Can Standing Long Jump Distance be Predicted from Standing Vertical Jump Distance?

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Purpose: The standing long jump (SLJ) and standing vertical jump (SVJ) are commonly used in physical fitness assessments. Due to the similarity between the SLJ and SVJ techniques, we hypothesize that a strong relationship exists between measured distances in the two activities. The purpose of this study is to assess the strength of the relationship between measured distances in SLJ and SVJ activities. **Methods:** Seven male and eighteen female undergraduate students participated in the study. Participants performed three SLJ and three SVJ trials, with the goal of achieving maximum distance. For each participant, the best performance (based on largest measured distance) was used for further analysis. In order to determine the extent of the relationship between the two measures, the Pearson product moment correlation coefficient "r" was computed. **Results:** For males, SLJ distances ranged from 1.90 m to 2.60 m, while SVJ distances ranged from 22.0 in to 30.0 in. For females, SLJ distances ranged from 1.45 m to 2.20 m, and SVJ distances ranged from 13.5 in to 23.5 in. The coefficient of determination between SLJ distance and SVJ distance was $R^2 = 0.59$ for males and $R^2 = 0.20$ for females. A moderately strong correlation was found between the measures for males (Pearson's r = 0.77) but for females only a moderate correlation was observed (Pearson's r = 0.45). **Conclusion:** Due to the moderately strong relationship between the SLJ and SVJ measures, the authors recommend that if practitioners do not have enough time to perform both SLJ and SVJ activities during a testing session, using either technique should provide a good measure of athletic power.