

The effects of small-sided games versus traditional training on physical fitness and skills among Under-12 hockey players

ABSTRACT

Background and Study Aim Despite many evidence showed the effectiveness of small sided games (SSG) to be included in sport training programs, majority of the study was done in soccer, while is very limited in hockey. The purpose of this study was to determine and compare the effects of small, sided games and traditional training on physical fitness components (cardiovascular endurance, power, speed) and skills (dribbling, hitting, passing) among Under-12 hockey players. Material and Methods a total of 36 primary schools' male students aged below 12 that represent their district were randomly divided into three groups: i) 3x3, ii) 4x4 and iii) traditional training (TT). The yo-yo test (cardiovascular endurance), standing long jump test (power) and 30m sprint test (speed) were conducted to measure level of physical fitness performance while the skills of the players was tested based on the skills of dribbling, hitting and passing. Pre- and post-tests were conducted on all fitness and skill level before and after 8-week intervention period. Mixed between within analysis of variances (ANOVA) was used to analyze the differences in physical fitness and skills performance between and within the three groups. Results The results of this study showed all groups managed to improve their physical fitness and skills in the post test. However, the 3x3 and 4x4 SSG have better improvement compared to TT in physical fitness while no significant differences were found in skills tests. Conclusions in conclusion, SSG interventions were found to be more effective in improving physical fitness but not in terms of skills. Coaches are encouraging to implement SSG in their training program in order to improve both physical and skills among hockey players.