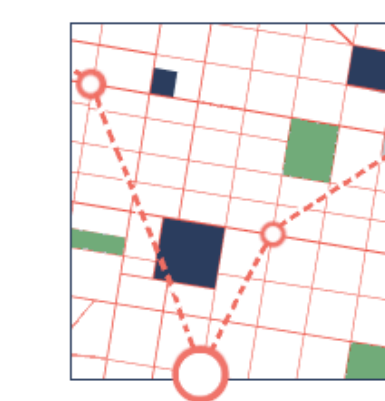


# Self-reported Habitual Sleep Patterns among Collegiate Athletes

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## Introduction

- Fewer than 30% of college students<sup>1</sup> meet nightly sleep recommendations (7-9 hours).<sup>2</sup>
- Sleep and its implications for student-athletes specifically is limited to cross-sectional surveys.

## Purpose

Describe the feasibility of monitoring self-reported sleep quantity and habitual sleep patterns in a collegiate student-athlete cohort.

## Methods

### DATA SOURCES

- We monitored self-reported sleep using a prospective cohort study with a Strength and Conditioning software application
- PISC Pilot funding

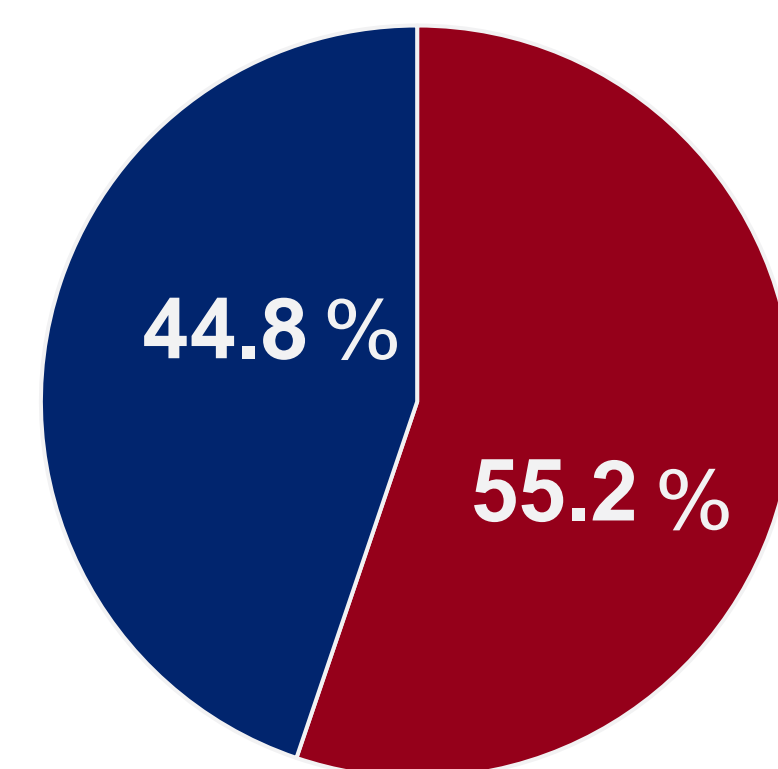


### PROCEDURES

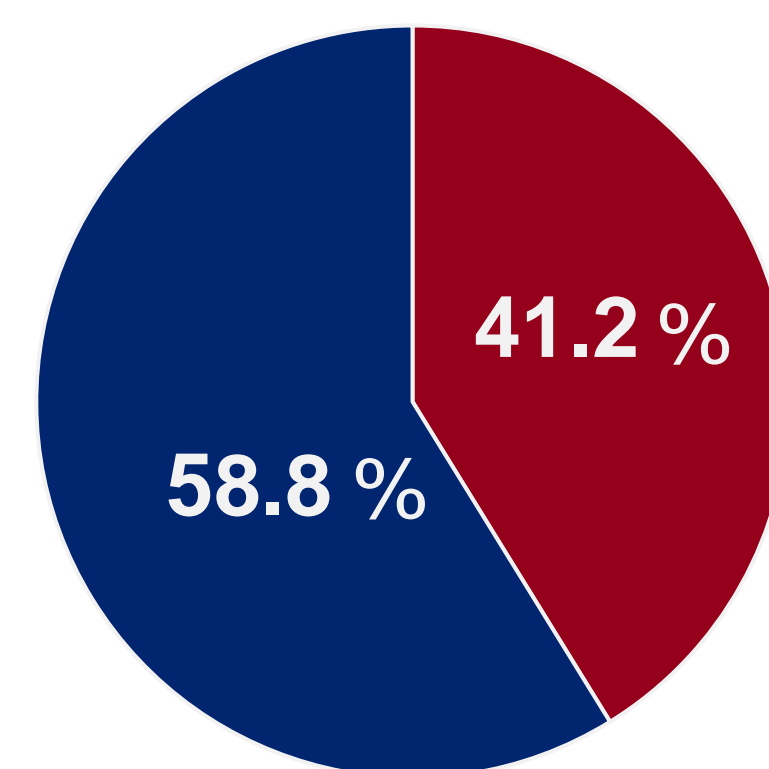
- Each day, over 54 days, the application prompted student-athletes to record the total sleep hours obtained in the previous 24 hours.
- To determine the feasibility of daily self-reported habitual sleep monitoring in this setting, we did not offer remuneration.

Participants n = 67

Total Responses (n = 1,860)



■ Male ■ Female



■ Male ■ Female

### STATISTICAL ANALYSIS

- Descriptive statistics
  - Athlete participation
  - Reported daily sleep



## Results

### ATHLETE PARTICIPATION

#### Response Frequency Median [IQR]

Overall:  
51.9% [24.1 – 87.0%]

Males:  
35.2% [13.0-61.1%]

Females:  
81.2% [5.3-92.6%]

#### Percent of Participants that Responded at least 60% Daily Prompts

Female 63.3

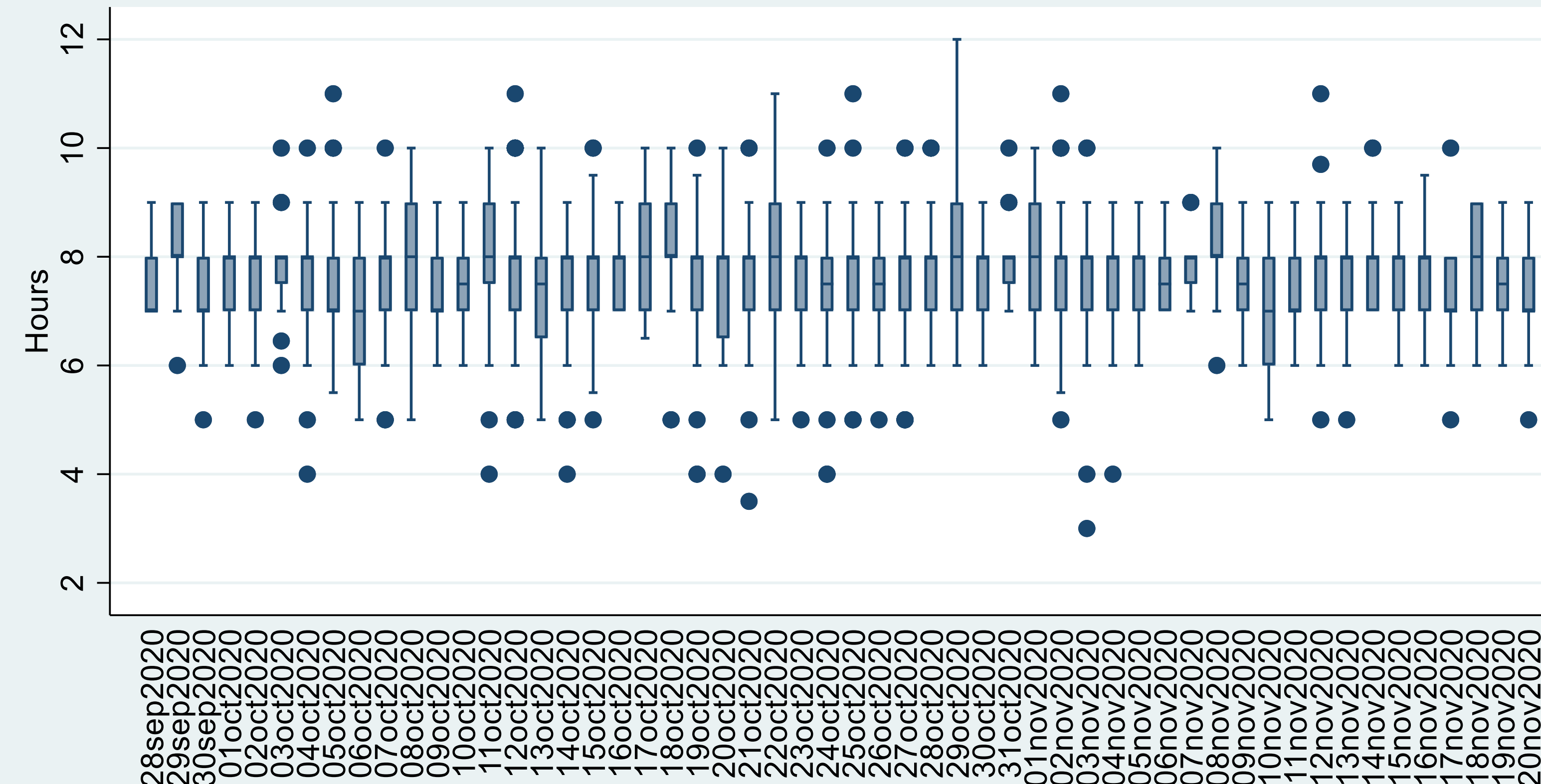
Male 27.0

Overall 43.3

0.0 20.0 40.0 60.0 80.0  
Percent

### REPORTED DAILY SLEEP

Total Hours of Sleep in the last 24 Hours by Date of Response



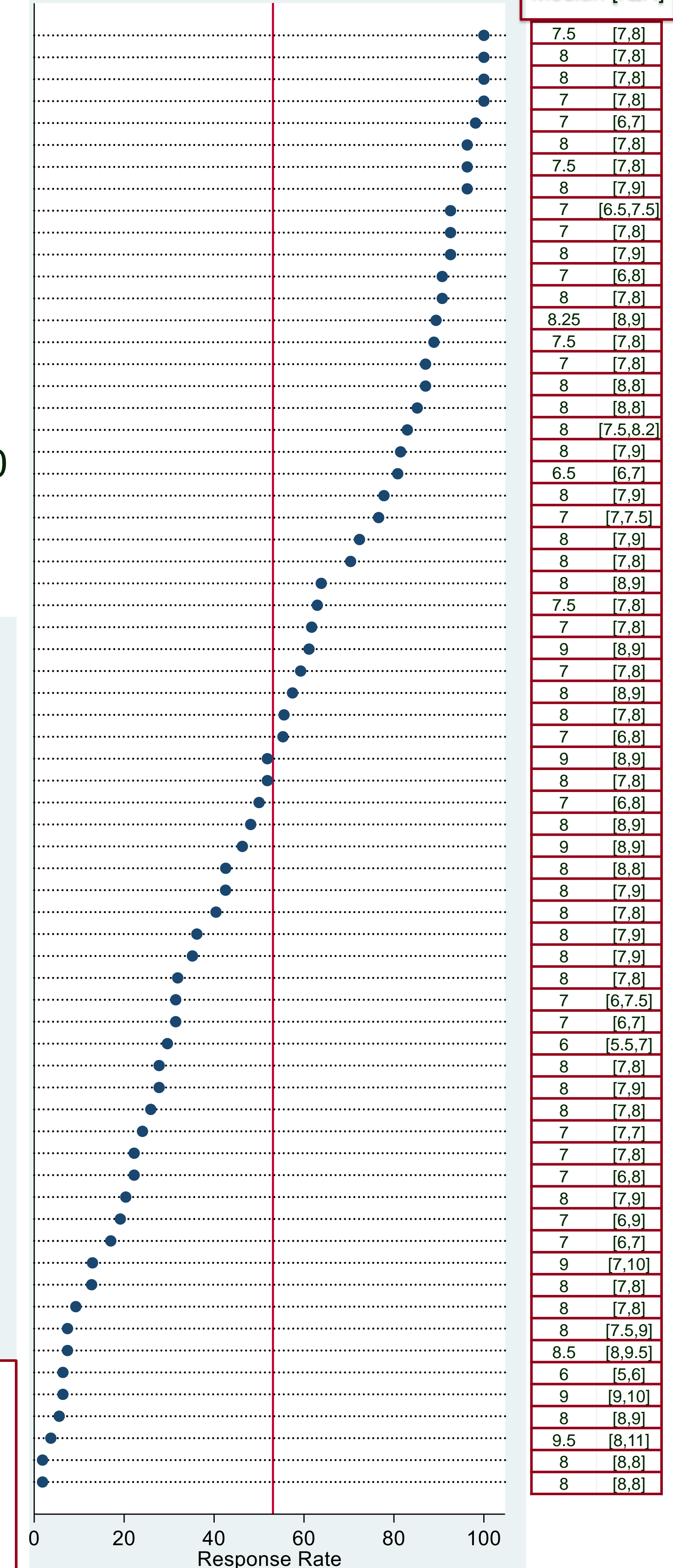
#### Median percent of days below recommended (7-9) hours:

Overall: 10.7% [IQR: 3.0 – 20.4%]

Males: 7.9% [IQR: 0 – 16.7%]

Females: 14.3% [IQR: 6.7 – 21.9%]

#### Response Rate



## Conclusions

- Participation was variable, occurring during fall 2020 (COVID-19), relied on remote monitoring; though most student-athletes reported their sleep on over half the days.
- Student-athletes reported generally obtaining the recommended total sleep, but sleep varied night-to-night.
- This study had a small sample and short observation period; however, these results suggest that studying habitual sleep in student-athletes is possible.
- Sets the stage for future collaboration with Penn Athletics and Sports Performance.

## References

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## Contact

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