating simple mindful routines as part of their wellbeing toolkit.

Further research is needed to examine longer-term impacts and to explore how mindfulness can be embedded more widely across the FE curriculum.
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