Research Paper

Predicting Positive Mental Health from Social Media Usage and Nature Relatedness

Dr. Balbinder Singh[1]*

ABSTRACT

The aim of this paper is to predict positive mental health from social media use and connection to nature. The findings of the study, in which students participated (N=150, both male and female), show that connection with nature and wise use of social media leads to better mental health.

Keywords: *Mental Health, Nature, Social Media, Positive Mental Health*

The natural environment has been recognized as important for good health and well-being since the 19th century (Lee, 2012). According to some theories, modern people have an inherent connection to nature and all living organisms due to our history as hunters and gatherers (Wilson, 1984). As a result, nature itself encourages concentration and does not require us to concentrate, making us feel better mentally (Herzog et al., 2003) and restoring our attention (Kaplan & Kaplan, 1989). It has been suggested by many ecologists (for example, Berry, 1997; Leopold, 1949; Orr, 1994) and nature writers (for example, Lowe, 2005; Muir, 1894; Thoreau, 1854) that the good with nature Creating harmony has a positive effect on a person's mental health.

As a fundamental human need, the basic human desire is to affiliate with others and live in groups (Baumeister and Leary, 1995; Fiske, 2004; Myers, 2000). The biophilia hypothesis (Wilson, 1984; Kellert and Wilson, 1993; Kellert, 1997) builds on this affinity for nature and argues that humans are genetically wired to identify with and relate to the larger natural world. Ecopsychology expert Roszak (1995) similarly said that this sense of connectedness is not limited to cities only, it includes the feeling of connectedness to the natural environment. This theory argues that humans will benefit psychologically from living in nature because it will satisfy their desire to connect with nature. According to studies, people who make an effort to connect with nature experience better health (Tarrant, 1996), vitality (Ryan et al., 2010), and overall mental health (e.g., Kaplan, 1995; Leder et al., 1998) may have such benefits. Additionally, nature increases peace (Plante et al., 2006) and reduces stress (Ulrich et al., 1991).

Seven themes emerged from the qualitative data, including enjoyment, connection, detail, tactile stimulation, and positive attitude. The findings collectively show that activities that

[1]Assistant Professor, Department of Psychology, Guru Nanak Dev University, Amritsar.
*Corresponding Author

strengthen feelings of connection to nature can reduce harmful anxiety (Martin and Brymer, 2016). Experiences in nature improve emotional and mental health (Roederer and Cerwinka, 2012; Bowler, 2010). Additionally, fostering connection with nature can be a successful treatment for both symptom and condition anxiety.

According to various recent in-depth evaluations (Bowler et al., 2010), experiences with nature, as opposed to indoor environments (Thompson Coon et al., 2011) and artificial or built environments, improve mental health. Increases in self-esteem, positive and negative mood (Barton, Griffin, & Pretty, 2012; Barton, Hine, & Pretty, 2009; Mackey & Neal, 2010; Park et al., 2009; van den Bergh & Custers, 2011), situation anxiety (state anxiety), and feelings of relaxation and calmness have all been noted. Similar results have been observed when employing modeled environments under supervised laboratory settings (Pretty et al., 2005). According to research by Mitchell (2013), regular outdoor recreation in nature leads to fewer mental health problems. Although it may be more complex than first thought, a strong relationship has been found between natural habitats and health outcomes (Ward Thompson and Aspinall, 2011; Mitchell, 2013).

Social media and mental health

In terms of people's mental health, the imbalance caused by excessive use of social media is a major issue for the society, scholars and caregivers. Excessive use of social internet sites is one of the most popular modern hobbies (Bashir and Bhat, 2017). According to Kaur and Bashir (2015), important benefits of social media on adolescent psychological health include socialization, effective communication, educational experiences, and seeking health information. Negative effects include sexting, sadness/depression, cyberbullying, exhaustion, stress, emotional inhibitions, and decreased cognitive skills. The evaluation ultimately included a total of 16 studies. A person's self-perception, emotions, and social interactions are all significantly influenced by social media. It is interesting to trace its impact on politics, organizations and sometimes even medical complications.

Social ties, among other types of social resources, have been linked to psychological well-being indicators such as self-esteem and quality of life (Bargh and McKenna, 2004; Ellison et al., 2007; Helliwell and Putnam, 2004; Nabi et al., 2013). Satisfaction According to new research, online social media networks help people build and preserve offline social capital (Steinfield, Ellison, & Lampe, 2008; Valenzuela, Park, & Key, 2009). According to research, social media can have both negative and favorable effects on one's mental health. Anxiety, depression, loneliness, poor sleep, poor mental health markers, thoughts of suicide and self-harm, elevated levels of emotional distress, cyberbullying, unhappiness with one's body image, fear of missing out, and decreased life satisfaction. There were some negative consequences. Gaining access to other people's health experiences and professional health records, attempting to manage depression, psychological support, and building communities were all positive effects. Other positive effects include enhancing and strengthening offline systems and interactions, expressing oneself and one's identity, and establishing and maintaining relationships (Sadagheyani and Tatari, 2020).

In the contemporary era of scientific endeavor, a large body of research has demonstrated the importance of nature for human physical health, highlighting the various ways in which individuals rely on food, water, vitality, weather to ensure their complete survival. In many ways they depend on the natural environment. Scientists have also begun to evidence the importance of nature for psychological well-being in response to growing human issues such as pollution, which are most evident in the systems of land conversion, increased

urbanization, and air and water pollution (Bratman, Hamilton and Daly, 2012). Another example of how much people have been willing to spend in the past to create visually beautiful landscapes is the integration of nature into the homes of the wealthy. Motivations for this can range from the owner's desire for peace and understanding to a display of dominance and control over nature (as in the Versailles gardens) (Mookerjee, 1994).

Rationale for the study

From the introduction and review of the literature it is quite clear that nature plays an important role in psychological well-being. Most previous work has focused on the negative effects of social media use on mental health. But social media as an in-vitro technique may be helpful in enhancing positive mental health. According to studies, people who make an effort to connect with nature can have benefits such as better health, vitality, and overall mental well-being. Additionally, nature can promote peace and reduce stress. Creating harmony with nature has a positive effect on the overall mental health of humans. Being in nature or even watching nature videos reduces anger, fear, and stress while increasing pleasant emotions. Nature not only improves one's emotional health, but it also improves physical health by reducing blood pressure, heart rate, muscle tension and the generation of stress chemicals. Therefore, the current work focuses on the positive role of social media use and how connectedness to nature will significantly influence positive mental health.

METHODOLOGY

Hypothesis
I. Social media use will predict positive mental health among young adults.
II. Connectedness to nature will predict positive mental health among young adults.

Sample
A sample of one hundred fifty (N=150) young adults (male and female) of university/college going students aged 20-25 years were selected. For the purpose of data collection convenient sampling method has been used.

Psychological tools used
1. **Positive Mental Health Scale** – The 9-item PMH-scale was developed by Lukat et al. To provide a brief, unidimensional, and person-centered instrument to assess positive mental health (Lucat et al., 2016). Test-retest reliability – The test-retest reliability of the PMH-scale has been found to be satisfactory with a correlation of 0.77. Scoring Information: This is a 4-point Likert scale ranging from 0 (do not agree) to 3 (agree). Item scores are combined into a sum score with higher scores indicating higher positive mental health.
2. **(NR - 6) Short form version of the Nature Related Scale** - The Nature Related Scale (NR - 6) was developed by Elizabeth K. It was developed by Nisbett and John M. Zelensky (Nisbett and Zelensky, 2013) with 6 items. "Self" and "Experience" dimensions, and its predictive ability was tested with multiple samples and longitudinal data in students, community members, and business people. The new NR-6 scale had strong internal consistency and temporal stability, and it Happiness, environmental concern and connectedness with nature were significantly correlated (r = 0.91, p 0.01), similar to the full scale. (Nisbett and Zelensky, 2013). Scoring information: The NR-6 score is calculated by averaging all 6 items.
3. **Social Media Use Questionnaire (SMUQ)** – The Social Media Use Questionnaire (Xenidis & Brignell, 2016) is a 9-item questionnaire that measures social media use

on a five-point Likert scale, from 0 (never) to 4 (Always) till). The SMUQ also demonstrated internal reliability and construct validity (Xenidis and Brignell, 2016).

RESULTS AND DISCUSSION

Table 4.1 presents the mean, standard deviation, skewness and kurtosis of the variables included in the study. Many researchers (Gravetter and Wallnow, 2012; George and Mallery, 2010; Field, 2009; Tabachnick and Fidell, 2007; and Trochim and Donnelly, 2006) suggest that if the skewness and kurtosis values are between +2/-2 The data will be assumed to be of normal distribution. From a perusal of Table 4.1, it becomes quite clear that the values of skewness and kurtosis of all the variables are within acceptable limits. Therefore, the data obtained is normal and can be used for further analysis.

Table 4.1 Showing Descriptive Statistics (N = 150)

	Range	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
PMH	19.00	21.91	3.06	-2.61	.198	2.47	.394
NR 6	10.00	12.90	1.88	-1.12	.198	2.67	.394
SMUQ	23.00	32.92	2.68	-2.01	.198	3.33	.394

The correlation between positive mental health (PMH), nature connectedness (NR-6) and social media use (SMU) is presented in Table 4.2. It was found that social media use was significantly and positively correlated with NR-6 [$r(148)$ = .225, p = .006] and PMH [$r(148)$ = .343, p = .000] Is. Furthermore, it was also found that PMH is significantly and positively correlated with NR-6 [$r(148)$ = .790, p = .000].

Table 4.2 Showing Correlation Matrix

	NR 6	SMU
SMU	.225[**]	
PMH	.343[**]	.790[**]
. Significant at 0.01 level of significance.		

The regression analysis is reported in Table 4.3. Positive mental health (PMH) served as the dependent variable in a two-step hierarchical multiple regression. In the first step of the regression, SMU was added and at step 2, NR6 was entered to account for the variation.

Table 4.3 Showing Summary of Hierarchical Regression Analysis for Variables predicting Positive Mental Health (PMH)

Variable	β	t	Std. Error	R	R^2	ΔR^2
Step 1				.343[a]	.118	.118
Social Media Usage (SMU)	**.391**	**4.445**[**]	**.029**			
Step 2				.808[b]	.653	.536
Social Media Usage	**.199**	**3.496**[**]	.057			
Nature Relatedness (NR)	**1.222**	**15.071**[**]	.081			
. Significant at 0.01 level of significance.						

The results of hierarchical multiple regression showed that at Step 1, SMU contributed significantly to the regression model ($F(1, 148)$ = 19.762, p = .000) and accounted for 11.8% of the variance in positive mental health (PMH). Was. When nature relatedness (NR6) was

included, an additional 53.6% of the variation in PMH could be explained, and this change in R2 was significant (F(2, 147) = 138.547, p = .000).

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	163.823	1	163.823	**19.762**	**.000[b]**
	Residual	1226.871	148	8.290		
	Total	1390.693	149			
2	Regression	908.649	2	454.325	**138.547**	**.000[c]**
	Residual	482.044	147	3.279		
	Total	1390.693	149			
a. Dependent Variable: PMH						
b. Predictors: (Constant), SMUQ						
c. Predictors: (Constant), SMUQ, NR 6						

Internet use is an essential aspect of everyday life, especially for young individuals (Jones et al., 2007). The results of the current study indicate a positive correlation between social media use and positive mental health. Furthermore, it has also been found that social media use significantly and significantly impacts positive mental health. The current research found a significant positive correlation between nature connectedness and positive mental health. Furthermore, connectedness to nature significantly and positively predicted positive mental health, explaining 53.6% of the variation in PMH. When given the opportunity, people choose areas with the highest concentration of forests, waterways or hills. They sometimes incorporate signs or natural elements into their enclosed environments, such as plants, animals, vases, artifacts, or paintings that depict nature, if these types of environments are not easily accessible (Weinstein, Przybylski & Ryan, 2009). The present work is clearly consistent with previous research. Being in tune with nature is considered by many ecologists (e.g., Berry, 1997; Leopold, 1949; Orr, 1994) to have positive effects on human overall mental health. According to Robert Ulrich, patients who viewed views of trees managed pain better, had less negative impact on nurses, and spent less time in the hospital (meaning they recovered sooner).

CONCLUSION

From the results and discussion it can be concluded that there are significant relationships between social media use, connectedness to nature and positive mental health. Furthermore, social media use and connectedness to nature significantly and positively predicted and influenced positive mental health. By using social media in a positive way, individuals can boost their social networks and communicate more with loved ones and friends. This can improve their mental health because the exchange of relationships and communication in society can improve mental happiness. By using social media positively, a person can be dedicated to himself and take steps towards self-care. The primary objective should be to take care of a person's health, so that his mental and physical health can remain better. Moderate and cautious use of social media will not affect the mental health of children and youth. Spending excessive time on social media can lead to inactivity and self-talk, which can affect mental health. Connection to nature is also important for mental health. Spending time in natural places, enjoying natural beauty, and being positively disposed to the environment can strengthen a person's mental health. Spending time in nature, such as taking a walk in the woods, having a picnic, or spending time with flowers and trees, can improve a person's mental health. Seeing and connecting with natural greenery can boost morale.

Exercising in nature, yoga and following a healthy diet can improve a person's physical and mental health. Encountering different situations in nature can strengthen a person's problem-solving abilities, which can improve his or her mental health. By spending time in nature, a person can experience a sense of companionship and support from others, which can improve their mental health. Spending time in nature can strengthen a person's attention and mindfulness skills, improving his or her mental stability and attentiveness.

All these factors together can promote a person's positive mental health, while excessive and uncontrolled use of social media can have negative effects. A person should control their social media usage and try to spend time in nature regularly so that their mental health remains safe.

Implications
- Social media can be used as an in-vitro technique for mental health counseling.
- Reconciliation with nature has a positive impact on the overall well-being of humans.
- Being in nature or even watching nature videos reduces anger, fear, and stress while increasing pleasant emotions. Nature not only improves one's emotional well-being, but it also improves physical well-being.
- So, the present work helps in making wise decisions about the positive role of social media usage and nature related positive mental health will have significant impact

Delimitation
- It adds to existing theory related to the use of social media and nature in mental health.
- The work is well designed and quite applicable to the current context.

Boundaries
- The sample size was small but could not be increased due to master's degree and time constraints.
- A larger sample would have given wider scope for greater generalization of the research findings.

Future suggestions
- Larger sample can be selected.
- Different populations should be included in the study.
- Further research can be planned based on the findings of the present work.

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