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REVIEW ARTICLE

# Association of Internet Addiction with Personality Traits, Family Violence, and Sleep Quality

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#### **ABSTRACT**

**Background:** Internet addiction has been defined as a loss of control over one's usage of the internet, a failure to manage one's time effectively, and a yearning for the online that leads to social difficulties. The health of an internet user can benefit from and suffer from using it. Mental health illnesses have increased as a result of internet addiction. In addition to impairing the quantity and quality of sleep, internet addiction is associated with an increased risk of insomnia, psychological problems such as anxiety and depression, alcoholism, and attention deficit disorder among college students. It has also had a detrimental effect on how long people sleep at night, led to daytime weariness, and decreased productivity at work. Internet addiction is linked to depression, poor sleep, extreme mood swings, low self-esteem, impulsivity, suicide, lack of physical activity, and a host of other health issues, including lifestyle disorders like obesity, back pain, and migraines. **Conclusion:** We concluded that internet addiction among university students is a major public problem. We also concluded that there is a strong significant relationship between internet addiction among university students' personality traits and family violence. Furthermore, internet addiction can also affect sleep quality.

**Keywords:** Internet Addiction, Personality Traits, Family Violence, Sleep.

### INTRODUCTION

Internet Addiction (IAD) has different signs as changes in mood, obsession with the internet and digital media, an inability to regulate the amount of time spent interacting with technology, the need for more time or a new game to reach a desired mood, withdrawal symptoms when not using the technology, and a persistence of the behavior despite family conflict, a deteriorating social life, and negative work or academic consequences [1].

Internet use-related problems were common among Egyptian university students. IA was associated with "fresh studying" and online gaming while using the internet for educational purposes could be protective. Addressing this issue and its predictors would help raise awareness of internet use-related problems among both university administrators and parents, and might help in implementing prevention programs [2].

Investigating the part that personality plays in psychopathology has been a topic of interest for a while. The most well-known personality model is the Five Factor Model (FFM) of Personality, sometimes referred to as the "Big Five" model. Neuroticism (Neuroticism is the tendency to have strong negative emotions, such as anger, anxiety, or depression. It is sometimes called emotional instability or is reversed and referred to as emotional stability [3]), extraversion (Extraversion is characterized by breadth of activities (as opposed to depth), surgency from external activities/situations, and energy creation from external means[4]) openness: (Openness to experience is a general appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience[5]), agreeableness (They are generally considerate, kind, generous, trusting, and trustworthy, helpful, and willing to compromise their interests with others. Agreeable people also have an optimistic view of

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human nature [6]), and conscientiousness (Conscientiousness is a tendency to be self-disciplined, act dutifully, and strive for achievement against measures or outside expectations. It is related to people's level of impulse control, regulation, and direction [7]) which are the five personality qualities of the FFM. According to certain findings, there is a substantial correlation between internet addiction and each of the big five personality traits [8].

Abuse directed at children, adults, and the elderly on all fronts—economic, physical, sexual, emotional, and psychological—is included in the category of domestic and family violence. Sleep quality is defined as waking up feeling refreshed and in shape. Sleep is important for maintaining human health, both physically and mentally. The need for sleep is especially significant for younger generations due to their developing body systems [9].

One of the best ways to forecast both poor sleep quality and carelessness at work is to use the internet excessively. The excessive and problematic use of the internet, known as pathological internet use, is one of the major causes of sleep disorders, which are highly complex. The prevailing consensus is that college students don't get enough sleep. Not only does poor sleep negatively impact academic performance, but it also increases the likelihood of alcohol and smoking behaviors, behavioral and emotional issues, and bad emotional status [10].

## IAD and personality traits

Previous research has found that while neuroticism was found to be positively associated with these predictors, extraversion, agreeableness, conscientiousness, and openness were found to be negatively associated with the positive predictors of Internet addictions, such as low self-esteem, loneliness, depression, and social anxiety [11].

Thus, the majority of research indicates that while neuroticism is a considerably positive predictor of Internet addiction, extraversion, agreeableness, conscientiousness, and openness are significantly negative predictors. Some research, however, has shown conflicting conclusions. For instance, there was no correlation or a positive correlation discovered between extraversion and Internet addiction, as well as between openness and Internet addiction [12].

The Big Five personality traits are predictive of internet addiction. Personality traits are consistent for people; however, they can vary within a range. Several studies have shown that psychological qualities like loneliness, despair, and low self-esteem can be impacted by Internet addiction [13].

Furthermore, there is evidence that the Big Five personality traits may be outcome variables for Internet addiction because they have been significantly linked to people's feelings of loneliness, sadness, and self-worth. The consequences of Internet addiction on people's Big Five personality traits, however, have not yet been well researched, according to a thorough evaluation of the pertinent literature, which is why the current study looked into these impacts [14].

Research has indicated that throughout the COVID-19 pandemic, people's addiction to the Internet has grown. This is due to the possibility that people may become more anxious, depressed, and experiencing other unpleasant feelings if there are no clear answers to the issues of when the epidemic will stop and how to deal with this difficult time [12].

For instance, it has been discovered that neuroticism is favorably correlated with negative emotions such as anxiety and sadness, while extraversion, agreeableness, conscientiousness, and openness are negatively correlated with these feelings. These correlations could result in more robust negative or positive relationships between Internet addiction and the Big Five personality traits [14].

## IAD and family violence:

The issue of internet addiction has spread globally, affecting individuals of all ages. Relationships, education, employment, income, and other facets of life are all badly impacted. From the standpoint of family violence, the extent of internet addiction can have an impact on all members of the family, including the roles, relationships, systems, and functions of the family [15].

The main result is that family members become more stressed. Hence, there is a connection between the effectiveness of the family system and internet addiction in family members. The swift expansion of the internet has greatly influenced psychology research aimed at comprehending emotional states and heightened curiosity about internet addiction. Research has revealed that family violence, anxiety, and sadness are among the consequences of Internet addiction [16].

Stress is a person's physical, emotional, and mental reaction to any pressure or change. A person's life will inevitably involve stress. The perspectives of the person experiencing, acting upon, and managing stress are explored. The conversations will soon address all family members who experience stress, coping mechanisms, and family stress

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management techniques when the strain is seen from the viewpoint of the family [17].

Families are viewed as a cohesive entity that shares problems, struggles, and life experiences. As a result, family members share the inherent stress. The disparity between the demands and the family's capacity to meet them is referred to as family stress. One of the main sources of stress is family demands. It also alludes to modifications in family life [17].

Children and teenagers use the internet in large quantities. A number of parents are in the dark about what their kids are doing online. Mobile phones, digital music players, and computer games are among the devices that expose students to the Internet. Most teenagers who are aware of using the internet are susceptible to internet addiction, according to studies [16].

Teens who change their bedtime owing to extended internet use are among those who exhibit symptoms of internet addiction and become less productive. Kids are merely using the internet, while parents mistakenly believe they are doing their homework. Teens' daily routines, academic performance, and family dynamics will all be impacted by their excessive internet use [17].

Stress in family relationships is a result of family violence. Positively, disagreements amongst family members also contribute to this. Stressful phenomena like internet addiction cause family members to feel stressed. For instance, unhappy family members may be urged to carry out actions that could harm them psychologically or physically, such as making suicide attempts [15].

Families provide a person with a social network and a spiritual role in helping them manage stress. Time management issues and the neglect of family relationships are two things that lead to the consequences of internet addiction. Internet surfing has taken the place of social interactions, family outings, and hobbies, which can strain ties within the family and raise the risk of domestic abuse [17].

Indirectly, face-to-face interactions with people in the real world have been supplanted by virtual ones. This is a major contributing factor to the rise in marital violence and divorce cases. A cyber affair is characterized as a romantic and sexual relationship that starts online and continues through email exchanges, chat rooms, and interactive games [18].

Many people experience depression and deal with issues like property destruction, job loss or failure, domestic disputes, and so forth. Anxiety, lack of concentration, irritability, insomnia, appetite loss, and more are traits of depression. Family violence is

a worrying and more prevalent issue in today's culture. Newspaper reports from the past few years have shown an increase in cases of abuse, brutal murders, suicide, and a myriad of other issues [19].

The husband and wife's relationship is impacted by family violence. There is no detrimental influence on a person's psychology that separates a married couple. As a result, people decide that getting a divorce is a simple fix. Divorce was once thought of as a way for some people to escape their problems and begin a brighter, more fulfilling life. Nonetheless, one of the biggest issues of the modern day is handling domestic violence [15].

# IAD and sleep quality

One of the most important prerequisites for optimal health is getting enough excellent quality sleep, along with a balanced diet and frequent exercise. Globally, insomnia is thought to cost hundreds of billions of dollars each year. These estimates take into account data on the number of persons who are injured and killed annually as a result of sleep-related incidents [12].

A cyclic metabolism controlled by internal components under the moderating impact of external elements like sunshine, food quality, and regular exercise to assist the body in maintaining them is known as a circadian rhythm, sometimes also referred to as a sleep-wake cycle. Digital addiction is a syndrome characterized by an obsessive drive to use the internet for an excessive amount of time, both during the day and at night, to the point when relationships, jobs, sleep, exercise, good food, and outdoor activities with daylight exposure are seriously jeopardized [20].

On the one hand, using computers excessively during the day and at night results in an almost constant state of arousal and prevents the relaxing effects of relaxation, which are crucial for getting the body ready for sound sleep. Conversely, it is commonly recognized that depression and sleep disorders are mutually reinforcing. The intricate interaction between these two conditions can lead to the disruption of circadian rhythms by intensifying negative emotions and diminishing regular exposure to daylight, healthy physical activity, dietary habits, and social activities that regulate mood [12].

Backaches, eating disorders, obesity, behavioral and mental issues, migraines, and social disengagement are other common signs of internet addiction and digital addiction. Many characteristics, such as delayed bedtime (DBT), total sleep time (TST), sleep onset latency (SOL), wake after sleep onset (WASO), or sleep efficiency (SE), with

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delayed bedtime (DBT) and shorter TST, represent the impact of electronic media usage on sleep in school-aged children and adolescents [20].

Sleep disturbance was the most common complaint (46%), followed by headaches, eye problems, backache, and decreased physical activity (44.3%, 37%, 24.7%, and 21.7%, respectively). Shoulder pain was the least detected symptom among them (16.3%). Decreased family time was significantly higher among students with abnormal internet use than those with regular use (51.9% versus 20%, respectively). [21].

There were statistically significant relations between abnormal internet use and physical problems such as backache, shoulder pain, eye, and sleep issues, which were all found to increase among the odd users compared to those with regular internet use (28.9%, 19.1%, 40.4%,52.3% versus 9.2%, 6.2%, 24.6%, and 23.1% respectively) [21].

All of these symptoms could be the result of, or the primary cause of, dysfunctional sleep. The COVID-19 pandemic that began to spread two years ago has had an impact on many people's lives, especially those of teenagers and young pupils [22].

A cross-national study examined the association between internet addiction and sleep pattern alterations throughout the epidemic among medical students. Convenience sampling and an online survey with demographic and COVID-19-related data were used to conduct the cross-sectional study in seven countries: the Dominican Republic, Egypt, Guyana, India, Mexico, Pakistan, and Sudan [20].

Young's Internet Addiction Test (IAT) and Pittsburgh Sleep Quality Index (PSQI) scores were employed. Out of all 2749 individuals, 67.6% scored higher than 30 on the online Addictive Test (IAT), indicating the possibility of online addiction, and 73.5% scored at least 5 on the PSQI, indicating inadequate quality sleep. 13.2% of the variance in poor sleep quality is attributed to internet addiction, which has been demonstrated to be a major predictor of poor sleep quality [20].

Compared to those who did not, participants who reported COVID-19-related symptoms experienced sleep disturbances and higher degrees of internet addiction. Individuals who disclosed a COVID-19 diagnosis also reported having low-quality sleep. When compared to individuals who did not have any COVID-19 patients nearby, those who shared a home with a patient who had been diagnosed with the virus noted increased internet addiction and decreased sleep quality [20].

These findings highlight the significant influence pandemic-related stressors have on students' digital addiction and sleep hygiene. We need to learn more about what goes on in the minds of people who are addicted to online activities to better comprehend the multiple variables at play here and how they are interdependent [12].

**Conclusion:** We concluded that internet addiction among university students is a major public problem. We also concluded that there is a strong significant relationship between internet addiction among university student's personality traits and family violence. Furthermore, internet addiction can also affect sleep quality.

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