

## REVIEWER'S REPORT

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**Title: RELATIONSHIP BETWEEN THE FREQUENCY OF HAND MOVEMENTS DURING DRIBBLING AND REACTION SPEED HIGH-SKILLED FIELD HOCKEY PLAYERS**

### Recommendation:

**Accept as it is** .....

Accept after minor revision.....

Accept after major revision .....

Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality			✓	
Techn. Quality			✓	
Clarity			✓	
Significance			✓	

Reviewer Name: Shafiya Akhter

### Reviewer's Comment for Publication.

The article titled “*Relationship Between the Frequency of Hand Movements During Dribbling and Reaction Speed in High-Skilled Field Hockey Players*” presents a focused and data-driven exploration of motor control and reaction speed in elite female athletes. It addresses a relatively underexplored area in field hockey biomechanics and performance science, particularly the technical and neurophysiological interplay between hand movement frequency and reaction dynamics during dribbling.

The abstract effectively introduces the core premise of the study and highlights its originality—namely, the investigation into stickhandling frequency and its correlation with simple visual-motor reaction (SVR) and error rates. The significance of findings at  $p \leq 0.05$  and  $p \leq 0.01$  provides statistical weight to the analysis. The discovery of a negative correlation between the final 5-second dribbling segment and SVR, alongside a positive correlation with error rates, indicates a decline in neuromuscular efficiency under fatigue, an important insight for training and performance assessment.

The keywords accurately capture the scope of the research, linking key concepts such as reaction speed, motor frequency, and technical precision within the context of elite field hockey.

The introduction establishes a broad and conceptual foundation by situating stick-based sports within a kinematic and biomechanical framework. It emphasizes the centrality of the stick as both a physical and symbolic element in various sports, and connects this to the functional study of movement variables like tempo and rhythm. This grounding offers a clear rationale for focusing on dribbling mechanics and supports the scientific relevance of the study.

The article demonstrates coherence in structure and clarity in presentation, with appropriate use of domain-specific terminology. It reflects a sound understanding of sport science principles, integrating

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biomechanical and psychological perspectives. The emphasis on fatigue-induced changes in reaction performance adds a layer of physiological analysis that enriches the study's practical implications.

Overall, the paper represents a valuable contribution to the field of sport biomechanics and performance optimization in field hockey. By bridging technical execution with neuro-motor responsiveness, it opens avenues for targeted training interventions and further interdisciplinary investigation.