

USING GPS TRACKING TO MONITOR EXERTNAL LOAD OF NCAA DIVISION II WOMEN'S LACROSSE ATHLETES IN OUT-OF-CONFERENCE GAMES

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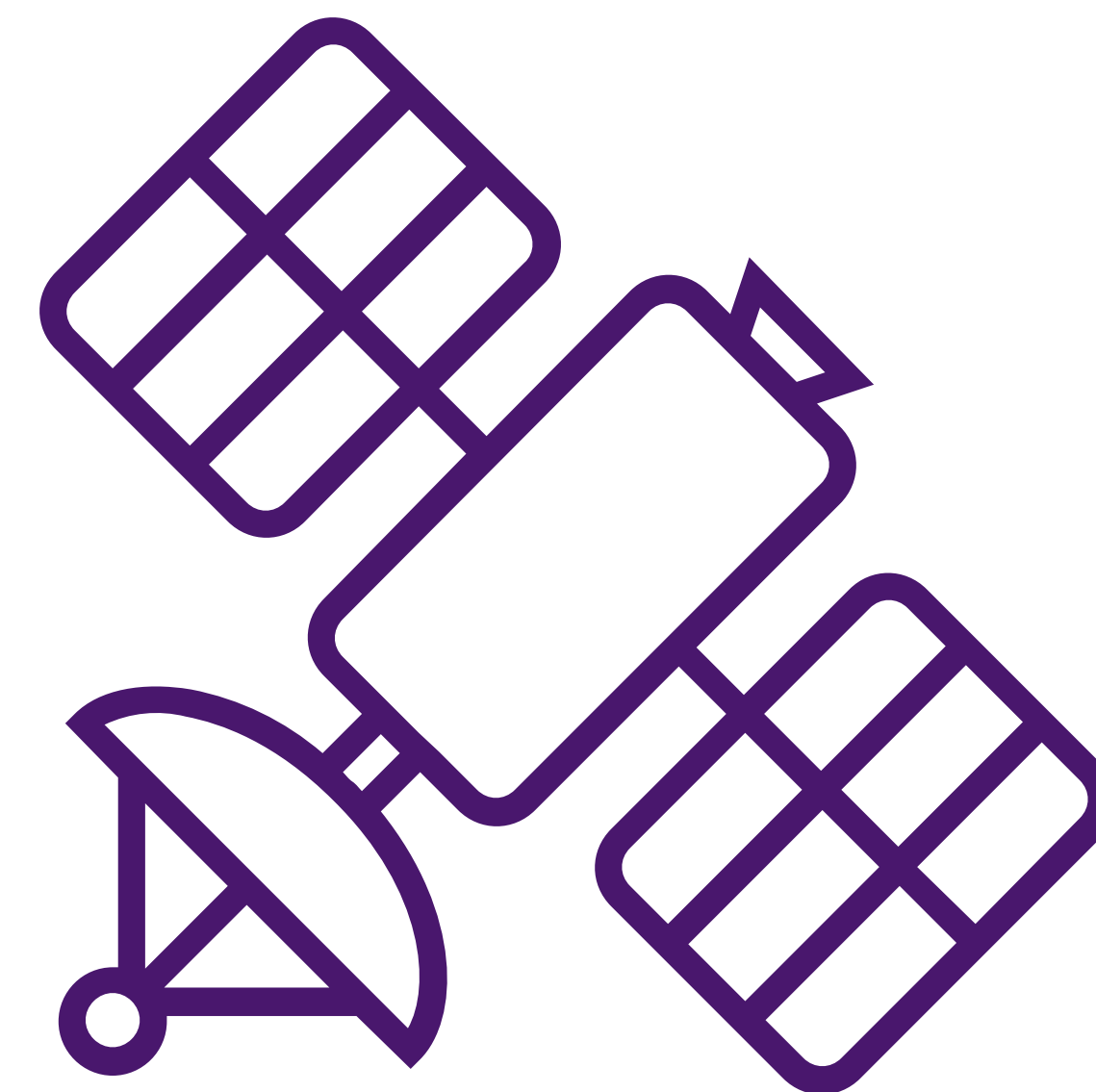
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INTRODUCTION

- External load monitoring is important to understand for the safety and health of athletes.
- The purpose of this project is to monitor external load on athletes competing in NCAA Division II women's lacrosse out-of-conference games.

METHODS

- n = 15; Females
- 5 DII Lacrosse
- Out-Of-Conference Games



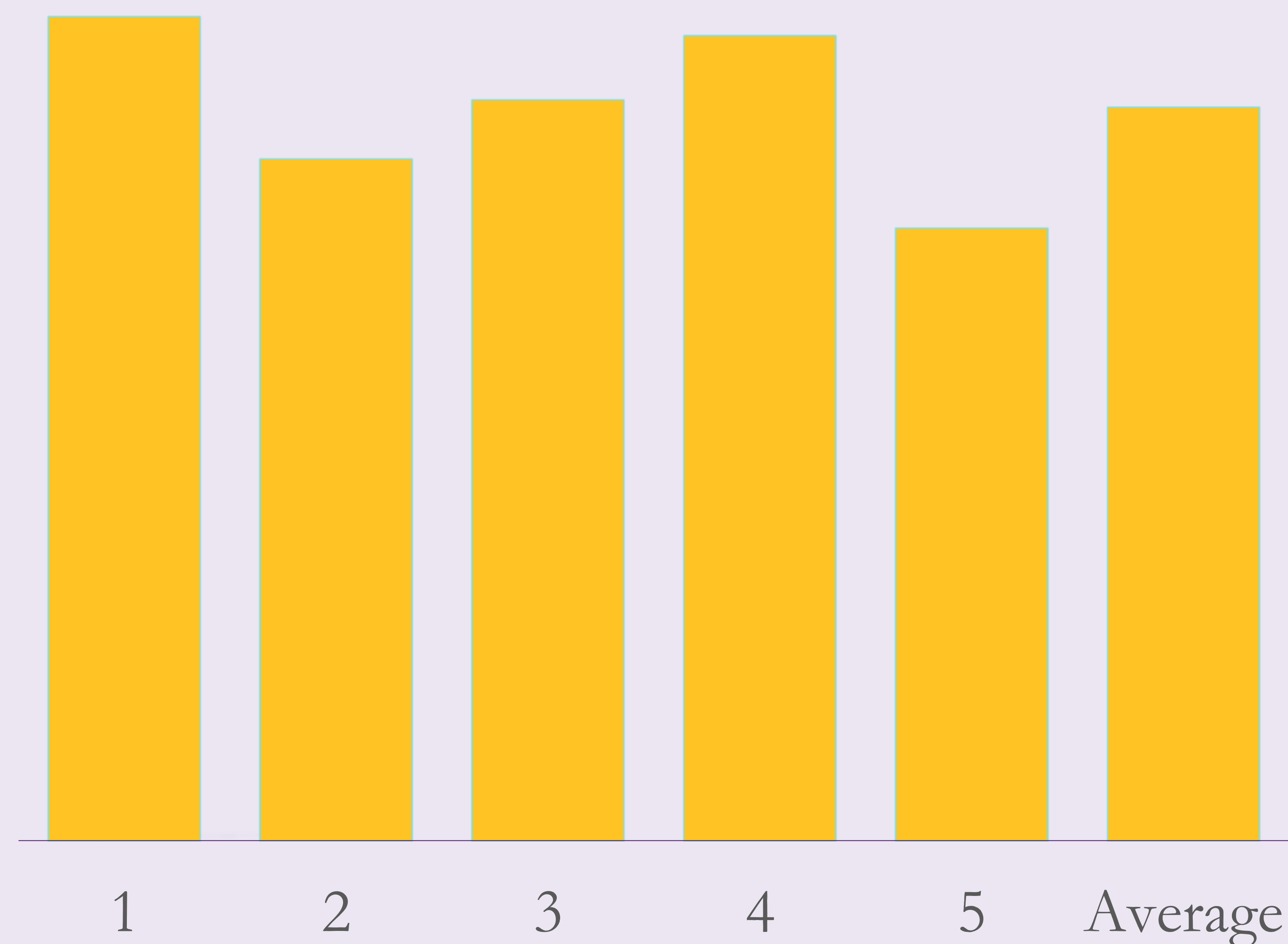
- Means and standard deviations calculated.
- 2D Load (au), 3D Load (au), Total distance (m) Work Rate (m/min) and hard running distance (m) or the distance traveled over $4.5 \text{ m}\cdot\text{s}^{-1}$

RESULTS

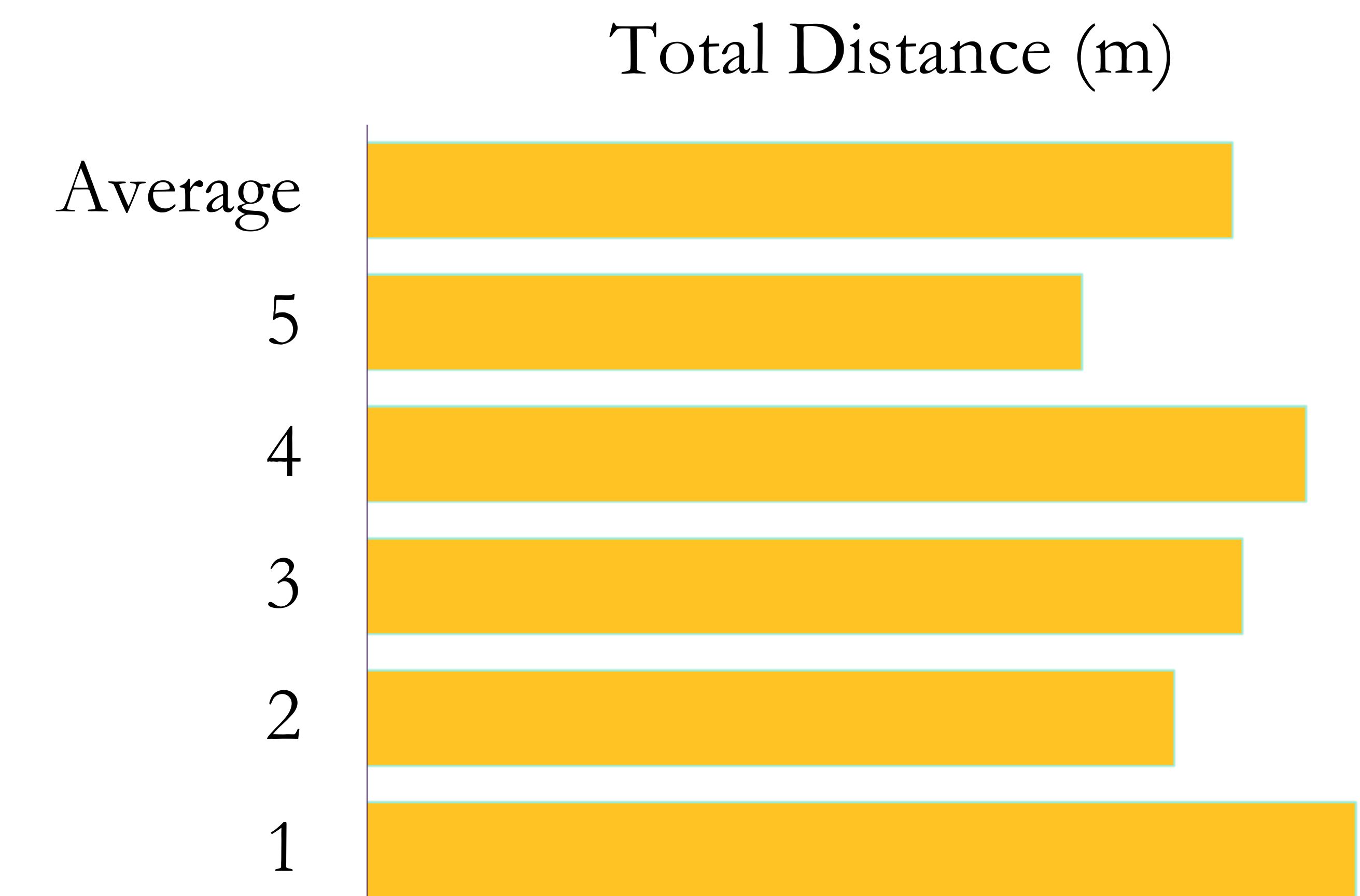
- 2D Load Average = 237 ± 106 au
- 3D Load Average = 360 ± 161 au
- Total Distance Covered Average = 5486.9 ± 1893.1 m
- Hard Running Distance Average = 470.4 ± 593.9 m
- Work Rate = 44.6 ± 13.8 $\text{m}\cdot\text{min}^{-1}$



3D Load Profile Out-of-Conference



RESULTS



CONCLUSION

- Division II women's lacrosse has substantial, but different in-game performance and load metric when compared to Division I research.

PRACTICAL APPLICATIONS

- External load data can help coaches and training staff to optimize practice plans.
- Data can be used to create better strength and conditioning strategies.
- Load management can optimize performance and minimize risk of injuries.