What Keeps You Up at Night? Chronobiology and Insomnia Levels in Post-Secondary Students

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INTRODUCTION

- **Insomnia**: The inability to fall asleep and/or to maintain sleep during the night. Waking up earlier than desired is also a characteristic of chronic insomnia.

- **Chronotype:** A natural inclination to want to sleep at a specific time (i.e. night owl vs early bird).

Research questions:
- Is there a relationship between chronotype and level of insomnia in students?
- Are students who stay up late more at risk of developing insomnia than students who chose not to?

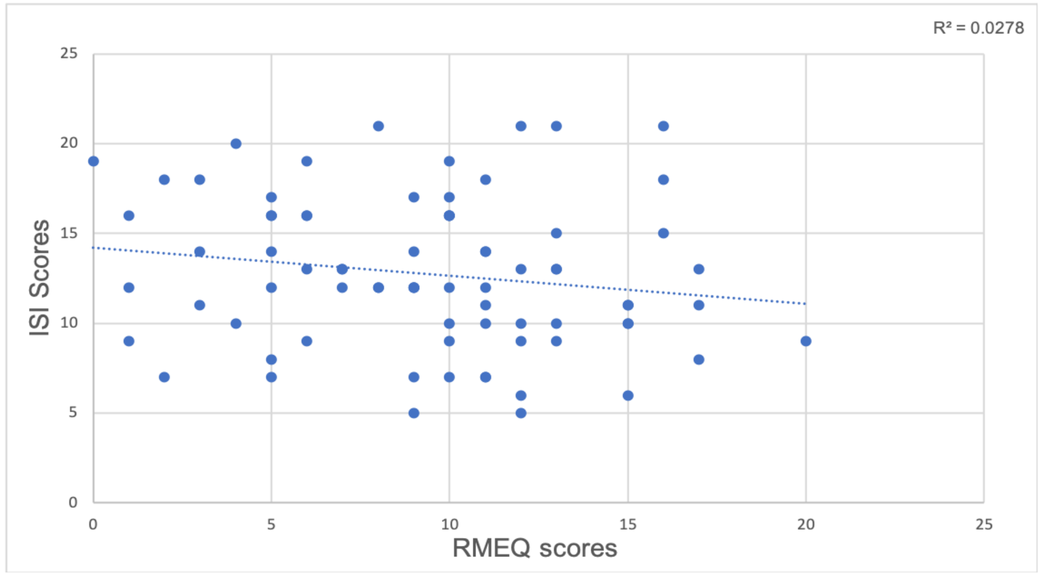
METHODS

Participants
- 77 current and former students (within past 5 years) from post-secondary institutions
- 39 women, 26 men, 2 non-binary
- Mean age: 22 years

Questionnaires
- ISI (Insomnia Severity Index)
  - Score range: 0-28
  - A higher score indicates a greater level of insomnia
- RMEQ (Reduced Morningness-Eveningness Questionnaire)
  - Two chronotypes based on a score ranging from 0-26
  - Morning type : >12 (n = 37)
  - Evening type: <12 (n = 30)
  - All scores of 12 were removed

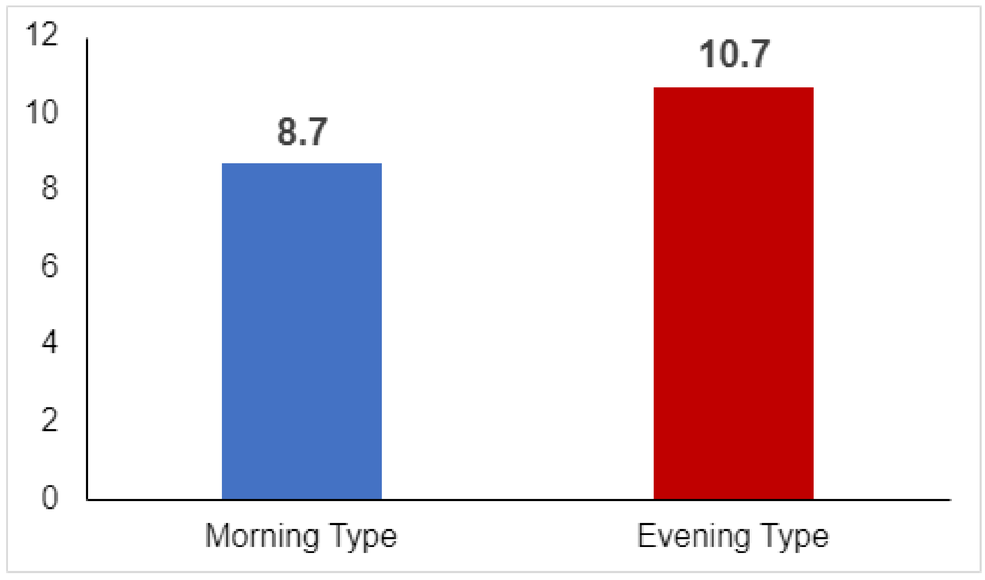
RESULTS

Scatter Plot of ISI vs RMEQ Scores



- Weak nonsignificant correlation (r= -.16) between insomnia severity scores and chronobiology scores.

Average Insomnia Score for Each Chronotype



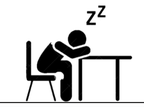
- Those with an evening chronotype had overall higher insomnia levels than those with a morning chronotype.

CONCLUSION

- There was a weak relationship between levels of insomnia and chronotype in students.
- However, we found that those who were **evening types** reported greater severity of insomnia than those who were **morning types.**

Implications:
- Students who stay up late are not more at risk of developing insomnia than students who choose not to.

Limitations:
- Small sample size
- No consideration of lifestyle differences
- No consideration of program differences
- Removed students with an intermediate chronotype



RECOMMENDATIONS

Based on our study, future research should look into:
- Common factors influencing both insomnia and chronotype
- Insomnia levels and chronotypes in students based on different programs of study and lifestyle differences
- Factors that predispose students to disturbed sleep patterns in general

and tools to help improve sleep quality
- Difference in sleep quality in men vs women

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