

A+ or Asleep?

Academic Units Effect on Sleep Quality

Preena Patel, Alondra Logrono, Yuxin Lin

University of California, San Diego - Herbert Wertheim School of Public Health



Introduction



- Sleep deprivation is a condition caused by insufficient sleep. Young adults may need about 8 hours of sleep, but approximately 70.6% of college students report getting less than this amount.²
- The mental and emotional demands of an increased workload make students vulnerable to the negative effects of poor sleep quality.⁷
- Many students report poor sleep quality and feel they must sleep less to meet academic, extracurricular, athletic, and social activities needs.⁷

Objective

Determine if an increase in college coursework credits is associated with decreased quality and duration of sleep among the UC San Diego undergraduate student population.

Methods



- Data from 50 undergraduate UCSD students responses were collected through Qualtrics and analyzed using R-statistical software.
- Pittsburgh Sleep Quality Index (PSQI) was used to assess sleep quality and duration.¹⁶
- A cross-sectional study conducted through an anonymous survey was distributed via UCSD-affiliated discord groups and the BSPH department email announcements.
- Data analysis involved adjusted linear regression to evaluate the relationship between course units and sleep metrics across different ages and majors.
- The outcome is the quality of sleep and the number of hours of consistent sleep obtained per night. The exposure is the number of units enrolled in during spring quarter of 2024.

Results



Table 1. Demographic Characteristics of Repondents (N=50)

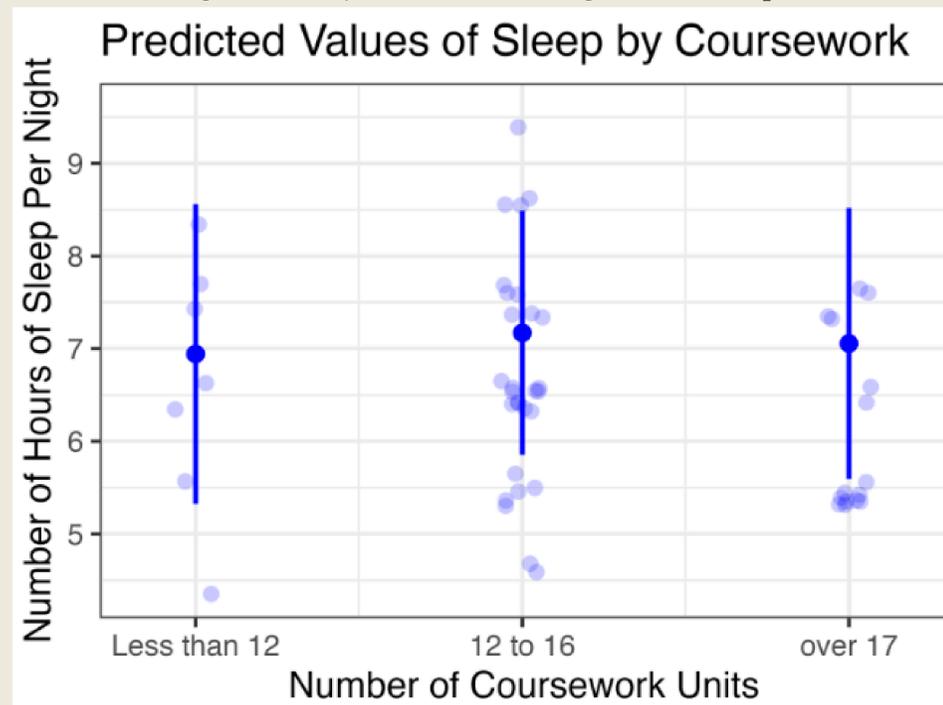
Characteristic	Overall, N = 50 ¹	Less than 12, N = 7 ¹	12 to 16, N = 28 ¹	over 17, N = 15 ¹	p-value ²
Age Group					0.53
24 and Under	45 (90.0%)	6 (85.7%)	26 (92.9%)	13 (86.7%)	
25 and Over	5 (10.0%)	1 (14.3%)	2 (7.1%)	2 (13.3%)	
Grade					0.008
Freshman	4 (8.0%)	0 (0.0%)	3 (10.7%)	1 (6.7%)	
Sophomore	7 (14.0%)	1 (14.3%)	1 (3.6%)	5 (33.3%)	
Junior	17 (34.0%)	0 (0.0%)	10 (35.7%)	7 (46.7%)	
Senior	20 (40.0%)	5 (71.4%)	13 (46.4%)	2 (13.3%)	
Other	2 (4.0%)	1 (14.3%)	1 (3.6%)	0 (0.0%)	
Major					0.53
Non-Stem Majors	16 (32.0%)	3 (42.9%)	10 (35.7%)	3 (20.0%)	
Stem Majors	34 (68.0%)	4 (57.1%)	18 (64.3%)	12 (80.0%)	

¹ n (%)
² Fisher's exact test

Table 2. Chi-Square Analysis.

A chi-square test was performed to examine the relationship between the number of units students took and their amount of sleep. The relationship between these variables was insignificant, $X^2 (10, N = 50) = 13.18, p = 0.214$. There was no significant association between the number of units taken and the amount of sleep students get. This suggests that the amount of sleep students get is not dependent on the number of units they are taking.¹⁷

Figure 1. Adjusted Linear Regression Graph.



Conclusion

- Students are mostly enrolled in 12 to 16 course units and have an average sleep duration of 6 to 7 hours per night.
- A chi-square analysis and adjusted linear regression found no association between the number of units and sleep.
- Our results did not support our initial hypothesis.



Policy Implications¹⁷

- Universities should consider current academic policies that allow for more flexible course scheduling options to accomodate different student needs.
- Increase the availability of mental health counselors and reduce wait times for appointments.

Acknowledgements

Special thanks to our professor Dr. Mathew Stone, our TA, Araz Majnoonian, the BSPH Department, and the study participants.

References

