

What is the Relationship Between Balance and Sports Performance?

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ABSTRACT

Introduction: One of the newest phenomena in the sports performance world is balance and proprioceptive training. Previous research has showed a strong relationship between improved balance and reductions in sports injury, however, the relationship between balance and sports performance is less clear. **Objective:** Due to the lack of research in this field, the purpose of this study was to examine whether there is a relationship between balance and sport performance among division III male athletes at Skidmore College. It was hypothesized that athletes with better balance would have better sports performance as determined by NCAA statistics. **Methods:** Athletes from the Skidmore College baseball and ice hockey teams ($n = 41$) performed the Balance Error Scoring System (BESS) test to assess balance after completing measures of age, height and weight. NCAA statistics were then recorded from each player's respective seasons. **Results:** Strong significant correlations were found between weight and balance across athletes ($r = -0.41$, $p = 0.02$) and short-handed goals and balance for ice hockey players ($r = -0.60$, $p < 0.01$). Unexpected correlations between reduced balance and decreased goals against average ($r = -0.95$, $p = 0.03$) and increased save percentage ($r = 0.98$, $p = 0.01$) for hockey goalies were also found. No correlations were found for baseball players. **Conclusion:** Improving balance through strength training and increasing relative muscle strength may help improve sports performance parameters. Future research exploring the relationships between balance and selected skills such as pitching error, and skating speed may reveal more significant correlations.