

Social Anxiety & Sleep Quality among Young Adults- A Correlational Study

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ABSTRACT

Poor sleep quality has been linked to high anxiety levels. This study sought to examine the probable association between social anxiety, poor sleep quality. Stressful situations questionnaire & Pittsburgh sleep quality index were used for the same. In the current study, 103 young individuals with social anxiety or poor sleep quality participated by using snowball sampling method. All participants were evaluated for eligibility using the Stressful Situations questionnaire and the Pittsburgh Sleep quality Index. The association between social anxiety and sleep quality was weakly positive. The further scope for the current study exists in applied psychology as well as in community settings.

Keywords: Social Anxiety, Sleep Quality, Intervention, Adults, Apprehension, Intervention, Positive Psychology

"We are disturbed not by what happens to us, but by our thoughts about what happens or what might happen" Greek philosopher Epictetus.

Anxiety is a state of being characterised by apprehension elicited by broad and generic stimuli seen as possibly hazardous in the future. According to study conducted in the United States, 7 percent of the population today suffers from a kind of social anxiety disorder. It has been documented that this generation's young adults have poor sleep quality.

Social anxiety

In its simplest form, social anxiety consists of feeling mildly to intensely anxious or uncomfortable in social situations. People with social anxiety are typically characterised as being extremely shy. Some scenarios that can induce social anxiety include: speaking in public, communicating with individuals in power, eating a meal in a public area, and being criticised or teased. Social anxiety is associated with an elevated pattern of negative thinking in which the individual doubts his or her own talents. According to a comprehensive study on social anxiety and avoidant personality disorders conducted by the Norwegian Institute of Public Health, genes play a crucial influence over time.

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Received: May 29, 2022; Revision Received: December 27, 2022; Accepted: December 31, 2022

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The chances of acquiring social anxiety over the long term is greatly impacted by hereditary variables. Social anxiety can be influenced by the demands of life at each growth stage, particularly adolescence and young adulthood. Experiencing traumatic or distressingly negative events could also contribute to the development of social anxiety. There may be numerous underlying factors for social anxiety, it is difficult to identify and separate them. Social anxiety is essentially a psychological problem, although nutrition plays a significant role in its development.

Consuming certain foods such as sugary foods and alcohol can exacerbate the physical symptoms of social anxiety. Increased self-focus, rumination, etc. is also observed in individuals with social anxiety when they spend a great deal of time focusing on themselves, which makes it harder for them to join in or participate in social situations. In its simplest form, social anxiety consists of feeling mildly to intensely anxious or uncomfortable in social situations. People with social anxiety have difficulty socialising, meeting new people and engaging in new activities. Some scenarios that can induce social anxiety include: speaking in public, communicating with individuals in power, eating a meal in a public area, or being criticised or teased.

According to a comprehensive study on social anxiety and avoidant personality disorders conducted by the Norwegian Institute of Public Health, genes play a crucial influence over time, although environmental variables play a larger role in the short term. According to the Biological approach, social anxiety may have familial relationships, so that if another individual feels social anxiety, their personality features may be inherited. There may also be an evolutionary component to having social anxiety. Some individuals may be too sensitive to negative judgement because humans are social animals. Social anxiety can be influenced by the demands of life at each growth stage, particularly adolescence and young adulthood.

There may be numerous underlying factors for social anxiety, it is difficult to identify and separate them. Individuals with social anxiety are susceptible due to their vulnerability, which can be biological, psychological, or a combination of both. Consuming coffee and other caffeinated beverages will cause you to experience symptoms that might provoke or exacerbate social anxiety, including nausea, restlessness, inability to sleep, and irritability.

Sleep Quality

Sleep Quality is a subjective measure. Time taken to fall asleep with 7-8 hours of research-proven sleep duration consisting of habitual sleep efficiency; i.e., the percentage of time in bed that one is asleep without sleep disturbances; absence of daytime dysfunction; i.e., the inability to stay awake and alert during the major waking periods of the day; and absence of sleep medications.

Sleep difficulties, including insomnia, have been identified as a frequent indicator of social anxiety. Constantly anxious individuals have a tendency to dwell on their worries in bed, which can prevent them from falling asleep. Insufficiency of sleep can amplify a person's sensation of dread and preoccupation, which can be exacerbated by difficulties in maintaining adequate sleep quality. Even after falling asleep, people may awaken in the middle of the night with uneasiness. Getting back to sleep can be difficult if the individual's mind starts racing with anxiety over the predicament they will face the following day. This can result in fragmented sleep, diminishing both the quantity and quality of sleep. Anxiety disorders and changes in a person's sleep cycle have been proven to be related. According to

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research, anxiety and pre-sleep ruminating may disrupt rapid eye movement (REM) sleep, which is associated with the most vivid dreams. Anxiety is associated with more distressing dreams and a greater likelihood of sleep disturbances. Nightmares may strengthen apprehension and unpleasant associations with sleep. Nonetheless, substantial research suggests that insomnia is not only a symptom of anxiety. In contrast, sleep deprivation can cause or exacerbate anxiety problems. Sleep deprivation is known to negatively impact emotional health, which may worsen the difficulties associated with anxiety disorders. Due to their reciprocal link, anxiety and sleep deprivation can be self-reinforcing; worrying produces bad sleep, which contributes to more anxiety and additional sleep problems.

According to the research conducted by Daniel et al. in 1988, sleep quality consists of both objective and subjective elements, such as the "depth" and "restfulness" of sleep. However, this can differ from person to person. Similarly, research by Pillai et al. reveals that rumination may be associated with sleep problems. Rumination, or repetitive, largely involuntary negative thoughts, frequently interrupts sleep. This association may be cyclical, as researchers also discovered that those with sleep problems ruminate more frequently than those without sleep problems. Moreover, ruminating is associated with greater sleep onset delay in patients with insomnia disorder and healthy controls, independent of subjective self-report measures (Galbiati, et al., May 2018). Thus, both self-report and objective measures of sleep reveal a link between sleep and ruminating.

MATERIALS & METHODS

Current research intends to examine the effect of Intervention on Adults' Social anxiety and Sleep quality.

Which contained the following objective:

- To study the relationship between Sleep Quality & Social Anxiety

The study's hypothesis included:

- There will be a significant relationship between Social anxiety & Sleep Quality.

The study was Quantitative study, conducted using snowball sampling method. The study sample comprised of 90 subjects, 40 males and 70 girls between the ages of 18 and 25 selected using simple random sampling. The sample was recruited using various demographic variables, including occupation, relationship status, gender, and age, among others.

The following were the inclusion criteria for the participants:

Age between 18 and 25; 2) Voluntary involvement in the study; 3) Ability to read and comprehend the English language; 4) Internet connectivity;

The following factors determined exclusion: 1) Clinical diseases 2) Loss to follow-up or inability to comply owing to personal reasons.

Using a questionnaire, participants' demographic information and informed consent were gathered at the outset. Included in the demographic information were the participant's name, age (in years), gender, employment status, current residence, and relationship status.

Participants were told verbally and in writing about the nature of the study, its purpose, methodology, and confidentiality, and were given the option to withdraw if they so desired.

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Two questionnaires (the Stressful Situations Questionnaire and the Pittsburgh Sleep Quality Index) and a Google form with open-ended questions were used to collect data. Utilizing Google forms, data was collected online.

Stressful situations questionnaire (SSQ) by William F. Hodges and James P. Felling is a 45-item self-report questionnaire designed to measure the amount of expressed apprehension or anxiety in different social contexts. Four subscales may be used to measure apprehension in physical danger (APD), Apprehension in classroom and speaking contexts (ACSS), apprehension of social and academic failure (ASAF), and apprehension in dating scenarios (ACSS) based on the instrument's factor analysis (ADS). Using a sample of 228 undergraduate college students, the SSQ was created. Greater scores indicate greater apprehension or concern.

High Reliability has been documented.

Validity: The concurrent validity methods provided some support for the SSQ's validity, and a stronger concurrent validity was discovered.

The SSQ was normed on a sample of 228 students, 141 of whom were male and 87 of whom were female. For the general population, there are five answer alternatives, numbered 1, 2, 3, 4, and 5. The person must select the option that is most pertinent to him or her. Each item is assigned a score ranging from None (1) to Extreme (5) based on the level of fear or anxiety it elicits. The total score is the sum of the item scores. The subscales and items are as follows: (APD:3,7,10,11,12,13,14,16,17,18,28,32,45).

(ACSS:4,5,20,22,24,29,37,42.) (ASAF: 6,9,44,15,19,21,23,25,27,33,38.) (ADS: 1,2,34,41.)

The Pittsburgh sleep quality index scale is utilised to determine the quality of sleep. The PSQI was created by Daniel J. Buysse and colleagues to assess sleep quality. It is a self-reported questionnaire that evaluates sleep quality and disruptions. 19 items yield seven "component" scores: subjective sleep quality, sleep latency, sleep length, habitual sleep efficiency, sleep disruptions, usage of sleeping medication, and daytime dysfunction. The sum of the seven component scores yields a global score.

Validity & Dependability: We got acceptable metrics of internal homogeneity and consistency, i.e. test-retest reliability and validity.

Norms: The PSQI's clinimetric and clinical features imply its applicability in both psychiatric clinical treatment and research. PSQI was created using samples of adolescents (13-17 years), adults (18-64 years), and elderly adults (65+ years) and was found to be similarly significant across all three age groups.

1. Component 1; Subjective Sleep quality consists of Question 6: 'Very good,' 'Fairly good,' 'Fairly awful,' and 'Very' are scored as 0, 1, 2, and 3, respectively.
2. Component 2: Sleep Latency consists of Questions 2 and 5a, where minutes and responses are graded according to the norm table. The addition of these scores yields a component score in which 0, 1-2,3-4,5,6 are each scored as 0,1,2,3.
3. Component 3: Sleep time comprises question 4, which is graded based on the norm table.
4. Component 4: Habitual sleep efficiency is comprised of Habitual Sleep efficiency, in which the number of hours slept and hours spent in bed are calculated and a percentage is obtained. Which is then scored according to the norm table.

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5. Component 5: Sleep Disturbances consists of questions 5b through 5j, and the sum of all scores is again calculated according to the norm table.
6. Component 6: Sleeping pills comprises of question 7. Component 7: Daytime dysfunction consists of questions 8 and 9. The sum of the obtained scores is again scored using the norm table. Global PSQI Score is derived by summing the final scores for each component.

The Google form that was circulated before and after the intervention contained 7/8 subjective open-ended questions centred on social anxiety and sleep quality.

Pre Intervention form questions included the following:

1. In any stressful circumstance, what physiological and psychological effects do you experience?
2. What are your tactics for coping with stressful situations?
3. What do you do to prevent uncomfortable situation?
4. What is your pre-sleep routine that you roughly adhere to every day?
5. What do you do if you are unable to go asleep at your regular time?
6. How can inadequate sleep impact your daily routine?
7. What is the relationship between social anxiety and sleep quality?

Procedure comprises: 140 Young adults were evaluated for eligibility; 1 declined to participate, and 5 were rejected for various reasons. One hundred thirty-four people consented to participate. After participants completed a consent form, demographic information, and questionnaires, they were scored.

Social anxiety and sleep quality were the variables with social anxiety also known as anxiety in stressful situations. Which is the fear of future physical danger, classroom and public speaking, social and academic failure, and dating circumstances perceived as potentially threatening? In its simplest form, social anxiety consists of feeling mildly to intensely anxious or uncomfortable in social situations. In which Anxiety is a state of being characterised by apprehension elicited by general and nonspecific stimuli that are considered as possibly dangerous in the future. This perception causes a rise in mood along with arousal and vigilance. Sleep Quality is a subjective measure. Time taken to fall asleep with 7-8 hours of research-proven sleep duration consisting of habitual sleep efficiency; i.e., the percentage of time in bed that one is asleep without sleep disturbances; absence of daytime dysfunction; i.e., the inability to stay awake and alert during the major waking periods of the day; and absence of sleep medications. Sleep difficulties, including insomnia, have been identified as a frequent indicator of social anxiety.

RESULTS & DISCUSSION

Considering the scores on social anxiety and Sleep Quality,

Table 1.1: Descriptive Statistics of Social Anxiety and Sleep Quality

	N	Range	Mean	Std. Deviation
Social Anxiety	103	107.0	105.94	22.91
Sleep Quality	103	15.00	6.58	3.54
Valid N (listwise)	103			

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Table 1.2: correlation results of social anxiety and Sleep Quality.

		Social Anxiety	Sleep Quality
Spearman's rho	Social Anxiety	Correlation Coefficient	1.00
		Sig. (2-tailed)	.
		N	103
	Sleep Quality	Correlation Coefficient	0.317
		Sig.(2-tailed)	.025
		N	103

The correlation coefficient for social anxiety and Sleep quality of Experimental group is 0.317 which denotes the strength of correlation between the two variables which further indicates very low correlation which is significant and the positive sign of the score clearly signifies on a positive relationship between the two variables.

A mild positive relationship between social anxiety and Sleep Quality is obtained, therefore hypothesis is neither rejected nor accepted.

The sample was asked certain open ended questions. According to which, many of the participants experienced psychological symptoms leading to Physiological when faced to any stressful situations. Such as, Increased heart rate, Migraine, less appetite but extreme need to eat something sweet, Experiencing panic and Confusion, unavoidable urge to smoke, anxious, Restlessness, negative thoughts, palpitations, Headaches, Fear and fright, experiencing anger, loss of interest, Tiredness, Poor decision making, frustration, nervousness etc. When asked about their coping strategies to deal with anxious situations, most of the participants shared that ways such as using distraction, listening to music, try to be logical, smoking, counting, crying, talking out loud etc. All the participants were also asked about their pre sleeping schedule which is followed by them approximately every day. Which consisted of using phone, taking to friends, studying, working, listen to music etc Participants were also asked what do they do if they are not able to sleep properly and if they have not slept properly, how does it affect their schedule.

In a study by Rodrigo et.al in 2019, it was found that higher levels of social anxiety led to poor sleep quality, Daytime dysfunction. Similar study conducted by Kiara et.al in 2008, concludes that social anxiety was associated with increased insomnia symptoms. Specifically, social perception of a sleep problem to others, and distress about sleep problems. Which was supported by another study conducted on similar grounds by Arielle et.al in 2019 on social anxiety disorder and non-clinical population with high social anxiety. The results of the study show that Participants with SAD reported poorer sleep quality and Non clinical Participants with High social anxiety comparatively reported less poor sleep quality which was manageable. The relationship found in this study shows positive relationship which signifies that As, Social anxiety increases or decreases, Poor Sleep quality also tends to Increase or decrease or vice versa. But the relationship found could be mild because different individuals have different coping mechanisms. According to the Qualitative data obtained, many participants mentioned that they prefer sleeping when they are apprehensive about any stressful social situation. Furthermore, the sample size of the study is small which could be one of the reasons that a firm relationship between the two variables is not found.

CONCLUSION

The present study aimed to study the relationship between Social anxiety and sleep quality. It can be concluded that, the results obtained of the relationship between social anxiety and Sleep Quality support the previous research conducted in the same area. A mild positive relationship between variables was found which signifies that high social anxiety is correlated with high poor sleep quality. Results obtained can be used in social setting and at community levels while considering social anxiety or sleep quality issues. The study can be further carried by considering participants from different geographical areas as well as Different sample such as LGBTQA+, elderly population etc.

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Acknowledgement

To the Department of Psychology JAIN deemed-to-be University, Bangalore, for guidance, support for the research study.

Conflict of Interest

The author declared no conflict of interest.

How to cite this article: Mahajan, S.N. (2022). Social Anxiety & Sleep Quality among Young Adults- A Correlational Study. *International Journal of Indian Psychology*, 10(4), 2289-2295. DIP:18.01.220.20221004, DOI:10.25215/1004.220