

## **STANDING POSTURE IS RELIABLE ACROSS DAYS AND WEEKS IN HEALTHY, YOUNG ADULTS**

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A simple way to evaluate posture is to use a force plate, an instrument that quantifies balance and the control of one's posture. Although many studies have examined postural control, no study has investigated how reliable posture is over time. This is important to determine whether posture can be used as an assessment tool in clinical populations. Therefore, the purpose of this study was to determine the reliability of standing posture across multiple days in healthy, young adults. 39 adult subjects (ages 20-31yrs; 23m, 16f) participated in eight visits at the same time of day. Subjects stood on a force platform for four, two-minute conditions: 1) shoes on with eyes opened (SEO), 2) shoes on with eyes closed (SEC), 3) barefoot with eyes opened (BEO), and 4) barefoot with eyes closed (BEC). Intraclass Correlation Coefficient (ICC) was used to assess reliability with values  $\geq .700$  indicating high reliability. Across all eight visits, ICC values for posture in the BEO condition were the most reliable for all dependent measures. When examining the day-to-day variability (i.e. visits one through five), BEO trials were also the most reliable. For the week-to-week reliability (i.e. visits one, six, seven, and eight), all ICC values were  $>.756$  for all measures across all conditions. In conclusion, standing posture in healthy, young adults was reliable across four consecutive days and weeks, with the fifth day leading to inconsistencies. Therefore, testing posture during one visit should be representative of one's typical posture, and BEO trials are recommended for consistency.