

Comments to the manuscript „Kinematic differences in serving techniques between female tennis master sportsman and division I athletes” (Manuscript ID: 1386025)

Summary: The study examines kinematic differences between female tennis players in different leagues. The aim of the study is interesting, but various information is missing for the reader.

Specific Comments:

Title: It might be more appealing to readers if the title directly indicates that it is about different performance groups or age groups. For people who are not familiar with the relevant league system, this might not be immediately obvious.

Abstract:

1-2 sentences more on the background would be helpful.

ll. 24: In general, the biomechanics of the tennis serve were investigated for various questions. I therefore consider this statement to be only partially correct. If it is about a specific topic or the women's serve, the statement would be more accurate.

Introduction:

The introduction should focus more on the importance of the research question and what practical significance the results will have for players and coaches.

What has already been found out with players of different performance and age groups? What results can be expected? Formulate hypothesis(es) as well.

There are two reviews which might be helpful for this paper:

Lambrich, J., & Muehlbauer, T. (2023). Biomechanical analyses of different serve and groundstroke techniques in tennis: A systematic scoping review. *PLoS One*, 18(8), e0290320.

Brito, A. V., Afonso, J., Silva, G., Fernandez-Fernandez, J., & Fernandes, R. J. (2023). Biophysical characterization of the tennis serve: A systematic scoping review with evidence gap map. *Journal of Science and Medicine in Sport*.

Methods:

Subjects:

The methodology should make the question even clearer. The aim is to compare groups in terms of different performance levels or age groups.

Experimental approach to the problem:

Please add the following information: serve type for first and second serve; stance style (Foot-up/ Foot-back) which was used for the players.

Statistical Analysis:

A statistical analysis that involves only five participants per group may not be sufficiently robust due to the significant impact of individual kinematic differences arising from unique techniques.

Please run an additional analysis using non-parametric statistical test (e.g. Mann-Whitney-U-test) to verify your results.

Results:

ll. 158/168/178: Please vary the sentence beginnings.

Discussion

ll. 198/215/220/249/262: Please vary the sentence beginnings.

A structure with different subheadings would be helpful for the reader. Please add suitable ones.

The summary lacks a practical application. The results are summarized but there is no advice for players and coaches? What needs to be considered in technique training?

Conclusion:

No comments.