

THE RELATIONSHIP BETWEEN NATURE CONNECTEDNESS, BODY IMAGE PERCEPTION, AND SELF ESTEEM IN OBESE AND OVERWEIGHT INDIVIDUALS.

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Abstract

Background -Overweight individuals face unique challenges related to their body image and self-esteem, which can impact their overall health (Jutel,2006)Nature connectedness can serve as a powerful tool in promoting positive body image and enhancing self-esteem. Nature connectedness refers to the psychological and emotional relationship that individuals have with the natural world. Body image refers to an individual's perceptions about their own body, including its size, shape, and appearance. Self-esteem is a person's overall sense of their own worth, value, and confidence in themselves.

Objective- To study the relationship between nature connectedness, body image perception and self-esteem in obese and overweight individuals.

Methodology- Research design was descriptive correlational design. The sample of 200 students were selected by using purposive sampling method, as per inclusion and exclusion criteria. Measures used were the nature connectedness scale, the body image questionnaire and the Rosenberg Self-esteem scale. After the data was collected, it was analysed by using Descriptive (mean and standard deviations) and inferential (Pearson correlations) statistics with the help of Statistical Package for Social Sciences software.

Result- The results shows that there is a positive correlation between the nature connectedness body image perception and self-esteem in the individuals with obesity and overweight. Self-esteem and body image perception are also found to be positive correlated.

Conclusion-This study depicts that nature connectedness play a vital role in fostering positive body image and self-esteem among overweight individuals.

Key Words: Nature connectedness, body image perception, and self-esteem

Introduction

Nature connectedness refers to the psychological and emotional relationship that individuals have with the natural world. It encompasses the sense of belonging, connection, and identification with nature and the recognition of interdependence between humans and the environment. Nature connectedness involves not only physical interactions with nature but also a deep appreciation, understanding, and respect for its inherent value and the role it plays in our lives. Humans have evolved in close connection with nature, relying on its resources for survival and drawing inspiration from its beauty and complexity. However, with the rapid pace of urbanization and modernization, many individuals have become disconnected from nature. This disconnection has been linked to various negative consequences for both individuals and the environment, including decreased well-being, increased stress, and a reduced sense of environmental stewardship (Rachel Kaplan and Stephen Kaplan - 1980s, Richard Louv -2005, Terry Hartig and colleagues -1990s)

Body image refers to an individual's thoughts, feelings, and perceptions about their own body, including its size, shape, and appearance. It is influenced by various factors, such as societal standards of beauty, media representations, cultural values, personal experiences, and internal beliefs and attitudes. (Thomas F.Cash 1980, Sarah K. Murnen) Positive body image is characterized by acceptance, satisfaction, and appreciation for one's body. Individuals with a positive body image have

a realistic and healthy perception of their bodies, emphasizing self-acceptance, self-care, and body functionality rather than conforming to societal ideals. They embrace body diversity, recognizing that bodies come in various shapes, sizes, and forms, and value their bodies for their inherent worth and capabilities. (Tracy L. Tylka 2000, Sarah McMahon 2010, Marita P. McCabe 2000, Eric Stice 1990, Jessica Alleva 2010) Negative body image, on the other hand, involves dissatisfaction, criticism, and negative thoughts about one's body. Individuals with negative body image may feel inadequate, ashamed, or self-conscious about their physical appearance. They may engage in body comparison, striving to meet unattainable beauty standards and feeling discontented with their own bodies as a result. Negative body image can have significant impacts on mental and emotional well-being. It is associated with lower self-esteem, higher levels of depression, anxiety, and disordered eating behaviors. Negative body image can also lead to body dysmorphia, a distorted perception of one's own body, and can interfere with overall quality of life and self-confidence. (Thomas F. Cash 1980, Sarah Grogan 2000). A natural environment can expose individuals to a different set of beauty standards. In natural settings, there is often a greater emphasis on health, vitality, and appreciation of natural beauty, which may lead to more positive body image perceptions that prioritize overall well-being over unrealistic ideals. Nature connectedness can make individuals to prioritize values and standards that are more aligned with the natural world, which may contrast with unrealistic beauty ideals propagated by society and the media.

An individual's body image may affect his/her self-esteem. When someone has a positive body image and feels comfortable and confident in their own body, it can contribute to higher self-esteem. Feeling good about one's appearance can boost self-confidence and overall self-worth. Self-esteem refers to an individual's overall evaluation and feelings of self-worth, self-acceptance, and self-confidence. It encompasses how individuals perceive and value themselves, including their abilities, qualities, and achievements. Self-esteem plays a crucial role in shaping one's thoughts, emotions, behaviours, and overall well-being. (Evangelos C.Theodorakis, and YannisChroni2014) Having a healthy self-esteem is important for various aspects of life. It affects how individuals approach challenges, handle stress, form relationships, and make decisions. Individuals with high self-esteem generally have a positive outlook on themselves and their abilities, which allows them to navigate life with confidence and resilience.

Overweight individuals may often face unique challenges related to their body image and self-esteem, which can impact their overall health and well-being. Understanding how nature connectedness influences these factors can provide insights into potential interventions to improve their mental and emotional health. Nature has been associated with positive psychological outcomes, including enhanced self-esteem and body image perception. Examining these relationships in overweight individuals may reveal opportunities to harness the benefits of nature to improve their self-esteem and body image. Studying this area can empower overweight individuals by demonstrating that they have the potential to improve their self-esteem and body image through nature-based experiences. The relationship between nature connectedness, body image, and self-esteem among overweight individuals is multifaceted and warrants attention. Overweight individuals may face societal pressures and stigmatization, leading to negative body image perceptions and lower self-esteem. However, nature connectedness can serve as a powerful tool in promoting positive body image and enhancing self-esteem. Therefore this study is planned with the following objective and hypothesis.

Objectives

1. To study the relationship between nature connectedness, body image perception and self-esteem in obese and overweight individuals.
2. To study the Nature connectedness as predictor of body image perception and self- esteem

Hypotheses

After going thorough inspection of the literature following hypotheses were formulated-

1. There will be positive correlation between good Nature Connectedness and body image perception in the individuals with Obesity and overweight
2. There will be positive correlation between scores of Self-esteem and nature connectedness of the individuals with Obesity and overweight.

3. The Nature connectedness will be a significant predictor of body image perception and self-esteem.

Method

Participants

The sample was constituted of 200 male and female. Sample were selected by using purposive sampling method. Inclusion and exclusion criteria of the sample selection are given below:

Inclusive criteria

- Individuals between the age group of 18-30 years.
- Individuals who are obese or having high weight as per BMI range.
- Participants who can read and write English.

Exclusive criteria

- Individuals already undergoing any therapy for weight management.
- Individuals suffering from any serious physical and psychological problems.
- Low socio-economic status.
- Individual who are part of any spiritual group on regular basis

Research Design

Descriptive correlational research design.

Instruments

The Connectedness to Nature Scale(By- F. Stephan Mayer, Cynthia McPherson Frantz, 2004): measures to what degree people feel part of nature. Mayer and Frantz conducted five studies when they introduced the CNS. The CNS is a reliable and valid scale and internal consistency is $\alpha=.84$.

Rosenberg Self Esteem Scale(By- RosenBerg M, 1965): 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be uni-dimensional. All items are answered using a 4-point likert scale format ranging from strongly agree to strongly disagree.

The Body- Image Questionnaire (By-Michele Koleck, MarilouBruchon-Schweitzer, FlorenCecousson-Gélie and Bruno quintard): Body image questionnaire is a measure of general body satisfaction. It consists of 19 bipolar items of opposite meaning where participants need to rate the frequency of their body feelings on all of the dimensions listed. There is no time restriction, but the questionnaire takes approximately 5 minutes to complete. The instrument demonstrates good internal consistency and test-retest reliability.

Procedure

The sample of 200 students were selected by using purposive sampling method, as per inclusion and exclusion criteria. Rapport was established with the participants. They were made comfortable and relaxed and assured that their personal information would kept confidential. They were given details about research, and informed consent was taken from participants to use the data for research purpose. The nature connectedness scale, the body image questionnaire and the Rosenberg Self-esteem scale were given to the participants to mark their responses in one to one manner. After the data was collected, it was analysed by using Descriptive (mean and standard deviations) and inferential (Pearson correlations) statistics with the help of Statistical Package for Social Sciences software.

Results

The aim of this study was to study the relationship between nature connectedness, body image perception and self-esteem in obese and overweight individuals. With the help of SPSS-20 the scores on nature connectedness, body image perception, and self-esteem among obese and overweight individuals was analysed. The findings are described as follows-

Table 1 – Summary of Descriptive Analysis of BMI, Nature Connectedness, Body image, Self Esteem

Variables	Mean (N=200)	Std. Deviation	Std. Error
Body Maas Index	30.64	3.018	.21

Nature Connectedness	43.49	8.24	.58
Body Image	54.58	7.72	.54
Self Esteem	13.74	4.30	.30

The objective of this study was to see the relationship between Nature connectedness, Body image & self-esteem. Pearson correlation calculated to fulfil this objective. Obtained result is given below:

Table 2 – Summary of Correlation Analysis for *Relationship between Nature connectedness, Body image & self esteem*

	Body Maas Index	Nature Connectedness	Body Image	Self Esteem
Body Maas Index	1	.082	-.111	.028
Nature Connectedness	.082	1	.739**	.812**
Body Image	-.111	.739**	1	.665**
Self Esteem	.028	.812**	.665**	1

Note ** Correlation is significant at .01 level

The results shows that there is a positive correlation between the nature connectedness body image perception and self-esteem in the individuals with obesity and overweight. Self-esteem and body image perception are also found to be positive correlated. No significant correlation is found between BMI with nature connectedness body image perception and self-esteem.

Discussion

The main objective of the research was to the study the relationship between the Nature connectedness, Body image perception and Self-esteem of obese and overweight individuals. The study was conducted on 200 participants who are obese or overweight. The data was collected as per the sampling criteria. In this study the connectedness of nature scale (ByF.Stephan Mayer, Cynthia McPherson Frantz, 2004) measured to what degree people feel part of nature. Body image questionnaire (By-Michele Koleck, MarilouBruchon-Schweitzer, FlorenCecousson-Gélie and Bruno quintard) measured general body satisfaction. Rosenberg selfesteem scale By- RosenBerg,M.(1965) measured both positive and negative feelings about the self. The first objectives of the study was to measure the level of Nature Connectedness of the individuals with Obesity and overweight. Second objective was to measure the body image Perception of the individuals with Obesity and overweight. Third objective was to measure the level of self-esteem of the individuals with Obesity and overweight. The fourth objective was to study the relationship between Nature Connectedness and body image perception in the individuals with Obesity and overweight, The fifth objective was to study the relationship between Nature Connectedness and Self- esteem of the individuals with Obesity and overweight and the final objective was to study the Nature connectedness as predictor of body image perception and self- esteem. While the data was analyzed to see the level of nature connectedness in the sample it was found that nature connectedness was high in obese and

overweight individuals On the basis of result of the data it was concluded that there is significant difference and positive correlation between nature connectedness body image perception and self-esteem in obese and overweight individuals. It was proved that the level of Nature Connectedness of the individuals 40 with Obesity and overweight was quite low, the score of body image Perception of the individuals with Obesity and overweight Individuals was low, The score of self-esteem of the individuals with Obesity and overweight Individuals was also low, there is a positive correlation between scores Nature Connectedness and body image perception in the individuals with Obesity and overweight, there will be positive correlation between scores of Self-esteem and nature connectedness of the individuals with Obesity and overweight. But it was not proved from this study that the Nature connectedness is a significant predictor of body image perception and self- esteem. All the hypotheses which were formed based on the objectives are proved except of that the Nature connectedness is a significant predictor of body image perception and selfesteem. Researches also show the similar findings. Research of (MigleBaceviciene , Rasa Jankauskiene , Viren Swami (2021)), (Bratman et al. (2015)) has demonstrated a positive association between nature connectedness and body image perception. Spending time in natural environments and feeling connected to nature may promote a more holistic and appreciative perspective of the body, reducing the emphasis on appearance-based evaluations. Nature connectedness can foster acceptance, self-compassion, and a shift in focus towards the overall well-being of the body rather than societal ideals. This positive relationship suggests that nature connectedness may serve as a protective factor against negative body image perceptions. The Studies Diedrichs et al. (2017), Vogel et al. (2018) have consistently shown that nature connectedness is also positively associated with self-esteem. The experience of being in natural environments and feeling connected to nature has been linked to increased self-worth, self confidence, and overall psychological well-being. Nature offers a space for individuals to engage in meaningful and positive experiences, which can enhance their sense of competence, purpose, and belonging. This, in turn, contributes to higher levels of self-esteem. Body image perception 41 and self-esteem are closely intertwined. Negative body image perceptions are often associated with lower levels of self-esteem, as individuals may internalize societal ideals and standards that negatively impact their overall self-worth. On the other hand, individuals with positive body image perceptions tend to have higher levels of self-esteem, as they possess a more accepting and confident view of themselves. Nature connectedness may influence both body image perception and self-esteem through several mechanisms.

References

- Bratman, G. N., Hamilton, J. P., & Daily, G. C. (2012). The impacts of nature experience on human cognitive function and mental health. *Annals of the New York Academy of Sciences*, 1249(1), 118-136. doi: 10.1111/j.1749-6632.2011.06400.x
- Capaldi, C. A., Dopko, R. L., Zelenski, J. M., &Theel, M. M. (2014). Exploring the relationship between nature connectedness and happiness: A meta-analysis. *Frontiers in Psychology*, 5, 976. doi: 10.3389/fpsyg.2014.00976
- Capaldi, C. A., Dopko, R. L., Zelenski, J. M., &Theel, M. M. (2014). Exploring the relationship between nature connectedness and happiness: A meta-analysis. *Frontiers in Psychology*, 5, 976. doi: 10.3389/fpsyg.2014.00976
- Capaldi, C. A., Dopko, R. L., Zelenski, J. M., &Theel, M. M. (2014). Exploring the relationship between nature connectedness and happiness: A meta-analysis. *Frontiers in Psychology*, 5, 976. doi: 10.3389/fpsyg.2014.00976
- Centers for Disease Control and Prevention. (2019). About adult BMI. Retrieved from https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html
- Gallagher, D., Heymsfield, S. B., Heo, M., Jebb, S. A., Murgatroyd, P. R., & Sakamoto, Y. (2000). Healthy percentage body fat ranges: An approach for developing guidelines based on body mass index. *American Journal of Clinical Nutrition*, 72(3), 694-701. doi: 10.1093/ajcn/72.3.694
- Howell, A. J., Dopko, R. L., Passmore, H.-A., &Buro, K. (2011). Nature connectedness: Associations with well-being and mindfulness. *Personality and Individual Differences*, 51(2), 166-171.
- Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology*, 24(4), 503-515. doi: 10.1016/j.jenvp.2004.10.001

- Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24*(4), 503-515. doi: 10.1016/j.jenvp.2004.10.001
- Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24*(4), 503-515. doi: 10.1016/j.jenvp.2004.10.001
- Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24*(4), 503-515.
- National Heart, Lung, and Blood Institute. (2021). Assessing your weight and health risk. Retrieved from https://www.nhlbi.nih.gov/health/educational/lose_wt/risk.htm
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2009). Happiness is in our nature: Exploring nature relatedness as a contributor to subjective well-being. *Journal of Happiness Studies, 10*(5), 505-516.
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2011). The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behavior. *Environment and Behavior, 41*(5), 715-740. doi: 10.1177/0013916510385082
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2011). The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behavior. *Environment and Behavior, 41*(5), 715-740. doi: 10.1177/0013916510385082
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2011). The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behavior. *Environment and Behavior, 41*(5), 715-740. doi: 10.1177/0013916510385082
- Richardson, M., & Sheffield, D. (2015). Reflective self-attention: A more stable predictor of connection to nature than mindful attention. *Ecopsychology, 7*(4), 245-251. doi: 10.1089/eco.2015.0023
- Richardson, M., & Sheffield, D. (2015). Reflective self-attention: A more stable predictor of connection to nature than mindful attention. *Ecopsychology, 7*(4), 245-251. doi: 10.1089/eco.2015.0023
- Richardson, M., & Sheffield, D. (2015). Reflective self-attention: A more stable predictor of connection to nature than mindful attention. *Ecopsychology, 7*(4), 245-251. doi: 10.1089/eco.2015.0023
- Ryan, R. M., Weinstein, N., Bernstein, J., Brown, K. W., Mistretta, L., & Gagne, M. (2010). Vitalizing effects of being outdoors and in nature. *Journal of Environmental Psychology, 30*(2), 159-168.
- Schultz, P. W. (2002). Inclusion with nature: The psychology of human-nature relations. In P. Schmuck & P. W. Schultz (Eds.), *Psychology of Sustainable Development* (pp. 61-78). Springer.
- Schultz, P. W. (2002). Inclusion with nature: The psychology of human-nature relations. In P. Schmuck & P. W. Schultz (Eds.), *Psychology of Sustainable Development* (pp. 61-78). Springer.
- Schultz, P. W. (2002). Inclusion with nature: The psychology of human-nature relations. In P. Schmuck & P. W. Schultz (Eds.), *Psychology of Sustainable Development* (pp. 61-78). Springer.
- Swami, V., Barron, D., & Weis, L. (2016). The beauty of nature and the nature of beauty: How physical attractiveness and environmental sustainability influence judgments of environmental aesthetics. *Environment and Behavior, 48*(1), 111-134. doi: 10.1177/0013916514551986
- Swami, V., Barron, D., & Weis, L. (2017). Aesthetic preferences for nature-based artwork and associati<endoftext>
- Tam, K.-P. (2013). Concepts and measures related to connection to nature: Similarities and differences. *Journal of Environmental Psychology, 34*, 64-78.
- World Health Organization. (2000). Obesity: Preventing and managing the global epidemic. Report of a WHO consultation (WHO Technical Report Series, No. 894). Author.
- World Health Organization. (2022). Body mass index - BMI. Retrieved from [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/body-mass-index-\(bmi\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/body-mass-index-(bmi)).