

# THE USE OF ACCELOMETERS TO QUANTIFY THE TRAINING LOAD IN SOCCER

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## Introduction

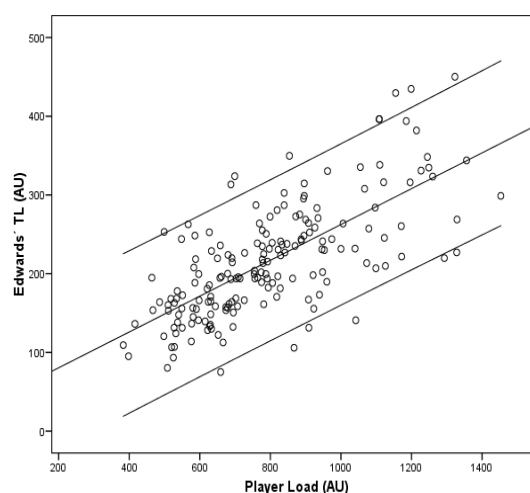
There are different methods to quantify the load on team sports<sup>1</sup>, that have shown high levels of correlation between them<sup>1,2</sup> such as the method *Edwards' Training Load* (*Edwards' TL*) based on heart rate (HR) and the *Session-RPE* based on perceived exertion that athlete has of the completed session. The purpose of this study was to determine the validity of the *Player-load* as an indicator of training load in soccer, based on correlations with other methods of quantification used in team sports.

## Methods

Twenty eight semiprofessional male soccer players participated in this study. They were monitored for 44 sessions through GPS devices (*MinimaxX* v.4.0), HR through thoracic strap (Polar Oy, Finland) and the subjective perception of effort (scale CR-10 modified by Foster<sup>3</sup>) shown by the players after the completion of training.

## Results & Discussion

The value of *Player-load* average was  $789.2 \pm 224.9$  AU, while the *Session-RPE* average was  $462.4 \pm 237.9$  AU and *Edwards' TL* was  $216.3 \pm 72.6$  AU. Relationship between training load using the *Session-RPE* method and the *Player-load* of 210 records made ( $r = 0.74$ ,  $p < 0.01$ ). This is the first study that analyzes the relationship between *Player-load* index variables obtained by accelerometry with different methods of quantification used in team sports<sup>1</sup>.



**Figure 1.** Relationship between training load using the method of *Edwards' Training load* and *Player-load* of the 210 records made ( $r = 0.70$ ,  $p < 0.01$ ).

## Conclusion

The results suggested that *Player-load* index may be a good indicator to quantify the training load in soccer.

## References

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