

# Sex Differences in Physical Activity Moderating the Association between Pre-Sleep Arousal and Pain Intensity

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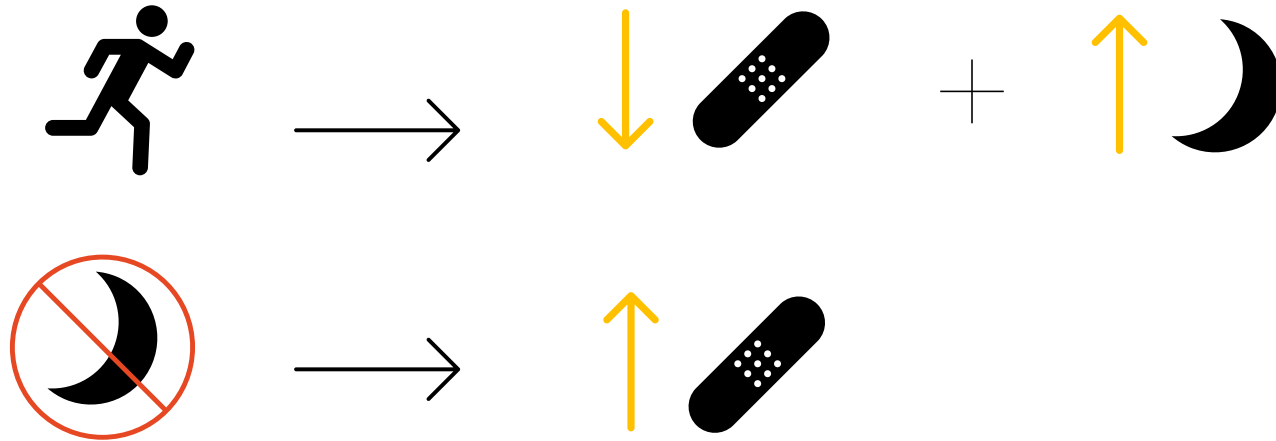
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# Introduction

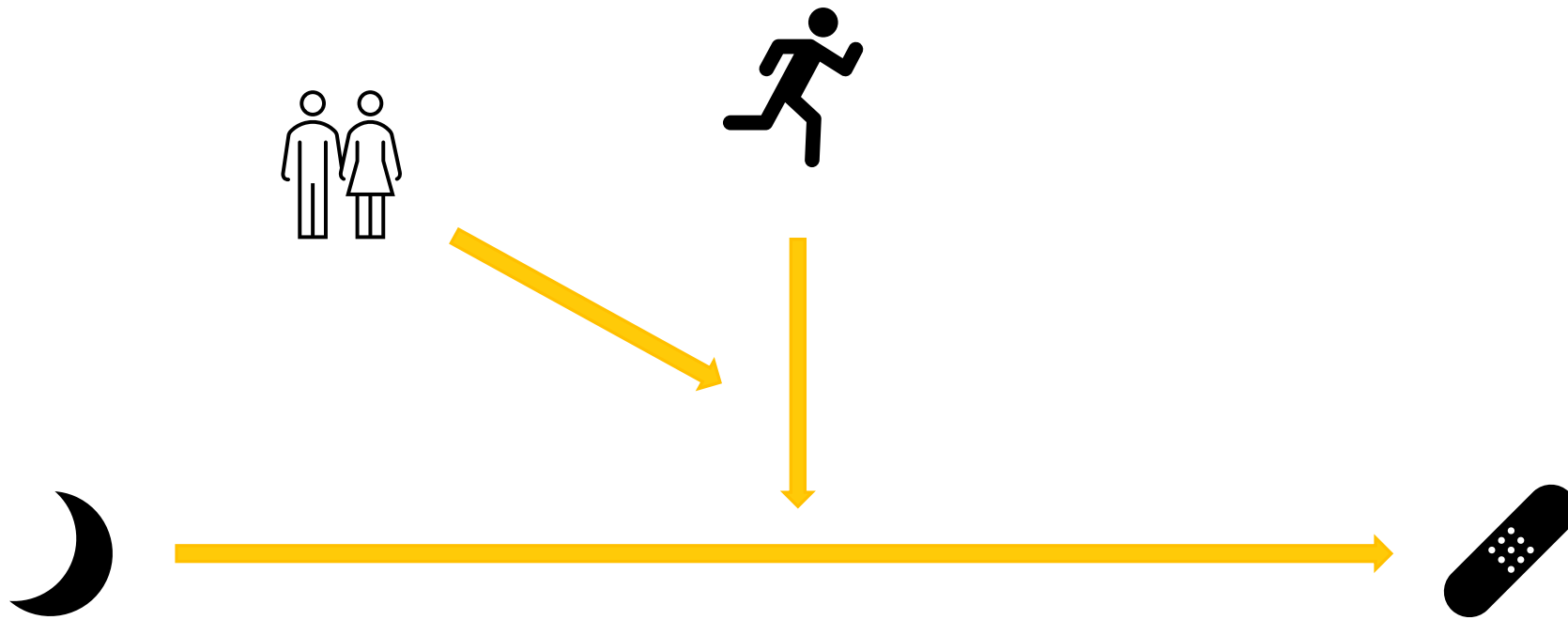
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- Women have an increased pain sensitivity and have a higher prevalence of insomnia than men
- Research regarding the sex-specific interactive associations of different types of physical activity and sleep on pain is limited

# Study Objective

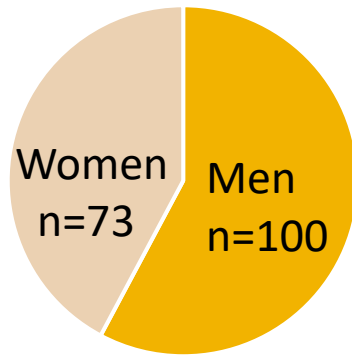
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# Methods

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- **127 participants** age 50+ (*Mean age = 64.7, SD = 7.9*)



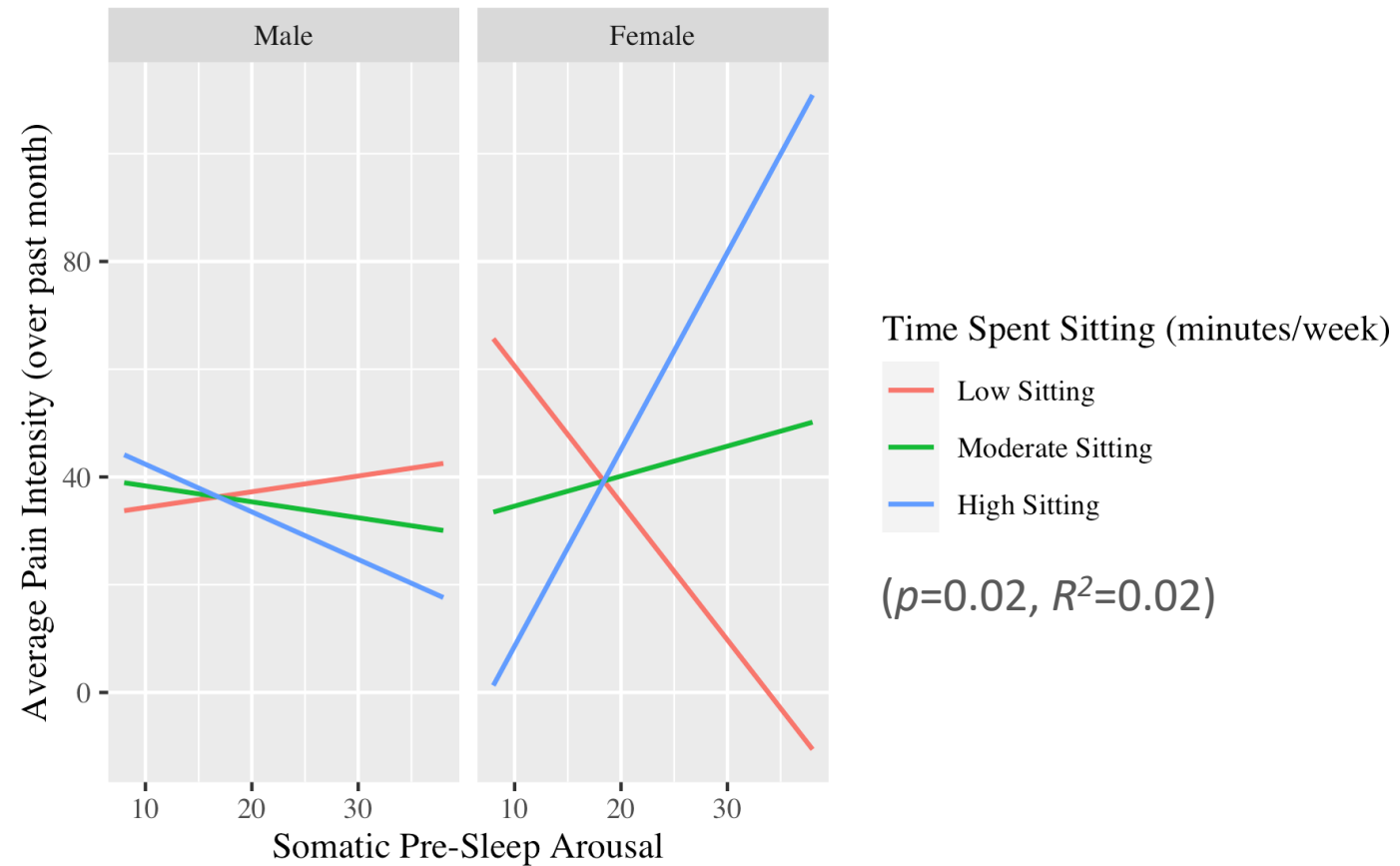
## - Data Analyses

- Moderated Regressions: IPAQ, PSQI subscores, PSAS, sex

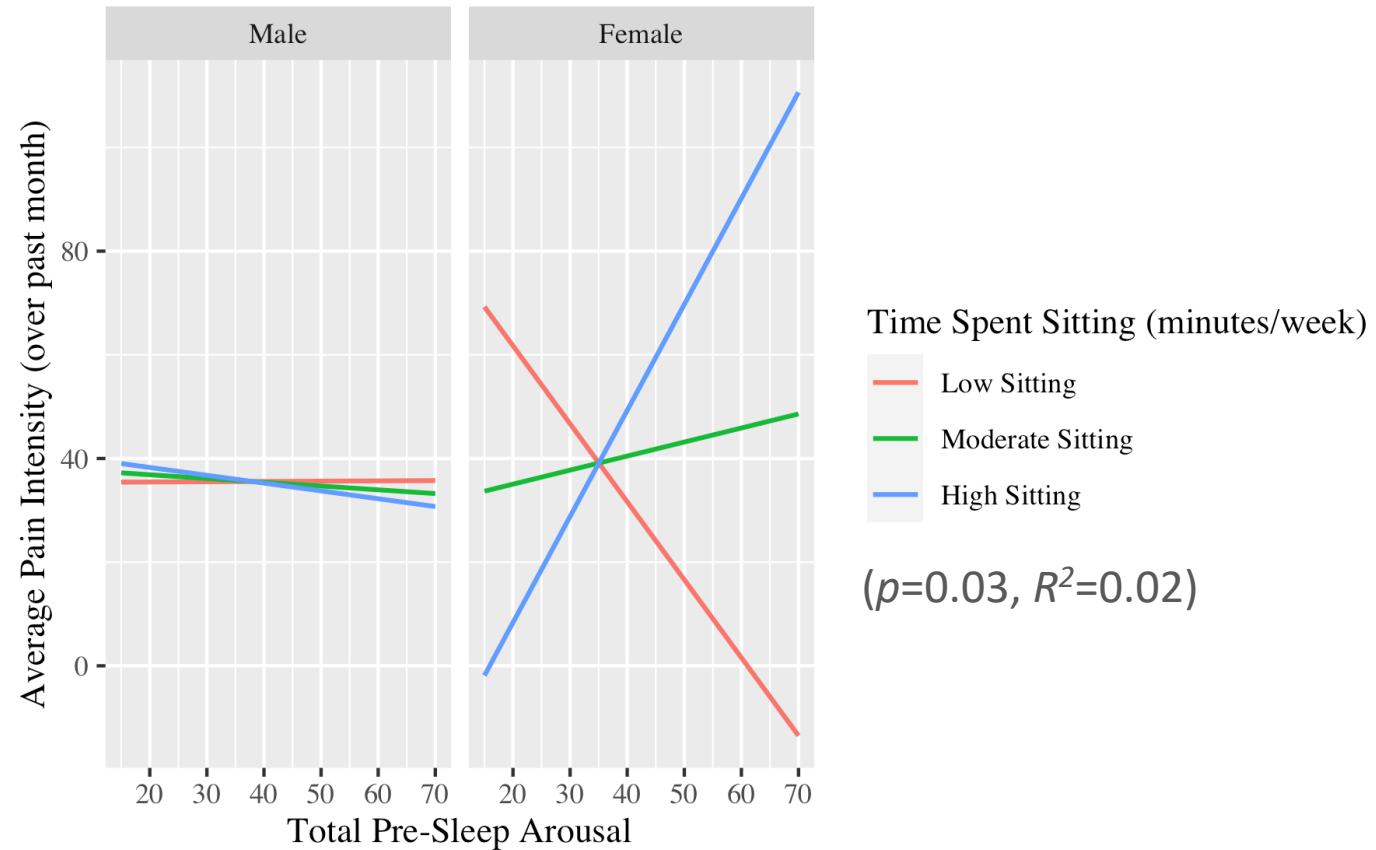
## Measures

- Sleep 🌙
  - Pittsburgh Sleep Quality Index (PSQI)
  - Pre-Sleep Arousal (PSAS)
- Physical Activity 🏃
  - International Physical Activity Questionnaire (IPAQ)
- Pain 🩹
  - Average pain intensity over the last month

# Results: Somatic Pre-Sleep Arousal



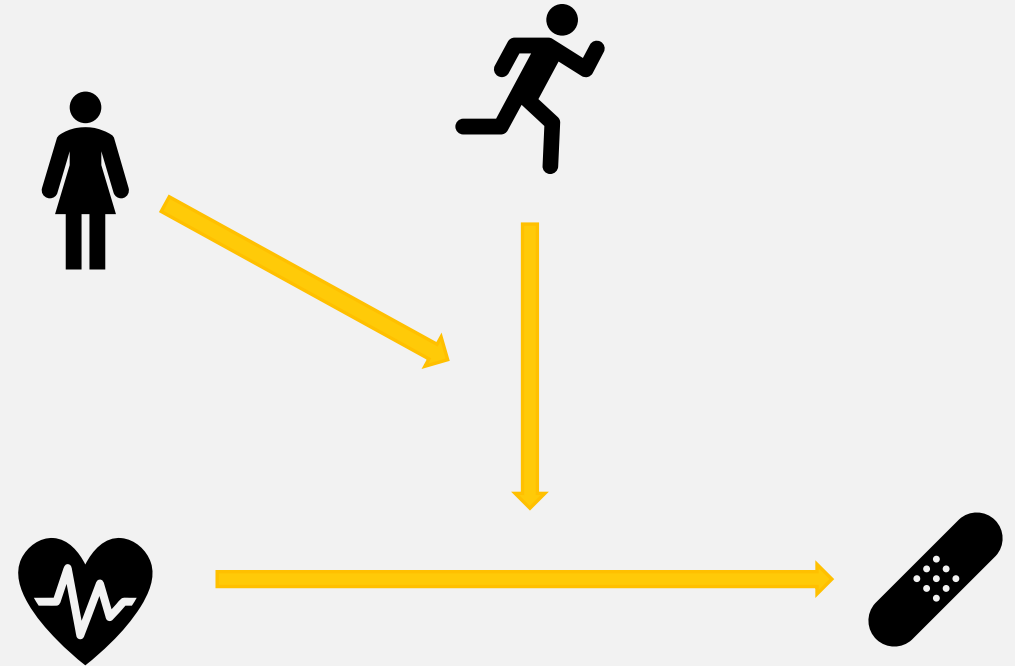
# Results: Total Pre-Sleep Arousal



# Conclusion

## Key Finding:

Women are more vulnerable to worse pain in the presence of higher pre-sleep arousal and prolonged sitting



- **Possible Interventions:** taking short breaks throughout the day and meditation

# Acknowledgements

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