



## **TO STUDY SLEEP QUALITY, DEPRESSION, ANXIETY, AND STRESS DURING THE COVID19 PANDEMIC**

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### **ABSTRACT**

In spite of the fact that the Covid-19 pandemic disrupted international students' mobility, many schools and higher educational institutions began responding to the spread of this lethal disease's pandemic in their own unique ways and in ways that were suitable for them.

It gave rise to new views about the educational system, whatever we say about education during the COVID-19 era. Remote learning became a viable alternative, and it is now a component of education that offers learning, teaching, and evaluation services outside of the traditional classroom and teacher-based settings.

Additionally, emergency education has become a viable substitute for physical education classes, serving the same objective of educating children during emergencies like war, pandemics, conflicts, and other emergency situations.

In other words, emergency remote education is education during times of emergency and remote education is education delivered through methods other than in-person classes. If we combine these two ideas, we can see that emergency remote education was in fact education during times of emergency—the pandemic itself being an emergency—and that it was the best option for offering students the opportunity to receive an education.

**KEYWORDS:** *COVID-19, Physical Education, Pandemic, Emergency*

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### **INTRODUCTION**

"Coronaviruses are encased ribonucleic acid (RNA) viruses that have a crown-like form and can be anywhere between 60 and 140 nanometers in diameter. They are common in animals, including humans and birds, and can affect any kind of animal. According to Ghosh et al. (2020), "coronaviruses have been discovered to mutate and recombine, resulting in illnesses of the respiratory, gastrointestinal, hepatic, and neurological systems. WHO states that "Coronavirus disease (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)". It started in Wuhan, China, in the latter days of 2019, and it has caused anxiety all across the world. The WHO deemed this a public health emergency of global significance. Due to the virus's quick transmission from person to person, it was then referred to as a global pandemic.

As of the 14th of September 2021, 4,636,153 deaths from COVID-19 had been reported globally, with 225,024,781 confirmed cases. Since then, there have been 443,213 fatalities and 33,289,579 confirmed COVID-19 cases in India (WHO Coronavirus, 2021). As of August 15, 2021, the Indian government reported 37,529 fatalities in Karnataka and 29,62,967 Covid positive cases. In 2021, India Battles Corona. The Prime Minister declared the first phase of the closure, which would last 21 days, on March 25, 2020. As the virus's impacts were evaluated, the government of India gradually raised the lockdown phase; the fifth shutdown was announced on April 30. It was in effect until June 30, 2020. During the times of the lockdown, educational institutions all around the nation have never been able to begin their instructional work.

Around the second week of March 2020, the Indian government started closing educational institutions as a result of COVID-19. For students, that was an important moment because numerous university and college exams, as well as entrance exams and competitive exams, were scheduled to be given then. Additionally, college, school, and university closures were made necessary to stop the COVID 19 outbreak because there was no quick fix for it. It has an effect on more than 285 million young kids in India. Particularly those who were in their last year and those who had to take an admission exam, students encountered major challenges because they were ignorant of impending exams. The closure of schools and colleges disrupted the process of instruction, assessment, and examination, leading to an unrecoverable teaching and learning crisis in India's educational system. As a result, online learning methods quickly took the role of the traditional face-to-face classroom method.

## **COVID-19 PANDEMIC & YOUTH**

The International Labour Organization performed a research to assess the impact of COVID-19 on youth rights, employment opportunities, psychological health, and education across 112 nations. According to the survey, 61% of the students reported lower learning results and work anxiety. A little over 13% of young people said they

believed tests and teaching had completely ceased in education. High-income countries (65%) used online learning more frequently than low-income countries (18%), including video lectures, online exams, and homework assignments. Despite the government and educational institutions' efforts to continue academic activities, 65% of the samples claimed to have learned much less. Online learning can be disrupted for a variety of reasons, such as problems with internet connectivity, a lack of familiarity with digital tools, a lack of digital equipment at home, and more. Nine percent of the young pupils believed they would fail academically. According to the report, 50% of the respondents likely experience mental health issues like melancholy and anxiety. The epidemic, according to several subjects, is impeding their future because schools are closed, there are no tests, and economies are deteriorating. 24 percent of them said they were concerned about the pandemic's potential impact on their employment chances. 68% of young people reported that the epidemic has put many constraints on leisure activities including going out, seeing friends, and traveling. In comparison to males (65%), women (71%) perceived a greater impact on their right to leisure. Subjects from low-income nations (40%) felt that their right to participate in public affairs was significantly impacted, compared to those from lower-middle (36%) and high-income countries (28%). They acknowledged that it is difficult for them to make a contribution to political debate and policy formulation.

More than 25% of the participants said that their ability to engage in religious activity had been significantly impacted. In comparison to single teenagers, participants who were married or had a partner reported experiencing more domestic abuse throughout the pandemic. This had a bigger impact on their right to be free from violence. Despite the limitations of the pandemic, the study demonstrates that youth are using the crisis scenario as a springboard for community service by volunteering. Participants are very content to stay at home, and they used social networking sites to connect with one another.

### **NEED AND SIGNIFICANCE OF THE STUDY**

Today, a world without the internet is unimaginable. Nearly 465 million individuals were actively utilizing the internet as of April 2020, accounting for 59.5% of the world's population. China, India, and the United States outnumber all other nations in terms of internet users.

The internet is still changing how people interact with one another, organize information flow, and disseminate it globally. With its growing impact on both small and large marketplaces, it is becoming a significant part of daily life.

Individuals are spending an increasing amount of time online each day as it has become a necessary resource for information, communication, and pleasure. In 2019, people mostly used their mobile phones for three hours a day of online time.

Among the most popular mobile internet habits are texting, using video streaming services, and using social media websites Facebook is the most popular social networking site in the world, and users often spend more than two hours per day on the internet.

The number of active internet users in India increased from five million in 2000 to almost 46 million in 2017, according to the internet and mobile association of India. India now has more than five times as many internet users as it did in 2005. According to Sahu et al., mobile internet usage is growing at a rate of around 85% annually. The understanding that using the internet excessively can cause disorders is still developing in India. There aren't many research that look at internet addiction's prevalence in India.

Internet addiction was more common among young people between the ages of 18 and 24. IA was first recognized as a distinct type of addiction and psychological health issue, similar to alcoholism, in the mid-1990s. Internet addiction is an impulse-control issue that does not involve the use of intoxicants, according to Young. Internet addiction disorder symptoms include preoccupation with using the internet, the need to spend extended amounts of time online, persistent attempts to cut back on internet use, experiencing withdrawal symptoms after doing so, difficulties with time management, environmental issues, and mood changes brought on by using the internet.

Both positive and negative effects of the internet can be had on one's health. The prevalence of mental problems has increased due to internet addiction. IA not only affects the quantity and quality of sleep, but also raises the risk of diseases such as alcohol addiction, depression, anxiety, and attention deficit disorder among university students negatively affected sleep cycle length, affected daytime fatigue, and decreased work quality.

Internet addiction originated from the modern world's need for the internet. Additionally, it was associated with severe headaches, backaches, obesity, a lack of exercise, depression, suicide, poor self-esteem, and impulsive behavior. Internet addiction dramatically increases worry and stress, lowers standard of living, lack of physical activity, and difficulties forming healthy, constructive, and meaningful relationships with others.

Sleep is a natural state of relaxation for both physical and mental activity, and it's frequently necessary to produce adequate growth hormone for children's and teenagers' typical developmental milestones. Youth IA is on the rise, impairing their ability to concentrate, work quality, and length and quality of sleep. According to research done

in Vietnam in 2015, sleep issues and poor sleep quality are closely linked to childhood IA. A study conducted in Denmark with 815 young adults revealed that 13% of participants utilized their smartphones overnight, 3-5 hours after self-reporting their bedtime. According to a study done on Vietnamese teenagers, there is a connection between poor sleep and internet addiction.

### OBJECTIVES OF THE STUDY

- To evaluate the relationship between IU, sleep hygiene, stress, anxiety, and depressive symptoms in college students during the Covid-19 pandemic.

### RESEARCH METHODOLOGY

This study was undertaken by gathering data from students at Kittel Arts College and CSI College of Commerce, Dharwad, who are pursuing undergraduate and graduate degrees in a variety of fields, including BA, B. Com, M. Com, and BCA. The information was gathered between February 8 and March 25, 2021. College presidents were briefed on the research study's specifics, including its goals and objectives, and given assurances that the information would be kept confidential before it was collected. For this study, the researcher used both an online and an offline survey. The researcher gathered data from Kittel Arts College by distributing questionnaires to each participant and getting information directly from them. 170 samples in all were taken from this college. Every example was a student in the arts stream. The researcher next traveled to the CSI College of Commerce, where 60 samples were obtained personally and 155 samples were obtained via online Google forms. Consequently, 385 samples were taken in total. For data collection, the following instruments were used: "Socio-demographic data sheet, Internet addiction test (IAT), Pittsburgh sleep quality index (PSQI), and Depression Anxiety Stress scale (DASS)."

### RESULTS AND DATA INTERPRETATION

#### SOCIO DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

**TABLE-1: DISTRIBUTION ON THE BASIS OF DEMOGRAPHIC VARIABLES**

Characteristic	n	%
Gender		
Male	111	28.8

Female	274	71.2
Class & Course		
III year Bachelor of Arts	170	44.2
I year Master of Commerce	45	11.7
II year Master of Commerce	20	5.2
III year Bachelor of Commerce	120	31.2
III year Bachelor of Computer Application	30	7.8
Religion		
Hinduism	255	66.2
Islam	28	7.3
Christianity	94	24.4
No religion	8	2.1
Marital status		
Unmarried	320	83.1
Married	65	16.9
Place of residence		
Rural	254	66
Urban	131	34
Family monthly income		
Less than 10,000	233	60.5
10,000 to 20,000	82	21.3
More than 20,000	70	18.2
<i>Note.</i> N = 385. Participants were on average 20.61 years old (SD = 1.03)		

Table 1 provides the sociodemographic details of the population under study. The respondents' standard deviation is 1.03 years, with an average age of 20.61. 71% (or 274) of the participants in the study were women, and 29% were men. The respondents were enrolled in five different classes and courses: the III-year Bachelor of Arts

(44%), the I-year Master of Commerce (12%), the II-year Master of Commerce (5%), the III-year Bachelor of Commerce (31%) and the III-year and Bachelor of Computer of Application (8%). Hinduism is practiced by 66% of respondents (255), Christianity is practiced by 24% of respondents (94), and Islam is practiced by 7% of respondents (28). Eight of the participants (2.1%) stated that they are atheists. According to the table, there were 83.1% (320) unmarried respondents and 16.9% (65) married respondents in this study. The two categories of place of residence are rural and urban, with rural areas making up the majority (66%) of the total. In addition, the majority of participants (60.5%) had monthly household incomes of less than \$10,000.

**TABLE 2: TEST OF DIFFERENCE BETWEEN “GENDER AND INTERNET ADDICTION TEST SCORE, PITTSBURGH’S SLEEPQUALITY INDEX SCORE, DEPRESSION, ANXIETY AND STRESS”**

Variable	Male		Female		t-value	<i>p</i>
	M	SD	M	SD		
IAT Score	27.55	14.34	22.88	13.08	3.085	0.002
PSQI Global score	4.73	2.22	4.71	1.97	0.094	0.925 (NS)
Depression	8.79	7.21	8.8	6.91	-0.013	0.99 (NS)
Anxiety	6.05	6.46	6.39	6.21	-0.481	0.631 (NS)
Stress	8.56	6.45	8.73	6.75	-0.229	0.819 (NS)
Note. N = 385; IAT - Internet Addiction Test; PSQI - Pittsburgh's Sleep Quality Index						

The test of the relationship between gender and IAT score, PSQI score, sadness, and anxiety is shown in Table 2. There is a difference between the mean IAT scores for males and females (27.55). The significant IAT score gender differences ( $p=0.002 < 0.05$ ) indicate that college students' IAT scores vary according to gender. The mean values of the IAT global score do not differ significantly ( $p= 0.925 > 0.05$ ). According to this, gender has no bearing on a college student's PSQI score. It is clear that there were no appreciable gender-based differences in depression ( $p=0.99 > 0.005$ ), anxiety ( $p=0.631 > 0.05$ ), or stress ( $p=0.819 > 0.05$ ) in the current sample of college students. The mean values of gender factors for depression, anxiety, and stress do not differ significantly. Therefore, it implies that gender has no bearing on college students' levels of stress, anxiety, or melancholy.

**TABLE 3: “MEANS, STANDARD DEVIATIONS, AND ONE-WAY ANALYSES OF VARIANCE IN PSQI, DEPRESSION, ANXIETY AND STRESS ON HOURS SPEND ON INTERNET DAILY”**

Measure	0-2 Hours		2-4 Hours		4-6 Hours		>6 Hours		F (3,381)	<i>p</i>
	M	SD	M	SD	M	SD	M	SD		
PSQI	4.41	1.93	4.82	2.45	4.89	1.54	4.89	1.77	1.373	0.251 (NS)
Depression	1.66	0.9	1.73	0.91	1.95	1.1	1.87	1.25	1.485	0.218 (NS)
Anxiety	2.17	1.33	2.18	1.26	2.38	1.3	2.23	1.45	0.394	0.757 (NS)
Stress	1.26	0.64	1.2	0.57	1.34	0.72	1.42	0.89	1.737	0.159 (NS)
<i>p</i> > .005; IU – Internet Use; PSQI - Pittsburgh's Sleep Quality Index; NS - Not Significant										

According to the aforementioned table, there was no significant relationship between college students' daily internet use and their PSQI global score ( $p = 0.251 > 0.05$ ), depression score ( $p = 0.218 > 0.05$ ), anxiety score ( $p = 0.757 > 0.05$ ), or stress score ( $p = 0.159 > 0.05$ ). Therefore, it might be said that there is no discernible difference in the PSQI global score, depression, anxiety, and stress levels of college students who belong to different daily internet use groups. Thus, the null hypothesis that there is no significant relationship between sleep, depression, anxiety, or stress and daily internet use was accepted.

## CONCLUSION

Covid-19 posed for the entire world to see. People used the internet more frequently as a result of the lockdown to stop the Corona virus from spreading. The educational system used this as a chance to provide online courses. Internet use is required of students for academic purposes. The ubiquitous smartphone has a negative impact on students' sleep and mental health. Internet use has decreased because to the time spent throughout the day in educational institutions when offline classes were introduced in India following the Covid epidemic. Therefore, the current study's objective was to ascertain the relationship between internet use and college students' sleep quality, sadness, anxiety, and stress during the offline courses of the Covid-19 pandemic situation. Poor sleep is a problem that affects half the population and will need to be researched in the future. A correlation was found between using the internet and restful sleep. When respondents' internet addiction levels rise, the quality of their sleep declines. The participants' stress, anxiety, and sadness are also linked to internet addiction.

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