

Relationship Between Connectedness to Nature and Subjective Well-Being

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Abstract

Connectedness to nature can be understood in terms of close affiliation with the natural world in a physical, cognitive and emotional manner. The purpose of the current study was to find out the relationship between connectedness with nature and subjective well - being. It was hypothesized that connectedness with nature was positively related with positive affect and satisfaction with life and negatively related with negative affect. A sample of 80 adults in the age range of 20 – 30 years was taken from tricity (that is, Chandigarh, Mohali and Panchkula). The Connectedness to Nature Scale (Mayer and Frantz, 2004), Positive and Negative Affect Schedule (Watson et al., 1988) and Satisfaction with Life Scale (Diener et al., 1985) were administered on the sample. The results were in line with the prediction.

Key Words: Nature, Connectedness, Well-being, Life Satisfaction

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Introduction

The current materialistic world has drifted man away from nature. Humans today prefer to live their life with the technological innovations rather than the magnificent beauty of nature. However, there are numerous benefits of being connected with nature. Previous researches clearly show its positive influence on mental health and well-being of an individual. It has been documented in various studies as to how connectedness with nature promotes an enrichment of life in every sphere.

Nature is defined as 'the environment in which organisms or their biotopes expressly manifest themselves. In addition to nature reserves, this will also include farmland, production forest, urban green spaces and back gardens.' (Netherlands Health Council, 2004). Connectedness to nature has been defined as a self-perceived relationship of interconnection between the self and the natural world; it reflects

a sensation of kinship and an affective individual experience of connection with nature (Mayer and Frantz, 2004; Schultz et al., 2004). Subjective Well - Being refers to people's evaluations of their lives--evaluations that are both affective and cognitive. People experience abundant subjective well-being when they feel many pleasant and few unpleasant emotions, when they are engaged in interesting activities, when they experience many pleasures and few pains, and when they are satisfied with their lives (Diener, 2000).

It is well established that exposure to nature leads to positive mental health outcomes and cognitive, affective and behavioral changes (Huppert et al., 2007). The link between contact with nature and improved mental health is understood by those who regularly seek out green spaces and choose to participate in green exercise activities (any activity in a green space in the presence of nature). People living in

greener environment regardless of level of urban city reported fewer symptoms of ill health and greater perceived general health (de Vries et al., 2003). Exposure to nature has been found to increase connectedness to nature, attention capacity, positive emotions, and ability to reflect on a life problem (Mayer et al., 2009). Green exercise as a health-promoting initiative for people experiencing mental ill health is equally as effective as other existing programs for augmenting mental well-being. Combining exercise, nature and social components in future initiatives may play a key role in managing and supporting recovery from mental ill health, suggesting a potential 'green' approach to mental healthcare and promotion (Barton et al., 2012).

Engaging in physical activities in green spaces also plays a role in reducing social isolation (Richardson et al., 2005). A driver in promoting mental health is the ability to establish close relationships based on reciprocal trust and affection (Emmons, 2003). It is well known that trusting relationships help to change attitudes and behaviour as well as have a positive effect on health (Pretty and Ward, 2001)

Hypotheses:

Based upon previous literature, the following hypotheses were proposed:

- ◆ Connectedness to nature was expected to be positively related with positive affect.
- ◆ Connectedness to nature was expected to be negatively related with negative affect.
- ◆ Connectedness to nature was expected to be positively related with satisfaction with life.

Method:

Sample: The sample comprised of 80 adults in the age range of 20- 30 years. The sample was selected from tricity (that is, Chandigarh, Panchkula and Mohali). The chosen participants spent one hour everyday walking and running in natural settings.

Tests and Tools: The following standardized tests were administered:

◆ **The Connectedness to Nature Scale** (Mayer and Frantz, 2004)

CNS provides a measure of an individual's trait levels of feeling emotionally connected to the natural world. It was designed to measure the extent to which participants generally feel a part of the natural world and emotionally connected to it. This measure consists of 14 items rated on a 5-point Likert scale, with a rating ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency of the CNS was examined using Cronbach's alpha and was found to be .84. Test-retest reliability was also examined and the CNS was shown to be stable across time, $r = .78, p < .01$.

◆ **Positive and Negative Affect Schedule** (Watson et al., 1988)

PANAS provides independent measures of positive affect and negative affect. The reliability of the PA scale ranged from .86 to .90, the NA scale from .84 to .87; values similar to those obtained from independent research involving clinical and non-clinical populations (Jolly et al., 1994)

◆ **Satisfaction with Life Scale** (Diener et al., 1985)

The SWLS is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. Initial and subsequent studies have examined the internal consistency of the SWLS and alpha coefficients have repeatedly exceeded .80. The criterion-related validity along with the construct validity has been significantly high. (Pavot and Diener, 1993).

The above two measures, that is, Positive and Negative Affect Schedule and Satisfaction with Life Scale, indicate the subjective well-being in a person.

Results

As per the requirement of the hypotheses, the data was processed yielding the following results shown in table 1 and table 2.

Table 1 showing mean and standard deviation of different variables

	Mean	SD
Connectedness to Nature	63.32	2.4
Positive Affect	39.63	2.74
Negative Affect	19.67	3.01
Satisfaction with Life	26.5	3.76

relatedness has been found to be significantly associated with positive affect, autonomy, personal growth and purpose in life (Nisbet et al., 2011). As reported by Mayer et al. (2009), the ones after watching short nature-oriented video clips showed high levels of positive emotions, ecstasy, respect, wonder, and spirituality, compared to the participants who viewed video clips of urban scenes.

Table 2 showing the inter correlations among different variables

VARIABLES	1	2	3	4
1. Connectedness to Nature		.64**	-.19*	.34**
2. Positive Affect			-.13*	.59**
3. Negative Affect				-.21*
4. Satisfaction with Life				

There has been a significant relationship between connectedness to nature with positive affect and satisfaction with life ($r = 0.34, p < 0.01$).

*Correlation significant at .05
 **Correlation significant at .01

Discussion:

The results clearly revealed a highly positive relationship between connectedness to nature and positive affect ($r = 0.64, p < 0.01$). It has been found out that affective connection was a significant independent predictor of intentions to engage with the natural environment. People tend to experience positive emotions while interacting with the natural surroundings (Hinds et al., 2008). As hypothesized, the relationship between negative affect with connectedness to nature and positive affect came out to be negative ($r = -0.19, p < 0.05$; $r = -0.13$). Nature

$r = 0.59, p < 0.01$). A recent correlation study demonstrating that those who are highly nature affiliated derive a sense of meaningful existence in life from their closeness with nature, and that this in turn boosts well-being (Howell et al., 2012). O'Connor et al. (2011) concluded that experiences in nature were reported as a significant source of meaning for adults. Pretty et al. (2007) conducted a study measuring the effects of 10 green exercise case studies (including walking, cycling, horse-riding, fishing, canal-boating and conservation activities) in four regions of the UK on 263 participants. All these activities generated mental health benefits. Howell et al. (2012)

reported the associations between individual nature connectedness and aspects of well-being such as psychological, social, emotional well-being and personal growth engagement, meaning, spirituality and hope.

Overall, the subjective well-being was highly positively associated with connectedness to nature. As noted by Dutcher et al. (2007), connectedness to nature is an affective individual experience that tends to influence one's well-being. Such an individual is better able to associate and relate with both natural and social surroundings and derive accurate meaning out of it.

Conclusion:

It can thus be concluded that there exists a strong relationship between connectedness to nature and subjective well-being. Being connected with physical environment boosts one's positive emotions and reduces stress. The quality of life is ameliorated with one's association with nature.

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