

Reshaping our Psyche: Establishing Closeness to Nature ensures Well-Being

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Abstract

The objective of the present study was to analyse the relationship between relatedness to nature and its impact on one's mental health and psychological well-being. This study involved relation to nature as the independent variable and measures of mental health and psychological well-being as the dependent variables. A two-group design was followed for this study wherein the NR-6 scale was employed as a screening tool to divide the obtained sample (N= 110) into two groups: group 1 (n= 19) included those who scored low on nature relatedness while group 2 (n= 91) included those who scored high on the same. The obtained results were analyzed using descriptive statistical techniques, mainly percentage analysis. Findings indicated that a higher degree of relatedness to one's natural environment and regular exposure to greenery leads to a high level of overall psychological well-being and promotes good mental health. Future implications and limitations were also suggested.

Keywords: Anxiety, Depression, Mental health, Nature Relatedness, Psychological well-being, Stress

1. Introduction

The hustle and bustle of modern life coupled with commoditization and commercialization of every little thing has confined people to their glorified, concrete jungles. Jam-packed roads cause stuffy traffic, smoke exhausts choke the air and gigantic, glass buildings dot the landscape of India's most sought after metropolitan cities. As our lives become more modernized and replete with an abundance of technology with every passing decade, the fundamental relationship between our psyche and nature becomes more and more endangered and ceases to exist. This goes against what has been propagated and substantiated throughout ancient history, principles of spirituality and the core of various religions- nature and its elements are undeniably a crucial component of the lives of mankind.

Human beings derive resources to fulfill their primary physiological and safety needs from nature. The environmental processes “regulate the conditions (e.g., temperature, water quality) in which people live, work, and play and, most fundamentally, underpin the basic processes (e.g., primary production) and cycles (e.g., carbon cycle, water cycle) that support life” [1]. Moreover, any worthwhile interaction with our natural surroundings contributes to improvement and maintenance of high levels of psychological well-being and stable mental health. The growing disconnects between humankind and nature puts everyone at the risk of impairing our physical and mental health [2]. Latest studies indicate that urbanization is a major cause of isolation from nature, preventing people from harnessing psychological benefits provided by nature [3]. The COVID-19 pandemic further augmented this disconnect by quarantining people to their homes that led to an increase in their screen time which has been proven to be quite detrimental to our physical and mental health [4].

The construct of Nature Relatedness (NR), derived from the study of environmental attitudes and behavior and psychological well-being, highlights an individual’s subjective relationship with their natural environment. It captures the magnitude of one’s connection or disconnection with the natural world. It is inspired from the bio-ophilia hypothesis propounded by Wilson in 1984 that says human beings possess an inborn need to connect with nature which ensures their survival, good health, and mental well-being [5]. Nature Relatedness, proposed by Nisbet et al (2009) [6], analyses an individual’s relationship with nature in terms of three important facets: cognition, affect and experience. It elucidates a broader interpretation of human-nature relationships that speaks of emotions and fostering a deeper understanding and appreciation of nature regardless of its aesthetic value or usefulness through one’s experiences. Thus, a high level of relatedness to nature is associated with well-being and positive health outcomes.

There are individual differences in ways through which people connect themselves to nature. Urbanites are less likely to have direct contact with natural surroundings whereas village-dwellers are exposed to foliage daily. Consequently, people might express extreme closeness to their natural environments whereas others may find it difficult to care for nature when they are significantly detached from the same [7]. Such human-nature relationships are an important factor underlying pro-environmental behavior and attitudes. This has been emphasized by Schultz who explained that the extent to which people view nature as a representation of themselves determines their degree of concern for the environment and all living things. Therefore, if a person feels significantly closer to nature, they are highly likely to be aware of how their actions impact the environment and express concern for biodiversity as well. This construct can be measured by the following available scales: Inclusion of Nature in Self Scale (Schultz, 2001), Connectedness to Nature Scale (Mayer & Frantz, 2004) and Nature Relatedness Scale (Nisbet et al, 2009) [6, 8].

Individuals derive happiness, satisfaction and purpose from their interconnectedness to nature. This is akin to the well-established construct of psychological well-being (PWB) that is the bedrock of positive mental health. Psychological well-being can be understood as a state of being happy, healthy and prosperous. It is an important indicator of one’s physical and mental health, happiness, wellness and longevity. It incorporates various broader aspects such as having high life satisfaction, a sense of meaning and purpose, good mental health and the ability to regulate stress effectively. It originates from one’s thoughts, emotions and behaviors. A person’s relationship with their natural surroundings and the amount of exposure to greenery exerts a positive, significant influence on their overall state of psychological well-being. Capaldi et al (2014) [9] conducted a meta-analysis to understand the

relationship between nature connectedness and happiness. Findings of the study showcased that individuals who have a greater connection to nature report more positive affect, life satisfaction and vitality. Moreover, the strongest association was found between happiness and inclusion of nature in self.

According to Carol Ryff, there are three components of well-being that characterize positive psychological functioning and mental health: Emotional, Psychological and Social. Here, an individual's well-being rests on three pillars of human strengths, personal striving and growth [10]. The six-factor model of psychological well-being comprises of the following: Self-acceptance, Environmental Mastery, Purpose in Life, Autonomy, Personal Growth and Positive Relations with Others. Self-acceptance refers to developing a positive attitude towards oneself and acknowledging one's positive and negative traits. Environmental Mastery refers to becoming a competent individual by developing necessary skills and abilities and creating opportunities for oneself by adapting to the changing, dynamic environment. Purpose in Life involves developing a sense of direction in life, adding meaning to our present and establishing goals for the future. Autonomy is concerned with becoming self-reliant and independent while resisting others' influence on our behavior. Personal Growth involves being open to new experiences, cultivating a growth mindset to help realize our true potential and improving ourselves over time. Lastly, Positive Relations with Others involves building warm and trusting interpersonal relationships, fostering empathy and creating a quality social support network.

Psychological well-being is stable at the baseline level; however, if an individual is exposed to stressful events in their daily life experiences, then it can exert a negative impact on their health. An individual experiencing high levels of stress is said to be in a state of poor well-being in terms of having low life satisfaction, poor mental health and inability to manage stress. Such distress can lead to serious consequences such as cardiovascular diseases, diabetes and immune system maladies [11]. Those who suffer from chronic stress are far more likely to experience psychological symptoms such as anger, mood swings, nervousness, irritability, boredom, tension, aggressiveness, hostility, poor concentration, poor memory and loss of ability to make sound decisions. Persistent stress has the potential to put vulnerable individuals at a substantially increased risk of psychological disorders such as depression, anxiety and psycho-somatic illnesses.

In contrast, a high level of psychological well-being is linked with innumerable benefits such as improved immune system functioning, increased longevity, speedy recovery from injuries and lowered risk of developing diseases, illnesses or injuries. It is also associated with better interpersonal relationships, higher productivity at work and improved performance. There are several signs of well-being such as being socially active, experiencing a sense of belongingness and social acceptance, feeling satisfied with one's current life, high self-esteem, experiencing a sense of purpose, feeling that one's life is similar to their ideal life, being independent, attaining mastery over one's skills and being physical active. Howell et al (2011) [12] examined the relationship between nature connectedness, well-being and mindfulness among undergraduates. Findings of the study concluded that there were significant associations between nature connectedness, well-being and mindfulness.

Psychological well-being also overlaps with positive mental health; thus, nature relatedness seems to play a vital role in influencing stable mood, emotional regulation and adaptive cognitive abilities. Mental health is understood as an individual's cognitive, behavioral and emotional well-being. It covers various facets of a person's life- how they think, feel, act, ergo, affecting the way a person relates to others, handles stress and makes healthy choices [13]. Mental health is just as critical as physical health to

promote a high quality of living, stability and adequate functioning in society. Mental illnesses can arise due to genetic factors, biological factors, traumatic experiences, history of abuse and family history. Soga et al (2020) [14] assessed the association between experiences with nature and mental health during the onset of COVID-19 pandemic in Tokyo, Japan. Participants (N= 3000) completed an online questionnaire survey that measured the relationship between mental health outcomes (depression, life satisfaction, subjective happiness, self-esteem and loneliness) and nature experiences (frequency of green space use and green view through windows from home). Results indicated that regular exposure to nature and green spaces was linked with decreased levels of depression, anxiety and loneliness and improved levels of self-esteem, life satisfaction and subjective happiness.

Nature impacts the very core of our being- at the neurotransmitter level. As simple as stepping outside and looking at the trees, sky, birds and clouds could help the human body in releasing neurotransmitters [15] like dopamine, oxytocin, serotonin and endorphin which attach to brain's reward centre and carry signals across the nervous system. Exposure to the natural environment acts as a stress buster since it triggers the release of happy hormones which can elevate one's mood, relieve pain and improve the sense of well-being. It also triggers a cascade of other health benefits: “reducing stress, increasing patience, increasing self-discipline, increasing capacity for attention, increasing recovery from mental fatigue or from crisis and from psycho-physiological imbalance” [1]. Browning et al (2020) [16] conducted an experiment to analyze if exposure to nature through virtual reality can enhance emotional well-being for people who cannot access green spaces. The findings depicted that nature exposure in outdoor spaces increased positive mood while they remained the same in the other treatment group. Overall, both variants of exposure to nature benefitted positive mood, increased physiological arousal and had restorative properties. Thus, it is evident that any form of interaction with nature and its living beings provides an array of benefits to our psyche and well-being.

An individual's relationship with nature and its various cognitive, affective and behavioral facets are an important predictor of their mental health that contributes to their overall psychological well-being. Regular exposure to green spaces provides relief and catharsis especially in a fast-paced, modernized society. A high level of well-being and positive mental health ensures quality of life and satisfaction; thus, it is crucial to investigate into the relationship between mankind and the environment and its all-encompassing positive impact. For the present study, young adults belonging to the age group of 18-25 years residing in India were chosen due to convenience of obtaining the sample and its relevance to the research objective. It is important to analyze the relationship between relatedness to nature and overall well-being because it contributes further to the broader understanding of promoting good physiological and mental health, nurturing pro-environmental attitudes and eco-friendly behavior. Moreover, there is a need to trace the developments of this construct in the Indian setting since a majority of the research studies have been conducted in the Western context. Therefore, in view of the above rationale, the objective of the present study is to analyze the relationship between relatedness to nature and its impact on one's mental health and psychological well-being.

2. Method

Design and Sample

A two-group design i.e., Low on Nature Relatedness Group and High on Nature Relatedness Group were utilized in the present study. The study population consisted of participants who were in the age group of 18-25 years. Purposive sampling method was used to collect the data. The sample was sorted into two

groups based on their scores on the Nature Relatedness scale-6 items (NR-6), thus, it was used as a screening tool to divide the obtained sample (N= 110) into group 1 (n= 19) which included those who scored low on nature relatedness while group 2 (n= 91) included those who scored high on the same. Thus, group 1 was labeled as “Low on NR” and group 2 was labeled as “High on NR”. Additionally, the sample comprised of 36 males and 74 females.

Tools Used

The present study employed the following tools for the purposes of screening and data collection: the NR-6 scale, DASS-21 scale and Psychological Well-being scale. The Nature Relatedness scale- 6 items (NR-6) is a self-report assessment of an individual’s connectedness to nature and their relationship with the natural environment. This scale, developed by Nisbet and Zelenski in 2013, is the shortened version of the original nature relatedness scale.

The Depression, Anxiety and Stress scale- 21 items (DASS-21) is a self-report measure of the individual’s emotional states of depression, anxiety and stress. This scale is the shortened version of the original measure developed by Lovibond and Lovibond in 1995. DASS-21 assesses the individual on three subscales: Depression, Anxiety and Stress subscales. The Cronbach’s α for this scale is 0.74.

The Psychological Well-being scale is a self-report measure of an individual’s mental well-being, happiness and satisfaction with one’s life. This scale was developed by Ryff and Keyes in 1995 and later revised by Ryff et al in 2010. This scale assesses the individual on six subscales: Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life and Self-Acceptance. The scale contains 18 items with 3 items for every subscale. The scale takes 3 to 5 minutes to complete and requires a reading level of 6th to 8th grade. The test-retest reliability for this scale ranges between 0.88 to 0.81.

Procedure

The objective of the present study was to analyze the relationship between relatedness to nature and its impact on one’s mental health and psychological well-being. The study population consisted of young adults belonging to the age group of 18-25 years residing in India. Purposive sampling method was used to collect the data. The NR-6 scale, DASS-21 scale and Psychological Well-being scale were administered to the participants through a Google form. Ethical considerations were considered. The NR-6 scale was employed as a screening tool to divide the obtained sample (N= 110) into two groups based on their scores. Thus, group 1 (n= 19) included those who scored low on nature relatedness while group 2 (n= 91) included those who scored high on the same. The responses for the scales were scored according to the guidelines provided. The data was analyzed using Statistical Package for Social Sciences (SPSS).

Data Analysis

The obtained data was subjected to a percentage analysis using Statistical Package for Social Sciences (SPSS). Percentages were calculated for every dimension of the NR-6 scale, DASS-21 scale and Psychological Well-being scale for both sample groups. The data has been graphically represented in the form of bar graphs and pie charts.

3. Results and Discussion

Table 1: Demographic Characteristics of the Participants (N=110)

	Participants (N= 110)	
Demographics	Count	Percentage
Gender		
Male	36	33%
Female	74	74%
Total	110	100%
Age		
18	18	16.36%
19	39	35.45%
20	31	28.18%
21	10	9.09%
22	6	5.45%
23	3	0.27%
24	0	0.00%
25	3	0.27%
Total	110	100%

The results of the study were analyzed using descriptive statistical techniques. Referring to table 1, it can be inferred that 67% of the sample consists of females whereas 33% are males, i.e., 74 females and 36 males in a sample of 110 participants. A majority of the participants belong to the age bracket of 18 to 21 years. Moreover, a significant portion of the sample belongs to the following regions: Delhi-NCR, Haryana and Uttar Pradesh. Lastly, participants self-reported the amount of time they spent close to nature, thus, according to the bar graph representing the amount of time participants spent close to nature, it can be understood that 50% of the sample spent less than 1 year close to nature whereas only 23.63% spent more than 5 years.

Table 2: Results of percentage analysis on the measures of NR-6 and DASS-21 scales:

DASS-21 Subscales	Nature Relatedness (NR) Groups					
	Low on NR (n=19)		High on NR (n=91)		Total	
	Count	%	Count	%	Count	%
Depression						
Normal	10	52.6%	56	61.5%	66	60.0%
Mild	2	10.5%	9	9.9%	11	10.0%
Moderate	2	10.5%	8	8.8%	10	9.1%
Severe	4	21.1%	9	9.9%	13	11.8%
Extremely Severe	1	5.3%	9	9.9%	10	9.1%
Anxiety						
Normal	9	47.4%	47	51.6%	56	50.9%
Mild	1	5.3%	11	12.1%	12	10.9%

Moderate	6	31.6%	13	14.3%	19	17.3%
Severe	2	10.5%	14	15.4%	16	14.5%
Extremely Severe	1	5.3%	6	6.6%	7	6.4%
Stress						
Normal	10	52.6%	46	50.5%	56	50.9%
Mild	1	5.3%	9	9.9%	10	9.1%
Moderate	4	21.1%	15	16.5%	19	17.3%
Severe	2	10.5%	14	15.4%	16	14.5%
Extremely Severe	2	10.5%	7	7.7%	9	8.2%
Total	19	100.0%	91	100.0%	110	100.0%

Referring to table 2, it can be gathered that a majority of participants belonging to the “High on NR” group have normal scores on the measure of DASS-21 which indicates an individual’s emotional states related to depression, anxiety and stress. 61.5% of “High on NR” group lie in the normal category of depression whereas 52.6% of “Low on NR” group fall in the same category of scores. Furthermore, 26.4% of the “Low on NR” group lies in the severe to extremely severe level of depression as compared to 19.8% of the “High on NR”. Similarly, 51.6% of the “High on NR” group has normal scores for anxiety whereas 47.4% of the “Low on NR” group scored the same. There is a minor difference between the two groups on the measure of stress- 52.6% of the “Low on NR” group and 50.5% of the “High on NR” group fall in the category of normal levels of stress. Lastly, 21% of the “Low on NR” group falls in the severe to extremely severe category of stress and 23.1% of the “High on NR” group scored the same. Again, there is a small difference between the two groups.

It can be concluded that the higher the degree of one’s connection to their natural surroundings, the less they are vulnerable to being affected by depression and anxiety. This can be substantiated by a research study which showed that constant exposure to nature and green spaces was associated with lower levels of depression, anxiety and loneliness [15]. Notably, both the groups performed similarly on the measure of stress under DASS-21. An individual’s experiences with nature may provide a temporary sense of relief that decreases the adverse impact of stressors. This can be supported by a study which found that when confounding variables such as socio-demographic factors and health-related factors were taken into consideration, the score on the measure of nature relatedness was associated with increased stress [18].

Table 3: Results of Percentage Analysis on the measures of NR-6 and Psychological Well-being scales:

Psychological Well-being Subscales	Nature Relatedness (NR) Groups					
	Low on NR (n=19)		High on NR (n=91)		Total	
	Count	%	Count	%	Count	%
Autonomy						
Low	4	21.2%	9	9.9%	13	11.8%
Moderate	9	47.4%	50	54.9%	59	53.6%
High	6	31.6%	32	35.2%	38	34.5%
Environmental Mastery						
Low	5	26.3%	12	13.2%	17	15.5%

Moderate	9	47.4%	54	59.3%	63	57.3%
High	5	26.3%	25	27.5%	30	27.3%
Self-Acceptance						
Low	5	26.3%	9	9.9%	14	12.7%
Moderate	7	36.8%	41	45.1%	48	43.6%
High	7	36.8%	41	45.1%	48	43.6%
Positive Relations with Others						
Low	1	5.3%	14	15.4%	15	13.6%
Moderate	11	57.9%	44	48.4%	55	50.0%
High	7	36.8%	33	36.3%	40	36.4%
Purpose in Life						
Low	1	5.3%	14	15.4%	15	13.6%
Moderate	11	57.9%	44	48.4%	55	50.0%
High	7	36.8%	33	36.3%	40	36.4%
Personal Growth						
Low	0	0.0%	2	2.2%	2	1.8%
Moderate	6	31.6%	29	31.9%	35	31.8%
High	13	68.4%	60	65.9%	73	66.4%
Overall Psychological Well-being						
Moderate	19	100.0%	41	45.1%	60	54.5%
High	0	0.0%	50	54.9%	50	45.5%
Total	19	100.0%	91	100.0%	110	100.0%

Referring to table 3, it can be deduced that a majority of the participants belonging to the “High on NR” group have high levels of psychological well-being that indicates an individual’s mental well-being, happiness and satisfaction with one’s life. 54.9% of the “High on NR” group has high level of overall well-being while 100.0% of the “Low on NR” group has only moderate level of overall well-being. Moreover, 45.1% of the “High on NR” group also has moderate level of overall psychological well-being. In terms of the components of psychological well-being, 35.2% of the “High on NR” group has high autonomy while 31.6% of the “Low on NR” group scored the same. 21.2% of the “Low on NR” group has low autonomy. 27.5% of the “High on NR” group has high level of environmental mastery and 59.3% has moderate level. On the other hand, 26.3% of the “Low on NR” group has high level of environmental mastery and 47.4% has moderate level. There is a small difference between the two groups in terms of high level of environmental mastery.

Both groups have a similar percentage of moderate and high levels of self-acceptance. Notably, 9.9% of the “High on NR” group has a low level of self-acceptance and 26.3% of the “Low on NR” group scored the same. There is a small difference between the two groups in terms of high level of positive relations with others- 36.3% of the “High on NR” group and 36.8% of the “Low on NR” group. Interestingly, 15.4% of the “High on NR” group has low level of positive relations with others while only 5.3% of the “Low on NR” group scored low. Again, there is a slight difference between the two groups in terms of high level of purpose in life- 36.3% of the “High on NR” group and 36.8% of the “Low on NR” group. 15.4% of the “High on NR” group has low level of purpose in life while only 5.3% of the “Low on NR”

group scored low. In terms of personal growth, 65.9% of the “High on NR” group scored high while 68.4% of the “Low on NR” group also scored high. There is a minute difference between the two groups in relation to their moderate level of personal growth- 31.9% of the “High on NR” group and 31.6% of the “Low on NR” group.

Therefore, it can be concluded that a high degree of connection to one’s natural surroundings ensures moderate to high levels of overall psychological well-being. Nature relatedness has varying impact on the six constituents of psychological well-being. This can be substantiated by a study which depicted that there was a significant association between nature connectedness and well-being [13]. Capaldi et al (2014) [10] showcased that individuals who have a greater connection to nature report more positive affect, life satisfaction and vitality. It has a positive and significant impact on an individual’s levels of autonomy and environmental mastery. Referring to table 3, it can be understood that relatedness to nature does not significantly impact an individual’s levels of self-acceptance, positive relations with others, purpose in life and personal growth since both groups either scored similarly on such measures or indicated a slight, negligible difference between their scores. This can be further supported by a study which found that connectedness to nature had a small effect size for purpose in life, self-acceptance, positive relations with others, autonomy and environmental mastery [2].

The limitations of this research study are as follows: this study utilized a non-probability sampling technique called purposive sampling which made it difficult to form generalizations for rest of the population. The sample size is small due to which the chosen sample is not representative of the population at large. Additionally, the sample sizes of both groups are unequal. Responses were collected only from participants belonging to the age group of 18-25 years, thus, limiting the different age groups that could be studied. The sample did not adequately represent the geographical diversity of the population. Participants could have been influenced to give socially desirable answers to the questionnaire items. Lastly, the study could have employed triangulation of research methods and statistical techniques.

4. Conclusion

The objective of the present study was to analyze the relationship between relatedness to nature and its impact on one’s mental health and psychological well-being using a quantitative approach. After analyzing the results of the study and scores of the questionnaires, it was found that the "High on NR" group had normal scores for depression and anxiety and high scores for two dimensions of the psychological well-being scale- autonomy and environmental mastery. Both groups either scored almost the same or had a small difference between their results for the measures of stress, self-acceptance, purpose in life, positive relations with others and personal growth. Remarkably, a significant majority of participants belonging to the "High on NR" group had a high level of overall psychological well-being. This depicts that a higher degree of relatedness to one's natural environment and regular exposure to greenery leads to a high level of overall psychological well-being and promotes good mental health. Therefore, it can be concluded that a high level of relatedness to nature has a significant positive impact on an individual’s mental health and psychological well-being.

Future implications for further research studies are: the sample size should be larger and selected through random sampling to be more representative of the population and the sample size of groups should be somewhat equal. Studying the relationship between relatedness to nature and one’s mental health and psychological well-being generates awareness among the public and helps motivate people to

spend more time in touch with their natural surroundings and reap its innumerable benefits. Moreover, the findings of similar studies can be utilised to devise ways to inculcate pro-environmental attitudes amongst individuals and strengthen their commitment towards creating a sustainable and green world.

5. References

1. Russell, R., Guerry, A. D., Balvanera, P., Gould, R. K., Basurto, X., Chan, K. M., Klain, S., Levine, J., & Tam, J. (2013). Humans and Nature: How Knowing and Experiencing Nature Affect Well-Being. *Annual Review of Environment and Resources*, 38(1), 473–502.
2. Pritchard, A. E., Richardson, M., Sheffield, D., & McEwan, K. (2020). The Relationship Between Nature Connectedness and Eudaimonic Well-Being: A Meta-analysis. *Journal of Happiness Studies*, 21(3), 1145–1167.
3. United Nations Environment Programme. (n.d.). Caring for the environment helps to care for your mental health. UNEP. <https://www.unep.org/news-and-stories/story/caring-environment-helps-care-your-mental-health>
4. Pandya, A., & Lodha, P. (2021). Social Connectedness, Excessive Screen Time During COVID-19 and Mental Health: A Review of Current Evidence. *Frontiers in Human Dynamics*, 3.
5. Wilson, E. O. (1984). *Biophilia*. Cambridge: Harvard University Press.
6. Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2009). The Nature Relatedness Scale. *Environment and Behavior*, 41(5), 715–740.
7. Nisbet, E. K., & Zelenski, J. M. (2013). The NR-6: a new brief measure of nature relatedness. *Frontiers in Psychology*, 4.
8. Martin, L. M., White, M. P., Hunt, A., Richardson, M., Pahl, S., & Burt, J. A. (2020). Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours. *Journal of Environmental Psychology*, 68, 101389.
9. Capaldi, C. A., Dopko, L. L. R., & Zelenski, J. M. (2014). The relationship between nature connectedness and happiness: a meta-analysis. *Frontiers in Psychology*, 5.
10. Baumgardner, S., & Crothers, M. (2014). *Positive psychology*. Pearson Education India
11. Chandola, T., Britton, A., Brunner, E. J., Hemingway, H., Malik, M., Kumari, M., Badrick, E., Kivimäki, M., & Marmot, M. (2008). Work stress and coronary heart disease: what are the mechanisms? *European Heart Journal*, 29(5), 640–648.
12. Howell, A. J., Dopko, R. L., Passmore, H., & Buro, K. (2011). Nature connectedness: Associations with well-being and mindfulness. *Personality and Individual Differences*, 51(2), 166–171.
13. *About Mental Health*. (n.d.). <https://www.cdc.gov/mentalhealth/learn/index.htm>
14. Soga, M., Evans, M. J., Tsuchiya, K., & Fukano, Y. (2021). A room with a green view: the importance of nearby nature for mental health during the COVID-19 pandemic. *Ecological Applications*, 31(2).
15. Frontiers. (2019, April 4). Stressed? Take a 20-minute 'nature pill': Just 20 minutes of contact with nature will lower stress hormone levels, reveals new study. *ScienceDaily*. Retrieved January 5, 2023 from www.sciencedaily.com/releases/2019/04/190404074915.htm
16. Browning, M. H. E. M., Mimnaugh, K. J., Gobster, P. H., Laurent, H. K., & LaValle, S. M. (2020). Can Simulated Nature Support Mental Health? Comparing Short, Single-Doses of 360-Degree Nature Videos in Virtual Reality With the Outdoors. *Frontiers in Psychology*, 10.

17. Dean, J., Shanahan, D. F., Bush, R. K., Gaston, K. J., Lin, B. B., Barber, E. W., Franco, L., & Fuller, R. A. (2018). Is Nature Relatedness Associated with Better Mental and Physical Health? *International Journal of Environmental Research and Public Health*, 15(7), 1371.

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