



The Relationship of Nature-Connectedness with Subjective Happiness and Resilience

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ABSTRACT

Empirical studies have demonstrated that there are psychological and physical advantages for humans when they are connected to nature. Commonly discussed advantages include improvements in well-being and affect. However, many of the existing studies in this field have made use of qualitative data, which may depend on the researchers' interpretation to a certain extent. With the goal of addressing the research gap and recognizing the advantages of nature connectedness. This study aimed to use quantitative data to determine the correlation between connectedness to nature and subjective happiness, as well as between connectedness to nature and resilience in individuals residing in India. 132 respondents were sampled using snowball sampling and were assessed using the Connectedness to Nature Scale (CNS), the Subjective Happiness Scale (SHS), and the Brief Resilience Scale (BRS). Pearson's product moment correlation was used to analyse and correlate the data. The findings revealed the existence of a positive correlation between connectedness to nature and subjective happiness as well as between connectedness to nature and resilience, significant at the 0.01 level of significance. In the future, further research should concentrate on developing a greater number of interventions based on nature and implementing them to benefit the wider community.

Keywords: *Nature-Connectedness, Subjective Happiness, Resilience*

INTRODUCTION

Nature is crucial for human survival and prosperity, as it has provided humans with abundant resources to adapt, survive and flourish. Studies suggest that humans experience more positive emotions in areas with vegetation, water and panoramic views. The importance of nature goes beyond just providing resources for a sustainable life, as it also plays a significant role in regulating our overall health. Research has found that nature connectedness is essential for efficient physical and cognitive functioning, to the extent that it has been proposed as a basic psychological need. This study aims to investigate the relationship between connectedness to nature and subjective happiness, as well as connectedness to nature and resilience.

Resilience has been a topic of interest since the mid-20th century, referring to the ability to bounce back or recover from stress. Resilience is a complex concept that should be differentiated from related terms such as “thriving,” “adaptation,” and “resistance.” Thriving refers to achieving superior functioning after a stressful event, while adaptation refers to changes made by an individual while adjusting to a new situation. Resistance implies no decrease in functioning during a period of stress. Seven common characteristics of resilient people include calm, innovative, and non-dogmatic thinking, decisive action, tenacity, interpersonal connectedness, honesty, self-control, and optimism combined with a positive perspective on life. Researchers have also been interested in identifying the sources of resilience, which include individual and environmental attributes associated with resilience among children and youth. Protective factors for psychosocial resilience include good cognitive abilities, an easy temperament in infancy, positive self-perceptions and self-efficacy,

faith and a sense of meaning in life, a positive outlook on life, good self-regulation of emotional arousal and impulses, close relationships with adult caregivers, authoritative parenting, a positive family climate combined with low discord, close relationships with competent, pro-social, and supportive adults, connections to pro-social and rule-abiding peers, the presence of effective schools, neighbourhoods with high collective efficacy, high levels of public safety, good emergency social services, and availability of good healthcare and public health facilities.

Personality traits such as openness, extraversion, and agreeableness, an internal locus of control, feelings of mastery, self-efficacy and self-esteem, optimism, and cognitive appraisal are also sources of resilience. Biological and genetic factors can influence resilience, and social support in the form of relationships with family members and peers has been found to correlate with resilience. Availability of sports, arts, spirituality, and a lack of violence contribute to resilience.

Happiness has been a topic of interest among researchers for a significant amount of time. Modern Western psychology has emphasized a post-materialistic view of happiness, which focuses on pleasure, satisfaction, and the meaning of life. Happiness is a positive emotional state that is defined subjectively by each individual. Studies analysing happiness measures have revealed two components: affective and cognitive. The affective component is also known as the "hedonic level" and refers to the emotional experience of positive emotions such as joy, elation, and contentment. The cognitive component involves assessing satisfaction with different areas of life. Researchers have proposed the concept of overall "subjective happiness," which combines the affective and cognitive components and is a global, subjective assessment of whether one is a happy or unhappy person. This measure reflects a broader category of well-being and assists in understanding the global psychological phenomena of happiness. Happy individuals are optimistic, creative, extroverted, have a sense of personal

control, like themselves, tend to have a spiritual foundation, and try to achieve a proper work-life balance.

Over the past decades, there has been an increased amount of research on happiness and its sources. According to personality trait theories, several personality trait profiles, such as extraversion, optimism, and higher levels of self-esteem, are associated with happiness. However, the correlation between personality traits and happiness is not universal because cultural factors play a role in determining the kinds of personality traits associated with happiness. Genetics also play an important role in determining happiness because multiple genes determine temperamental characteristics, which further interact with environmental forces to give rise to personality traits. Peaceful cultural and socio-political conditions promote happiness. Forming close relationships is associated with higher levels of happiness and subjective well-being. Research indicates that married individuals tend to report greater happiness compared to unmarried individuals. Social support from close relationships contributes to well-being, as humans are naturally inclined to derive happiness from their social connections. Additionally, engaging in activities such as meditation and religious practices is linked to improved personal well-being. Self-reported personal health also shows a correlation with happiness. Long-term increases in happiness are linked to regular exercise, as it reduces feelings of depression and anxiety, enhances self-concept, and improves overall functioning. Employment status, engaging in goal-directed activities, and utilizing one's skills are also positively associated with happiness. The correlation between job satisfaction and happiness is 0.4. The same researchers also stated that education is positively correlated with happiness, and happiness levels are increased if people achieve highly valued goals. Recreation, relaxation, and good food have short-term effects on enhancing happiness.

Connectedness to nature refers to an individual's emotional bond with the natural world. It is a constant state that encompasses cognitive, affective, and experiential symbiotic features,

which reflect a sustained awareness of the interrelation between oneself and nature through consistent attitudes and behaviours. The interrelation occurs as a continuum, including information as well as experience. Therefore, nature-connectedness is not only about exposure to nature, but it involves being aware of one's surroundings and understanding one's relationship to those natural surroundings. Connectedness to nature has a positive impact on human well-being, happiness, and health. Being in nature elicits strong positive emotions, and evolutionary factors contribute to preferences towards the natural environment.

Kaplan's Attention Restoration Theory states that humans are more likely to respond positively to natural environments than urban environments due to the cognitive restorative effect. Adults who moved to greener residential areas experienced higher well-being, supporting the restorative effects of the natural environment. The Psycho-physiological stress reduction framework suggests that exposure to the natural environment can aid in stress reduction by reducing negative affect and enhancing positive emotions. Landscapes with natural elements promote pleasure and calmness and facilitate restoration from stress. Exposure to natural environments and connection to nature enhance well-being and happiness. Engaging in horticultural activities, such as gardening, improves self-esteem and overall wellness. Community gardening helps in strengthening social resilience. Natural areas improve sustained attention and promote the development of supportive relationships, which are an important protective factor for resilience. Children who have access to nature through green spaces in their schoolyards and gardens have been found to experience feelings of relaxation, peace, and calmness. They also have opportunities to feel competent and develop supportive social relationships, which are important protective factors for resilience. Additionally, being close to green areas can significantly improve an individual's emotional well-being and resilience.

Researchers in several fields have been studying the effects of nature connectedness for over two decades, and much has been learned. However, further research and exploration are

still required. The study aimed to demonstrate the benefits of connectedness to nature for mental health and encourage people to reconnect with nature.

REVIEW OF LITERATURE

Wu (2024) conducted a meta-analysis to examine the relationship between connectedness to nature and well-being for their doctoral dissertation at George Fox University. The aim was to synthesize existing research findings on this topic. Methodology involved systematically reviewing relevant literature and synthesizing effect sizes from included studies. The tools used in the included studies varied, encompassing measures of connectedness to nature and various indicators of well-being. Results of the meta-analysis are expected to shed light on the strength and direction of the relationship between connectedness to nature and well-being, providing valuable insights for future research and practical implications.

Patino et al. (2023) aimed to examine the relationship between happiness, life satisfaction, and the greenness of urban surroundings. Employing a quantitative methodology, the study utilized surveys to assess participants' levels of happiness, life satisfaction, and perceptions of urban greenness. Tools included standardized measures such as the Subjective Happiness Scale and the Satisfaction with Life Scale, as well as GIS-based assessments of urban green spaces. Results revealed a positive correlation between the greenness of urban surroundings and both happiness and life satisfaction, suggesting that access to green spaces within urban environments contributes positively to residents' subjective well-being.

Kövi et al. (2023) aimed to examine the cross-cultural validity of the Nature Relatedness Scale (NR-6) and its association with well-being. Employing a cross-sectional design, the study utilized survey methodology across different cultural contexts. The Nature

Relatedness Scale (NR-6) was employed to assess participants' connection with nature, alongside measures of well-being. The sample included University student participants ($N = 798$) from four countries (Hungary, India, South Korea, and Canada). Results suggested that the NR-6 demonstrated cross-cultural validity and revealed positive correlations between nature relatedness and well-being across diverse cultural settings, highlighting the universal significance of nature connection for enhancing well-being.

Wullenkord et al. (2023) aimed to explore the relationship between nature connectedness, cumulative stress, and different manifestations of climate anxiety, considering nature connectedness as a resilience factor and cumulative stress as a vulnerability factor. Employing a mixed-methods approach, the study utilized surveys to assess nature connectedness, cumulative stress, and various manifestations of climate anxiety. Tools included measures of nature connectedness, stress, and climate anxiety. The sample included 2052 German-speaking people. Results suggested that higher levels of nature connectedness were associated with lower levels of climate anxiety, with cumulative stress moderating this relationship, indicating the potential protective role of nature connectedness against climate-related distress.

Arola et al. (2023) conducted a systematic literature review aiming to explore the impacts of nature connectedness on children's well-being. Employing a comprehensive methodology, they analysed various studies to assess the relationship between nature connectedness and children's well-being. The review utilized diverse tools to evaluate the connection, encompassing surveys, observations, and qualitative interviews. The sample sizes varied across the reviewed studies, but collectively provided insights into the topic. Results indicated a significant positive correlation between nature connectedness and children's well-being, highlighting the importance of fostering a connection with nature in childhood for overall well-being.

Puhakka (2023) investigated the effects of outdoor adventures on emerging adults' well-being and connection with nature. The aim was to explore the potential benefits of outdoor activities on both psychological well-being and the development of a stronger bond with nature. Employing a mixed-methods approach, the study combined quantitative surveys and qualitative interviews to gather comprehensive data. Tools included standardized well-being measures and open-ended interview questions. The sample was collected from Finnish vocational students ($N = 16$). Results indicated a significant positive correlation between outdoor adventures and enhanced well-being, as well as a deeper connection with nature among emerging adults, suggesting the potential therapeutic benefits of outdoor activities on mental health and ecological consciousness.

Asmitha et al. (2023) aimed to investigate the connection between nature and young adults' mental well-being. Employing a mixed-methods approach, the study utilized both qualitative interviews and quantitative surveys to gather comprehensive data. Tools included semi-structured interview guides and standardized measures such as the Mental Well-being Scale. The sample comprises 67 young adults. Results revealed a significant positive relationship between time spent in nature and mental well-being among young adults, emphasizing the potential therapeutic effects of nature immersion on psychological health.

Wu et al. (2022) conducted a meta-analysis to explore the relationship between connectedness to nature and well-being. The aim was to synthesize findings from existing research to examine the strength and direction of this relationship. Methodology involved systematically reviewing relevant studies and extracting data on effect sizes. Tools used in the included studies varied but commonly included measures of connectedness to nature and various indicators of well-being. The meta-analysis encompassed data from numerous independent samples, with a combined sample size across studies. Results revealed a

significant positive association between connectedness to nature and well-being, suggesting that a stronger connection with nature is associated with higher levels of well-being.

Down et al. (2022) aimed to explore the impact of a short expedition on wellbeing and nature connectedness among emerging adult undergraduates. The study utilized a mixed-methods approach, combining quantitative surveys and qualitative interviews. Tools included measures of wellbeing and nature connectedness, as well as open-ended questions to capture participants' experiences. The sample size was of 54 Health and Physical Education emerging adult undergraduates. Results indicated a positive association between participation in the expedition and improvements in both wellbeing and nature connectedness among emerging adult undergraduates, highlighting the potential benefits of outdoor experiences for this demographic.

Grabowska-Chenczke et al. (2022) aimed to explore the relationship between psychological well-being and nature relatedness. Employing a quantitative methodology, the study utilized self-report measures to assess participants' psychological well-being and nature relatedness. Tools included standardized scales such as the Psychological Well-Being Scale and the Nature Relatedness Scale. Results indicated a positive correlation between nature relatedness and psychological well-being, suggesting that individuals who feel more connected to nature tend to experience higher levels of psychological well-being.

Yang et al. (2022) aimed to explore the relationship between connectedness with nature, life satisfaction, and depression among Chinese individuals residing in rural low-income households. Employing a quantitative methodology, the study utilized surveys to collect data on participants' levels of connectedness with nature, life satisfaction, and depression symptoms. Tools included standardized scales such as the Nature Relatedness Scale and the Centre for Epidemiologic Studies Depression Scale. A total of 675 individuals from Jiangsu province in China, residing in rural low-income households, took part in the

study. Results revealed that connectedness with nature was positively associated with life satisfaction and negatively associated with depression symptoms among individuals in rural low-income households, suggesting the potential role of nature connection in promoting mental well-being in disadvantaged populations.

Riddington (2022) aimed to investigate the predictive role of nature connectedness on eudaimonic well-being among K-12 teachers in urban public schools. Employing a quantitative methodology, the study utilized surveys to assess participants' levels of nature connectedness and eudaimonic well-being. Tools included standardized scales such as the Nature Relatedness Scale and measures of eudaimonic well-being. Volunteer sampling generated a final sample of 117. Results suggested that higher levels of nature connectedness predicted greater eudaimonic well-being among K-12 teachers in urban public schools, underscoring the potential benefits of nature connection for educators' overall well-being.

Bakir-Demir et al. (2021) aimed to investigate the relationship between nature connectedness, emotion regulation, and stress reduction. Employing a quantitative methodology, the study utilized self-report measures to assess participants' levels of nature connectedness, emotion regulation strategies, and perceived stress levels. Tools included standardized scales such as the Nature Connectedness Scale and the Emotion Regulation Questionnaire. One hundred and twenty-three female college students, aged between 18 and 25 years old, were part of this study. Results revealed that higher levels of nature connectedness were associated with greater use of adaptive emotion regulation strategies, which in turn contributed to reduced perceived stress levels, highlighting the potential therapeutic benefits of nature connection on emotional well-being.

Jackson et al. (2021) aimed to investigate the impact of connection to nature on adolescents' mental well-being during the COVID-19 pandemic. Employing a quantitative methodology, the study utilized surveys to assess participants' levels of connection to nature

and mental well-being indicators. Tools included standardized measures such as the Connection to Nature Index and mental health assessment scales. The sample included 624 adolescents across the United States. Results indicated a positive association between connection to nature and adolescents' mental well-being during the pandemic, highlighting the potential protective role of nature connection in times of crisis.

Bowers et al. (2021) aimed to investigate the role of nature as an ecological asset for positive youth development in rural communities. Employing a mixed-methods approach, the study utilized both quantitative surveys and qualitative interviews to gather empirical evidence. Tools included standardized measures such as the Positive Youth Development Scale and semi-structured interview guides. The samples were collected from 587 diverse South Carolina middle school students between the ages of 11 and 14 and living in predominantly low-income communities. Results revealed that exposure to nature in rural environments positively contributed to various aspects of positive youth development, emphasizing the importance of natural settings in fostering resilience, well-being, and social skills among young people.

Sadowski et al. (2020) explored the relationship between nature relatedness, mindfulness facets, and subjective well-being. The aim was to investigate whether mindfulness mediates the relationship between nature relatedness and well-being. The study employed a cross-sectional design with a sample size of 358 participants. Measures included the Nature Relatedness Scale, Five Facet Mindfulness Questionnaire, and the Subjective Well-being Scale. Results indicated that mindfulness, specifically the facets of observing and describing, partially mediated the relationship between nature relatedness and well-being, suggesting a potential role of mindfulness in enhancing subjective well-being through connection with nature.

Pritchard et al. (2020) conducted a meta-analysis aiming to explore the relationship between nature connectedness and eudaimonic well-being. Employing a comprehensive search strategy, they identified relevant studies meeting inclusion criteria. Methodology involved synthesizing effect sizes from included studies to determine the strength and direction of the relationship. Various measures of nature connectedness and eudaimonic well-being were utilized across the studies. The meta-analysis included data from 27 independent samples with a total sample size of 8,504 participants. Results indicated a significant positive association between nature connectedness and eudaimonic well-being, suggesting that greater connection with nature is linked with higher levels of eudaimonic well-being.

Nisbet et al. (2020) aimed to investigate the relationship between connectedness with nearby nature and well-being. Employing a quantitative approach, the study utilized survey methodology to collect data on participants' connectedness with nearby nature and their subjective well-being. Tools included measures of connectedness with nearby nature and various indicators of well-being. Results indicated a significant positive correlation between connectedness with nearby nature and well-being, suggesting that individuals who feel more connected to nearby nature tend to experience higher levels of well-being.

Sadowski et al. (2020) aimed to investigate the role of mindfulness facets in the association between nature relatedness and subjective well-being. Employing a quantitative methodology, the study utilized self-report measures to assess mindfulness, nature relatedness, and subjective well-being. Tools included standardized scales such as the Five Facet Mindfulness Questionnaire and the Nature Relatedness Scale. The sample included 250 university students. Results suggested that certain facets of mindfulness mediate the relationship between nature relatedness and subjective well-being, highlighting the potential

synergistic effects of mindfulness and nature connection on overall psychological well-being.

Kryazh (2019) investigated the relationship between nature connectedness and psychological well-being, with a focus on trust as a potential mediator. The study employed a quantitative approach, utilizing survey methodology to collect data on participants' nature connectedness, trust, and psychological well-being. Tools included measures of nature connectedness, trust, and psychological well-being. The sample comprised 232 Ukrainian university students. Results revealed that trust partially mediated the relationship between nature connectedness and psychological well-being, suggesting that trust plays a significant role in explaining how nature connectedness influences psychological well-being.

Huynh et al. (2019) aimed to explore the promotion of psychological well-being through connection to nature and mindfulness. Employing a quantitative methodology, the study utilized surveys to assess participants' levels of connection to nature, mindfulness, and psychological well-being. Tools included standardized scales such as the Nature Relatedness Scale, Five Facet Mindfulness Questionnaire, and Psychological Well-Being Scale. The sample included 360 participants. Results suggested that both connection to nature and mindfulness were positively associated with psychological well-being, indicating the potential benefits of incorporating nature connection and mindfulness practices into interventions aimed at enhancing mental health.

Cartwright et al. (2018) aimed to investigate the potential buffering effect of nearby nature on the relationship between low social connectedness and adult subjective well-being over the past week. Utilizing a quantitative approach, the study employed survey methodology to gather data on social connectedness, nearby nature exposure, and subjective well-being. Tools included measures of social connectedness, perceived nearby nature, and subjective well-being assessed over the previous week. The sample consisted of 3,084

adults. Results revealed that nearby nature moderated the negative impact of low social connectedness on subjective well-being over the past week, highlighting the beneficial role of nature in mitigating the adverse effects of social isolation on well-being.

Houlden et al. (2018) conducted a systematic review to examine the relationship between greenspace and the mental well-being of adults. The aim was to assess the impact of greenspace exposure on various aspects of mental health. Employing a comprehensive methodology, the study included various types of research designs such as longitudinal studies, cross-sectional surveys, and qualitative analyses. Tools used in the reviewed studies included self-report measures, interviews, and observations. The sample size varied across the studies included in the review. Results indicated a consistent positive association between greenspace exposure and improved mental well-being among adults, suggesting the potential therapeutic benefits of green environments for psychological health.

Olivos et al. (2017) investigated the relationship between self, nature, and well-being, focusing on sense of connectedness and environmental identity as determinants of quality of life. Employing a qualitative methodology, the authors analysed narratives and conducted interviews to explore individuals' experiences and perceptions. Tools included semi-structured interviews and thematic analysis. The sample size was not specified due to the qualitative nature of the study. Results revealed that a strong sense of connectedness with nature and a well-defined environmental identity contribute positively to individuals' quality of life, underscoring the importance of these factors in promoting well-being.

Huynh (2017) aimed to explore the roles of connection to nature, mindfulness, and distress in relation to psychological well-being. Employing a quantitative methodology, the study utilized surveys to assess participants' levels of connection to nature, mindfulness, distress, and psychological well-being. Tools included standardized scales such as the Nature Relatedness Scale, Five Facet Mindfulness Questionnaire, and measures of distress

and psychological well-being. The sample included 276 graduate and undergraduate students from a Midwestern university. Results indicated that higher levels of connection to nature and mindfulness were associated with lower levels of distress and higher psychological well-being, highlighting the importance of these factors in promoting mental health.

METHODOLOGY

Aim

To examine the relationship of Nature-Connectedness with Subjective Happiness and Resilience.

Research Objective

- To identify a relationship between connectedness to nature and subjective happiness.
- To identify a relationship between connectedness to nature and resilience.

Hypothesis

- *Hypothesis 1:* There is a significant relationship between connectedness to nature and subjective happiness.
- *Hypothesis 2:* There is a significant relationship between connectedness to nature and resilience.

Sample

Snowball sampling has been employed in this study to select the sample. This method is a non-probability sampling technique where the researcher identifies potential participants who meet

the required eligibility criteria, and then these participants further identify their friends and acquaintances who also meet the eligibility criteria and can participate in the research study. In order to participate in this research, the participants must fall within the age range of 18-26 years. The sample size is comprised of 132 participants, all of whom are individuals currently residing in various states of India and have received education till at least the 12th standard. Data from the samples was collected through a sample survey. Sample survey refers to the process of taking a sample from a population to study the prevalence and relationships of psychological variables. The survey was conducted using Google Forms.

Design

For this study, a correlational research strategy has been used. When a researcher gathers two or more sets of data from the same sample in order to ascertain the link between the two following sets of data, they employ a correlational technique. Pearson product-moment correlation was used to calculate the association between resilience and closeness to nature, as well as the relationship between resilience and subjective happiness. As a non-experimental approach, correlational analysis is not suitable for determining cause and effect correlations between variables. This study looked at the connection between resilience and being linked to nature, as well as the relationship between those two factors and subjective happiness. There was no manipulation of any of the variables.

Measures

The following scales were used with the participants:

Connectedness to Nature Scale (CNS): Mayer and Frantz (2004) created this self-report measure. Participants are asked to answer on a 5-point scale (1 being strongly disagree, and 5 being strongly agree) to the 14 items on the test. The scale's components are designed to

gauge a person's emotional and sensory ties to the natural world. The psychometric properties of the scale were also tested by the scale's developers: validity was established by correlating the CNS with the New Environmental Paradigm (NEP), which produced a coefficient of 0.52, and three lifestyle indices, all of which were significant. Reliability was tested using the test-retest method, with coefficients ranging from 0.82 to 0.84.

Subjective Happiness Scale (SHS): It is a 4-item self-report measure that evaluates an individual's overall happiness based on their subjective assessment. Developed by Lyubomirsky and Lepper in 1997, the scale uses a 7-point Likert-type scale, with scores ranging from 1 to 7, where higher scores indicate greater happiness. The scale has been proven to be reliable and valid. The internal consistency of the scale was assessed using Cronbach's alpha, and the values for the 4 items ranged between 0.79 and 0.84. The test-retest reliability was measured using values ranging from 0.55 to 0.99 over an interval from three weeks to one year. The validity of the scale was determined by assessing convergent validity, which ranged from 0.52 to 0.72 between the SHS and other happiness measures, as well as correlations with related constructs of self-esteem and optimism, ranging from 0.36 to 0.60. Discordant validity was also examined. To check the validity of the scale, the developers examined the correlation between self-reports and other reports and found substantial agreement between self-other ratings on this scale, ranging from 0.41 to 0.66.

Brief Resilience Scale (BRS): It is a scale developed by Smith, Dalen, Wiggins, Tooley, Christopher and Bernard (2008). It consists of six items that aim to evaluate the resilience of respondents in terms of their ability to recover from stress. Respondents are required to rate their level of agreement to each item using a 5-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree). The internal consistency of the BRS is good (with

Cronbach's alpha ranging from 0.80 to 0.91). To determine its reliability, the test-retest method was used, which yielded a range of 0.69 (for one month) to 0.62 (for three months). Convergent validity was established through the correlation between the BRS and personal characteristics, social relations, coping, and health outcomes. Positive correlations were found between the BRS and resilience measures, optimism, purpose in life, social support, active coping, positive reframing, as well as health outcomes such as positive affect and the number of exercise days per week.

All 3 scales are suitable for use with adults.

Procedure

Initially, a Google form was created that included the Connectedness to Nature Scale, Subjective Happiness Scale, and Brief Resilience Scale items along with a few standard demographic questions. The researchers also wrote a cover letter outlining the prerequisites for participation, additional information, and the goal of the study. Prospective replies were then sent a link to this form along with a note requesting them to spread the word about it. The survey was completed by those who consented to participate, and their answers were noted. These answers were then graded and subjected to statistical analysis. Data was analysed statistically using SPSS version 20. The statistical analysis served as the basis for the interpretations.

RESULTS

The data has been analysed through descriptive and inferential statistics. The results have been divided into 2 parts. The analysis is divided into two parts: descriptive statistics and inferential statistics. The table below summarizes the mean and standard deviation of the CNS, SHS, and BRS scores for the present sample.

Table 1*Mean and Standard Deviation for the CNS, SHS, and BRS scores of the sample.*

Scale	Sample Size	Mean	Standard Deviation
CNS	132	3.97	0.49
SHS	132	4.93	1.07
BRS	132	3.24	0.74

From Table 1, it can be inferred that the mean scores of all 3 scales fall within the average range for the present sample.

Hypothesis 1 and 2 were tested by computing the Pearson's product-moment correlation coefficient between the CNS and the SHS scores of the samples. For the computation of parametric statistics such as Pearson's product-moment correlation coefficient, the population from which the sample has been drawn should be normally distributed. A two-tailed Person's product-moment coefficient test was conducted to examine the relationship between CNS and SHS, CNS and BRS.

Table 2*Summary of the correlation coefficient of CNS and SHS, CNS and BRS.*

Variables	CNS	SHS	BRS
CNS		0.33**	0.33**
SHS			
BRS			

From table 2, it can be inferred that a significant positive relationship exists between connected to nature and subjective happiness, connectedness to nature and resilience ($r = 0.33$, $p < 0.001$)

Thus, hypothesis 1, stating, "There a significant relationship between connectedness to nature and subjective happiness" has been accepted at 0.001 level of significance.

Hypothesis 2, stating, "There is a significant relationship between connectedness to nature and resilience has been accepted at 0.001 level of significance.

DISCUSSION

The purpose of the study is to examine the relationship of Nature-Connectedness with Subjective Happiness and Resilience. The relationship between nature-connectedness, subjective happiness, and resilience is a topic of growing interest in psychological research. Nature-connectedness refers to an individual's sense of connection, belonging, and appreciation for nature. Nature is crucial for human survival and prosperity, as it has provided humans with abundant resources to adapt, survive and flourish. Studies suggest that humans experience more positive emotions in areas with vegetation, water and panoramic views. The importance of nature goes beyond just providing resources for a sustainable life, as it also plays a significant role in regulating our overall health. Research has found that nature connectedness is essential for efficient physical and cognitive functioning, to the extent that it has been proposed as a basic psychological need. This study aims to investigate the relationship between connectedness to nature and subjective happiness, as well as connectedness to nature and resilience. Subjective happiness relates to an individual's overall sense of well-being and satisfaction with life. Happiness has been a topic of interest among researchers for a significant amount of time. Modern Western psychology has emphasized a post-materialistic view of happiness, which focuses on pleasure, satisfaction, and the meaning of life. "Happiness is a

positive emotional state that is subjectively defined by each individual.” Studies analysing happiness measures have revealed two components: affective and cognitive. The affective component is also known as the "hedonic level" and refers to the emotional experience of positive emotions such as joy, elation, and contentment. While resilience pertains to one's ability to adapt and bounce back from adversity. Resilience has been a topic of interest since the mid-20th century, referring to the ability to bounce back or recover from stress. Resilience is a complex concept that should be differentiated from related terms such as “thriving,” “adaptation,” and “resistance.” Thriving refers to achieving superior functioning after a stressful event, while adaptation refers to changes made by an individual while adjusting to a new situation. Resistance implies no decrease in functioning during a period of stress. Seven common characteristics of resilient people include calm, innovative, and non-dogmatic thinking, decisive action, tenacity, interpersonal connectedness, honesty, self-control, and optimism combined with a positive perspective on life.

Studies have shown that mindfulness mediates the relationship between nature relatedness and well-being (Sadowski, I., et.al., 2020). The aim was to investigate whether mindfulness mediates the relationship between nature relatedness and well-being. The study employed a cross-sectional design with a sample size of 358 participants. Measures included the Nature Relatedness Scale, Five Facet Mindfulness Questionnaire, and the Subjective Well-being Scale. Results indicated that mindfulness, specifically the facets of observing and describing, partially mediated the relationship between nature relatedness and well-being, suggesting a potential role of mindfulness in enhancing subjective well-being through connection with nature. A study by Down et al. (2022) aimed to explore the impact of a short expedition on wellbeing and nature connectedness among emerging adult undergraduates. The study utilized a mixed-methods approach, combining quantitative surveys and qualitative interviews. Tools included measures of wellbeing and nature connectedness, as well as open-

ended questions to capture participants' experiences. The sample size was of 54 Health and Physical Education emerging adult undergraduates. Results indicated a positive association between participation in the expedition and improvements in both wellbeing and nature connectedness among emerging adult undergraduates, highlighting the potential benefits of outdoor experiences for this demographic.

The present study found a significant relationship between connectedness to nature and subjective happiness and also between connectedness to nature and resilience among adults. The statistical analyses of these relationships resulted in positive correlation coefficients, contributing to the conclusion that both of these relationships are significant and positive. In other words, the findings of this study suggest that individuals who are more connected to nature would also be expected to report higher subjective happiness and resilience levels. Similarly, individuals with less connection to nature would likely report lower levels of subjective happiness and resilience. These findings align with previous research in this area.

Even though connectedness to nature has a significant and positive correlation with subjective happiness and resilience, certain other factors are also capable of contributing in an equal manner to the level of an individual's overall life satisfaction. The review of literature also suggests that there are multiple sources of happiness and resilience. The levels of happiness and resilience in one's life are an amalgamation of the different sources.

IMPLICATIONS

Understanding the relationship between nature-connectedness, subjective happiness, and resilience holds significant implications for both individual well-being and broader

environmental policies. As research suggests a positive correlation between nature-connectedness and subjective happiness, promoting engagement with nature could serve as a viable strategy for enhancing mental health and overall life satisfaction. Moreover, recognizing the role of nature in fostering resilience implies that interventions aimed at strengthening connections with the natural world could contribute to individuals' ability to cope with adversity and bounce back from challenging situations. These findings underscore the importance of incorporating nature-based activities and environmental education into mental health interventions and educational curricula to promote holistic well-being.

LIMITATIONS

This study has some limitations. Data has been collected using a non-probability sampling method (i.e., snowball sampling). This means that the sample was not randomly drawn but dependent on the respondents originally selected by the researchers. Hence, the sample was not completely representative of the population and this can affect the generalizability of the results. Further, it might have happened that some respondents decided to participate in the study because they already felt a connection to nature and were curious about the study, thus, increasing the possibility of occurrence of bias. The study is only open to individuals who are literate and fluent in English, as the survey instructions and questions are written in English. Additionally, participants must have internet access as the data collection is carried out using Google Forms. Lastly, this study followed a correlational design, and thus, could only reveal the existing relationships between the variables under consideration. "It does not provide any conclusive reason for the existence of the relationship between connectedness to nature and subjective happiness or connectedness to nature and resilience. Nor does it state that changes in either variable are responsible for changes in the other variable." Researches

on similar interventions should be encouraged so that everyone can benefit from the immense healing properties offered by nature.

CONCLUSION

From this study, it can be concluded that a positive correlation exists between connectedness to nature and subjective happiness and connectedness to nature and resilience. Being connected to nature and having adequate exposure to the natural environment are positively related to happiness and resilience. In addition to these factors, other sources such as marriage, education, personality traits, and so on also affect the levels of subjective happiness and resilience. Thus, connectedness to nature is not the sole predictor of subjective happiness and resilience. Since this study is correlational in nature, no cause-and-effect relationship between connectedness to nature and subjective happiness or connectedness to nature and resilience could be drawn. Further researches on implementing nature-based interventions should be encouraged so that the healing properties of nature can be utilized.

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