Analysis on the Phenomenon of Insomnia and the Effect of Sports Intervention in College Students

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Abstract: With the aggravation of social competition, the pressure facing college students is becoming more and more severe, which leads to the phenomenon of insomnia of college students is also becoming more and more common, which directly hinders the mental health, physical health and study life of college students. In order to grasp the current situation of college students'insomnia and seek the causes and characteristics of insomnia, this paper investigates and analyzes the effect of sports on changing college students'insomnia.

1. Introduction

Sleep is one of the advanced neural activities of human beings, and it is also the physiological process needed for human life activities. Good sleep is an important condition for college students to carry out normal life and study. In order to investigate the current situation of college students'insomnia, to understand the characteristics and causes of insomnia, to study the adverse effects of insomnia on college students'body and mind and study, and to explore the state of physical exercise on improving the insomnia of college students, we carried out investigation and intervention experiments.

2. Subjects, Methods, Results and Causes of Impact

2.1. Subjects

Group random sampling was carried out in eight universities in a certain city, and a total of 500 college students were investigated. Of these,230 were girls and 270 boys. freshmen 123, sophomore 140, junior 127, senior 110.

2.2. Research Methods and Processes

A survey of insomnia among college students used the asens sleeplessness scale, which had eight entries, each of which was classified from severe to undivided into four grades. If the total score is less than 5, it is considered as normal sleeper, if the total is between 5 and 7, it is classified as suspected insomniac, and if the total is above 7, it is classified as insomniac.

According to the first survey, the self-made questionnaire on the causes of insomnia, a total of 12 questions, respectively, from the physiological causes of insomnia, stress causes, external environmental causes, other reasons to carry out the investigation, so that college students can choose the main reasons that hinder their sleep.

Taking the class and dormitory as the unit to carry out the survey, the questionnaire was recovered on the spot, and a total of 496 valid questionnaires were obtained. Finally, the data were input into SPSS to carry out the statistical analysis.

2.3. Results

First of all, according to the college students'answers to the insomnia scale real-time analysis, the results are shown in figure 1:

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Table 1 Results of Total Insomnia in College Students

Insomnia	Number of persons	Percentage	
Normal sleepers	262	52.9%	
Suspected insomniac	82	16.2%	
Insomniacs	152	30.9%	

Thus, the severity of insomnia in college students, the total number of suspected insomniacs and insomniacs reached 30.9% and 16.2% of the total number of subjects, about half of the total number of people. This is close to some domestic research results.

Secondly, the following analysis of girls, boys and students of different grades of sleep status, specific Investigation Results such as Tables 2 and 3 show:

Table 2 Detection of insomnia in men and women

Gender	Sleep status	Number of persons	%
Female	Insomniacs	89	38.7
	Suspected insomniac	39	16.9
	Normal sleepers	101	44.4
Male	Insomniacs	60	22.6
	Suspected insomniac	48	17.9
	Normal sleepers	159	59.5

Table 3 The prevalence of insomnia in each grade

Grade	Sleep status	Number of persons	% of the grade
Freshman year	Insomniacs	51	39.9
	Suspected insomniac	21	17.4
	Normal sleepers	51	42.7
Sophomore year	Insomniacs	30	21.3
	Suspected insomniac	18	12.3
	Normal sleepers	92	66.4
Junior	Insomniacs	30	22.3
	Suspected insomniac	27	15.3
	Normal sleepers	70	62.4
Senior year	Insomniacs	47	41.9
	Suspected insomniac	22	20.6
	Normal sleepers	41	37.5

As can be seen from Table 2 and Table 3, there are significant differences between men and women in insomnia status, and girls experience insomnia relatively more than boys. At the same time, freshman and senior students have more insomnia than the other two grades, with 39.9 per cent and 41.9 per cent of the class.

2.4. Analysis of the Causes of Insomnia Among College Students

According to the self-evaluation of college students, the reasons for insomnia were analyzed, and the data of the selected reasons were analyzed statistically. As shown in Table 4:

Table 4. Selection frequency table of causes of insomnia among college students

Causes of	Selection	Percentage of selected
impact	frequency	items
Environmental	123	26.7
reasons		
Physiological	80	17.1
causes		
Stress causes	189	39.9
Other reasons	83	16.3

From table 4, we can see that the main reason for college students'insomnia is from the stress level, followed by the environmental level, and finally by their own reasons and other reasons.

3. Summary of the Discussion

3.1. Higher Rate of Insomnia Among College Students

According to the survey results, college students overall insomnia rate is relatively high, insomnia rate of about 35%, which must be a warning. The negative effects of insomnia are very serious and bad. In recent years, many of the suicide cases of college students have been caused by insomnia in advance. However, the physiological loss of sleep caused by insomnia and the disorder of endocrine system make college students more anxious, thus deepening their insomnia symptoms[1]. Therefore, in the work of mental health education in colleges and universities, attention should be paid to the mental health status of insomniac students, and more attention and appropriate intervention should be paid to them.

The number of female insomniacs is larger than the number of male insomniacs, which may be due to the more delicate and sensitive feelings of female students, these reasons will hinder their sleep quality. Moreover, college and senior college students also have relatively heavy insomnia. Because a freshman is facing a transition from high school to college, it is common to encounter a kind of adaptation problem, while a senior student is facing pressure of higher education or employment, and the reasons for hindering sleep are also more prominent[2]. To this end, schools need to develop effective sleep improvement programs according to the characteristics of these college students'sleep conditions.

3.2. Causes of Insomnia Among College Students

First, college students think that the biggest obstacle to their own sleep is stress problem, in the survey project, the main reason of stress is learning and interpersonal stress. Therefore, college students are under more pressure to study. In interviews with college students, we know that many college students stress on learning English as well as their majors. In addition, interpersonal relationship is also an important factor affecting insomnia, especially the disharmony with dormitory interpersonal relationship, will hinder the quality of insomnia for students[3]. The second major cause of sleep is environmental problems, mainly due to the quality of the sleep environment, such as the intensity of the light, the noise of the sound, the temperature and so on. In the dormitory, many students used to go to bed late. During this period, there were some phenomena such as not turning off the lights or speaking, playing games and so on[4]. The last two reasons are physiological and other factors, some college students think that the cause of insomnia is physical discomfort, is caused by occasional illness, but also some people do not know what their insomnia factors, feeling cannot be expressed, like a kind of insomnia for no reason. However, if they do some in-depth analysis, should find insomnia.

Nowadays, there are immature aspects of college students from the aspects of physiology and emotion, and there will be different degrees of insomnia in the face of social fierce competition, study pressure, graduation distribution, career choice, love, interpersonal tension and so on. As can be seen from the survey results, most modern college students have insomnia[5]. Occasional

insomnia is not a major obstacle to the body, severe and persistent insomnia will make the body uncomfortable, damage the function of the body's related organs, resulting in fatigue, emotional distress, inattention, fatigue limbs, slow thinking, memory decline, dizziness and other symptoms. In the face of insomnia, college students often or long-term medication is not the best way Studies abroad have shown that 4/5 insomniacs do not have to be treated with drugs, only to eliminate their psychological factors, scientific and reasonable arrangement of study and life, combined with the implementation of reasonable sports, insomnia will be well controlled[6]. Therefore, we must make good use of sports to prevent insomnia.

4. Effective Strategies to Deal With Insomnia in College Students

4.1. Reasonable Psychological Guidance

This kind of psychological guidance mainly includes learning and interpersonal level methods and skills learning, so that college students can make clear the education mode of the university, understand the necessary learning strategies, and make the college students talk with the senior students or teachers regularly to solve all kinds of doubts and puzzles for the college students.[7]. At the same time, the implementation of a variety of models of interpersonal communication strategy training, such as group training, interpersonal relationship courses, so that college students learn how to deal with interpersonal relationships, when interpersonal conflicts, need to deal with reasonable, weaken the emergence of psychological pressure.

4.2. Creating a Good Sleep Environment

The high-quality sleeping environment needs the cooperation of the whole dormitory people, so it is necessary to form the necessary dormitory system, for example, set the time of the day to turn off the lights, enter the sleep time, do not make a noise and other systems. If possible, schools can also use some mandatory mechanisms to make college students consciously observe the rest time and ensure adequate and high quality sleep.

4.3. Enhancing Physical Activity

The effect of physical exercise on sleep is a well-worn method, but it has proven to be a very effective one[8]. Physical exercise can strengthen people's physique, regulate the metabolism of people, make the body function system run regularly, so that it can enter the dream normally in the sleep period.

5. Conclusions

In general, insomnia is an important reason that often puzzles college students'normal life and study. Because insomnia is easy to make college students appear the status quo such as inattention, agitation, mental retardation and so on, it seriously affects their learning efficiency, interpersonal relationship is urgent and so on. Therefore, it is necessary to rationally arrange the sports activities of college students, actively create conditions to improve the sports field equipment of the school, provide different sports items and contents for college students according to the different conditions of college students, hold a variety of group sports activities on a regular basis, pay special attention to the cultivation of college students'will to exercise independently, enhance their ability to live independently and adapt to the natural environment.

References

- [1] Tan, Aihua., Xu, Bo., Wang, Ping., et al. Analysis of factors related to insomnia and prevention and treatment of traditional Chinese medicine in college students. World Journal of Sleep Medicine, vol. 3, no. 3, pp. 162-165, 2016.
- [2] Peng, Zhongxiu., Yao, Lei., Du, Hongmei., et al. effect of 2 essential oil components on

- relieving insomnia and anxiety in college students. Journal of Shanghai Jiaotong University (Agricultural Science Edition), vol. 37, no. 2, pp. 54-58, 2019.
- [3] Su, Yunpeng., Zhao, Yuan., Yang, Guanying., et al. Mental health status and health management of a college student in Yunnan province. Chinese Journal of Social Medicine, vol. 35, no. 6, pp. 596-599, 2018.
- [4] Liu, Zhiqiang., Zhu, Lingling. The relationship between mobile phone addiction and anxiety in college students: the mediating role of sleep quality. Health Education in China, vol. 34, no. 6, pp. 541-544, 2018.
- [5] Xiao, Zizeng., Gu, Yu., Gu, Xing., etc. Investigation and intervention of sub-health insomnia in a college student. Medical Clinical Research, vol. 34, no. 6, pp. 1142-1142, 2017.
- [6] Qiu, Jiehui., Tian, Xia., Zhou, Xianting., etc. a survey of sleep status and cognitive effects of different colors on sleep in medical students. Health Care Guide, no. 9, pp. 85, 2018.
- [7] Yi-Lin, Chung. The influence of sleep time on college students'life learning -- Taking Jiangsu University as an example. Employee Law World, no. 20, pp. 294-295, 2017.
- [8] Chang, Xiangdong., Xue, Ling. correlation between sleep quality and life events in college students. Chinese Journal of Health Psychology, vol. 25, no. 6, pp. 940-944, 2017.