# Impact of Anxiety Sensitivity, Self- Transcendence, and Nature Relatedness on Internet Addiction

Stella Kurian Clinical Psychologist, Dymphna, Palakkad, Kerala, India

Abstract:- In, India use of internet is enormous, especially in young population. The study aimed to investigate the impact of anxiety sensitivity, self- transcendence, nature relatedness. The sample size for this study was 202 college students. There is significant relationship between anxiety sensitivity and internet addiction. The study also explored the negative relationship between nature relatedness and sub variable - neglect of social life. Further there is significant positive relationships with the sub variables of internet addiction and nature relatedness.

**Keywords**:- Internet Addiction, Anxiety Sensitivity, Self-Transcendence, Nature Relatedness.

## I. INTRODUCTION

For a long time since, the term addiction has expanded beyond substance dependence to include non-substancerelated behaviors that cause problems and resistance (Van Rooij and Prause 2014). Addiction to a substance and addiction to a behavior may look similar in their effects on behavioral patterns, emotions and physiology (Valentini & Biondi, 2016). A multi-country meta-analysis report of 80 studies (from 1996 to 2012), including 89,281 participants from 31 countries around the world, reported an overall prevalence rate of 6.0%, the highest in the Middle East (10, 9%), the northern and western regions are the lowest (2.6%).

The clinical features of behavioral problems Internetrelated have been described in various terms, including Internet addiction disorder, pathological internet use (PIU), problematic Internet use, excessive Internet use, Internet dependence, compulsive computer use and virtual addiction (Shaw & Black, 2008). The phenomenon of Internet addiction is divided into five subtypes, because people are usually addicted to specific applications that are triggers for excessive Internet use (Young 1998): Cybersexual addiction, Cyber-relational addiction, Net compulsions, Information overload, and Computer addiction.

According to Beard (2005), a diagnosis of Internet addiction should take into account the following five diagnostic criteria: being distracted, using the Internet for longer periods of time, losing control, and having trouble cutting back. It also has a detrimental effect on employment, relationships, and education. Other than that, he makes an effort to hide how often he uses the Internet. According to Valentini & Biondi (2016), people who are experiencing dysphoric moods (such as emotions of helplessness, guilt, anxiety, or sadness) may utilize the Internet to escape from their issues or to get relief.

Previous study has demonstrated that anxiousness is one of the notions that Internet addiction is linked to. According to Butcher et al. (2013), anxiety is defined as a generalized fear of a potential threat in the future that involves behavioral, physiological, and cognitive components. Similar to the anticipation and dread that panic attack sufferers may have panic attacks again, anxiety sensitivity is described as the fear that the symptoms and sensations associated with anxiety will have major bodily or social repercussions (Mantar et al., 2011). The person who wishes to let go of these unfavorable feelings could start fresh searches. People have access to a new world, a means of meeting new people, and a range of emotions through the internet (Youthful, 1997).

Empirical evidence has demonstrated a significant relationship between high scores on self-transcendence and elevated levels of state anxiety were significantly associated with more severe cannabis use (Spalletta et al., 2007). Furthermore, Internet addiction negatively correlated with self-transcendence. (June, Sohn, So AY, Yi GM, & Park, 2007). The term self-transcendence has been widely used to refer both to a process of expansion, or movement beyond one's immediate self-boundaries (Levenson, et al, 2005; Reed, 1991b), and to a quality which emerges as a result of this process, culminating in a generally stabilized and broadened worldview (Maslow, 1971; Wilber, 2000).

Nature is thought to have direct positive effects on psychosocial well - being and also provide a buffer against negative emotions and stress (Berto, 2014). With increased interest in studying connection with nature, a number of different ways to conceptualize connection with nature have been developed since 1999. Most of these concepts focused on one aspect, such as emotionally or cognitively connecting with nature (Tam, 2013). Nature relatedness is described as the "cognitive, affective and physical connections that individuals have with the natural world" and our relationship with nature is suggested to generate an "ecological identity" within us (Nisbet et al., 2009, Windhorst & Williams, 2016). Volume 9, Issue 3, March – 2024

The individuals aged between 18 and 25 years, the

period during which they become more economically

independent by training and/or education (Arnett, 2000;

Arnett, 2010). Given the fact students are impeded by internet

addiction during the time period when they needed the

cognition and alertness abilities the most. A number of

studies conducted among adolescents with respect to internet

addiction, there is only a handful of direct research evidence

accompanying the facts that the technologies are often

acknowledge as the potential cause of growth in the human

costs of alienation from nature. The time in nature is associated with a variety of mental, physical and emotional

health benefits while the effect on internet addiction is

unclear and there is lack of research examining the relationship between anxiety sensitivity, self- transcendence,

and nature relatedness on internet addiction. Experts in the field can shape therapy plans in consideration of the

relationship between anxiety sensitivity, self- transcendence,

and nature relatedness in reducing Internet addiction. In

particular, present study aimed to explore the impact of anxiety sensitivity, self- transcendence, nature relatedness on

Aim: To investigate the impact of anxiety sensitivity, self-

transcendence, nature relatedness on internet addiction

**METHODOLOGY** 

The sample size for this study was calculated with a

confidence level of 95% and alpha error of 5% and was found to be 218. Random sampling method will be used to recruit a sample of approximately 218 college students. It was a Cross-

internet addiction among college students age.

among college students.

II.

A. Sample

sectional study.

# https://doi.org/10.38124/ijisrt/IJISRT24MAR1439

## B. Procedure:

The investigator collects email id of the students and randomly selects them according to the sample size. Subsequently, google form in which the nature of the study is explained and the informed consent obtained, the personal data will be collected from the student using the personal data sheet. The investigator will administer the General Health Questionnaire, Anxiety Sensitivity Index-3(ASI-3), Internet Addiction Test (IAT), Self -Transcendence Scale (STS) and Nature Relatedness Scale (NR- 21).

The result will be provided as per the request. Psychological or psychiatric referral will be provided.

## III. RESULT

### A. Sociodemographic Characteristics

The sample consisted of 202 college students. The sample consisted of 55 males (27%) and 147 females (72%). Majority of the participants were undergraduates (97.5%) and 2.48% were PG students. In terms of religion, 71.3% were Hindu(N=144), followed by 22.8% Christians (N= 46) and 5.9% Muslims (N=12). Majority of the participants, that is, 166 of them, belonged to the nuclear family constituting 82.2% of the sample and 31 participants belonged to the extended family (15.3). Only 5 participants belonged to a joint family (2.5%). Majority of the participants belonged to urban areas, 47 participants belonged to rural (23.3%) and 34 participants belonged to the middle and 26.2% from uppermiddle socio- economic status. 2.47% belonged to upper and 0.99% belonged to lower socio-economic status.

B. Relationship of Variables with Anxiety Sensitivity and Internet Addiction

Pearson's correlation (r) was used to find out the relationship between anxiety sensitivity, self - transcendence, nature relatedness and internet addiction in the entire sample (N=202). The correlation coefficients (r) are displayed in the tables below.

Anxiety sensitivity	r	p-value
Internet addiction	.431**	0.001
Salience	.415*	.000
Excessive Use	.397**	.000
Neglect work	.350**	.000
Anticipation	.278**	.000
Lack of Control	.350**	.000
Neglect social life	.287**	.000

 Table 1: Relationship between Anxiety Sensitivity and Internet Addiction

\*\*. 0.01 level (2-tailed).

Table 1 shows the relationship between anxiety sensitivity and internet addiction and its subdomains. There is a significant positive relationship between anxiety sensitivity and internet addiction, r = 0.431 which is significant at the 0.01 level. The result shows a significant positive

relationship with the sub-variables of internet addictionsalience (r =.415, p =.000), excessive use (r =.397, p =.000), neglect work (r =.350, p =.000), anticipation (r =.275, p =.000), lack of control (r =.350, p = .000), and neglect social life (r =.287, p =.000). Volume 9, Issue 3, March - 2024

ISSN No:-2456-2165

# International Journal of Innovative Science and Research Technology https://doi.org/10.38124/ijisrt/IJISRT24MAR1439

Table 2: Relationshi	n hetween Self	Transcendence and	Internet Addiction
1 a 0 0 2. Relationsin		Transcendence and	i munul Augulum

Self- Transcendence	r	p-value
Internet addiction	.052	.464
Salience	.012	.864
Excessive Use	.057	.422
Neglect work	002	.973
Anticipation	.119	.092
Lack of Control	.084	.232
Neglect Social life	.024	.738

The table 2 displays the relationship between self – transcendence and internet addiction and its subdomains. It

reveals that there is no significant relationship between self-transcendence and internet addiction.

Table 3: Relationship between Internet Addiction and Nature Relatedne	ess
---	-----

Nature Relatedness	r	p-value
Internet addiction	107	.129
Salience	165*	.019
Excessive Use	101	.152
Neglect work	081	.252
Anticipation	094	.184
Lack of Control	067	.344
Neglect Social lie	226**	.001
Nature Self		
Internet addiction	.095	.178
Salience	.044	.536
Excessive Use	.129	.067
Neglect work	.076	.283
Anticipation	.087	.221
Lack of Control	.161*	.022
Neglect Social life	067	.341
Nature perception		
Internet addiction	.093	.186
Salience	.059	.406
Excessive Use	.121	.086
Neglect work	.064	.367
Anticipation	.094	.185
Lack of Control	$.158^{*}$	.025
Neglect Social life	082	.244
Nature experience	r	p-value
Internet addiction	.159*	.024
Salience	.117	.096
Excessive Use	.203**	.004
Neglect work	.094	.183
Anticipation	.145*	.040
Lack of Control	$.180^{*}$	.010
Neglect Social life	002	.983

\*\*. 0.01 level (2-tailed).

\*. 0.05 level (2-tailed).

The table 3 exhibits the relationship between internet addiction and its subdomains and nature relatedness. It reveals that there is a significant negative relationship between nature relatedness and neglect of social life (r = -.226, p = .001). There is a weaker negative relationship with

salience and nature relatedness (r=  $-.165^{\circ}$  p= .019), reveals that people with nature relatedness may not feel that life without the Internet would be boring, empty, or joyless. Positive relationship with lack of control and nature relatedness self (r=  $.161^{\circ}$  p= .022), nature relatedness

# ISSN No:-2456-2165

perception (r=.158 p= .025). A significant positive relationship is evident between excessive use and nature experience. There is a weaker relationship between nature relatedness experience and internet addiction (r=.159, p= .024), anticipation (r = .145, p= .040) and lack of control (r= .180, p = .010).

## IV. DISCUSSION

The main objective of the study is to explore the impact of anxiety sensitivity, self- transcendence, and nature relatedness on internet addiction. The present study found that there is a significant positive relationship with internet addiction and its subscales and anxiety sensitivity variables. Previous study findings suggest that increased anxiety sensitivity predicts addictions-related to clinical and psychiatric issues (Stathopoulou et. al, 2020). Anxiety sensitivity has also been proven to be related with high consuming ranges and consuming problems, as properly as with misuse of a variety of substances in adults, such as heroin, alcohol, nicotine, and anxiolytics (Natalie & Patricia 2013). One of the motives for this is human beings drag into dependency to cope with multiplied anxiety sensitivity, or the concern of anxiety-related cognitive, social, and bodily symptoms.

According to this study, neglecting one's social life and being connected to nature are significantly correlated negatively. It stands to reason that people who are more in tune with nature might not find the social aspect of internet addiction to be significant. The sub-scale salience of internet addiction is significantly correlated with nature relatedness, suggesting that those who are nature related may no longer feel that life would be dull, meaningless, or devoid of joy without the Internet. Humanity's fundamental nature is the natural world, and feelings of belonging, camaraderie, or connection to the natural world are precursors to psychological well-being (Feral, 1998). Multiple studies have additionally validated the stress-reducing (Laumann, Garling, & Stormark, 2001; Rader, 2009), restorative outcomes (Nebel, 2003), well-being enhancement (Kaplan, 2001), and mood improving elements (Rader, 2009) of exposure to nature and nature-related stimuli. Therefore, the relationship with nature is a protective component for Internet addiction.

There exists a positive relationship with internet addiction subscale- lack of control and subscales of nature relatedness- nature relatedness self and nature relatedness perception. A significant positive relationship is evident between internet addiction as well as subscale- excessive use, anticipation and lack of control and nature relatedness experience. In a study, Greenway (1995) confirmed that individuals following a nature-based route had been successful in kicking long-standing bad habits like using tobacco and alcohol. Nevertheless, it is more difficult to pinpoint nature's contribution to the denial of substance use when control variables are absent. Similarly, teenage participants in wilderness therapy programs-which highlight the therapeutic aspects of a wasteland setting—have also demonstrated a great deal of positive effects, including a stronger desire to curtail maladaptive behavior, a significant

decrease in substance abuse, and an improved ability to pay attention to one's emotions (Phillips-Miller, 2002). Once more, it is challenging to pinpoint the actual role that being in a natural environment and feeling a part of it has in achieving these favorable results.

https://doi.org/10.38124/ijisrt/IJISRT24MAR1439

Also, there is no significant relationship between self transcendence and internet addiction. There is ongoing controversy in the impact of self - transcendence on addictions. Previous studies contend that high selftranscendence (ST) were correlated with IA severity and some findings reveal that there is a negative relationship between self-transcendence and addictions (Ha JH, Kim SY, Bae SC, et al. 2007).

## V. IMPLICATION

According to the study, there is a strong positive correlation between college students who are very addicted to the Internet and their high levels of anxiety sensitivity. Therefore, it can be advised that when working with people who are internet addicted, professionals in the field take anxiety sensitivity levels into account and, if needed, focus on minimizing or curing this symptom altogether. A person's relationship to the natural world has an impact on how they function generally, even though there is no statistical evidence linking nature-relatedness to internet addiction. Additional studies might include a wider range of topics. Examining the effect on internet addiction following an increase in deliberate participation would also be fascinating.

## VI. LIMITATION

A noteworthy constraint of this research was the utilization of Google Forms to gather data on internet addiction, nature relatedness, self-transcendence, and anxiety sensitivity. Observation and other direct measurements would be great qualitative additions to the research. Instead of taking a strictly quantitative approach, future research may take a mixed-method approach. Furthermore, since the present study relied solely on self-report data, the prevalent method bias may have had an impact on the findings. Additionally, the study's sample size was quite uniform. Because the majority of the subjects were female, undergrads, and from cities, the survey does not provide a complete view of college students. There were 202 participants in the current sample; a larger sample would greatly boost the statistical power of the tests. Furthermore, the study does not look into certain personality traits, a family history of mental illness, or other socio - demographic information. It could be fascinating to compare and examine the relationship between college students' Internet addiction across various streams in a future study.

- Financial Support and Sponsorship: Nil
- Conflicts of Interest: Nil

ISSN No:-2456-2165

## REFERENCES

- [1]. Beard KW. Internet Addiction: A review of current assessment techniques and potential assessment questions. Cyberpsychol Behav 2005; 8(1):7–14.
- [2]. Berto, R.; Barbiero, G.; Barbiero, P.; Senes, G. An individual's connection to nature can affect perceived restorativeness of natural environments. Some observations about biophilia. Behav. Sci. 2018, 8, 34.
- [3]. Butcher, J. N., Mineka, S., & Hooley, J. M. (2013). Anormal Psikoloji. Çev., Okhan Gündüz. İstanbul: Kaknüs yayınları.
- [4]. Ha JH, Kim SY, Bae SC, Bae S, Kim H, Sim M, et al. Depression and Internet addiction in adolescents. Psychopathology 2007; 40(6): 424-30.
- [5]. Kaplan, R. (2001). The nature of the view from home: Psychological benefits. Environment & Behavior, 33, 507-542.
- [6]. Khan, M. A., Shabbir, F., & Rajput, T. A. (2017). Effect of Gender and Physical Activity on Internet Addiction in Medical Students. Pakistan journal of medical sciences, 33(1), 191–194.
- [7]. Levenson, M. R., Jennings, P. A., Aldwin, C. M., & Shiraishi, R. W. (2005). Self transcendence: Conceptualization and measurement. International Journal of Aging and Human Development, 60(2), 127–143.
- [8]. Mantar, A., Yemez, B., & Alkın, T. (2011). Anksiyete duyarlılığı ve Psikiyatrik Bozukluklardaki Yeri. Türk Psikiyatri Dergisi, 22(3): 187-193.
- [9]. Maslow, A. H. (1971). The farther reaches of human nature. New York, NY: Penguin.
- [10]. 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.
- [11]. Nisbet, E. K. L., Zelenski, J. M., & Murphy, S. A. (2009). The Nature Relatedness Scale: Linking individuals' connection with nature to environmental concern and behaviour. Environment and Behavior, 41, 715-740.
- [12]. Reed, P. G. (1991b). Toward a nursing theory of self transcendence: Deductive reformulation using developmental theories. Advanced Nursing Science, 13, 64-77.
- [13]. Shaw M, Black DW. Internet addiction: Definition, assessment, epidemiology and clinical management. CNS Drugs 2008; 22(5):353–365.
- [14]. Spalletta, G., Bria, P., & Caltagirone, C. (2007). Differences in temperament, character and psychopathology among subjects with different patterns of cannabis use. Psychopathology, 40, 29–34.
- [15]. Stathopoulou G, Gold AK, Hoyt DL, Milligan M, Hearon BA, Otto MW. Does anxiety sensitivity predict addiction severity in opioid use disorder? Addict Behav. 2021 Jan;112:106644. doi: 10.1016/j.addbeh.2020.106644. Epub 2020 Sep 6. PMID: 32987306; PMCID: PMC7572685.

[16]. Tam, K.-P. Concepts and measures related to connection to nature: Similarities and differences. J. Environ. Psychol. 2013, 34, 64–78.

https://doi.org/10.38124/ijisrt/IJISRT24MAR1439

- [17]. Valentini M, Biondi M. The emergence of behavioral addictions. Riv. Psichiatr 51(1), 85-86 (2016).
- [18]. Van Rooij AJ, Prause N. A critical review of Internet addiction criteria with suggestions for the future. J. Behav. Addict 3(4), 203-213 (2014).
- [19]. Wilber, K. (2000). Integral psychology: Consciousness, spirit, psychology, therapy. Boston, MA: Shambhala.
- [20]. Young KS. Caught in the Net. New York: John Wiley & Sons, 1998.
- [21]. Young KS. Internet Addiction: A new clinical phenomenon and its consequences. American Behavioral Scientist 2004; 48(4):402–415.
- [22]. Young KS. Internet addiction: The emergence of a new clinical disorder. 104th annual meeting of the American Psychological Association, August 11; Toronto, Canada1996. Young KS. Internet addiction: the emergence of a new clinical disorder. Cyberpsycol. Behav 1998.11(1), 237-244.
- [23].