

2015

# Sleep as an Occupation in College Students

Michelle Del Rosario

*Dominican University of California*

Lisa Mrsny

*Dominican University of California*

Amanda Cervantes

*Dominican University of California*

Carl Fitzgerald

*Dominican University of California*

**Survey: Let us know how this paper benefits you.**

## Recommended Citation

Del Rosario, Michelle; Mrsny, Lisa; Cervantes, Amanda; and Fitzgerald, Carl, "Sleep as an Occupation in College Students" (2015). *Student Research Posters*. 11.

<https://scholar.dominican.edu/ug-student-posters/11>

This Presentation is brought to you for free and open access by the Student Scholarship at Dominican Scholar. It has been accepted for inclusion in Student Research Posters by an authorized administrator of Dominican Scholar. For more information, please contact [michael.pujals@dominican.edu](mailto:michael.pujals@dominican.edu).

## INTRODUCTION

- The average person spends 1/3 of his or her life sleeping (Curico et al., 2006).
- College students have poor quality and quantity of sleep resulting in ↓ performance in student related occupations, and academic performance.
- Minimal evidence examines the relationship between self-efficacy, sleep, and occupational performance in college students.
- OTs can develop interventions to improve sleep problems by modifying the environment and performance patterns of college students.

## STATEMENT OF PURPOSE

- Measure sleep quality and patterns of sleep in undergraduate college students
- Explore the relationship between sleep, academic self-efficacy and student characteristics
  - First-generation college students
  - Students with disabilities
  - Student athletes

## Review of Literature

### SLEEP AS AN OCCUPATION

- Sleep is vital for all human life.
- ↓ sleep quality may result in behavioral, occupational, psychological, cognitive impairments and even premature death (Curico, et al., 2006).

### SLEEP DISORDERS

- Common sleep disorders include insomnia, sleep apnea and narcolepsy (Buck, 2013).
- Narcolepsy affects 16% of college students (Gaultney, 2010).

### COLLEGE STUDENTS

- University students often have trouble falling asleep and staying asleep for 7-10 hours a night (CDC, 2013).
- Athletes, first generation students & students with disabilities were shown to have a higher risk of experiencing sleep disturbances.

### SLEEP AND OCCUPATIONAL THERAPY

- Rest and sleep are categorized as occupations in the Occupational Therapy Practice Framework (AOTA, 2014).
- Sleep is the only occupation that cannot be performed by another person (Pedretti, 2010).
- OTs implement interventions to address sleep insufficiency and sleep disorders (Leland et al., 2014).

## METHODOLOGY

### DESIGN

- Quantitative, exploratory, descriptive, and correlational.
- Used PSQI and original questionnaire.
- Areas measured: sleep duration, sleep disturbances, sleep latency, sleep medication, day dysfunctions, sleep efficiency, demographic information, self-efficacy.

### PARTICIPANTS

- Undergraduate college students
- 18 – 25yo, no diagnosed sleep disorders

#### Sample Survey Questions

- During the past month, what time have you usually gone to bed at night?
- During the past month, how long (in minutes) has it usually taken you to fall asleep each night?
- During the past month, what time have you usually gotten up in the morning?
- During the past month, how many hours of actual sleep did you get at night?
- During the past month, how would you rate your sleep overall?
- During the past month, how often have you taken medicine (prescribed or "over the counter")?
- During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?
- During the past month, how much of a problem has it been for you to keep up enough enthusiasm to get things done?
- Do you have a bed partner or roommate?
- Do you have any of the listed medical conditions/diagnosis
- I have academic goals that I believe I will accomplish while I am in college.
- I believe that I have the ability to complete my Bachelor's Degree.
- I believe I will be able to earn the grades I desire in the remainder of my college courses.

#### Participant Demographic Data

Participant	N = 209	%
Gender, <i>n</i>		
Male	27	13
Female	182	87
Majors, <i>n</i>		
Health and Natural Sciences	163	78
First-generation students, <i>n</i>	77	34
Students with a disability, <i>n</i>	79	38
DUC Athletes, <i>n</i>	51	24

### RECRUITMENT and DATA COLLECTION

- Flyers, emails, & face-to-face strategies
- 15 min survey on Survey Monkey

### DATA ANALYSIS

- Quantitative Data:** Statistical Package Social Sciences Version 22.0 (SPSS V22.0) Pearson's *r* correlation coefficient
- Qualitative Data:** Open ended questions regarding sleep disturbances

## RESULTS

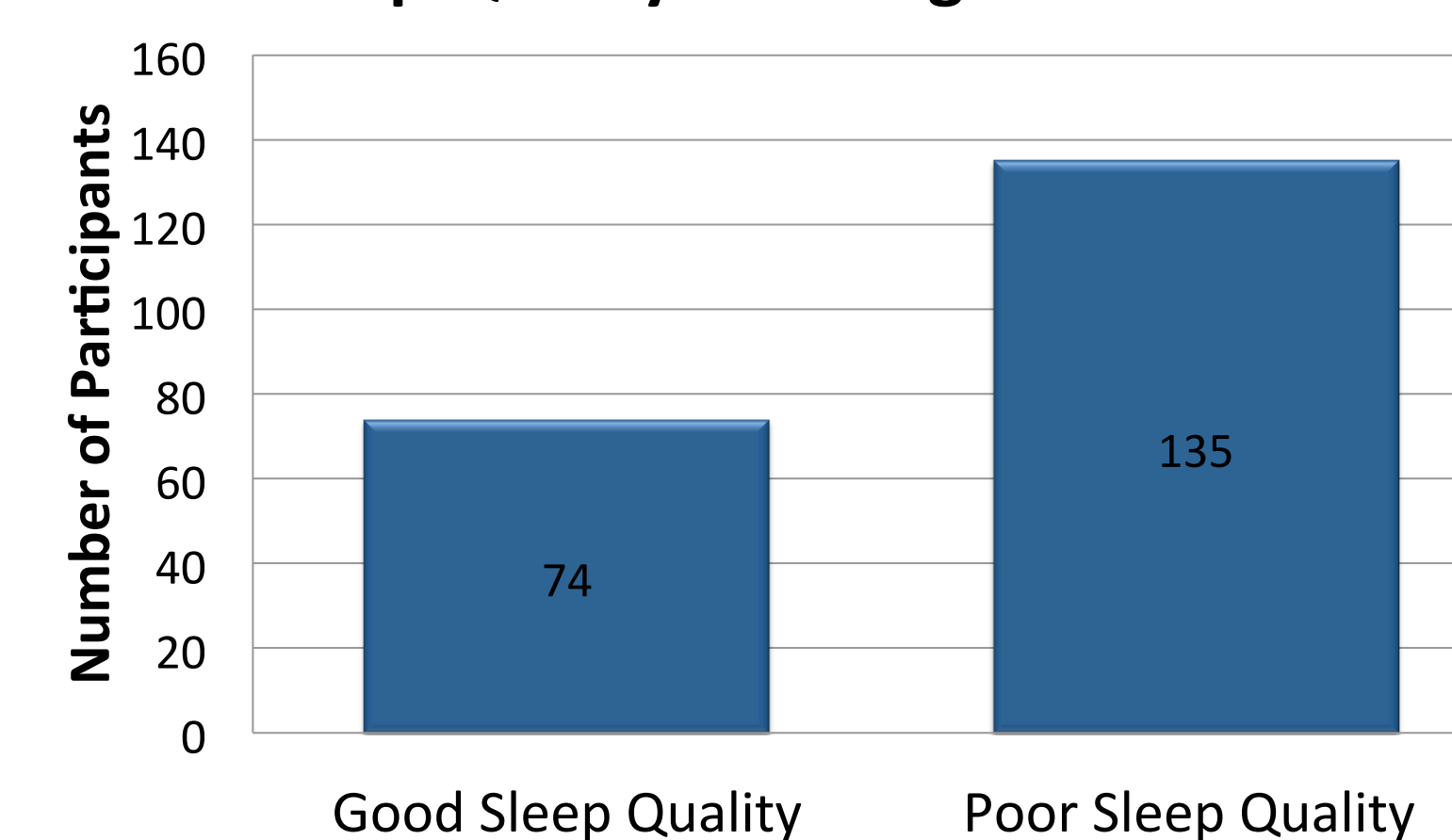
### QUANTITATIVE DATA

- PSQI scores: 135 (64.6%) participants reported poor sleep quality and 74 (35.4%) participants reported good sleep quality.
- Weak positive correlation ( $r = .33$ ) between PSQI scores and disability; sleep duration and GPA.
- Average number of sleep hours reported by participants is 6.68 hours.
- No significant correlations between PSQI scores, participant demographics or self-efficacy responses.

### QUALITATIVE DATA

- Environmental factors such as lighting, temperature, and noise affect quality of sleep.
- Sleep behaviors: sleep talking, snoring, tossing and turning, and coughing.
- Impact of partners and roommates: noise, movement, and snoring.

Sleep Quality of College Students



## DISCUSSION AND IMPLICATIONS

### DISCUSSION

- Results support existing evidence suggesting college students are sleep deprived.
- Over ½ of participants reported sleep issues that could be addressed by an occupational therapist.

### SUGGESTIONS FOR FUTURE RESEARCH

- Focus on key finding, which suggests that over ½ of undergraduate students have poor sleep quality and/or quantity.
- Conduct further studies with college students to determine specifically what is affecting their sleep quality and quantity and how it varies across time.

- Focus on specific student categories, ex: students with disabilities

### SUGGESTIONS FOR OCCUPATIONAL THERAPY

- OTs can help improve the performance of sleep as an occupation.
- Interventions to improve sleep quality through environmental modifications, client education, and promotion of good sleeping habits.
- Create sleep promotion programs targeting young adults to address their unique biological and physical needs.

## LIMITATIONS

- Responses based on self-report, weak correlations possibly due to small sub-category sample sizes.

## REFERENCES

- American Occupational Therapy Association. (2014). Occupational therapy practice framework: domain and process (3<sup>rd</sup> ed.). *American Journal of Occupational Therapy*, 68(Suppl 1), S1-S48
- Buck, C. (2013). *2013 ICD-9-CM for physicians* (Professional ed.). St. Louis, Mo.: Elsevier/Saunders.
- Centers for Disease Control and Prevention. (2013, July 01). *How Much Sleep Do I Need?* Retrieved May 07, 2015, from [http://www.cdc.gov/sleep/about\\_sleep/how\\_much\\_sleep.htm](http://www.cdc.gov/sleep/about_sleep/how_much_sleep.htm)
- Curcio, G., Ferrara, M., & De Gennaro, L. (2006). Sleep loss, learning capacity and academic performance. *Sleep Medicine Reviews*, 10(5), 323-337. doi:<http://dx.doi.org.ezproxy.dominican.edu/10.1016/j.smrv.2005.11.001>
- Dewald, J. F., Meijer, A. M., Oort, F. J., Kerkhof, G. A., Bogels, S. M. (2010). The influence of sleep quality, sleep duration and sleepiness on school performance in children and adolescents: a meta-analytic review. *Sleep Medicine Reviews*, 14(2010) 179-189. doi:10.1016/j.smrv.2009.10.004
- Gaultney, J. (2010). The prevalence of sleep disorders in college students: impact on academic performance. *Journal Of American College Health*, 59(2), 91-97. doi:10.1080/07448481.2010.483708
- Johnson, J. (2013). Assessing Academic Risk of Student-Athletes: Applicability of the NCAA Graduation Risk Overview Model to GPA. *NACADA Journal*, 33(2), 76-89. doi:10.12930/NACADA-13-041
- Kranke, D., Jackson, S. E., Taylor, D. A., Anderson-Fye, E., & Floersch, J. (2013). College Student Disclosure of Non-Apparent Disabilities to Receive Classroom Accommodations. *Journal Of Postsecondary Education & Disability*, 26(1), 35-51.
- Leland, N. E., Marcione, N., Niemiec, S. S., Kelkar, K., & Fogelberg, D. (2014). What is occupational therapy's role in addressing sleep problems among older adults?. *OTJR: Occupation, Participation And Health*, 34(3), 141-149.