

Summary

Title: **Objectivity of gymnasts' achievements judging in relation by Code of Points Men's Artistic Gymnastics changes**

The problem of our work is an objectivity of gymnastics way of ranking or judging. Analysis of results reached at chosen men's artistic gymnastics competition and also a method of gymnastics judging was used for solving purpose of our thesis. The evaluation of gymnasts achievements are realized by referees according to Code of Points (CoP) Men's Artistic Gymnastics (MAG), which are periodically changed.

The purpose was verify possibility of determination degree of objectivity judging gymnastic performances in relation to changes rules of men's artistic gymnastics realized in years 2006, 2009, 2013 through analysis of gymnastics results in seniors and juniors categories reached on important international competitions.

We used methods and techniques of statistical description for ordinal data; Sign test; Wilcoxon test; contingency table and sign diagram for contingency table. For evaluation rate of interrater concordance referees of panel "B" or "E" we used ICC and Pearson's correlation coefficient. For evaluation of bilateral discriminability of reached gymnastics results we used SEM and calculation of Critical Differences.

In connection with changes of CoP MAG on monitored period occur to increasing of gymnasts' capacity both categories at assessed Competition One MAG ECh 2002, 2006 and 2009 an also at international competition of Olympic Hopes. Increasing of gymnasts' capacity was evident in components of difficulty gymnastics judging in part at the expense of quality of execution. Reliability of panel "B" or "E" was variable according to separate discipline and competition from competition, both in relation to CoP changes and also with aspects of used model of ICC. Within context of reliability estimation through ICC was connected proportion value of separate components of variability. As the heights source of variability we considered variability β , which due to differences between gymnasts. The values range was from 80 % to 93 % and they were variable according discipline of gymnastics all around order and kind of competition by both categories. Reached results also showed that is necessary to consider not only statistical signification of results but also their factual signification, especially by relation of CoP MAG changes.

Through results of our work we are described not only participation of CoP MAG changes in development of gymnasts' capacity, but also in objectivity of gymnastics ways of rating or judging.

Keys words: Men's Artistic Gymnastics; objectivity; reliability; judging; achievement