



Nature Connectedness and Climate Anxiety on Psychological Resilience Among Young & Middle Adults

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Abstract: This study explores the relationships between nature connectedness, climate anxiety, and psychological resilience among young and middle adults. A total of 150 participants (75 young adults aged 18-40 and 75 middle adults aged 40-65) were selected using purposive sampling. Non-parametric tests (Spearman's rho correlation and Mann-Whitney U test) were employed. The findings indicate no significant relationship between nature connectedness and climate anxiety, suggesting that merely feeling connected to nature does not reduce climate-related distress. Similarly, no significant relationship was observed between psychological resilience and climate anxiety, implying that resilience alone may not sufficiently buffer against climate-related anxiety. However, a significant relationship was found between nature connectedness and psychological resilience, indicating that individuals with a stronger connection to nature tend to exhibit greater emotional resilience. Additionally, middle adults displayed higher levels of nature connectedness, climate anxiety, and psychological resilience compared to young adults, suggesting age-related differences in environmental concerns and coping mechanisms. These findings contribute to environmental psychology by highlighting the importance of fostering resilience and adaptive coping strategies. Future research should incorporate longitudinal designs and diverse populations to better understand protective mechanisms against climate anxiety.

Keywords: *Nature Connectedness, Climate Anxiety, Psychological Resilience, Young Adults, Middle Adults*

1. Introduction

Climate change has become a close-to-home environmental concern in recent years, transforming into an immediate psychological issue and spawning climate anxiety, a burgeoning emotional reaction marked by fear, helplessness, and worry over environmental destruction and the future of the planet. This type of anxiety is most common among young and middle-aged adults, who are burdened with environmental responsibility and unsure of long-term effects. In addition to this, nature connectedness, the affective and cognitive experience of belonging to the natural world, has also been identified as an important predictor of psychological well-being, positive emotions, and sustainable behavior.

Psychological resilience, the capacity to recover and adapt in the presence of stress, is another important construct here. Although each of the three constructs is important separately, there has been limited examination of how climate anxiety and nature connectedness collectively affect resilience, particularly in individuals at risk from climate stress. Investigating their interrelations could provide new insight into mechanisms to enhance mental health in the face of ecological unpredictability.

Keith Ingulli and Gordon Lindbloom (2013) discovered that individuals who are more nature connected are more likely to exhibit higher psychological resilience, which implies that nature can serve as a buffer against stress. Likewise, Vinita Ghosh and Raaya Alee (2023) indicated that greater nature connectedness is linked with greater resilience and happiness, which supports the emotional advantages of having a connection with nature.

Nonetheless, research by Marlis C. Wullenkord, Laura S., and Maria Johansson (2024) showed that those who are more attached to nature can also be more climate anxious, suggesting that emotional engagement with nature might make individuals more sensitive to threats from the environment. Susan Clayton (2020) indicated that climate anxiety is more defined by external influences, such as environmental processes and media exposure, than by individual affinity for nature, which accounts for why closeness to nature does not always shield against anxiety.

André Hajek and Hans-Helmut König (2023) discovered that climate anxiety has a strong association with mental health issues like depression and generalized anxiety, and that resilience may not be able to completely shield against these.

Tam, Chan, and Clayton (2023) noted that middle-aged adults report greater levels of climate anxiety, nature connectedness, and resilience than young adults, and that there are significant age-related differences.

2. Results

The hypothesis of this study states that there is a significant relationship between nature connectedness and climate anxiety among young and middle adults. The findings reveal that the relationship between nature connectedness and climate anxiety is not statistically significant.

Table 1: *Relationship between Nature Relatedness (NR) and Climate Anxiety (CCAS).*

		Median_NR	Median_CCAS
Spearman's rho	Median_NR		
	Sig. (2-tailed)	.	.318
	N	150	150
Median_CCAS	Median_NR		
	Sig. (2-tailed)	.318	.
	N	150	150

This table shows the result of the relationship between Nature Relatedness (NR) and Climate Anxiety (CCAS). The results ($p = .318$, $p > .05$) suggest that the relationship is not statistically significant.

The hypothesis of this study states that there is a significant relationship between psychological resilience and climate anxiety in young and middle adulthood. The findings reveal that the relationship between psychological resilience and climate anxiety is not statistically significant.

Table 2: *Relationship between psychological resilience and climate anxiety in young and middle adulthood.*

		Median_BRS	Median_CCAS
Spearman's rho	Median_BRS		
	Sig. (2-tailed)	.	.428
	N	150	150
Median_CCAS	Median_BRS		
	Sig. (2-tailed)	.428	.
	N	150	150

The hypothesis of this study states that there is a significant relationship between nature connectedness and psychological resilience in young and middle adulthood. The findings reveal that the relationship between nature connectedness and psychological resilience is statistically significant.

Table 3: *Relationship between Nature Relatedness (NR) and Psychological Resilience (BRS).*

		Median_NR	Median_BRS
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Spearman's rho Median_NR	Sig. (2-tailed)	.	.020*
	N	150	150
Median_BRS	Sig. (2-tailed)	.020*	.
	N	150	150

This table depicts the relationship between Nature Relatedness (NR) and Psychological Resilience (BRS). The results: $\rho = .020$, $p < .05$ indicate a statistically significant relationship exist between NR and BRS.

The hypothesis of this study states that there is a significant difference in nature connectedness, climate anxiety, and psychological resilience between young and middle adults. The findings reveal that middle adults scored higher than young adults in nature connectedness, climate anxiety, and psychological resilience.

Table 4: Mann-Whitney U test results

	Age	N	Mean Rank
Median_NR	Young Adults	75	68.27
	Middle Adults	75	82.73
	Total	150	
Median_CCAS	Young Adults	75	67.39
	Middle Adults	75	83.61
	Total	150	
Median_BRS	Young Adults	75	68.86
	Middle Adults	75	82.14
	Total	150	

This research explored the associations between nature connectedness, climate anxiety, and psychological resilience in young adults (18–40 years) and middle adults (40–65 years), with a sample of 150 participants divided equally into the two age groups. The analysis, based on non-parametric tests, did not show any significant correlation between climate anxiety and nature connectedness (Spearman's $\rho = 0.318$, $p > 0.05$), or between psychological resilience and climate anxiety (Spearman's $\rho = 0.428$, $p > 0.05$). A significant correlation, however, was observed between nature connectedness and psychological resilience (Spearman's $\rho = 0.020$, $p < 0.05$). In addition, the results of the Mann-Whitney U test revealed that middle adults obtained higher scores on the three variables nature connectedness, climate anxiety, and psychological resilience than young adults. These results imply that nature connectedness could be associated with psychological resilience but that its

impact on climate anxiety is more complicated and possibly subjected to other variables like coping styles and environmental awareness (Clayton, 2012). The research also points out the necessity to take into account the age-related factors in psychological interventions for mitigation of climate-related psychological distress. Research in the future should look into other possible mediators, utilize larger and more diverse samples, and control cultural and contextual influences in explaining these associations.

Limitations and Implications

The limited size and homogeneous nature of the sample restricts generalizability of findings. The self-selection of participants may have also potentially caused a selection bias. Because of the cross-sectional study design, it is not appropriate to make causal inferences. It may be useful for future resilience training interventions to also include emotional regulation, mindfulness, and social support. Future work should include pro-environmental behaviours, as they are very relevant to addressing climate anxiety. Finally, longitudinal studies would provide more insights into the changes over time.

3. Conclusion

The current research explored the relationship between nature connectedness, climate anxiety, and psychological resilience in young and middle adults. Findings indicated a significant relationship between nature connectedness and resilience but not with climate anxiety. Middle adults reported higher levels of nature connectedness, climate anxiety, and resilience than young adults, with important age-related differences. These results indicate that although a relationship with nature could be a bolstering influence on resilience, it might not be enough to mitigate climate-related psychological distress by itself. The research underscores the value of developing emotional coping mechanisms in addition to environmental engagement to support mental health in the face of increasing climate concerns. Future studies should aim at larger and more diverse samples, longitudinal designs, and other variables that impact across adulthood stages.

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