

The Relationships Between Physical Activity, Sleep Difficulties, and Gender

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INTRODUCTION

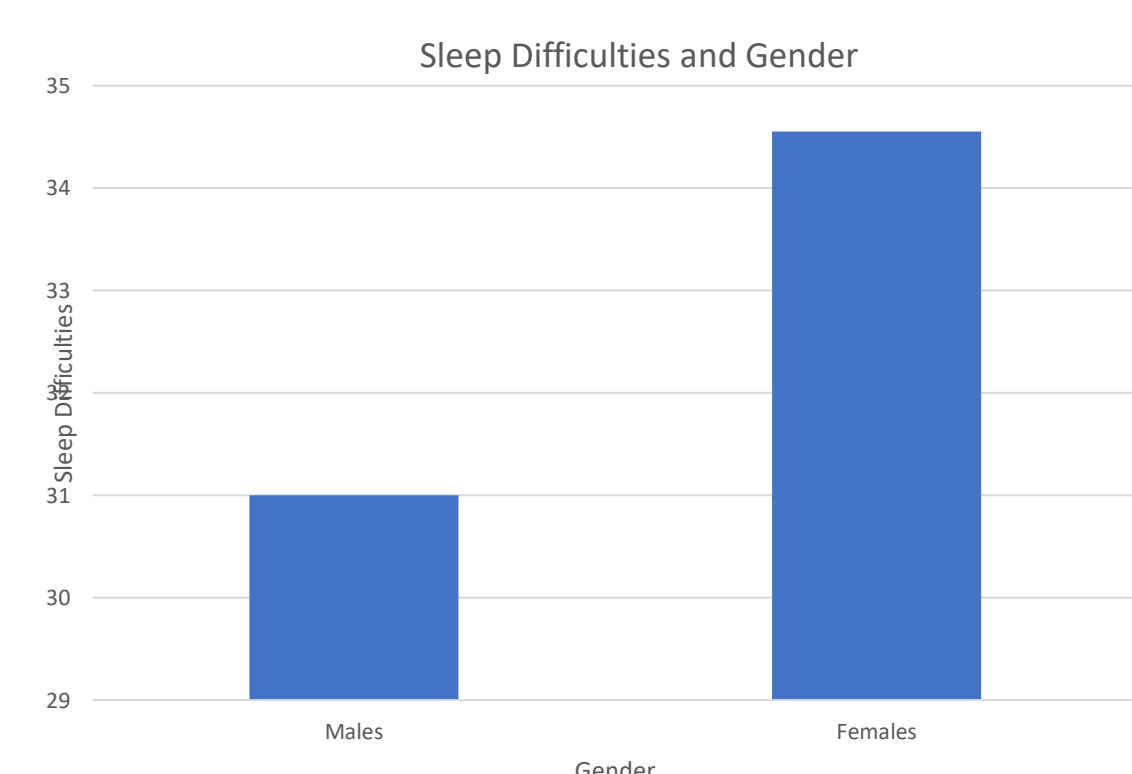
- Physical inactivity is a worldwide public health issue which can have negative effects on people - sleep difficulties are one effect.
- Past research found that sleep difficulties are more prevalent in females (Lindberg et al., 1997). Males engage in more physical activity (Azevedo et al., 2007). There is a negative correlation between physical activity and sleep difficulties (Murray et al., 2017).
- The **purpose** of this study was to discover what gender has more sleep difficulties, what gender exercises more, and if there is a negative correlation between physical activity and sleep difficulties.
- It is expected that females will experience more sleep difficulties, males will engage in more physical activity, and there will be a negative relationship between physical activity and sleep difficulties.

METHODS

- 38 students from Eastern Connecticut State University
- International Physical Activity Questionnaire – Short Form and the Sleep Quality Scale
- First, participants looked at the descriptions of each study on the Eastern Connecticut State University Psychology website. They emailed the researcher to sign up for the study. The researcher emailed the participants a link to the study. After clicking on the link, participants read and signed the informed consent form. Next, participants completed the International Physical Activity Questionnaire – Short Form and Sleep Quality Scale. They filled out a demographics questionnaire. At the end, psychology students clicked on a link which brought them to an area where they provided their Eastern email address so they could receive a debriefing form. Finally, the researcher emailed the participants a debriefing form.

RESULTS

Sleep Difficulties and Gender

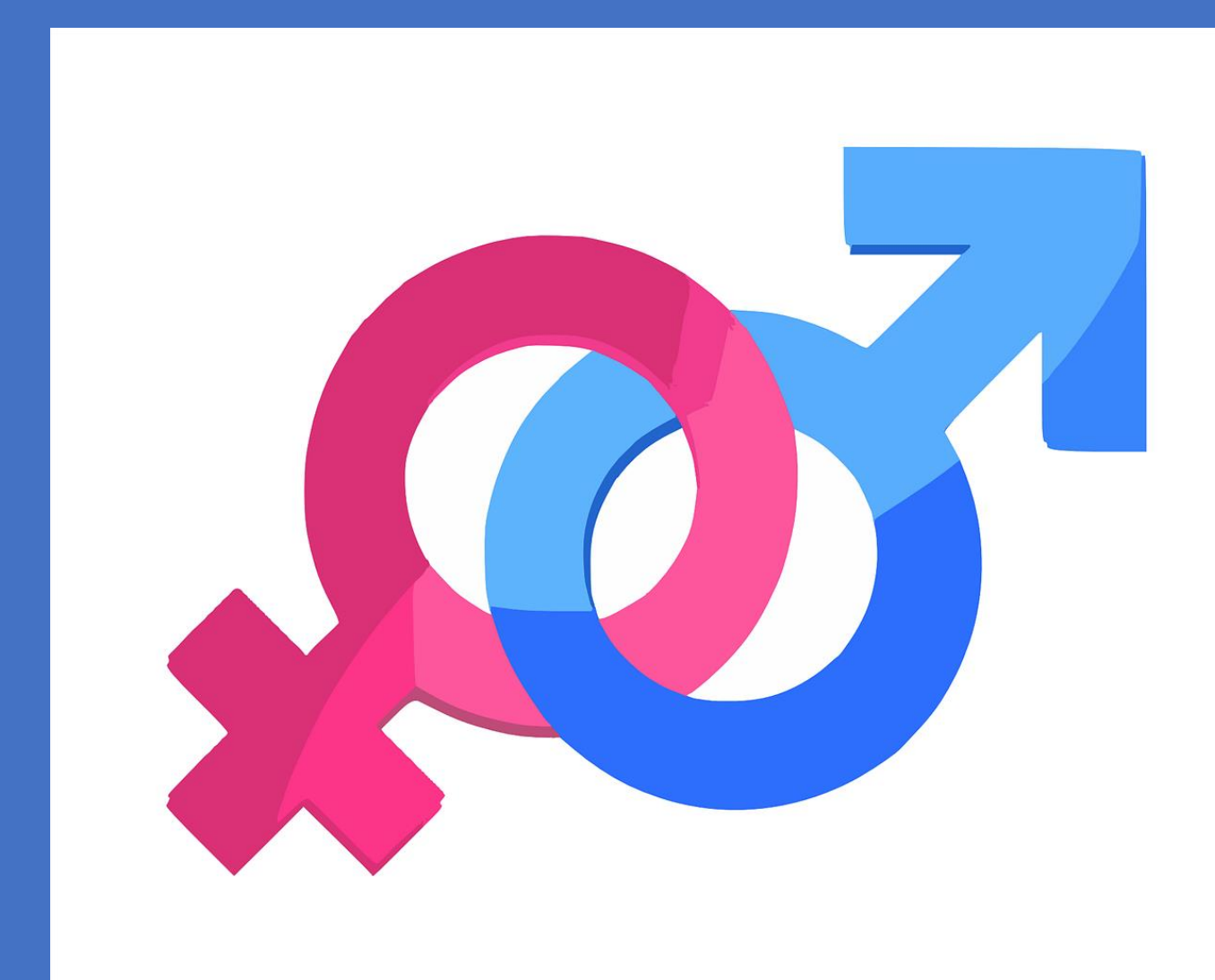
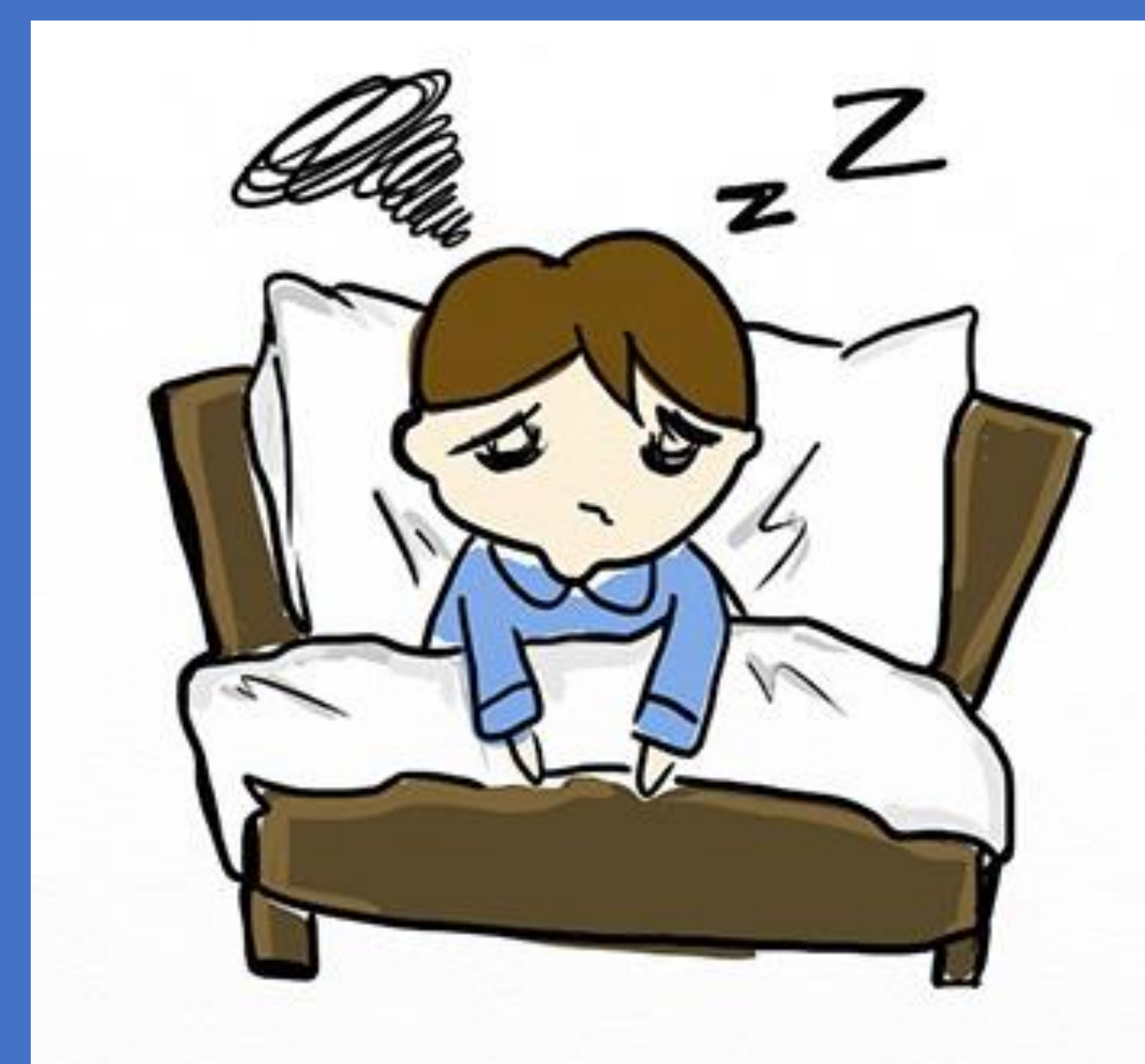


Women do not have significantly different sleep difficulty tendencies than men.

$$t(36) = -0.69, p = 0.49, d = 0.30$$

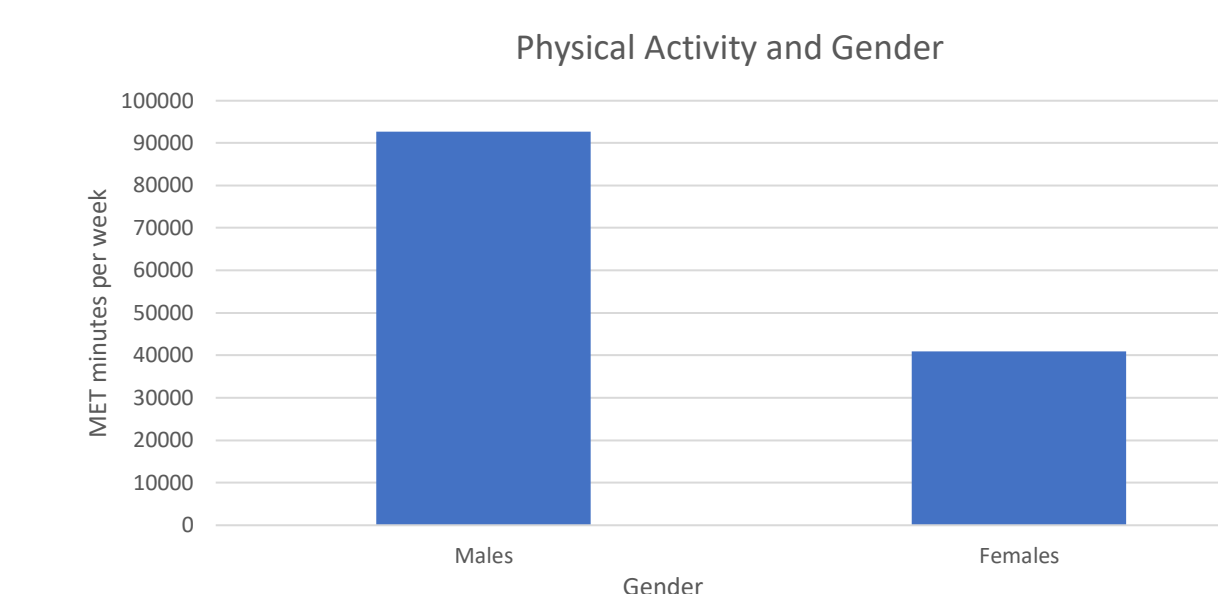


Physical activity is just one way to decrease the prevalence of sleep difficulties in individuals.



RESULTS (Cont.)

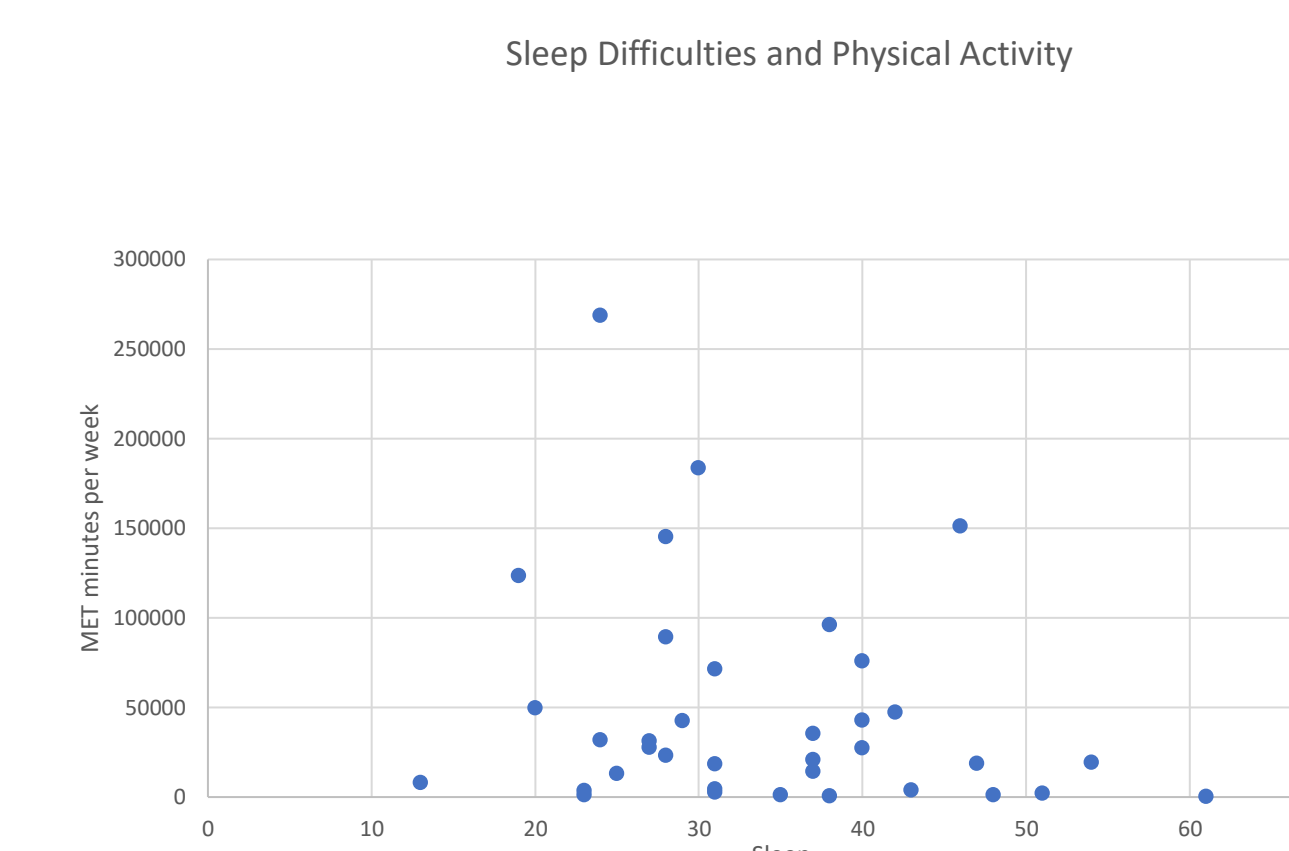
Physical Activity and Gender



Men do not have significantly different physical activity tendencies than women.

$$Md = 27685.35 \text{ and range of } 268320.00 \text{ minutes}$$

Physical Activity and Sleep Difficulties



There is a nonsignificant negative relationship between physical activity and sleep difficulties.

$$r(36) = -0.23, p = 0.18.$$

IMPLICATIONS

- Psychologists and other individuals are able to take this information and suggest physical activity as a way to reduce sleep difficulties.

LIMITATIONS

- A lack of male participants.
- All hypotheses were not significant
- Internal reliability - the International Physical Activity Questionnaire – Short Form had a Cronbach's alpha of .26.

FUTURE RESEARCH

- More male participants.

REFERENCES

- Lindberg, E., Janson, C., Gislason, T., Bjornsson, E., Hetta, J., & Boman, G. (1997). Sleep disturbances in a young adult population: Can gender differences be explained by differences in psychological status? *American Sleep Disorders Association and Sleep Research Society*
- Azevedo, M., Araújo, C., Reichert, F., Siqueira, F., Cozzensa da Silva, M., & Hallal, P. (2007). Gender differences in leisure-time physical activity. *International Journal of Public Health*
- Murray, K., Godbole, S., Natarajan, L., Full, K., Hipp, J., Glanz, K.,...Kerr, J. (2017). The relations between sleep, time of physical activity, and time outdoors among adult women. [US National Library of Medicine National Institutes of Health](#)

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