Self-reported Habitual Sleep Patterns among Collegiate Athletes
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Introduction

- Fewer than 30% of college students meet nightly sleep recommendations (7-9 hours).
- 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)

44.8% Male 55.2% Female
58.8% Male 41.2% 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%

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%]

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

Contact

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