

ORAL: EFFECTS OF STUDENTS' SEX ON IN-GAME VOLLEYBALL TECHNICAL IMPROVEMENTS THROUGHOUT A TACTICAL GAMES MODEL UNIT

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Objective: In a longitudinal perspective, to assess the effects of a tactical games model (TGM) instructional plan on technical volleyball performances of elementary school students by taking into account for sex. **Method:** Thirty-nine fourth-grade students participated in a 15-week unit and their improvements in technical in-game skills (i.e., volume of play, efficiency index, and performance score) were assessed by means of Team Sport Assessment Procedure. Each lesson was designed following the didactical framework of the TGM. The small-sided games were used to provide fun, developmentally adequate learning experiences, with students totally involved. A 2 (sex) x 3 (time) analysis of variance (ANOVA) with repeated measure across three tests (pre- and post-training, and at the end of summer vacation) was used to verify the students' improvements on the aforementioned indexes. Mean differences, 95% confidence interval, and effect size measures were used to interpret main effects and post-hoc analysis. **Results:** An overall improvement resulted for all the participants at the end of the instructional period (with large effect), and this improvement seem to remained at least until the end of summer vacation. For each assessment and index, no statistical differences resulted between the performances of boys and girls. In pre-post training comparison, the improvements had similar moderate to large effect for both groups, even if the performance score resulted with the largest differences among the indexes. In the comparison between post-training and the end of summer vacation, the differences for all the outcomes were negative even if resulted with less amplitude of the ones estimated in the other comparisons (the values of mean differences and effect size were the lowest). According to the effect size measures, girls seem to achieved greater and well-established improvements throughout the instructional plan. **Implications:** Teachers have to take into account sex when designed their lessons because, if adequately considered and managed by means of the small-sided games, these factors can enhance student's learning processes. Furthermore, the results obtained at the end of summer vacation suggested the need to design developmentally adequate learning experiences during this time for avoiding to lack the improvements obtained throughout physical education lessons.