A correlation survey and analysis of the impact of staying up late on the mental health status of college students: A case study of Yunnan Normal University

Hao Xiu

Yunnan Open University, Kunming 650101, China

Abstract: Objective: To investigate whether there is a common phenomenon of staying up late among students at Yunnan Normal University, and whether there is a correlation between staying up late and their mental health level.The method used a combination of self-designed survey questionnaire and SCL90 psychological test questionnaire, and conducted correlation analysis using Excel and SPSS.As a result, Yunnan Normal University has a common phenomenon of staying up late, and the degree of staying up late is positively correlated with the level of mental health.Conclusion: The phenomenon of staying up late has a significant impact on the mental health of students at Yunnan Normal University.

Keywords: Staying up late; College students; Psychological health; Relativity

I. Definition of nouns

1. Staying up late

According to the explanation of the entry for "staying up late" in "Cihai", "staying up late" refers to staying up late at night or staying up all night.Usually refers to staying up all night or staying up late at night due to various reasons.Currently, there are two recognized factors that affect sleep, one is the biological clock, and the other is the self balance of sleep.The two key criteria for determining whether to stay up late are whether the sleep is regular, but whether the sleep time is sufficient.In this article, the concept of staying up late is defined as the phenomenon of not entering a sleep state after 23:00.The phenomenon of not entering a sleep state after 23:00 due to occasional factors such as insomnia is excluded.

2. Psychological health

According to the explanation of the entry for "mental health" in "Cihai": an individual who does not have psychological disorders, has the ability to adapt well to the environment, can self understand and self realize, and can handle difficulties encountered is called "mental health".

Psychological health refers to the state in which all aspects and processes of psychology are in a good or normal state.The ideal state of mental health is to maintain a state of intact personality, normal intelligence, correct cognition, appropriate emotions, reasonable will, positive attitude, appropriate behavior, and good adaptation.

II. Survey results and analysis

1. Basic situation of students staying up late

The author distributed 400 survey questionnaires to undergraduate students at Yunnan Normal University through questionnaire survey method and random sampling survey, and collected 400 questionnaires.392 valid questionnaires.Through questionnaire collection and mathematical statistics, the following data were obtained: only 24 people entered a sleep state before 22:00, accounting for only 6% of the total number of survey respondents.72 people entered a state of sleep between 22:00 and 23:00, accounting for 18% of the total number of surveyed individuals.The above are students who do not stay up late.184 students entered a sleep state between 23:00 and 24:00, accounting for 46% of the total number of survey respondents, with the highest number of students in this interval.112 students fell asleep after 24:00, accounting for 27% of the total number of surveyed subjects.The above are classmates who stay up late.It can be seen that staying up late is a common phenomenon among students at Yunnan Normal University.

2. Self evaluation of sleep quality among students

Among the students who entered a sleep state before 23:00 (without staying up late), 76 felt that their sleep quality was good, while only 20 felt that their sleep quality was poor. No student thought that their sleep quality was average.Among the students who did not enter a sleep state (staying up late) before 23:00, 101 felt that their sleep quality was good, 36 felt that their sleep quality was average, and 159 felt that their sleep quality was very poor.Among the students who entered a sleep state before 23:00 (without staying up late), 4 had an average sleep time of at least 9 hours, 68 had an average sleep time of 7-8 hours, 23 had an average sleep time of 6-7 hours, and only 1 had an average sleep time of less than 6 hours.

3. Reasons and motivations for students staying up late

Among the research subjects of Yunnan Normal University, the proportion of staying up late due to mobile internet usage was the highest, reaching 46%, followed by studying and habitual late sleeping, which accounted for 27% and 25% of the total sample size, respectively.It is worth noting that due to roommates staying up late, lighting, sound, and other factors affecting their rest, the proportion of

students who passively stay up late has reached 23%.

4. Student's awareness of the health hazards of staying up late

(1) Students' cognitive understanding of the impact of staying up late

In this question, there are many students choosing each option, and the option with the highest percentage of the total sample size is staying up late which leads to a decrease in intelligence level and a decrease in concentration (58%);Secondly, the second day of class had a poor spirit and no energy to listen (48%);Some students only know that staying up late is harmful to their health, but they are not aware of the specific hazards (19%).

(2) Self perception after staying up late

Among the randomly sampled research subjects of Yunnan Normal University, 68 students felt very painful after staying up late, 220 students felt uncomfortable, and 104 students did not feel it and became accustomed to it.It can be seen that nearly two-thirds of the 392 surveyed students feel uncomfortable after staying up late.

Basic mental health status of 3 research subjects

Table 1 Statistical Table of Basic Mental Health Status of Research Subjects (n=392)

As shown in Table 1, it is a statistical table of the total scores of the SCL90 psychological test scale for the research subjects. From the data in the table, it can be seen that the mean score is 151.89 points, indicating a high overall score level and approaching the critical point. But it still remains within the normal score range, indicating that the psychological health level of the study subjects is relatively normal.5. Score of SCL90 in various dimensions of the research object

Among the 392 randomly sampled study subjects, 182 did not show any significant psychological symptoms, accounting for 46% of the total sample size;The total score of the SCL90 psychological test questionnaire did not exceed 160 points, and each dimension did not exceed the upper limit score of that dimension, indicating that the subjects did not have obvious psychological symptoms;

Somatization: The dimension option scored over 36 points, indicating subjective physical discomfort. There were 9 individuals with somatization, accounting for 2% of the total sample size;

Sensitivity to interpersonal relationships: A score of over 27 in the dimension indicates an individual's sense of discomfort and inferiority, especially when compared to others.89 people are sensitive to interpersonal relationships, accounting for 22% of the total sample size;

Anxiety is a feeling of confusion formed by the interweaving of worries when an individual is uncertain about adapting to the environment and fearful of the unknown future. It is an emotional experience of nameless troubles or inexplicable fears. A score of over 30 in this dimension indicates the existence of this psychological problem.There are a total of 66 people, accounting for 14% of the total sample size;

A score of over 39 in the depression dimension indicates the presence of depression, with 9 individuals having this psychological problem, accounting for 2% of the total sample size;A score of over 30 in the dimension of obsessive-compulsive symptoms reflects clinical obsessive-compulsive symptoms, with 37 people experiencing this psychological problem, accounting for 9% of the total sample size.

Schizophrenic symptoms such as auditory hallucinations, scattered thinking, and a sense of being perceived can reflect symptoms of schizophrenia.A score exceeding 30 points in this dimension indicates the existence of this psychological problem.There were no individuals with mental illness among the study subjects.

6. The correlation between staying up late and mental health status

As shown in Table 3, using SPSS 17 data analysis software, the degree of staying up late and the total score of SCL90 were entered and Pearson correlation analysis (bilateral) was performed. The analysis results showed that the R-value was 0.678 (strongly correlated between 0.6-0.8), with a significant sig value of<0.01 on both sides and a significant correlation at the 0.01 level (bilateral).

Table 3 Correlation analysis between the degree of staying up late and the mental health status of the research subjects (n=392)

		Staying up late	SCL90 Total Score
Staying up late	Pearson correlation	one	. 678**
	Significance (bilateral)		. 000
	N	three hundred and ninety-two	three hundred and ninety-two
SCL90 Total Score	Pearson correlation	. 678**	one
	Significance (bilateral)	. 000	
	N	three hundred and ninety-two	three hundred and ninety-two

** There is a significant correlation at the. 01 level (bilateral).

III. Conclusion and recommendations

1. Conclusion

Yunnan Normal University students generally have the phenomenon of staying up late, with the phenomenon being more pronounced

in higher grades.Nearly half of the students believe that their sleep quality is poor and their average sleep time is less than 8 hours.

The phenomenon of staying up late is more serious due to the use of mobile phones to access the internet. Most students have poor self-control and are not ready to go to sleep after going to bed. Instead, they habitually pick up their phones to access the internet. Various fragmented and eye-catching information stimulates the nerves, causing the brain, which should have entered a resting state, to become excited, causing students to be unable to sleep.

When asked about the biggest obstacle to breaking the habit of staying up late, internet addiction on mobile phones and computers still accounts for more than half of the total population.

Many students are forced to stay up late due to external factors, such as roommates staying up late, lighting, sound, etc. Students who originally had good sleep habits are forced to stay up late.And this has also become the biggest obstacle for this group of students to stay up late.

Yunnan Normal University students have a better understanding of the harm caused by staying up late, and 2/3 of them reported feeling unwell after staying up late, but still did not change their habit of staying up late.

Although the average score of the mental health test for students at Yunnan Normal University remains within the normal range, it is close to the critical value.In individual case analysis, nearly half of the students have obvious psychological symptoms, mainly manifested in interpersonal sensitivity, anxiety, and obsessive-compulsive symptoms.

By using SPSS software to analyze the correlation between the degree of staying up late and the level of mental health among students at Yunnan Normal University, it was found that the phenomenon of staying up late has a significant impact on the mental health of students at Yunnan Normal University.

2. Suggestion

In view of the widespread phenomenon of students staying up late, it is suggested that Yunnan Normal University should take advantage of the fast speed of information dissemination among students to publicize in a way that students can accept, such as posters of refusing to stay up late posted by relevant associations, WeChat official account, etc.Schools should also provide education, training, and lectures on cultivating good sleep habits and refusing to stay up late.Improve the awareness of good daily routines and refusal to stay up late among college students in multiple dimensions.Increase student exercise time by selecting a fixed 2-3 time periods per week for all students to engage in outdoor sports activities and strengthen physical exercise, in order to enhance physical fitness and improve sleep quality.

College students are in their youth and have strong energy, but their self-control is poor and their behavior habits are still gradually being established. The habit of staying up late caused by addiction to mobile phones and computers is difficult to change with the expectation of relying on self-control.In this regard, Yunnan Normal University should strengthen network management and cut off the network immediately after turning off the lights.Schools should also establish specialized dormitory rules and regulations to address the phenomenon of staying up late. It is recommended to close the bed half an hour in advance and turn off the lights half an hour in advance.In response to the passive phenomenon of staying up late at Yunnan Normal University caused by external factors such as roommates staying up late playing with mobile phones, lighting, and sound, it is recommended to establish a responsibility system on a dormitory basis, with the dormitory director taking responsibility and reminding students to stay up late. If they do not listen to advice, they should be reported to the dormitory management to urge them to make corrections.

The leaders of Yunnan Normal University should increase their attention to the phenomenon of college students staying up late.College students are still in the stage of psychological growth, the stage of developing behavioral habits, and the stage of gradually establishing viewpoints. They have not yet fully realized the physical and mental harm caused by staying up late habits. Moreover, college students belong to a group of living groups and imitate each other in the environment where staying up late is common. Over time, the number of people staying up late will continue to increase.Schools should attach great importance to the mental health of students, establish a network of contacts with the school hospital, psychological counseling room, and counselors from various departments, constantly monitor the dynamic psychological situation of students, grasp the overall state of student psychological changes, and strive to have the school take the lead every academic year. Each department organizes psychological health tests for students, evaluates their mental health levels, and records them in the database. Students with obvious psychological conditions should be promptly provided with psychological counseling to help them overcome psychological confusion.

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