

Study on the Current Situation of College Students' Sleep Quality in China

Anqiong Ji¹ and Rufang Wang^{1,2*}

¹Department of Management, Chengdu University of Traditional Chinese Medicine, Chengdu, P.R. China

²Department of Psychiatry & Health Behavior, Medical College of Georgia, Augusta University, Augusta, GA, USA

*Corresponding author: Wang R, Department of Management, Chengdu University of Traditional Chinese Medicine, Chengdu, P. R. China, Tel: +86 28 6180 0000; E-mail: RUFWANG@augusta.edu

Received Date: April 2, 2018; Accepted Date: April 17, 2018; Published Date: April 23, 2018

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Abstract

In order to understand the current status of sleep quality of students in Chengdu University of Traditional Chinese Medicine, and to propose countermeasures. A simple random sampling method was used to select 255 university students as the survey subjects, and Pittsburgh Sleep Quality Index (PSQI) scale was used as a tool to evaluate the quality of college students' sleep. The survey found that the average score of PSQI was about 7.6 points. There were 128 people above 7 points, which accounted for 50.2% of the total number of students. This indicated that the overall quality of sleep of the undergraduates was poorer; the quality of sleep for boys was better than that of girls, and the quality of sleep among rural college students was better than that of girls. Urban college students, seniors and undergraduates have worse sleep than sophomores and juniors. The sleep quality of students in Chengdu University of Traditional Chinese Medicine is generally poor, and it is necessary to implement measures that target different populations for different demographic differences to achieve proper treatment and improve sleep quality.

Keywords: College students; Sleep quality; Influencing factors

Introduction

Sleep is necessary in people's life, work and study. Sleep quality affects health status [1]. At the same time, research from the World Health Organization (WHO) shows that about 27% of people worldwide suffer from sleep problems, and sleep problems need to be solved urgently. Sleep disorders are one of the most common health problems for late adolescents and young adults. Students report lack of sleep, difficulty sleeping or difficulty sleeping [2]. Studies have shown that sleep problems are common among college students [3-5] among them; about 20% of college students have sleep problems [6]. Despite this, many studies only examined total sleep rather than specific sleep components, highlighting the significance of further analysis of college students' sleep problems [7-11]. This article aims to investigate the current status of college students' sleep quality and their existing problems, so as to take appropriate measures to improve the quality of sleep for college students in order to promote their physical and mental health.

Research Objects and Methods

Research objects

A simple random sample was taken of students from Chengdu University of Traditional Chinese Medicine. During the survey, 300 questionnaires were actually sent out. A total of 262 questionnaires were returned, and 255 valid questionnaires were sent. Freshman students accounted for 20.0% (51/255), sophomores accounted for 44.7% (114/255), juniors accounted for 22.4% (57/255), and seniors accounted for 12.9% (33/255). Among them are 128 male students and 127 female students. Urban students accounted for 34.9% (89/255), rural students accounted for 65.1% (166/255).

Research methods

Questionnaire method, using the PSQI scale compiled by Liu et al. with the help of classmates from Chengdu University of Traditional Chinese Medicine, 255 university students were selected to conduct a questionnaire survey. The questionnaire used an anonymous method.

Survey tool

Analysis using the PSQI Scale [12], the scale has a total of 7 dimensions, which are sleep quality, fall-sleep time, sleep time, sleep disorders, and sleep efficiency, the application of sleep medicine and impact on daytime function. Each dimension score is divided into four levels, which are 0-3 points, the scores of each component add up to the PSQI score, the total score is between 0-21. The high or low PSQI score indicates the quality of sleep. The higher the total score, the worse the quality of sleep. In this study, PSQI score of 7 was used as the standard for the classification of sleep disorders so as to understand the quality of sleep in the subjects in the past 1 month. According to this method, the quality of sleep can be demonstrated objectively and scientifically [13].

Confidence test

The reliability test of the questionnaire showed that the Cronbach alpha coefficient was 0.832, which had a high level of credibility and could be used as a tool for investigating the quality of sleep quality of college students.

Statistical Results

Different sex and sleep quality

The average score of boys (7.50 ± 1.97) is less than the average score of women (7.61 ± 2.37), and the difference is statistically significant ($P=0.000 < 0.05$) (Table 1). Taking the score criterion $PSQI > 7$ as the

critical value of sleep quality, there were 128 people with sleep disorders in college students, accounting for 50.2% of the total number of people. The average score of PSQI score was about 7.6 points. Slightly more than the study. About one-third of subjects had sleep problems (Table 1) [14].

Factors	Male (n=128)	Female (n=127)	T value	P-value
Total score	7.50 ± 1.97	7.61 ± 2.37	-1.514	0.004
Sleep time	1.94 ± 0.54	2.22 ± 0.57	-6.757	<0.001
Sleep efficiency	2.21 ± 0.47	2.97 ± 0.39	4.709	<0.001
Sleep quality	0.94 ± 0.68	0.88 ± 0.70	-3.241	<0.001
Hypnotic	0.09 ± 0.39	0.09 ± 0.31	-1.25	0.213
Fall-sleep time	1.13 ± 0.85	1.00 ± 0.79	1.751	0.08
Sleep disorder	0.85 ± 0.42	0.79 ± 0.43	5.143	<0.001
Day function	1.13 ± 0.79	1.16 ± 0.85	-2.727	0.786

Table 1: The influence of gender on sleep quality ($\bar{x} \pm s$).

Different grades and sleep quality

The differences in PSQI scores of different grades were statistically significant ($P=0.000<0.05$), the mean from the largest to the youngest is senior, freshman, sophomore and junior (Table 2).

Factors	Freshman (n=51)	Sophomore (n=114)	Junior (n=57)	Senior (n=33)	P-value
Total score	7.98 ± 2.19	7.37 ± 1.91	6.82 ± 2.06	8.78 ± 2.63	<0.001
Sleep time	0.63 ± 0.77	0.57 ± 0.76	0.37 ± 0.72	0.52 ± 0.91	0.109
Sleep efficiency	1.23 ± 0.25	2.34 ± 0.95	2.93 ± 0.53	1.38 ± 0.84	<0.001
Sleep quality	1.10 ± 0.88	0.84 ± 0.54	0.81 ± 0.70	1.06 ± 0.75	0.049
Hypnotic	0.04 ± 0.20	0.11 ± 0.35	0.05 ± 0.30	0.15 ± 0.57	<0.001
Fall-sleep time	1.22 ± 0.90	1.02 ± 0.75	0.81 ± 0.77	1.42 ± 0.90	<0.001
Sleep disorder	0.92 ± 0.39	0.73 ± 0.44	0.81 ± 0.44	0.97 ± 0.30	<0.001
Day function	1.08 ± 0.77	1.08 ± 0.75	1.05 ± 0.91	1.67 ± 0.78	<0.001

Table 2: Comparison of different grades of sleep quality ($\bar{x} \pm s$).

Different places of origin and quality of sleep

The detection rates of poor and relatively poor sleep quality in urban and rural areas were 55.06% and 47.59%, respectively, the difference was statistically significant ($P<0.05$) as shown in Table 3.

Source of origin	Number of people examined	Poor or relatively poor (%)
Urban	89	4955.06
Rural	166	7947.59
Total	255	12850.20

Table 3: Comparison of sleep quality in different habitats.

Discussion

The study found that the reporting rate of sleep quality problems among college students reached 50.2%, which was higher than that of and higher than that of poor quality of sleep, it is still not clear whether it is a downward trend. The reported rate of sleep quality problems among girls is higher than that of boys, and coincides. However, with some domestic surveys, the prevalence of sleep quality among boys is inconsistent with that of girls. Male and female students receive the same education at school and live in the same general environment. However, girls are more meticulous and sensitive, and their emotions fluctuate. As a result, anxiety and tension occur, which affects sleep quality. The unique physiological characteristics of women (menstrual period) can also affect Sleep quality. The difference in sleep quality at different grades was statistically significant, which is consistent with some domestic reports. The quality of the freshman's sleep is poor. Freshmen have just entered school and need to adapt to the new environment. The process of adapting to the new environment is accompanied by insomnia. This transition period is usually associated with an increase in stress levels, which in turn has a profound and lasting effect on sleep. The sleep quality of sophomores was gradually reduced from the second year to the fourth year, which is consistent with the related research. Seniors are facing the pressure of examinations or employment and are prone to sleep disorders. Studies show that there is a negative relationship between stress and emotion. Schools, family, friends, etc. should pay attention to these problems and find practical solutions. This survey of college students in rural and urban areas found that the quality of sleep among urban students was worse than that in rural areas. This is contrary to the conclusion. Some domestic reports indicate that the difference between rural and urban areas is not statistically significant. However, this study did not find it. Urban students lived in a colorful world from childhood. They were tempted by the outside world, and their nightlife was abundant. This affected the quality of sleep. This is a manifestation of the simple quality of rural students. Early in the morning and early evening, there is less nightlife.

Conclusion

To resolve the existing problems, schools should pay attention to strengthening dormitory management, creating a good sleeping atmosphere, and paying attention to noise management to alleviate anxiety and depression caused by various reasons. Girls are more sensitive and must pay more attention to the psychological activities of girls. Visits to students from rural areas allow students to adapt to college new life as soon as possible, and reduce the negative emotions brought about by various pressures [15-22].

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