

Scientific research process:

1 What did this study explore?

This study investigated the impact of extrinsic visual feedback and additional

cognitive/physical demands on single-limb balance in individuals with ankle instability.

2 How did the authors perform all experiments?

The subject's unstable ankle was examined using the Athletic Single Leg Stability Test of the

Biodex Balance System (BBS) with 4 different protocols: 1) default setting with extrinsic visual

feedback from the monitor, 2) no extrinsic visual feedback, 3) no extrinsic visual feedback with

cognitive demands, and 4) no extrinsic visual feedback with physical demands.

3 How did the authors process all experimental data?

One-way Analysis of Variance (ANOVA) with repeated measures was used to compare the

4 different testing protocols. Post hoc comparisons were performed with the Paired-Samples T

test. Pearson Correlation was used to examine the correlations between the OSI and the CAIT

scores.

4 How did the authors deal with the pre-study hypothesis?

It was hypothesized that taking away the extrinsic feedback and additional

cognitive/physical demands could compromise single-limb balance control. The results of the

study are in agreement with the hypotheses.

5 What are the novel findings of this study?

Single-limb balance control is worse without extrinsic visual feedback and/or

with cognitive/physical demands.

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