The Effect of Unilateral and Bilateral Training Circuit with Ladder Drill and Plyometric Cone on Speed, Agility, Reaction and Balance of Elementary School Students in Indonesia

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ABSTRACT

The purpose of this study was to examine and analyze the effects of using unilateral and bilateral circuit training with ladder drills and plyometric cones on the speed, agility, reaction, and balance abilities of elementary school students. The subjects of this study were 28 students in grade 5 of SDN Bawakaraeng II Makassar City, male, aged 10–11 years. The type of research used is quasi-experimental research with a quantitative approach. The results of ordinal pairing were divided into 4 groups. This study found that after the training, students who received the training of unilateral and bilateral circuit latter drills showed significantly increased on agility by 3.1 seconds and 2.4 seconds respectively. The balance also showed substantially rising by 8.9 and 6.6 seconds, with p value <0.005. For groups with unilateral and bilateral plyometric cones showed that after the training there was a remarkable increase in agility by 3.7 and 2.9 seconds respectively, with p value <0.005. In addition, balance also showed a significant improvement by 10 and 7.1 seconds with p-value <0.005. To conclude, this study found that unilateral and bilateral circuit training with ladder drills and plyometric cones significantly increased agility and balance abilities on children.

KEYWORDS

Training Circuit, Plyometric Cone, Ladder Drill, Elementary School