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## Examining the Effect of a Dance Technique Class on Postural Stability in Novice Collegiate Dancers

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Postural stability is an essential skill across many genres of dance to create and maintain specific positions and motions with proper technique, but limited research has examined changes in postural stability following a dance intervention in novice collegiate dancers. This may, in part, be due to the use of costly equipment to assess postural stability; the use of balance boards has been shown to be a cost-effective alternative. **PURPOSE:** to examine the effect of an introductory dance technique class on postural stability in novice collegiate dancers. **METHODS:** Balance boards were used to assess postural stability at the beginning and end of a college semester via four 30-second trials: bilateral stance - eyes open (BEO), bilateral stance - eyes closed (BEC), unilateral stance - right leg (UR), and unilateral stance - left leg (UL). The experimental group (EG; n = 8) participated in an introductory dance class involving ballet and modern dance technique. Participants in the control group (CG; n = 8) never received dance training. Average center of pressure velocity (vCoP) was compared between groups and pre/post within groups. **RESULTS:** Post-intervention, the EG had a mean vCoP of 0.24 m/s in the BEC trial, 0.05 m/s less than that of the CG, indicating better postural stability in the EG (p=0.09). Similar results were seen in BEO post-intervention, in which the EG had a mean vCoP of 0.20 m/s, 0.06 m/s less than the CG, again indicating the EG had better postural stability (p=0.07). When comparing pre/post for UL trials, the CG displayed better postural stability at post-testing with a mean vCoP 0.36 m/s less than during pre-testing (p<0.01). No other comparisons of vCoP were found significant when comparing within groups pre/post or between groups. **CONCLUSION:** Overall, the EG showed better postural stability than the CG during post-testing trials BEO and BEC. While no significant improvements were seen in the EG post-intervention, postural stability in the EG remained intact despite confounding variables present at the end of semester (exams, fatigue, etc.). As participants here were healthy young adults, this intervention may be better suited for populations in which diminished postural stability is associated to a high risk of falls.

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