



Influence of Social Media Addiction on Nightmare Disorder among Adolescents: A Comparative Study

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Abstract:

With the increasing use of social media, the addictive use of this new technology also grows. Previous studies found that addictive social media use is associated with negative consequences such as anxiety, depression and thus, even some sleeping disorders. One such is the Nightmare Disorder. However, a holistic theoretical understanding of how nightmare disorder develops and its effects is still lacking which impedes practical research that aims at designing educational, medical and other intervention programs to prevent nightmare disorder. In this study we collected 84 different samples which were given the Nightmare Disorder Index test and the Social Media Addiction Test. A correlational study was conducted which included the Pearson Coefficient, standard deviation, and the t score. Results show that the influence of Social Media Addiction on Nightmares is very prominent, significant and positively correlated.

Keywords: Social Media, Nightmares, Addiction, Adolescents

Introduction:

How can addictions develop in people? In the last 50 to 60 years, science and medicine have made numerous advances that have considerably improved our understanding of addiction. We are starting to comprehend the biological factors that affect animal and human behaviour. People with addiction problems, such as heroin addiction, were once stigmatised as selfish and easily influenced. Whether they were acting inappropriately toward themselves or others, they seemed to be. The definition of addiction has expanded beyond problematic substance use. We now understand that some activities can potentially lead to addiction (such as sex and gambling). This is so because addiction is a problem with how the brain works.

It's not the drug or action that makes us addicted; it's the chemicals our brains release. How our brains function is significantly influenced by our DNA.

In their decision in 2013, the APA (2013) included Internet Gaming Disorder as one common sub-type from the umbrella-term IA into the appendix of the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, fifth edition; APA (2013); cf. (Petry & O'Brien, 2013). While this decision was generally appreciated, it has also been criticized that types of IA not related to gaming were ignored.

The past literature reveals how prevalent stress, anxiety, and depression were among social media addicts. Additionally, it showed the tenuous connection between social media addiction's stress and anxiety.

The International Telecommunication Union reports broadband is currently affordable in 111 countries, with a basic fixed or mobile plan costing less than 5% of Gross National Income (GNI) per capita. India consists 481 million internet users in December 2017. Among them youngsters (46% urban and 57% rural) below the age of 25 yrs are predominant. In our study users are aged 13-19 years with male predominance confirming the previous reports. According to the family technology education nonprofit group, teens are spending more than one third of their days using media - nearly nine hours on average. Estimates posit that over 210 million people worldwide suffer from Internet and social media addiction. The prevalence of internet addiction among high school students was 3.9% in an Italian study. Males were more likely to be classified as addicted to the internet compared to females. Although past research has revealed an unusual and unexpected result that female participants were not only more addicted but also suffered from negative effects like depression, loneliness and even an elevated sense of narcissism. A portion of this decreased drive also translates to a diminished libido. Studies have indicated that sleep apnea, a disorder that makes breathing difficult while sleeping, can interfere with testosterone levels, making it difficult for the body to replenish its ideal amount of the hormone when sleep is disturbed.

Rationale and Significance:

1. Health Consequences of Sleep Deprivation

Lack of sleep is associated with multiple health and academic consequences. First, mood and risk of depression are correlated with sleep duration. Self-reports of poor mood, emotional regulation, and self-harm increase with sleep restriction. The relationship between mood and sleep is complex and bidirectional because poor mood and anxiety can worsen insomnia and vice versa. However, data support improvement in depressive symptoms when sleep time is extended.

Adverse Effects of Social Media on Sleep:

Research (Anne-Marie Chang, 2014) conducted by Harvard University sleep researchers outlined the impact of light-emitting electronic devices on our sleep. "We found that the use of these devices before bedtime prolongs the time it takes to fall asleep," the report states.

A new study (M. G. Hunt, R. Marx, C. Lipson, J. Young; Dec 2018) concludes that there is in fact a causal link between the use of social media and negative effects on well-being, primarily depression and loneliness. The study was published in the Journal of Social and Clinical Psychology.

Statement of Problem:

To study the effects of addiction of Social Media amongst adolescents of the age group 12 to 19 over Nightmare Disorder.

Hypothesis: Adolescents with heavy usage of Social Media have more nightmares than adolescents with less usage of Social Media.

Variables:

Independent Variable: Amount of time (hours) on social media.

Dependant Variable: Number of Nightmares in a week.

Research Design: The present study is based on the correlational research design model in 2022 at Pune, India. This design fits the research as it it would like to know the relation (how and how much) between Social Media Addiction and Nightmare Disorder.

Sample: The sampling method used is probability sampling. The sample in this study includes a variety of adolescents from the city of Pune, India and a few people from around the world. Only people having an active Social media account for over 12 months were included. Total number of sample was N=82.

Research Tools:

1. Social Media Addiction Scale by Shahnawaz and Rehman (test-retest reliability was found to be .88).
2. The Nightmare Disorder Index by Jessica D., Daniel T., Kristi P., Sophie W-P., Danica S., Brett M., Rosemary E., Camilo R., and Kimberly K.

Procedure: With a sample of N=84 gathered by the method of random sampling, and given the two tests for Social Media Addiction and Nightmare Disorder. It was tested for correlation using the Pearson Coefficient. The distribution of normality and the t score were both computed using the Student's t test. Version 29.0.0.0 of IBM SPSS Statistics was used for this procedure (241).

Statistical Analysis: The study used descriptive analysis, correlations analysis, normality and variability tests to answer the questions. IBM SPSS Statistics, version: 29.0.0.0 (241) was the version used by the researcher for the statistics of the data.

Descriptive Analysis: From the table below (Table 1), a total sample of 82 can be seen participating in the survey. The mean of SMA and Nightmare Disorder is 69.52 and 6.14 respectively. Standard deviation of 28.249 and 4.827 indicate a healthy distribution of the sample.

Descriptive Statistics

	Mean	Std. Deviation	N
SMA	69.52	28.249	84
ND	6.14	4.827	84

Paired Samples t-test: The below table (Table 3) shows the t test along with the two sided significance level of this study. A Paired samples t-test was conducted to determine the effect of Social Media Addiction on Nightmare Disorder.

The re-

		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	SMA-ND	63.381	26.069	2.844	57.724	69.038	22.283	83	<.001	<.001

sults indicate a significant difference between Social Media Addiction score (M=69.52; SD=28.25) and Nightmare Disorder score (M=6.14; SD=4.83); [t(83) = 22.283, p < .001].

The 95% confidence interval of the difference between the means ranged from [57.72 to 69.04] and did indicate a difference between the means of the samples. We, therefore, reject the null hypothesis that there is no difference between the means and conclude that there is an effect of Social Media Addiction on Nightmare Disorder.

Conclusion: After gathering all the data and doing the analysis, the researcher concludes that the effect of social media addiction in adolescents of city of Pune on Nightmares is a real thing. The researcher felt it was urgent to concentrate on adolescent students because a greater proportion of this cohort suffers from social media addiction and night terrors. The schools or colleges should take the necessary steps to ensure that students, teachers, and parents are aware of the benefits of social media and how to help students manage their addiction. They should also be aware of the challenges that students face when trying to fall asleep and take the appropriate steps to address those challenges.

Limitations:

1. In the present study, the sample was of N=84 students as this was a highly time constrained report, thus more varied and higher number of sample would prove to be better at results.
2. This knowledge of the prevalence of nightmare disorder is crucial to the mental health of adolescents as well as their growth, career, and performance, especially in light of the well-documented detrimental effects of nightmare disorder (such as increased symptoms of depression, anxiety, and burnout), and thus should be explored more.
3. We should also be aware that there hasn't been a lot of research in the area of nightmare disorders, so more study is required to better grasp the disorder's benefits and drawbacks.

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