

## **Association between eco-anxiety and mental health difficulties among student nurses has implications for nurse education during a climate emergency**

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## Category: Nurse Education

**Study type:** Quantitative study – cross-sectional correlation

**Author's declarative title:** The association between eco-anxiety and mental health difficulties among student nurses has implications for nurse education during a climate emergency.

**Commentary on:** Er S, Murat M, Ata EE, Kose S, Buzlu S. Nursing student's mental health: How does eco-anxiety effect? *Int J Mental Health Nurs* 2024;**00**:1-12.

### Commentary

#### *Implications for practice and research*

- Nurse educators should be aware of eco-anxiety and think about the impact of climate change on nursing students.
- Nurse researchers should investigate ways of supporting nursing students affected by eco-anxiety and develop strategies to promote student learning during a climate emergency.

#### *Context*

Climate change is causing a global climate emergency which is increasingly seen as a major problem for global health concern.<sup>1</sup> Climate change has far reaching consequences for society and can impact our mental health.<sup>2</sup> Eco-anxiety is the fear of an environmental catastrophe and is associated with symptoms of stress, anxiety, depression, insomnia, and trauma.<sup>3</sup> Nurses are exposed to the negative impact of climate change through dealing directly with the consequences of extreme weather events and/or indirectly through exposure to social media or other news outlets.<sup>4</sup> Nursing students are also exposed to climate change and may experience eco-anxiety; so nurse educators need to understand how the current climate emergency affects nursing students and their mental health.<sup>3</sup>

#### *Methods*

This quantitative cross-sectional correlation and descriptive study<sup>5</sup> examined the association between nursing students' level of eco-anxiety and their mental health. Participants (n=609) were student nurses who were recruited from two universities in Istanbul. Data was collected via an online survey in 2022. Data was gathered using a personal information form, the Eco-Anxiety Scale,<sup>2</sup> and Depression Anxiety Stress Scale (DASS-21). Statistical analysis was performed using the SPSS (v.28). Normal distribution was examined using the Kolmogorov–Smirnov test ( $p < 0.05$ ) and correlation variables were analysed using the Spearman correlation test. Effects of the independent variable on the dependent variable used a general linear model. The methods considered gender variables and the difference between affective symptoms, anxiety, and rumination sub-dimension scores to the Eco-Anxiety Scale scores. The difference between stress,

anxiety and depression sub-dimension were compared to DASS-21 total scores. Finally, the comparison between the total and sub-dimension scores of the Eco-Anxiety Scale and DASS-21 were compared.

### **Findings**

Participants (n=609) were predominantly female (n=513, 84.2%) and aged 18-20 (n=370, 60.8%). Descriptive statistics showed Eco-Anxiety Scale scores of between 13 and 52 (mean 25.65, SD 7.49) and DASS-21 scores of between 0 and 63 (mean 21.24, SD 14.76). The study found most participants (n=464, 76.2%) were affected by climate change: moderate eco-anxiety, moderate anxiety, moderate depression, and mild stress. There appears to be a moderate and statistically significant ( $p<0.01$ ) relationship between the Eco-Anxiety Scale scores and the DASS-21 scores. The study suggests that eco-anxiety is positively associated with mental health difficulties.

### **Commentary**

There is a climate emergency and public health will be affected.<sup>1</sup> This robust study shows eco-anxiety and mental health difficulties were common among the nursing students who participated in the research.<sup>4</sup> Experiencing eco-anxiety and/or mental health difficulties as a student nurse could have a detrimental impact on learning and academic progression. The data shows a correlation between eco-anxiety and mental health difficulties, but this should not be interpreted as causation. This study adds to the small amount of evidence investigating eco-anxiety and mental health in the context of student nurses. Eco-anxiety affects student nurses and appears associated with mental health difficulties, but it is less clear what impact this may have on their learning and/or clinical performance. It is important to understand how climate change impacts student nurses, so appropriate supports can be put in place to mitigate any negative consequences of eco-anxiety on their mental health, their learning, and their future professional practice. Nurse educators have an important role in preparing future nurses to respond to the health consequences associated with climate change and eco-anxiety.<sup>1</sup> There is also a need to think about the burden eco-anxiety can have on student nurses and to develop appropriate supports/interventions to reduce eco-anxiety.<sup>5</sup> Promising interventions to help reduce eco-anxiety include climate change education, psychoeducation, and mindfulness but more research is needed to know what work best for student nursing.<sup>4</sup>

### **References (max 6)**

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#### **Competing interests**

Dr Ben Parkinson is the Deputy Editor for Content at Evidence-Based Nursing