

AN EXPLORATORY STUDY TO MEASURE CONNECTEDNESS TO NATURE IN THE YOUTH OF FIJI

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ABSTRACT

Topic: Connectedness to Nature in Youth of Fiji

Problem Statement: An Exploratory study to measure the connectedness to nature in the youth of Fiji.

Objectives:

- To understand the youths' connectedness to nature in present scenario in Fiji.
- To understand male's connectedness to nature in Fiji.
- To understand female's connectedness to nature in Fiji.

Sample: The sample of the study comprised of 120 respondents. Of these respondents 60 were Male Students and 60 were Female students of Fiji national University, Lautoka, Campus, College of Humanities & Education.

Conclusion: From the above study it is concluded that there is no significant difference in the youth of Fiji in present scenario to the connectedness to nature. It also suggests, no significant difference in male and female of Fiji to the connectedness to nature.

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INTRODUCTION

Due to advanced technologies, growing urbanizations and various lifestyle changes in our modern world, people live their lives increasingly separate from the natural world. Vinning, Merrick, and Price (2008) believe that humans were once “psychologically and physically closer to nature than residents of industrialized nations are now”. Nature is more and more often encountered either directly or indirectly through the use of technology. The decline of direct contact has led to the disconnection from nature and can have an adverse effect on physiological and psychological wellbeing. (Charles et.,al; 2008; Louv, 2005).

“All of life is rooted in nature and a separation from that wider world desensitizes and diminishes our bodies and spirits. Reconnecting to nature, nearby and far, opens new doors to health, creativity, and wonder and is fundamental to human wellbeing” Louv(2012). However, the benefits, and evidence of humans attraction towards nature, there remains individual differences in how they connect with nature, as, some may feel more connected to their local ecosystems, while others may view themselves as completely separate from the natural environment. Urban-dwellers, mostly may have lost their connection to the natural world (Conn, 1998), and may have difficulty to value and care for environment (Maller et al.2005)Schultz (2000) argues that environmental concerns are directly related to the degree with which people see themselves as part of nature.

Connecting to nature is not simply a love of nature, or enjoying the beauty and pleasing facets of it, but also to have awareness and understanding of various aspects of the natural world, along with those that are not aesthetically appealing or useful to humans.

Many recent researchers has begun to examine human-nature connection, suggesting the positive effect of having connectedness to nature and having healing effects of nature on physical, psychological well-being.(Howell, Passmore & Webber, 2013).

Many tools have recently been developed, to measure the concept of connectedness to nature (Mayer & Frantz,2004; Nisbet, Zelenski,& Murphy ,2009; Schultz, 2002). For the purpose of this study, connectedness to nature can be defined as the extent to which an individual’s view of nature is incorporated into their perception of their own sense of self (Schultz, 2002).

Connectedness to nature Scale (CNS), is used to test the effects of situational factors and personality characteristic that might impact connection to nature. Mayer and Frantz (2004) found the CNS to be a significant predictor of ecological behaviour and subjective well-being.

In the following five studies by Mayer and Frantz using connectedness to nature scale (2004) one study, found that men and women did not differ significantly on the CNS. In the other, it showed that social desirability bias and level of education did not affect CNS scores. In another study, it was found that, those “who chose to study environmental issues were...more connected to nature than those who chose to study other topics”. Another study reported that high school and college students were less connected to nature than those with college or graduate degrees. One of its study also showed that CNS scores correlate with biospheric values (i.e. values related to concern for the natural world like plants and animals) and environmentally responsible behaviours.

CNS is used in several studies to measure participants’ feelings of connectedness to nature in a variety of circumstances. One study found that people with a high sense of objective self-awareness tended to experience feeling less connected to nature (Frantz, Mayer, Norton, & Rock, 2005). Another study found that rural youth are more connected physically and emotionally to natural settings than urban youth (Klassen, 2010).

A more recent study found that CNS scores correlated to environmentally responsible behaviours (Hoot & Friedman, 2011). Another study found that simply being exposed to nature will increase a person’s connectedness to nature scores among other positive skills and traits (Mayer, Frantz, Bruehlman-Senecal, & Dolliver, (2009).

The study of the relationship between human mental health and the natural environment is known as ecopsychology (Doherty, 2011). Although this relationship can be important for both men and women, some research suggests there are gender differences in this regard (Ulrich, 1981). Nurse, Benfield, and Bell (2012) conducted a study to investigate whether significant gender differences existed in nature-based activities, motivation for sensory pleasure, and/or level of value assigned to natural environments. They found women had a unique motivation for sensory pleasure that differed from men, and that this motivation resulted in a unique

relationship with nature. Furthermore, their work also suggested women are more engaged with nature and have more pro environmental values and attitudes than do their male counterparts.

Studies on gender differences in environmentalism, Zelezny, Chua and Aldrich (2000); Hoot and Friedman (2011); and Arnocky and Stroink (2010), all found that women report stronger attitudes and behaviors towards the environment compared to men, this was found to be the case across age and race. It was found that females across most cultures are shaped by socialisation to have a stronger ethic of care, social responsibility and to be more compassionate and nurturing (Denzin, 1977; Bem, 1981 and Gilligan, 1982), whereas males are generally brought up to be competitive and autonomous (Arnocky and Stroink, 2010).

Research into bio-phillia or ecocentrism, shows that women are 'evolutionary programmed' to respond more positively to therapeutic interactions with natural settings (Kellert and Wilson 1993; Blatchford, Baines, & Pellegrini, 2003), males however, have been found to benefit more from being outside, as the environment allows them to take part in physical activities that they would be disciplined for indoors (Gill, 1997; Leupp, 2007; and Jacobsen, 2012).

The study by Karpiak and Baril (2008) reported women to have greater environmental concern and less apathy towards the environment in college students.

(Schultz & Zelezny, 1999; Schultz et al., 2005). Schultz (2001) reported significant gender differences, wherein women scored higher than men on priorities of environmental concerns.

(Arnocky & Stroink, 2010) suggested that gender differences commonly reported in more generalized types of environmentalism are accounted for by greater emotional empathy expressed by women compared to men.

It's indeed an interesting & ignited area of research and many past researchers, Environmentalists, Social Psychologists, Eco psychologists etc. have tried to study various environment and humans interconnections under Ecopsychology, Eco-therapy, Environmental psychology, Transcendental psychology, to name a few, as well as many interdisciplinary researches have also been carried out to understand the environment, nature & humans

interconnections and hence, the present study an attempt to explore the connectedness to nature in youth.

OBJECTIVES

- To understand the youth's connectedness to nature in present scenario.
- To understand male's connectedness to nature in present scenario.
- To understand female's connectedness to nature in present scenario.

HYPOTHESIS

- There is no significant difference in connectedness to nature in youth.
- There is no significant difference in connectedness to nature in male and females.

METHOD

- **Participants:** The sample of the study comprised of 120 respondents. Of these respondents 60 were Male Students and 60 were female students of Fiji national University, Lautoka, Campus, College of Humanities & Education.
- **Material:** Following scale was used as a tool for the present study to measure connectedness to nature.

Connectedness to nature scale: The connectedness to nature scale (CNS) is a measure of individuals' trait levels of feeling emotionally connected to the natural world in the realm of social and environment psychology.

The 14 item scale, was used as a nature specific measure of connectedness. It contains items about the respondents' feelings of connectedness to nature, which are rated on a 5 point Likert scale from strongly agree to strongly disagree, having internal reliability ($r=.84$, $n=60$). The CNS is being used to test the effects of situational factors and personality characteristic that might impact connection to nature. Mayer and Frantz (2004) found the CNS to be a significant predictor of ecological behaviour and subjective well-being.

Procedure: The procedure was as follows:

60 male students and 60 female students. All respondents were told that the purpose of the study was only for research, once they agreed, the connectedness to nature scale was administered. The scores obtained were analysed statistically. Measures of central tendency, and t-value were calculated to see the effect of independent variable on connectedness to nature scale.

RESULT & DISCUSSION

RESULT

Table 1 shows Mean values of male students and female students on connectedness to nature scale

Gender	Mean	N	SD	t-value	Degree of freedom	p-value	Standard error of difference
Male	49.50	60	6.97	0.7760*	118	0.4393	1.181
Female	50.42	60	5.92				
Total	49.96	120	6.459	-	-	-	-

* At 0.05 Level of significance.

The mean value of male group is 49.50 and female group is 50.42, representing that the mean scores of both male students and female students fall close to 50, and does not varies much. Mean difference of male and female group is 0.92. Overall all mean 120 sample is 49.96.

The t value of the male group and female group on connectedness to nature scale is 0.7760,degrees of freedom i.e. df=118, and p –value=0.4393, which suggest the test results to be insignificant at 0.05 level of significance.

DISCUSSION

Results suggest that there is no significant difference in male and female towards the connectedness to nature, as per the findings of Mayer and Frantz (2004). They both tend to have similar level of connectedness to nature, contrasting to the other past researches. Thus the present study has open a wide range of areas yet to be explored.

One of the attribution thought to have contributed to the result is that the sample drawn belongs to the islands of Fiji island, rich and famous for its beautiful natural environment and locations, and hence can be inferred to have closeness to nature and, the scores too suggest of it and statistically also proves to be having both male and female connectedness to nature.

Secondly, the sample drawn is from Lautoka, having pursuing similar education i.e all are from FNU Lautoka campus, college of humanities and education and are from first & final year primary and secondary student, falling in similar age range and having like mindedness in thinking and attitudes, that reflects the scores to be quiet closer suggesting both male and females tend to connect to nature and hence, suggesting that the youth of today, too, does connect to nature.

CONCLUSION

The present study opens new door to explore a wide range of further researches, as the results shows that there is no significant difference in the youth to the connectedness to nature hypothesis-1. Confirmed, and it also proves no significant difference in males and females to connectedness to nature hypothesis-2. Confirmed. Opening a wide range of possibilities to future researches, scientists, environmentalists, Eco psychologists, to view the problem from a newer & broader perspective.

LIMITATIONS AND SUGGESTIONS

The present study has robust findings, yet, according to the researchers' point of view, the present study has few limitations and some further research suggestions.

Firstly, to generalize the result sample size taken should have been larger in size.

Secondly, for a broader understanding the sample size shall be drawn from Suva, Ba, Labasa, Nadi etc. i.e from all campuses of Fiji national University, which shall provide a

comparative analysis along-with geographical condition that shall contribute to the overall understanding of the youth to connectedness to nature.

Thirdly, along with the present variables interrelations with other psychosocial variables, shall be helpful to understand nature human connection.

Fourthly, along with CNS other tools can also be used to have correlational study to understand the nature connection, relatedness and other environmental concerns in youth.

REFERENCES

- Brymer, E.George & Cuddihy, Thomas & Sharma-Brymer, Vinathe (2010). The role of nature-based experiences in the development and maintenance of wellness. *Asia-Pacific Journal of Health, Sport and Physical Education* , 1(2), 21-27.
- Charles, C., Louv, R., Bodner, L., & Guns, B. (2008). Children and nature: A report on the movement to reconnect children to the natural world.
<http://www.childrenandnature.org/uploads/CNMovement.pdf>.
- Conn S. (1998). Living in the earth: ecopsychology, health and psychotherapy. *Humanist. Psychol*, 26, 179–198.
- Holli-Anne Passmore (2011). Feeling Blue – Get Green: The Benefits of Nature on our Mental Health and Well-being. *Earth Common Journal* Vol. 1, No. 1.
- Maller C., Townsend M., Pryor A., Brown P., St. Leger L. (2005). Healthy nature healthy people: ‘contact with nature’ as an upstream health promotion intervention for populations. *Health Promot. Int.* 21, 45–54.
- Maloney M. P., Ward M. P., Braucht G. N. (1975). A revised scale for the measurement of ecological attitudes and knowledge. *Am. Psychol.* 30,787–790.
- Mayer, F.S., Frantz, C. M.P.,Senecal,K.,Dolliver.(2009).*Environmentand Behavior*, 41(5), 607-643.
- Mayer F. S., Frantz C. M. (2004). The connectedness to nature scale: a measure of individuals' feeling in community with nature. *Journal Environ. Psychol.* 24, 503–515

- Mayer F. S., Frantz C. M., Bruehlman-Senecal E., Dolliver K. (2009). Why is nature beneficial? The role of connectedness to nature. *Environ. Behav.* 41, 607–643
- Nisbet E. K., Zelenski J. M., Murphy S. A. (2011). Happiness is in our nature: exploring nature relatedness as a contributor to subjective well-being. *J. Happiness Stud.* 12, 303–322.
- Nisbet E. K. L., Zelenski J. M., Murphy S. A. (2009). The nature relatedness scale: linking individuals' connection with nature to environmental concern and behavior. *Environ. Behav.* 41, 715–740.
- Olivos.P, Aragonés J&M.Amerigo.(2011). The connectedness to nature scale and its relationship with environmental beliefs and identity. *IHPJVol.4,No. 1,5-19.*
- Pynn J, Jhonson J.S, Kityo R,Lugumya D.(2014). Students and scientists connect with nature in Uganda, East Africa. *International Journal of Environmental & Science Education*,9,311-327.
- Robert, E., & Friedman, H. (2011). Connectedness and Environmental Behavior: Sense of Interconnectedness and Pro-Environmental Behavior. *International Journal of Transpersonal Studies*, 30(1-2), 89-100.
- Ryan R. M., Frederick C. (1997). On energy, personality, and health: subjective vitality as a dynamic reflection of well-being. *Journal of Personality.* 65, 529–565.
- Ryan R. M., Weinstein N., Bernstein J., Brown K. W., Mistretta L., Gagné M. (2010). Vitalizing effects of being outdoors and in nature. *J. Environ. Psychol.* 30, 159–168.
- Ryff C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological wellbeing. *J. Pers. Soc. Psychol.* 57, 1069–1081.
- Ryff C. D., Keyes C. L. M. (1995). The structure of psychological well-being revisited. *J. Pers. Soc. Psychol.* 69, 719–727.
- Schultz P. W. (2000). Empathizing with nature: the effects of perspective taking on concern for environmental issues. *J. Soc. Issues* 56, 391–406.
- Schultz P. W. (2001). The structure of environmental concern: concern for self, other people, and the biosphere. *J.Environ.Psychol.* 21, 327–339.
- Schultz P. W. (2002). Inclusion with nature: the psychology of human-nature relations, in *Psychology of Sustainable Development*. Norwell, MA: *Kluwer Academic*; 62–78.

Ulrich R. S. (1993). Biophilia, biophobia, and natural landscapes, *The Biophilia Hypothesis. Washington, DC: Island Press; 73–137.*

Vining, J. Melinda S., Merrick & Price (2008). The Distinction between Humans and Nature: Human Perceptions of Connectedness to Nature and Elements of the Natural and Unnatural. *Human Ecology Review*, 15 (1).

Weinstein N., Przybylski A. K., Ryan R. M. (2009). Can nature make us more caring? Effects of immersion in nature on intrinsic aspirations and generosity. *Pers. Soc. Psychol. Bull.* 35, 1315–1329.

Zelezny, L.C., Chua, P.P., & Aldrich, C. (2000). Elaborating on gender differences in environmentalism. *Journal of Social Issues*, 56, 443-457.

Zelenski, J. M., & Nisbet, E. K. (2014). Happiness and feeling connected: The distinct role of nature relatedness. *Environment and Behavior*, 46(1), 3-23.

INTERNET SOURCES:

Klassen, M. J. (2010). Connectedness To Nature: Comparing Rural And Urban Youths Relationship With Nature. <http://hdl.handle.net/10170/150>

Leopold, A. (1949). *A Sand county almanac.* NY: Oxford University Press.

Leopold, A. (1970). *A Sand county almanac: With essays on conservation from Round River.* NY: Ballentine Books.

Louv, R. (2007). Leave no child behind. Orion Magazine. <http://www.orionmagazine.org/index.php/articles/article/240/>

Louv, R. (2005). *Last child in the woods: Saving our children from nature deficit disorder.* Chapel Hill, NC: Algonquin Books.

Mourato S, MacKerron G. (2013). Happiness is greater in natural environments.

<http://dx.doi.org/10.1016/j.gloenvcha>.

Wilson E. O. (1984). *Biophilia.* Cambridge: Harvard University Press

Webber, J. (2013). Allotment gardening, connectedness to nature and wellbeing. *D.Clin.Psych.thesis, Canterbury Christ Church University.*