

BACKGROUND

Adequate sleep is crucial for bodily repair and brain function. **One-third** of the US adults lack daily adequate sleep.¹ It is recommended that adults get **7 or more hours of sleep** per day.² Sleep deprivation affects mood, stress levels, learning, productivity, and physical comfort, especially for those with demanding schedules.³ Populations with excessive workload tend to be at higher risk of sleep deprivation due to productivity, deadlines, and time management.⁴

OBJECTIVE

To determine whether sleep deprivation correlates with heavy education workload and job hours among UCSD undergraduates.

METHODS

Surveys were distributed to UCSD undergraduate Public Health students via Qualtrics, shared on the UCSD Reddit forum, and sent individually. We received 41 qualified responses. The surveys maintained anonymity and used structured questionnaires to collect quantitative data, including demographics and major information. Demographic questions include age and class standing, followed by questions on sleep duration, academic commitments, and work hours. Our main exposures are academic commitment and work time, and our outcome is sleep duration. The survey concluded with participants rating their energy levels and sleep quality.

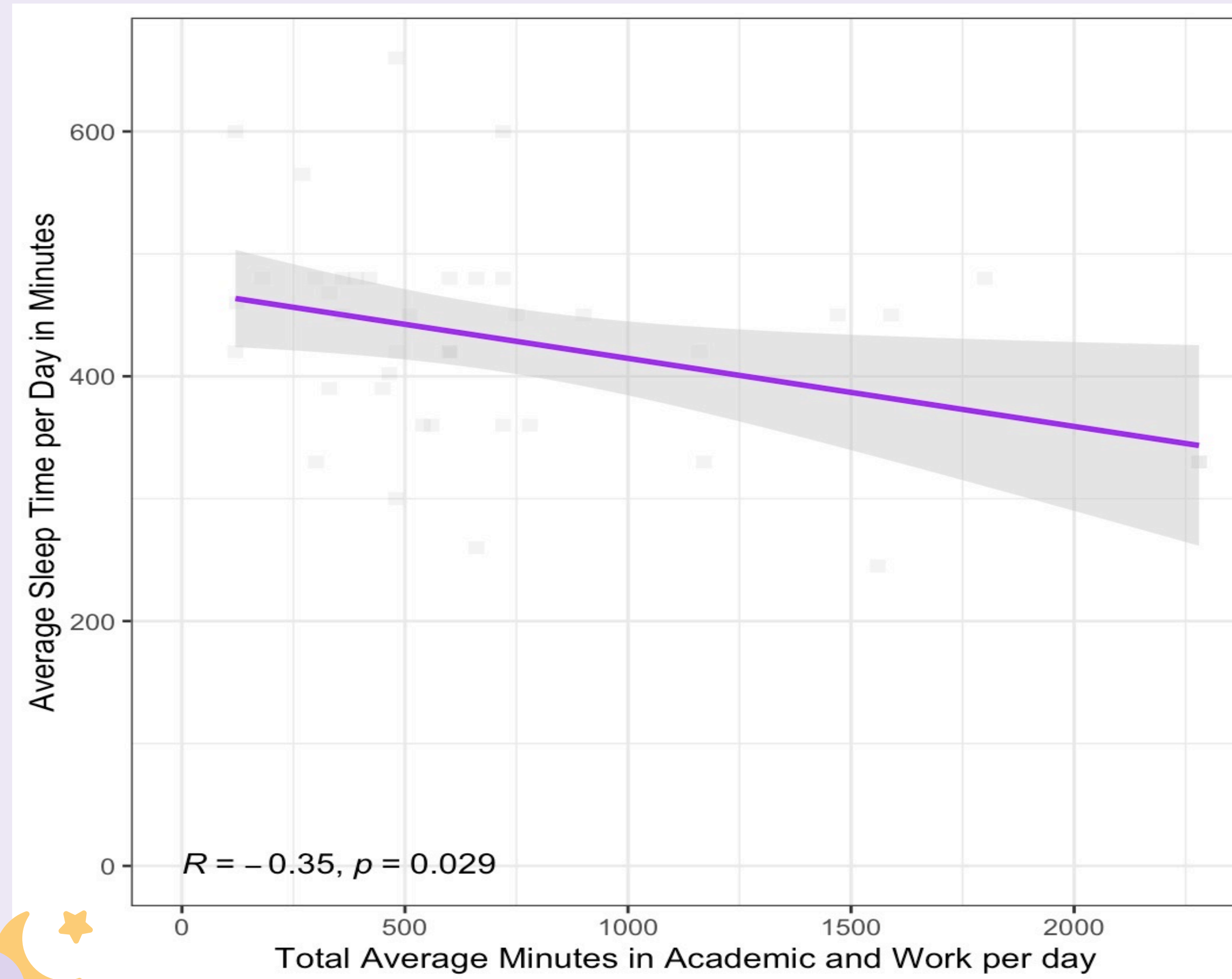
Table 1:
Sample
Summary

Characteristic	N = 41 ¹
Age	21.29 (2.41)
Class Standing	
Freshman	1 (2.4%)
Sophomore	5 (12.2%)
Junior	17 (41.5%)
Senior	18 (43.9%)
Enrolled Course Units	14.78 (2.89)
Average Academic Time per Day	476.66 (268.66)
Do you work?	
No	16 (39.0%)
Yes	25 (61.0%)
Average Work Time per Day	414.38 (346.23)
Average Sleep Time per Day	430.50 (87.74)
Sleep Quality Rating	
Not At All Rested	1 (2.5%)
Little Rested	6 (15.0%)
Somewhat Rested	16 (40.0%)
Fairly Rested	15 (37.5%)
Very Rested	2 (5.0%)
Energy Level Rating	
Energized	4 (10.0%)
Somewhat Energized	8 (20.0%)
Somewhat Tired	12 (30.0%)
Tired	13 (32.5%)
Very Tired	3 (7.5%)

¹ Mean (SD); n (%)

RESULTS

Figure 1:
ASSOCIATIONS BETWEEN SLEEP TIME AND
ACADEMIC & WORK TIME



On average, participants reported a total of 719 minutes (11 hours 19 minutes) in academic and work activities (SD=540) and slept for an average of 430 minutes (7 hours 10 minutes) per day (SD= 87.7).

Total average minutes in academic and work activities and sleep duration was moderately negative, $r = -0.35$ (95% CI= -0.59, -0.04), and statistically significant ($p = 0.029$). (Figure 1)

Average sleep time per day in minutes significantly differed ($t[35.5] = 2.71, p = 0.010$) by an average of 69.3 points (95% CI = 17.4, 121) among participants who worked (mean = 403 [6 hours 43 minutes]) versus those who do not work besides school (mean = 472 [7 hours 52 minutes]). (Figure 2)

Average academic and work time per day in minutes significantly differed ($t[38] = -2.75, p = 0.009$) by an average of 374 points (95% CI = -650, -98.9) among participants who felt energetic (mean = 453 [7 hours 33 minutes]) versus those who felt tired (mean = 827 [13 hours 47 minutes]). (Figure 3)

Figure 2:
AVERAGE SLEEP TIME PER DAY
BY WORK STATUS

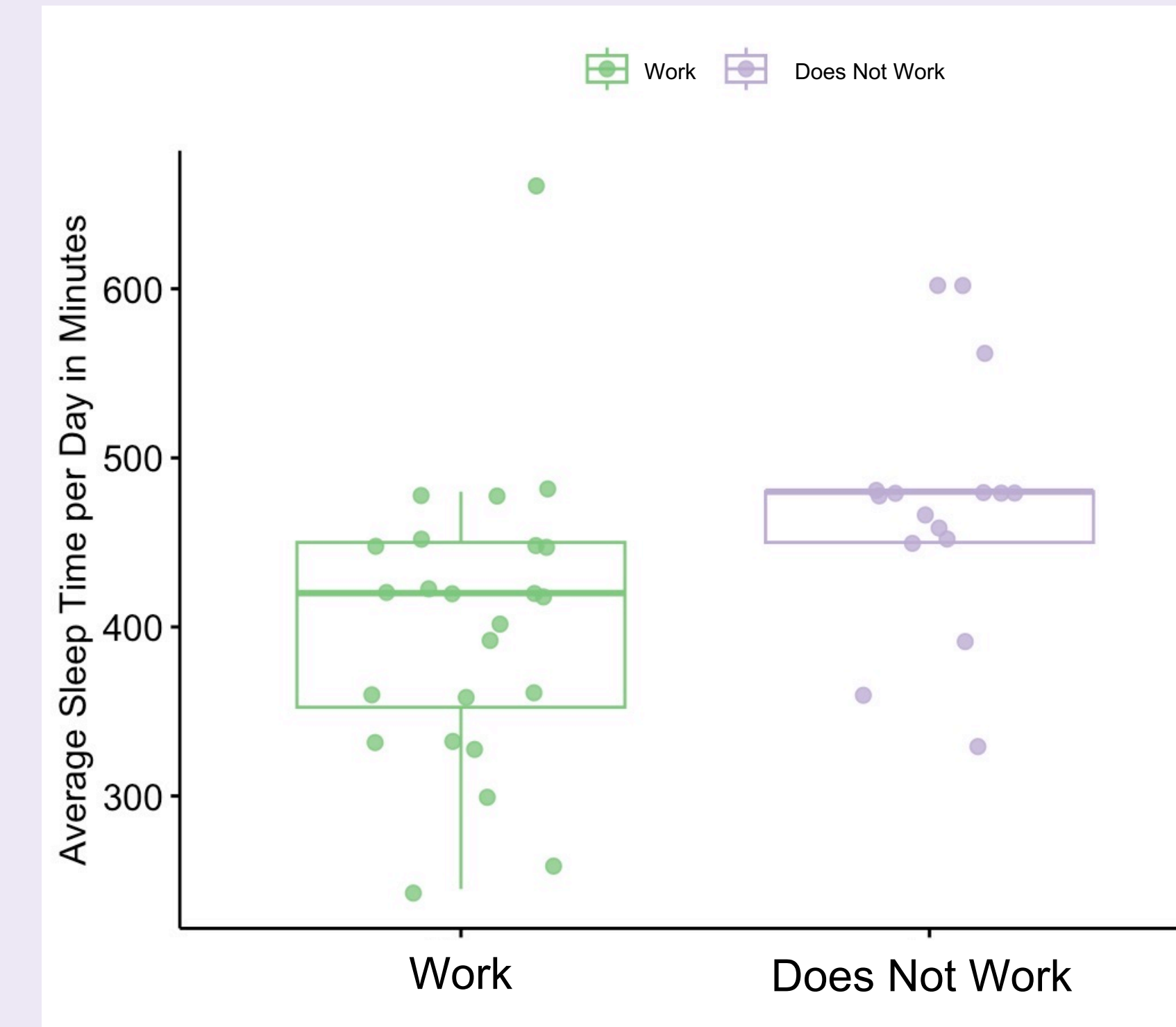


Figure 3:
AVERAGE SLEEP TIME PER DAY
BY ENERGY LEVEL

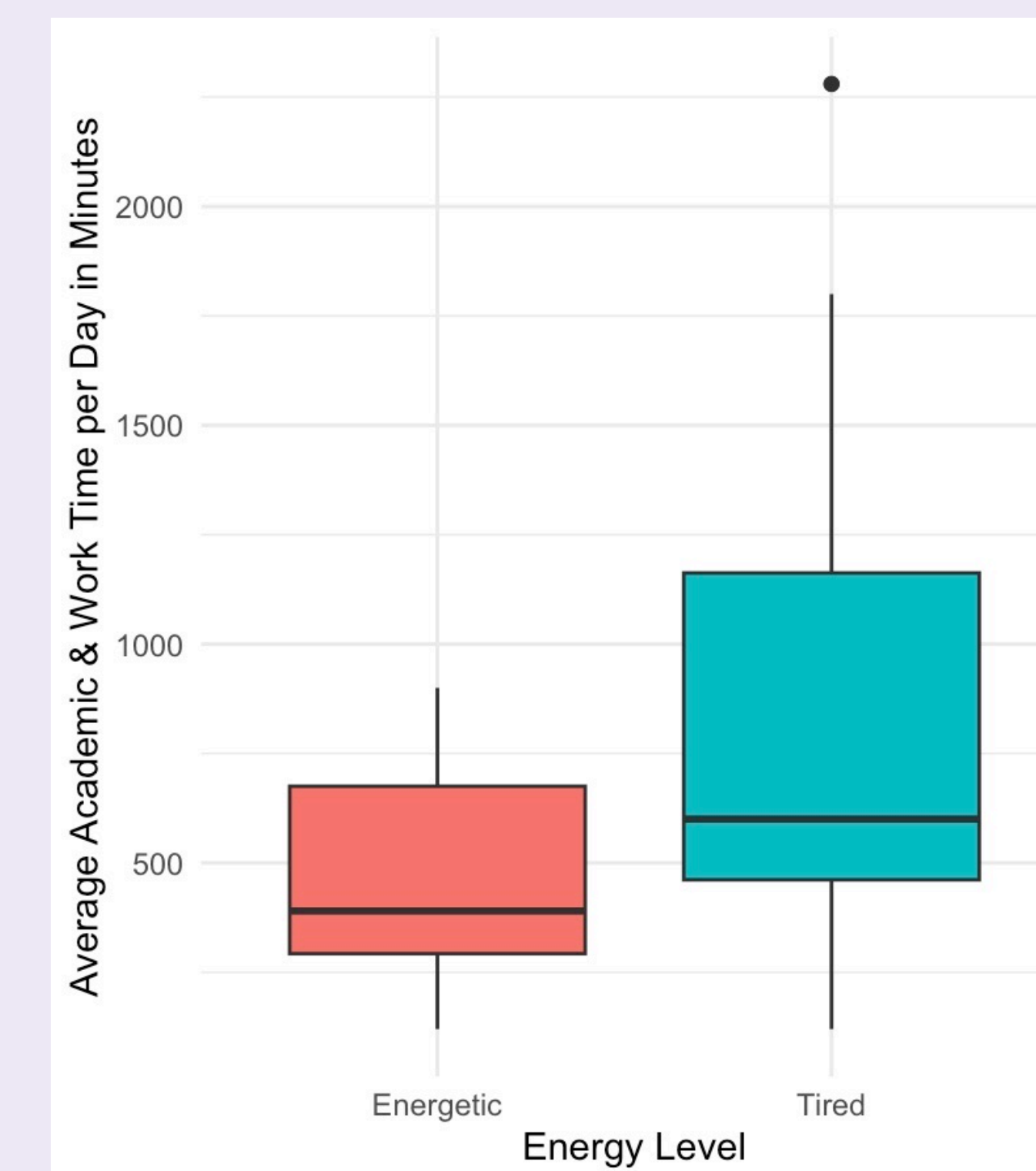
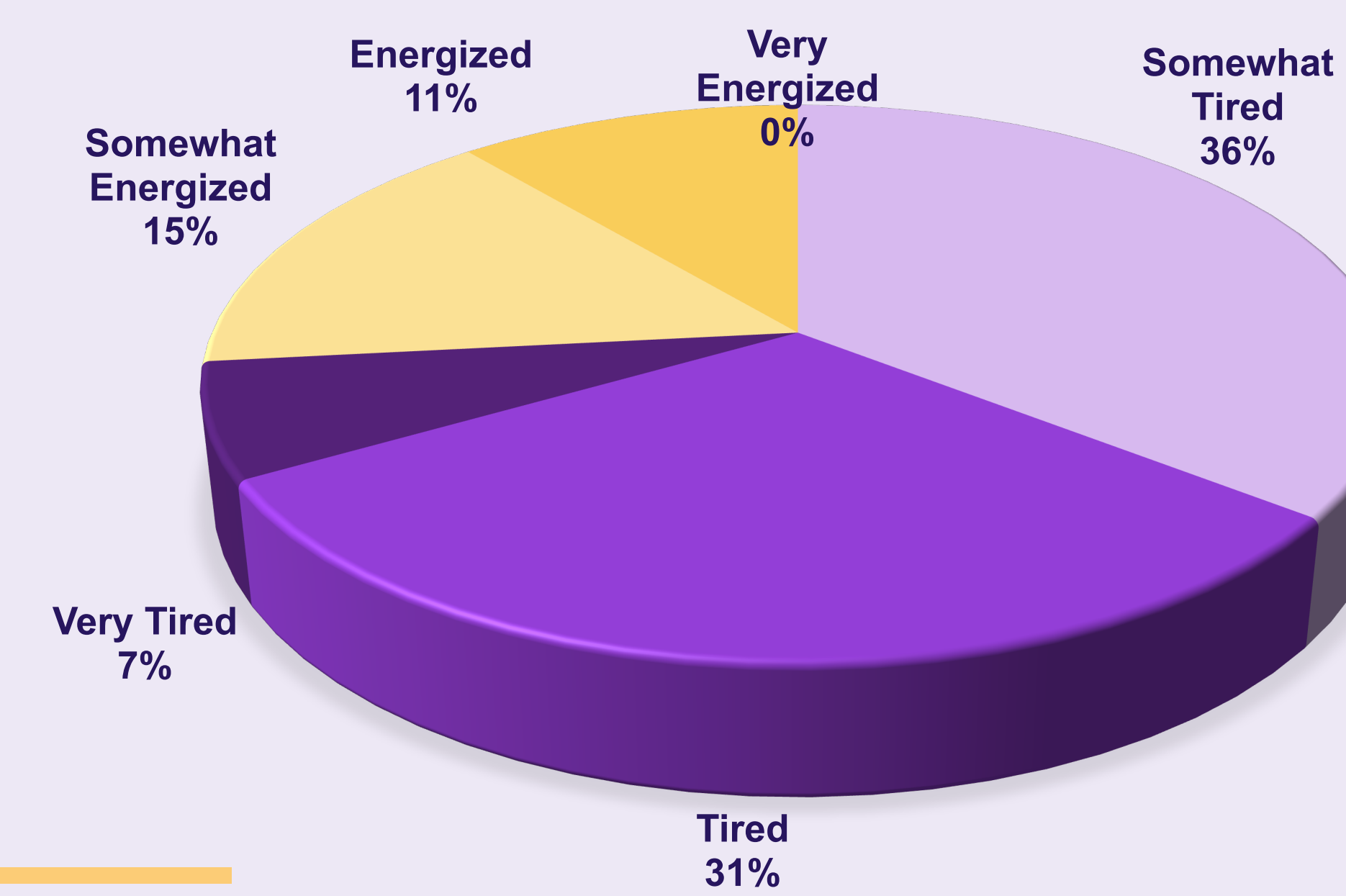


Figure 4:
GENERAL ENERGY LEVEL OF UCSD
PARTICIPANT STUDENTS



CONCLUSIONS

Our research indicates a **significant** association between the average time spent on academics and work per day and the average sleep time per day among UCSD undergraduate students. As academic dedication and work time **increase** the sleep time **decreases**. On average, participants sleep for 7 hours and 10 minutes per day. However, those who work tend to **sleep less** compared to those who do not work. Additionally, Participants' energy levels generally trend towards **tiredness** with increasing academic and work commitments (Figure 4).

POLICY IMPLICATIONS

Increasing funding for grants and scholarships can alleviate financial stress, allowing students to prioritize academics and sleep.^{5,6} Implementing **unit caps** per quarter can promote the balance between academic achievements and health wellbeing.⁷ These policies support student well-being and academic success.

ACKNOWLEDGEMENTS

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