



## PERCEIVED STRESS, INSOMNIA, AND INTERNET ADDICTION AMONG COLLEGE STUDENTS

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### Abstract

Perceived stress, insomnia, and internet addiction are common issues among college students that can have a significant impact on their academic performance and overall well-being. Students in college sometimes experience high levels of scholastic pressure, financial strain, and social responsibilities, all of which can heighten feelings of stress and cause sleeplessness. Some kids may use the internet as a coping strategy as a result, which might result in internet addiction. It is essential to comprehend how these three phenomena interact to create effective treatments and support systems for college students. Therefore, research on the prevalence, risk factors, and effects of perceived stress, sleeplessness, and internet addiction among college students has gained more interest in recent years. The present study aims to explore perceived stress, insomnia, and internet addiction among college students. 101 people were included in the study's sample, and simple random sampling and purposive sampling were both used in the selection process. The study concentrated on college students, regardless of age. 101 people from varied backgrounds completed a survey. The psychometrically standardized questionnaires were used i.e., PSS (Perceived Stress Scale) by Sheldon Cohen in 1983, ISI (Insomnia Severity Index) by Morin, C. M. in 1993, and IAT (Internet Addiction Test) by Kimberly Young in 1998. After the variables were analyzed, the correct statistical method was used to confirm the significance of the results. The original data were compared with the proposed hypotheses and the prior literature to determine the intended outcome. The findings showed that perceived stress and insomnia have an insignificant negative correlation, contradicting the hypothesis, whereas perceived stress and internet addiction had a significantly positive correlation, supporting it. When all the factors were considered, the association between internet addiction and insomnia was negligibly negative. The study also showed that while insomnia is more common in men, perceived stress and internet addiction are relatively higher in women.

**Keywords:** Perceived Stress, Insomnia, Internet Addiction, College Students.

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**DOI:** - 10.48047/ecb/2023.12.si5a.0173

## INTRODUCTION

As they handle the demands and strains of college life, college students may endure a variety of physical, cognitive, and moral changes. Changes in sleep patterns, weight gain or loss, increased alcohol and drug usage, increased sedentary behaviour, and elevated stress levels are just a few examples of physical changes. Higher mental complexity, better memory, better attentional control, the development of metacognition, higher cognitive load, and increased creativity are some examples of cognitive changes. Increasing moral thinking, being exposed to many viewpoints, developing one's own identity, and becoming more conscious of social justice issues are all examples of how one might modify moral behaviour. To manage these changes and advance general well-being, college students should place a high priority on self-care and healthy practices.

A complex and dynamic notion, perceived stress includes a variety of contributing variables, such as cultural, social, medical, physical, psychological, and psychosocial aspects. When people perceive their surroundings as dangerous or overpowering, it has an impact on how they interact with it. This is a subjective experience that differs from person to person. It is critical to pinpoint the root causes of stress and create strategies for efficient stress management because perceived tension can have detrimental effects on both mental and physical health. The way in which people experience and react to stress depends on a variety of factors, including personal characteristics, way of life, social support, life events, and sociodemographic factors. In addition, stress has different impacts on men's and women's health outcomes.

Insomnia is a typical sleep disorder with a wide range of symptoms. It is characterised by little or poor-quality sleep, which can make it difficult for a person to perform daytime tasks. Poor sleep patterns, stress and worry, medical disorders, drugs, substance misuse, environmental variables, and psychological conditions can all contribute to insomnia. Having trouble falling asleep, having trouble staying asleep, waking up during the night, not feeling rested after sleeping, being tired or sleepy during the day, being irritable, experiencing depression or anxiety, having trouble paying attention, focusing on tasks, or remembering, having a rise in errors or accidents, and worrying about sleep frequently are all signs of insomnia. Medication, mental health services, and lifestyle modifications like as adhering to a regular sleep schedule, avoiding electronic devices before night, and adopting a relaxation routine are all effective treatments for insomnia.

Because of its portability and accessibility, the Internet has become an essential part of daily life and a potent instrument for communication and information-seeking. However, excessive Internet use can result in Internet addiction, a problem that may affect young individuals. IA can result in physical discomforts such as carpal tunnel syndrome, dry eyes, and sleep difficulties in addition to satisfying the six essential elements of addiction. Additionally, it has social and psychological repercussions, including strained interpersonal ties, anxiety, stress, and depression as well as decreased academic performance. Excessive internet use, rising time spent online, futile attempts to restrict use, and using the internet to escape difficulties or improve a sad mood are all warning indications of IA. The American Psychiatric Association has released a statement acknowledging the problems caused by IA.

## METHODOLOGY

### Objectives

1. To assess the correlation between perceived stress, insomnia, and internet addiction.
2. To assess the gender difference in perceived stress, insomnia, and internet addiction.

### Hypothesis

1. There will be a significant positive correlation between perceived stress and internet addiction among college students.
2. There will be a significant positive correlation between insomnia and internet addiction among college students.
3. There will be a significant positive correlation between perceived stress and insomnia.
4. There will be significant gender differences in perceived stress among college students.
5. There will be significant gender differences in insomnia among college students.
6. There will be significant gender differences in internet addiction among college students.

## SAMPLE

College students from various backgrounds completed the survey regardless of age. 101 people were included in the study's sample, and simple random sampling and purposive sampling were both used in the selection process.

## PROCEDURE

The variables to be examined were evaluated using a cross-sectional study with simple random sampling and purposive sampling utilising a range of relevant approaches, such as scales. The proper statistical procedure was utilised to validate the findings for their significance after the variables

had been evaluated. In order to ascertain the desired result, the initial data were compared with the proposed hypotheses and the prior literature. Through the execution of an online survey, the necessary sample was gathered. Before submitting the questionnaire, prior approval was obtained. The study's goal and need were explained to the participants. Each instrument was used solely by itself. The participants received guarantees that the information collected would be kept private and that it would only be used for legitimate research. The questionnaire was filled out by the respondents in roughly 8 to 10 minutes. They were free to email any questions they had about any of the test items. Data input and documentation were completed in preparation for additional statistical analysis. Excel worksheets were mainly produced during data entry. For each of the three factors, raw scores, percentiles, and the corresponding category of each sample were recorded. To interpret the given data, appropriate statistical methods were used.

### PSYCHOMETRIC TOOLS

The right psychometric tools were chosen after considering the variables, the study's objectives, and the characteristics of the sample. The following resources were used in this study:

1. Perceived Stress Scale (PSS)- is a classic stress assessment instrument. It is developed by Sheldon Cohen in the year 1983. Because your impression of what is happening in your life is so crucial, the PSS is both interesting and significant. Think about the possibility that two people could have experienced the same things in their lives over the past month. Depending on how they see it, the total score may place one of them in the low-stress category and the other in the high-stress category. It consists of 10 items about your feelings and thoughts during the last month. For scoring, there is reverse scoring for questions 4, 5, 7, and 8, i.e., 0=4, 1=3, 2=2, 3=1, 4=0. The higher the score higher the severity of stress.

2. Insomnia Severity Index (ISI)- this psychometric test is designed to assess the nature, severity, and impact of insomnia and monitor treatment response. It is developed by Morin, C. M. in 1993. The index has 7 questions and then answers are added to get a total score. The score categories include:

- 0-7= No clinically significant insomnia
- 8-14= Subthreshold insomnia
- 15-21= Clinical insomnia (moderate severity)
- 21-28= Clinical insomnia (severe)

3. Internet Addiction Test (IAT)- test was developed by Kimberly Young in 1998. It consists of 20 statements. Participants are supposed to circle the 5-point Likert scale which describes the

best. The maximum score is 100. Likewise, the higher the score, the higher the severity of the problem. The score categories include:

- 0-30= Normal level of internet usage
- 31-49= Mild level of internet addiction
- 50-79= Moderate level
- 80-100= Severe dependence upon the internet.

### ETHICAL CONSIDERATIONS

Volunteers who provided their willing consent were used in the study; participants were asked for their approval to complete the questionnaire before enrolment. The form's purpose was explained to the participants. It was possible to communicate with the participants. Participants' confidentiality and the privacy of their responses were guaranteed. Following their consent, each participant filled out the forms, which took them, on average, 15 minutes to complete.

### DATA ANALYSIS

For statistical analysis, the statistical software package Statistical Package for Social Science Version 16 (SPSS 16) is used. The collection, coding, and completion of the descriptive analysis of the data. The significant correlation between perceived stress, sleeplessness, and internet addiction among college students was established using the Pearson correlation coefficient. Because we already know the population distribution is normal or because we can easily predict it to be normal, this test is parameterized.

### RESULT AND DISCUSSION

**Table No. 1** Correlation Table

Variables	Perceived stress	Insomnia	Internet addiction
<b>Perceived Stress</b>	1	-.040	.465
Sig. (2-tailed)		.687	.000
<b>Insomnia</b>		1	-.038
Sig. (2-tailed)			.000
<b>Internet Addiction</b>			1

Table number 1 shows that there is an insignificant negative correlation between perceived stress and insomnia. Therefore, the hypothesis "There will be a significant positive correlation between perceived stress and insomnia among college students" stands unsupported. In the same table, it is shown that is a significant negative correlation between perceived stress and internet addiction. Therefore, the hypothesis "There be a significant positive correlation between perceived stress and internet addiction among college students" stands supported. Eventually table number 1 shows the insignificant but negative correlation between insomnia and internet addiction. Therefore, the

hypothesis “There be a significant positive correlation between insomnia and internet addiction among college students” stands unsupported.

Many pieces of research have been conducted to study the link between perceived stress and insomnia. José L. Cuadros, et al., (2012). They determined to assess perceived stress, insomnia, and related factors in mid-aged Spanish women. This was a cross-sectional study in which 235 women aged 40–65 completed the Menopause Rating Scale (MRS), the Perceived Stress Scale (PSS), the Insomnia Severity Index (ISI), and a general socio-demographic questionnaire containing personal and partner data. The internal consistency of each tool was also computed. The median age of the sample was 52 years. Multiple linear regression analysis found that higher PSS scores (more stress) inversely correlated with female age and positively with MRS psychological and urogenital scores (impaired quality of life in these domains) total higher ISI scores (more insomnia), and partner premature ejaculation. Luenda E. Charles, et al., (2011). The objective was to investigate associations of perceived stress with sleep duration and quality among 430 police officers. The mean age was 42.1 years. They concluded that Perceived stress was inversely associated with sleep duration and positively associated with poor sleep quality. Additional research is needed to understand better the connection between perceived stress and internet addiction. Bhupendra Singh (2020). This study aimed to know the perceived stress and internet addiction among the students pursuing professional courses during the lockdown of corona pandemic in India. A total of 297 students from various professional courses participated in the study. 84% of participants reported a high level of perceived stress and internet addiction. A

positive correlation was present between perceived stress and internet addiction.

Yonghui Feng, Yutong Ma, and Qisong Zhong (2019). This cross-sectional study explored the impact of stress, social anxiety, and social class on internet addiction among adolescents. In conclusion, there is a mediated-moderation effect between stress and adolescent internet addiction. This means that adolescents from different social classes have different types of anxiety when they feel stress, which influences their choices concerning internet use. Furthermore, some studies reported the influence of internet addiction on disturbed sleep among college students. Ioulia Kokka, et al., (2021). This review aims to investigate the body of evidence regarding the impact of problematic internet use on adolescent sleep. Results of relevant studies should be embedded in educational interventions addressed to adolescents as well as parents, to eliminate the negative outcomes of problematic internet use on sleep and adolescents’ health in general. Marietta Pohl, et al., (2021). This study focused on the association of internet addiction with burnout, depression, insomnia, and lower quality of life among high school teachers. This is the first study from Hungary and is one of the first studies showing the association of IA with mental issues, burnout, and lower quality of life among adults. It underlines the clinical importance of problematic Internet use among adults. So Young Kim, et al., (2018). To elucidate the potential effects of sleep time on internet use, they explored the different associations between sleep time and internet use according to its purpose. They concluded that less sleep was significantly related to long-term use of the internet for leisure, whereas this association was not definite for internet use for study. Furthermore, poor sleep quality potentiated the relationship between less sleep time and internet use for leisure.

**Table No. 2** Independent T-Test

Variables	Gender	N	Mean	S D	t-value	p-value
<b>Perceived Stress</b>	Male	43	16.98	5.709	2.70	.008
	Female	59	20.73	7.670		
<b>Insomnia</b>	Male	43	10.97	6.16	.558	.578
	Female	59	10.23	6.91		
<b>Internet Addiction</b>	Male	43	4.21	2.14	.393	.695
	Female	59	4.41	2.73		

Table number 2 shows that there is a significant gender difference ( $t = -2.706$ ,  $p = .008$ ) in perceived stress among college students. Therefore, the hypothesis "There will be significant gender differences in perceived stress among adolescents" stands supported. In the same table, it is demonstrated that there is an insignificant gender difference ( $t = .558$ ,  $p = .578$ ) in insomnia among college students. Therefore, the hypothesis "There will be significant gender differences in insomnia among college students" is not supported. Finally, table 2 shows insignificant gender differences in internet addiction among college students. Therefore, the hypothesis "There will be significant gender differences in internet addiction among college students" stands not supported.

Much research has been conducted in this direction. Yonghui Feng, Yutong Ma, and Qisong Zhong (2019). This cross-sectional study explored the impact of stress, social anxiety, and social class on internet addiction among adolescents. In conclusion, there is a mediated-moderation effect between stress and adolescent internet addiction. This means that adolescents from different social classes have different types of anxiety when they feel stress, which influences their choices concerning internet use. Serge Brand, et al., (2011). Its purpose is to explore associations between dream recall, gender, sleep, perceived stress, and creativity in a large sample of adolescents. Multiple regression analyses revealed that increased dream recall was independently predicted by factors such as female gender, sleep quality, and creativity, whereas perceived stress, awakenings during the night, and sleep duration had no predictive value. These results can provide a basis for a better understanding of the psychology of dreams in adolescence.

## CONCLUSION

In conclusion, the purpose of this research was to investigate the connection between internet addiction, sleeplessness, and perceived stress in college students. The results of this study made clear how crucial it is to comprehend the intricacies of perceived stress and internet addiction problems among college students since they are directly related to the emergence of sleeplessness. Students at college are a segment of the population with a range of educational backgrounds and reasons for pursuing higher education. They are further broken down into subgroups based on a range of characteristics, including socioeconomic status, gender, ethnicity, and academic achievement. College students confront obstacles that must be

handled because they are studying away from home and are devoted to their education.

According to the studies we have analyzed, there may be a complicated connection between perceived stress and a variety of outcomes, such as subjective sleep disorders, internet addiction, coping mechanisms, and mental health. According to the studies, perceived stress may be a risk factor for these outcomes, and interventions to lessen stress may help people sleep better, stop using the internet as much, and develop better-coping mechanisms. The findings also underline the significance of evaluating internet use patterns and behaviors as a potential stress risk factor and posit that psychological variables like anxiety and depression may modulate the association between stress and different outcomes. The research's overall conclusions imply that management and preventative techniques may be crucial for enhancing health and happiness among various populations.

A small negative association between perceived stress and sleeplessness was discovered by the empirical study. On the other side, there is a strong inverse relationship between internet addiction and perceived stress. Additionally, there is a weak but unfavorable link between internet addiction and insomnia. The idea that perceived stress and internet addiction are positively correlated is specifically validated. The results refute the idea that perceived stress, sleeplessness, and internet addiction are significantly correlated. According to prior studies, stress, and social factors can affect college students' internet addiction, and aspects like dream recall, sound sleep, and creativity may be connected to gender differences in how stress is experienced. To completely comprehend the intricate interactions between these variables, more study is necessary. Insomnia in college students may therefore be prevented by therapies aiming at determining the positive association between perceived stress and internet addiction.

The relevance of comprehending the connection between perceived stress, insomnia, and internet addiction among college students has been highlighted by the dissertation's conclusion. The results of this study point to perceived stress and insomnia as factors contributing to college students' rising levels of internet addiction.

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