

Abstract

Title: Baseball modifications for kids and their comparison

Objectives: The goal of this project is to compare, via a two tier method, modified version of baseball for kids, T-ball and Coachpitch.

First goal is a comparison of a course of a T-ball and a Coachpitch game – analysis and evaluation of games and their respective scorecards , with the aim of extracting information about the course and the character of the game in both of these modifications.

Second goal is an analysis of a cinematic footage of a baseball swing and analysis of differences in mechanics between hitting against a Coachpitch delivery and hitting off a tee in T-ball.

On the data extracted from the first two steps, evaluation of benefits of each of these baseball modifications follows.

Methods: This research is a case study of a descriptive character in which a large amount of data from 11 individuals is collected. Video footage of 11 research subjects was created for swing motion in both baseball modifications. Video footage was thereafter evaluated via computer programme Dartfish. Extracted data was afterwards analysed via a one-way analysis of variance method.

In the second part of the thesis, evaluation of the modified scorecards and subsequent transfer of these scorecards into statistical data is used.

Results: Thesis concludes that hitting a ball from a tee in a T-ball leads to significant increase of the loading phase of the swing, which is caused by the lack of variable in travelling ball, which means that players are not limited in timing of the swing in correlation to the flying ball. At young players that is also caused by insufficient ability to anticipate trajectory and speed of the ball from the movement of the pitching coach.

The thesis also concludes that the average warm-up time is significantly longer for the Coachpitch and the game thus becomes more static.

Keywords: hitting, Coachpitch, T- ball, modification games