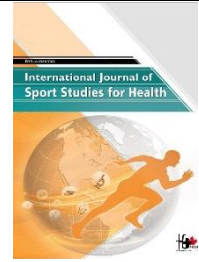


# International Journal of Sport Studies for Health

Journal Homepage



## The Comparison of Validity and Reliability of a Novel Smartphone-based Tool with Foot Scanner for Hallux Valgus Angle Measurement


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## 1. Round 1

### 1.1 Reviewer 1

Reviewer:

The introduction paragraph could benefit from additional context regarding the prevalence and impact of hallux valgus globally. Including recent statistics or epidemiological data would provide a stronger foundation for the study's significance.

The sentence "Left untreated it can not only cause deformities and pain in the big toe but also affect the entire foot." should include citations from recent studies that detail the specific complications and associated conditions of untreated hallux valgus.

The sentence "This comparison assesses how well the NSBT aligns with an established method;" would benefit from elaborating on why the foot scanner is considered an established method and any previous validation studies that support its use.

In the statistical methods section, the use of Cronbach's alpha and ICC is appropriate, but it might be helpful to explain why these specific statistical measures were chosen over others and to provide a brief interpretation guide for these statistics.

The results mention high ICC and Cronbach's alpha values, but it would be clearer to provide a brief explanation of what these values mean in terms of practical significance for reliability.

The table would be more informative if it included the degrees of freedom (df) for each ICC calculation, providing a complete statistical overview.

The discussion could be enriched by comparing the study's findings with specific numerical results from previous studies cited. For instance, detailing how the ICC values compare with those found by Otter et al. (10) or Meng et al. (18).

Author revised the manuscript and uploaded the updated document.

## 1.2 Reviewer 2

Reviewer:

The inclusion criteria are well-defined, but it would be beneficial to include a rationale for selecting only female participants. Clarifying if there is a gender-specific prevalence or if the results are intended to be generalized to the entire population would strengthen this section.

The procedure for recruiting and screening participants is thorough, but the details about how participants were instructed and positioned during measurements could be more specific to ensure replicability.

It would be useful to describe the calibration process of the DSI foot scanner. Including details on how often the equipment was calibrated and any protocols followed to ensure accuracy can reinforce the reliability of the measurement method.

The limitations section mentions the focus on female students, but it should also address potential sampling bias and the generalizability of the findings to other demographics or populations.

It would be beneficial to discuss any potential confounding variables that might have influenced the results, such as variations in participants' foot anatomy or differences in the evaluators' measurement techniques.

The conclusion summarizes the findings well, but it could be strengthened by proposing specific future research directions, such as longitudinal studies or studies involving other demographic groups.

Author revised the manuscript and uploaded the updated document.

## 2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.