

Comparing Predictable and Unpredictable Instability in Dual-Task Balance Training

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Balance training (BT) is a vital component of many exercise programs, but actual prescriptions for exercise frequency, intensity, time and type have yet to be defined. This study compared one BT session on two balance platforms: a predictably unstable tilt board (roll movement), and an unpredictably unstable shake board (roll, pitch, and yaw movements), to see if a relationship exists between the type of platform used and measurable balance improvement. A concurrent task was added to increase cognitive complexity. Methods: Twenty healthy young adults were randomly assigned to stand on the tilt board or the shake board while performing Bal-A-Vis-X ball-bouncing exercises. Each subject's balance (overall stability, anteroposterior stability, mediolateral stability) was measured before and after BT using a Biodex Balance System SD. Results: On average, each platform group showed balance improvement. The evidence failed to support the hypothesis of a significant or meaningful difference between the platforms.