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Relationship Between Lack of Sleep and Stress

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Relationship Between Lack Of Sleep And Stress



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The Relationship Between Lack of Sleep and Stress

Introduction

Lack of sleep is a major issue for people in general, but especially for college students who often have increased pressures to succeed both academically and in life. Due to how important sleep is, this study looks to the answer if there is a correlation between the amount of sleep a person gets and their level of stress. Not only are students trying to maintain good grades, but they are often incurring debt, and need to work while in school to decrease the burden of student debt (Khemka et al.,2020). Further research in this area is needed to see if the COVID-19 pandemic exasperated lack of sleep due to additional stressors in life. Many people have had to change how they live and work since the pandemic. Si et al., (2021) concluded that having higher levels of perceived stress since the pandemic has had a correlation with poor sleep quality on a study that was done in Wuhan, China.

Methods

- Anonymous online survey
- Developed and Analyzed in Qualtrics
- Population: Students enrolled in Research Health Methods
- 39 students completed the survey
- Conducted October of 2021

Results

- Most of the participants identified as female (N=31), with the remainder identifying as male (N=8).
- 76.92% of participants were employed and 23.08% were not. Most of the participants were between 18-21 years of age (53.85%) and enrolled in college fulltime (92.31%)
- In total 82.05% of respondents had at least moderate levels of stress.
- Thirty-three respondents felt tired at least three days a week. In total 53.84% of participants slept at least seven hours a night.
- Twenty-four of the respondents at least agreed that they often feel stressed (61.54%)
- Respondents who slept less than seven hours a night on average felt tired more days a week than those who received at least seven hours of sleep on average each night.
- The data suggests that less than seven hours of sleep has a relationship with perceived stress (p value of 0.20).
- The analysis suggests that working full time while in school is related to not receiving enough sleep on average, p value 0.05

Analysis/Data

Figure 1

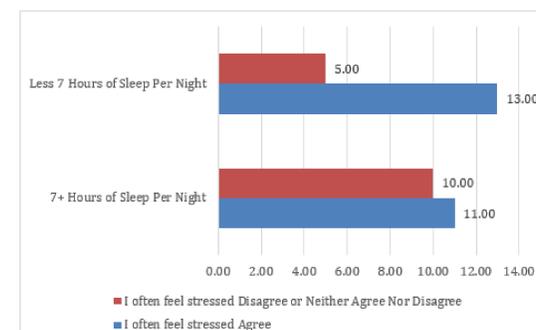
- Displays cross tab analysis of hours slept per night and perceived stress levels
- Although not statistically significant the data suggests that less than seven hours of sleep has a relationship with perceived stress (p value of 0.20)

Figure 2

- Does having to work full time while in school have a relationship with lack of sleep.
- The analysis suggests that working full time while in school is related to not receiving enough sleep on average, p value 0.05

Figure 1

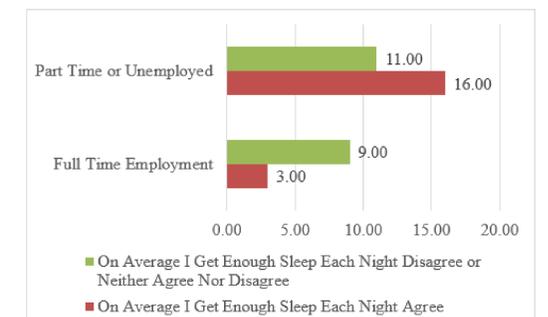
Relationship Between Amount of Sleep and Feeling Stressed



Note. Participants rated their disagreement or agreement with the following statement: I often feel stressed. Amount of sleep was compared to this statement. Chi Square analysis suggests that the respondents who received less than 7 hours of sleep had higher agreement that they often felt stressed (p= .20)

Figure 2

Relationship Between Employment and Reported Amount of Sleep Each Night



Note. Participants rated their disagreement or agreement with the following statement: I get enough sleep each night. It was then compared to employment status. Chi Square analysis suggests that working full time while in school had a relationship with not getting enough sleep each night (p= .05).

Conclusion

According to this pilot research study it is indicated that the individuals surveyed who received less than seven hours of sleep per night felt tired more often than those who received at least seven hours of sleep each night on average. This is similar to what Khemka et al., (2020) found in their research, they found that half of the students in their study had daytime sleepiness and 70% were not getting enough sleep each night. In this pilot study 61.54% of students had at least moderate levels of stress, even though almost half of the respondents felt that they got enough sleep each night. The data suggests that even with online classes and the increased flexibility of school since COVID-19, students are still struggling with getting adequate sleep.

References

- Khemka, P., Dhanuka, P., Bhutta, R., Narang, R., & Jakharia, R. (2020). Causes of sleep deprivation and its effect on performance of students and their mental health. *Indian Journal of Health & Wellbeing, 11*(7-9).
- Si, G., Xu, Y., Li, M., Zhang, Y., Peng, S., & Tan, X. (2021). Sleep quality and associated factors during the COVID-19 epidemic among community non-medical anti-epidemic Workers of Wuhan, China. *BMC Public Health, 21*(1), 1–6. <https://doi.org/10.1186/s12889-021-11312-8>