

Claire Felix

Junior Division Medicine & Health

How High Can She Go? An Assessment Of Vertical Jumping Ability

The purpose of this project was to determine which age group (14's / 16's / 18's) of female competitive club volleyball players will demonstrate the highest average increase in vertical jump in an eight-week period. I hypothesized that as the age of female competitive club volleyball players increases, the average amount of improvement in vertical jump will decrease. The investigation involved setting up one Vertec on a clean and obstacle-free area of sport court. I set the Vertec to the most recent vertical jump height for each player. Once I ensured that the plastic tubes were properly aligned on the Vertec, I made sure that each player was completely warmed up and understood what they were supposed to do. I then tested three jump trials, each separated by thirty seconds of rest. I recorded the highest jump for each player. The data collected did support my original hypothesis. For the 14's age group, the average increase in vertical jump was 2.26 centimeters (cm.). For the 16's age group, the average increase was .69 cm. and for the 18's, it was 1.69 cm. These findings lead me to believe that the younger athletes have the greatest potential and demonstrated ability to increase vertical jump. Coaches and athletes may want to examine training methods used with older athletes.