



# TRENDS OF CHANGES IN STRUCTURE OF PHYSICAL FITNESS AMONG POLISH YOUNG ATHLETES

## AIM

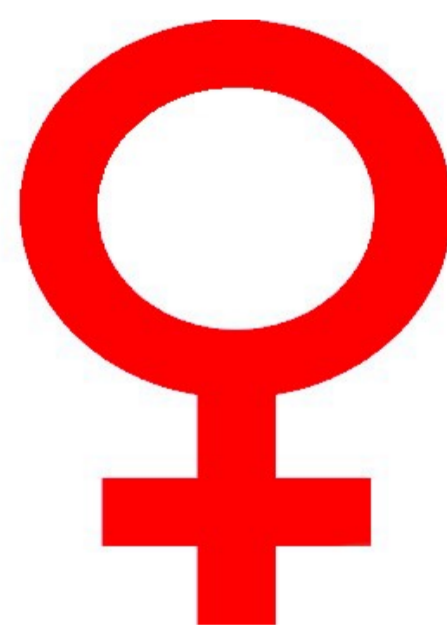
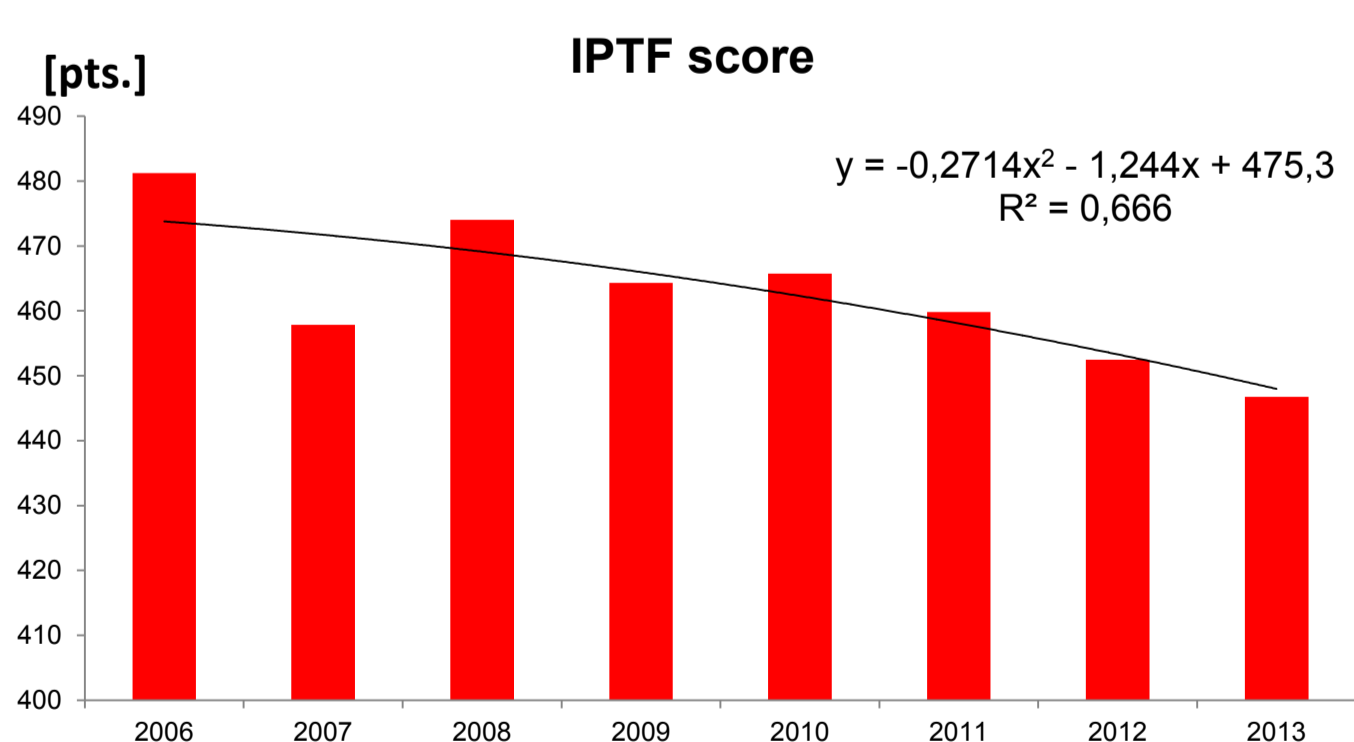
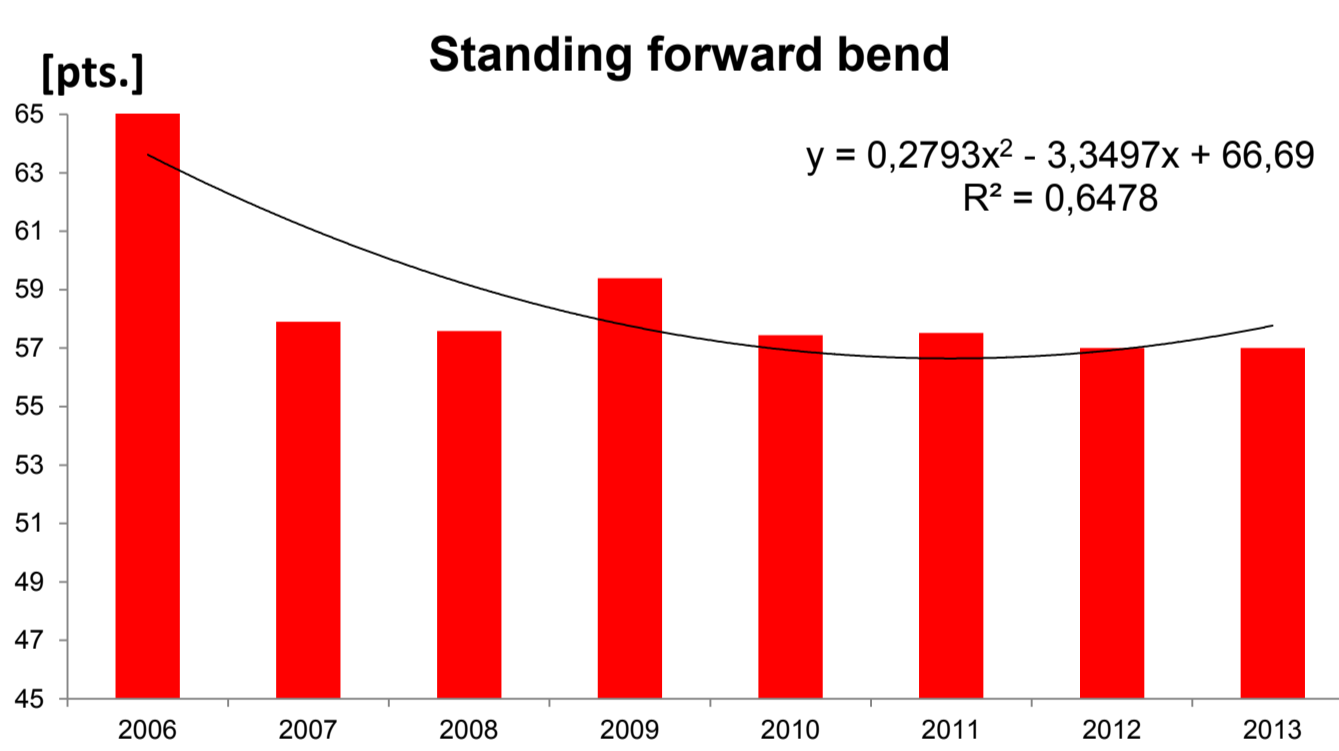
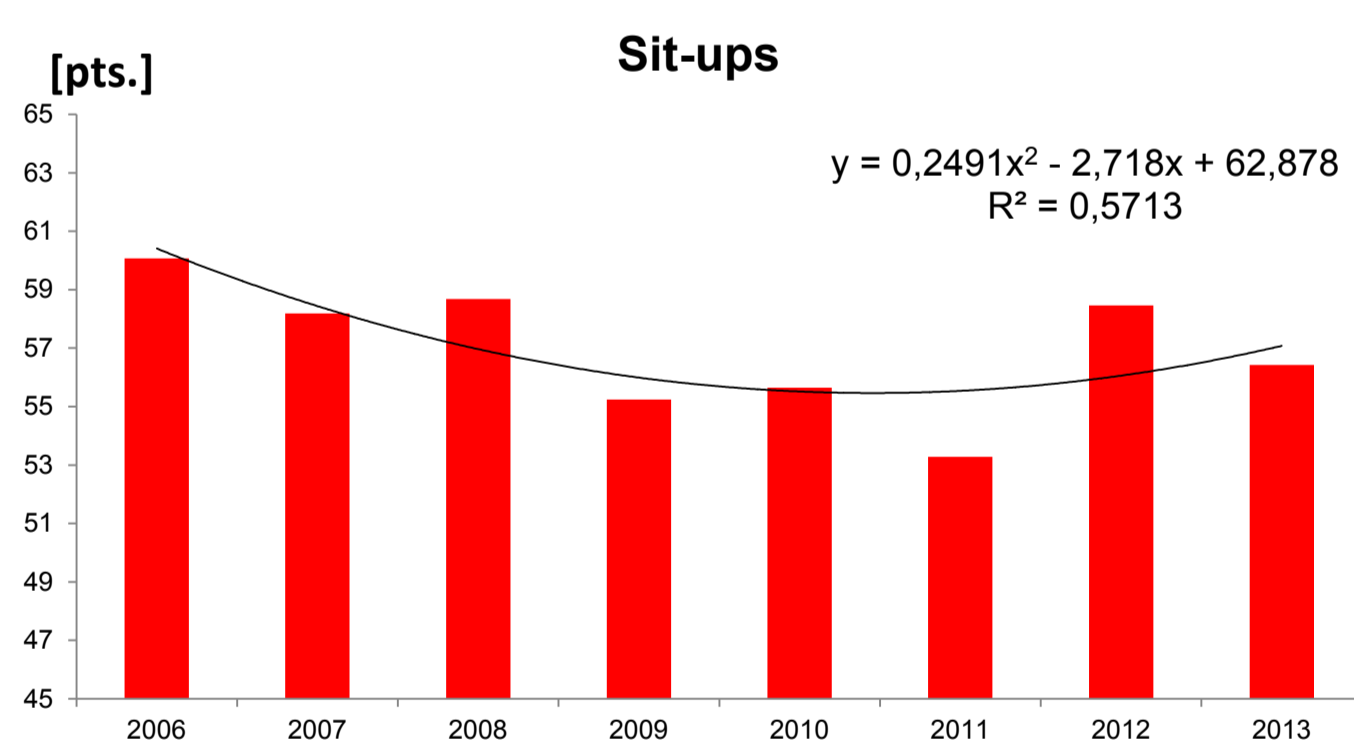
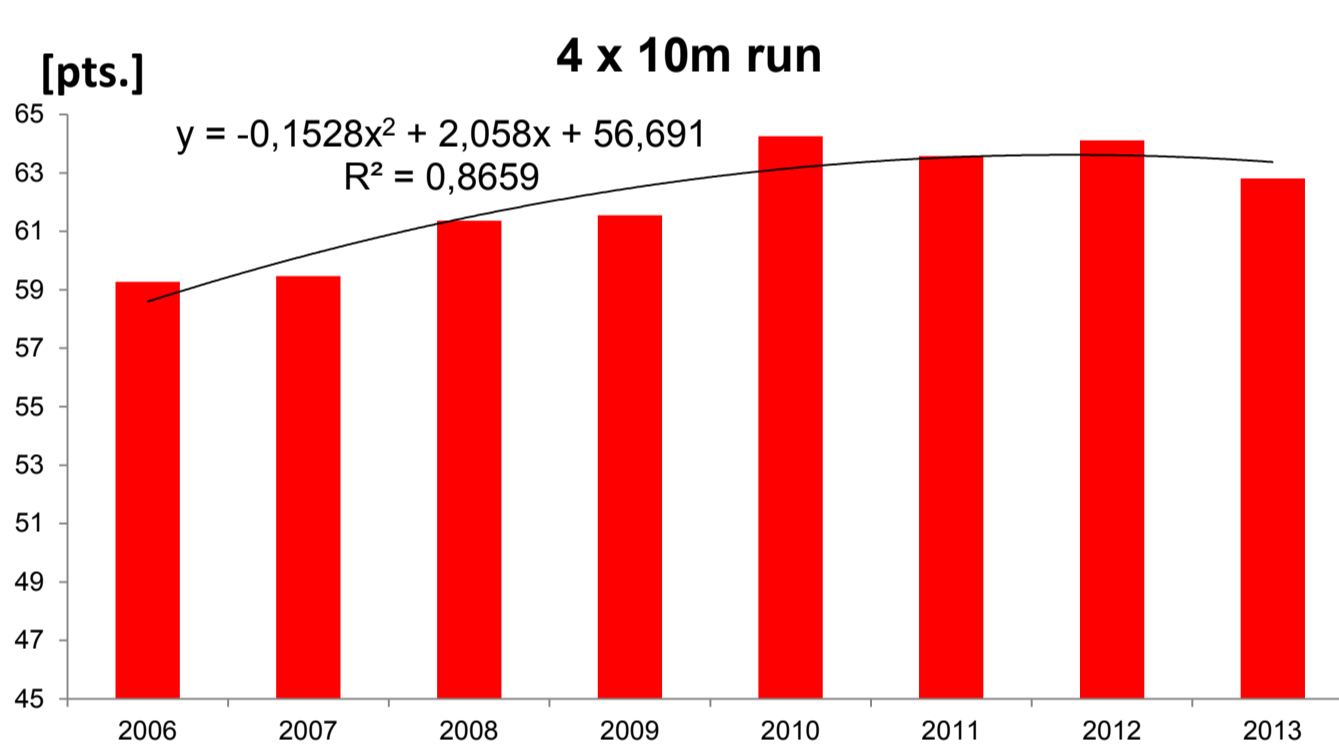
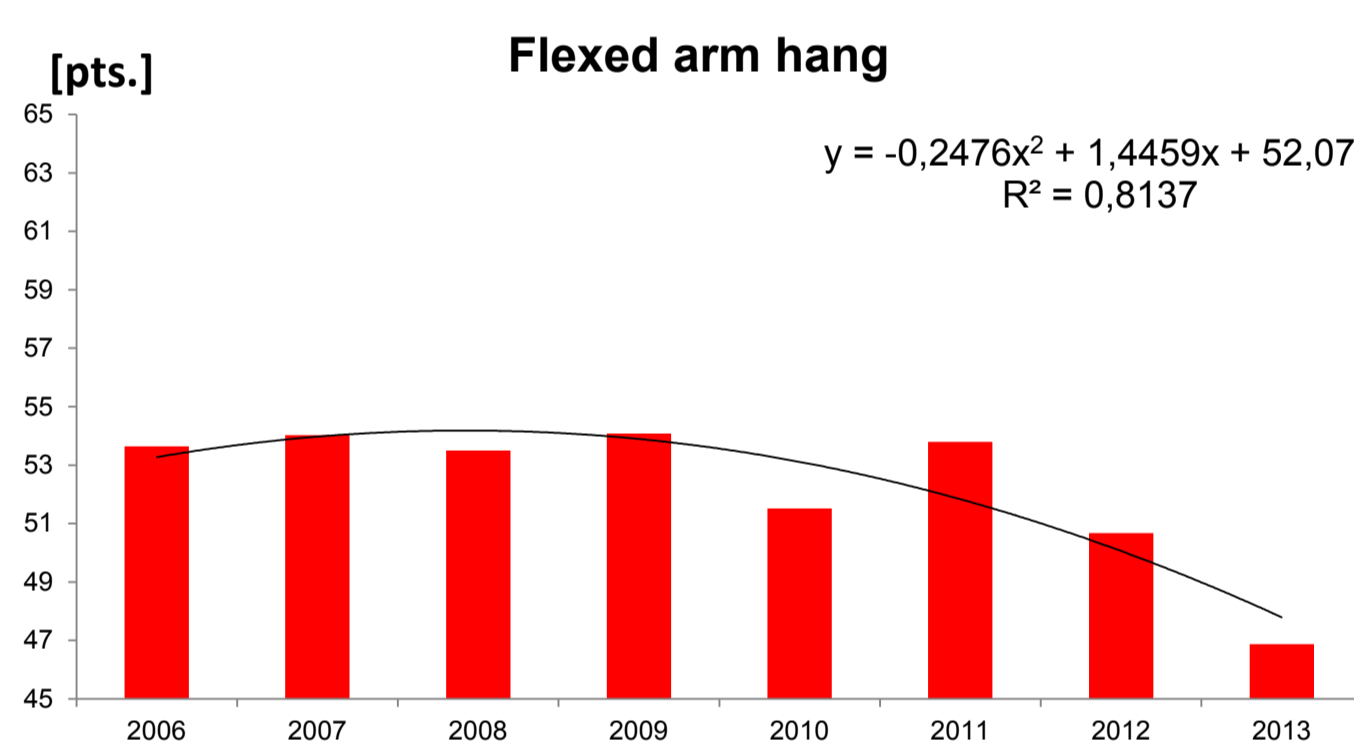
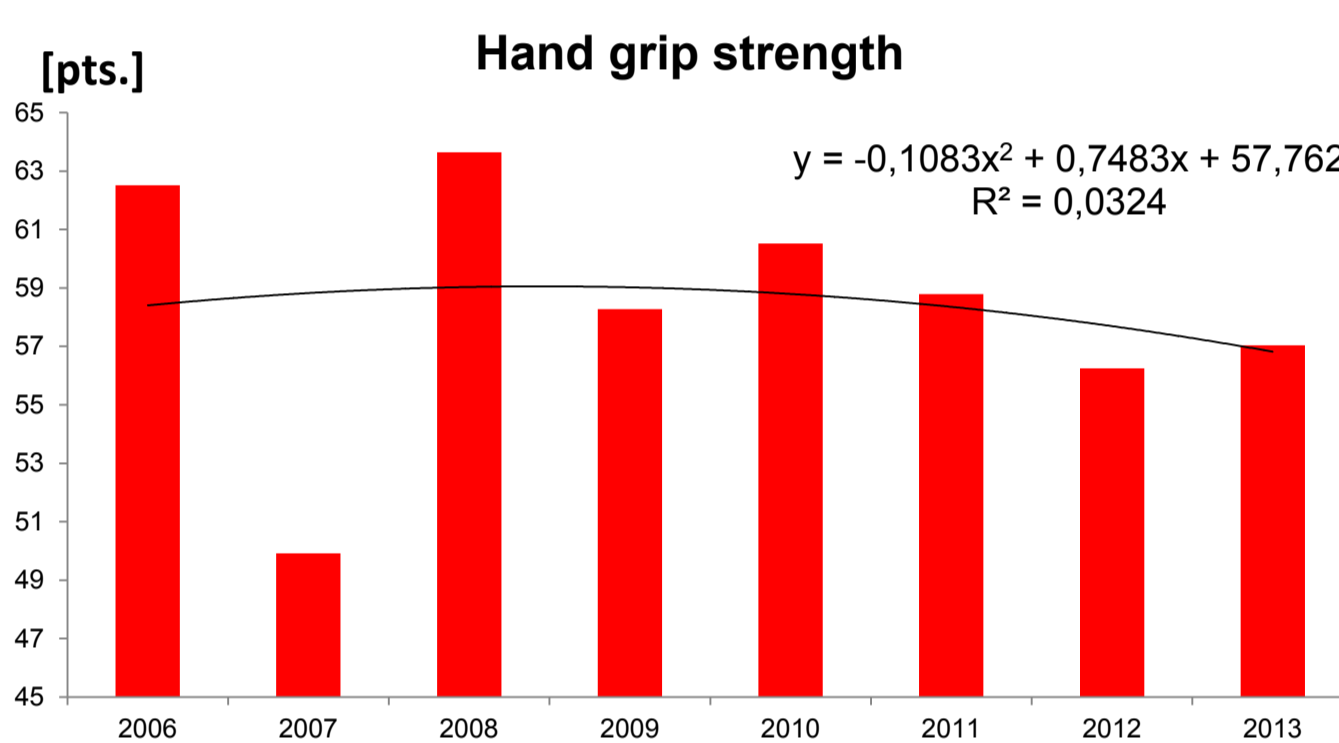
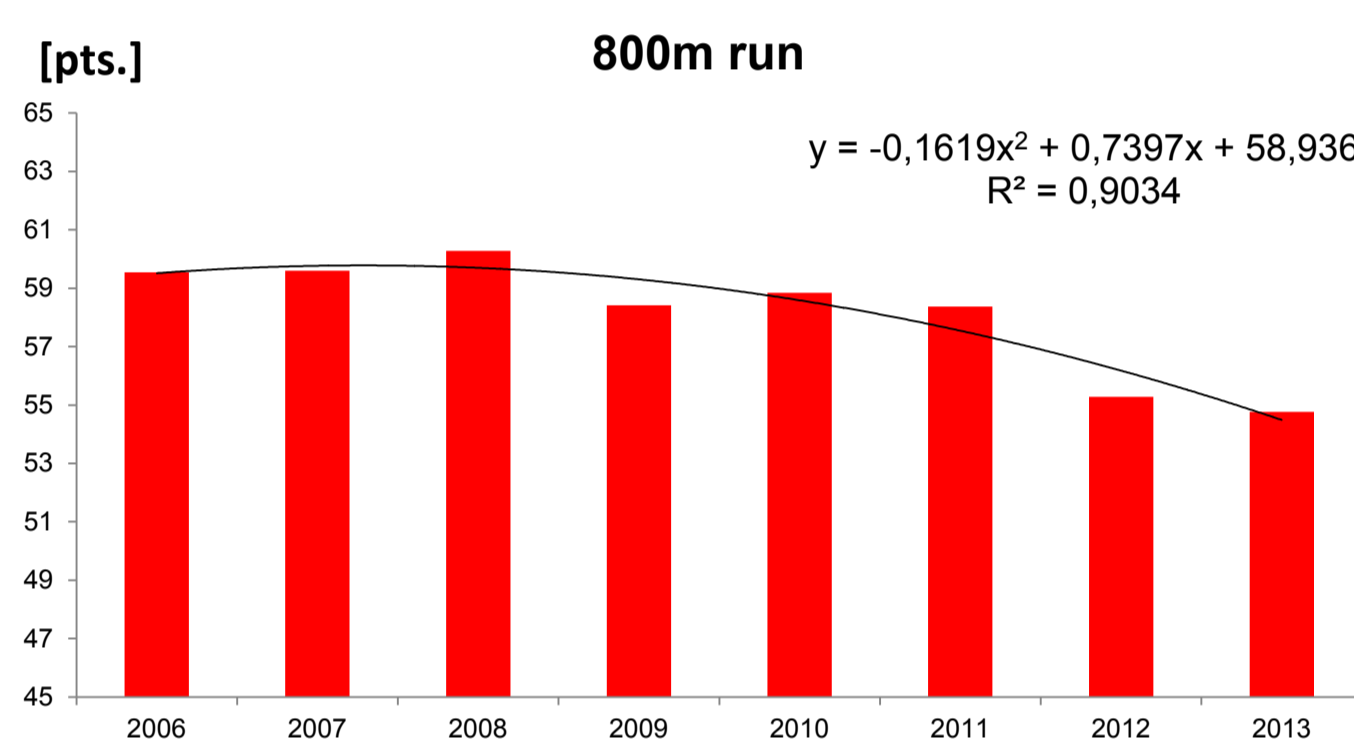
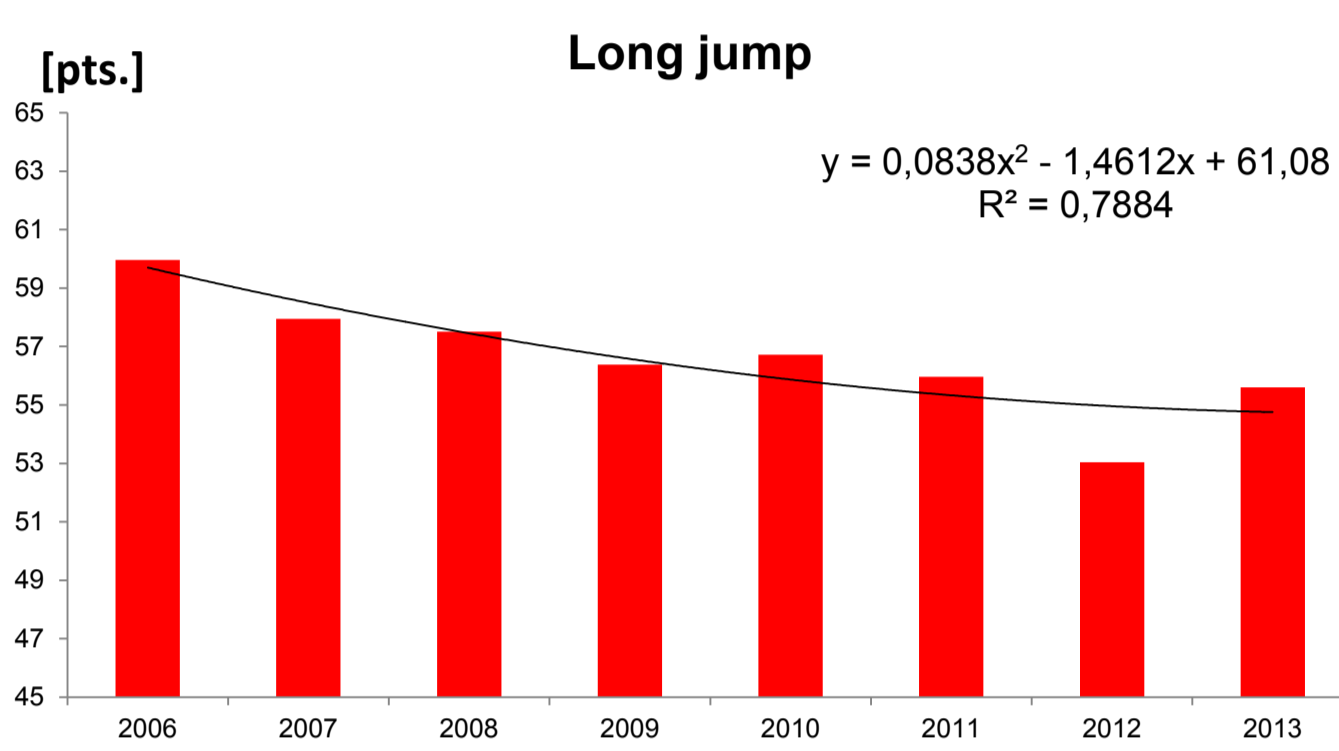
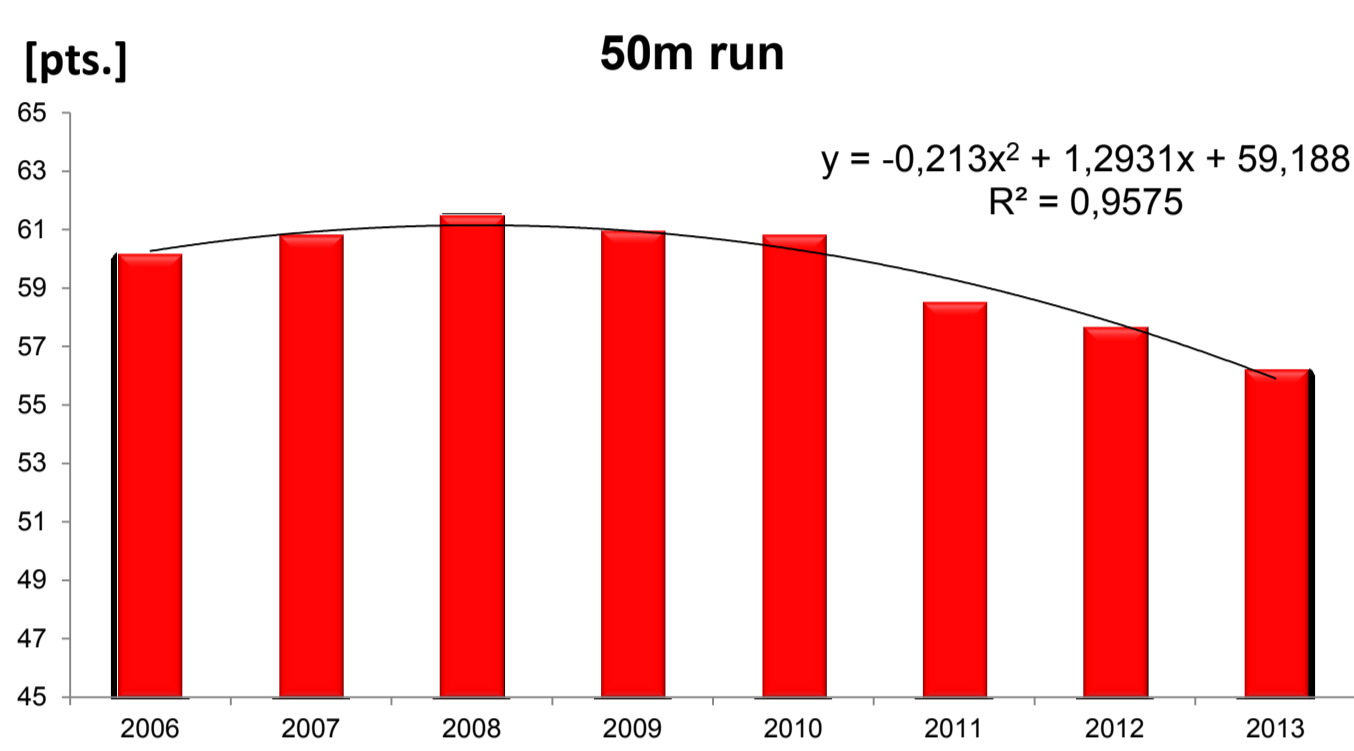
The aim of the study was to determine the tendency of the structure- and level-related changes of motor effects among young people from the Greater Poland in the years 2006-2013 showing talent for sports and having been assigned to a higher physical activity subpopulation. The changes were examined in the context of population tendencies as well as goals of particular phases of the adopted training, the main aim of which is to develop comprehensive functional, fitness-related and technical fundamentals with respect to the requirements of the targeted specialization.

## METHODS

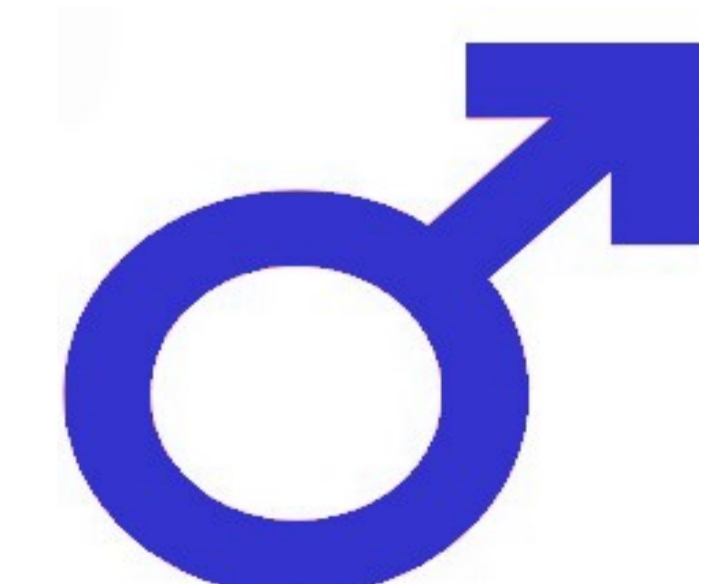
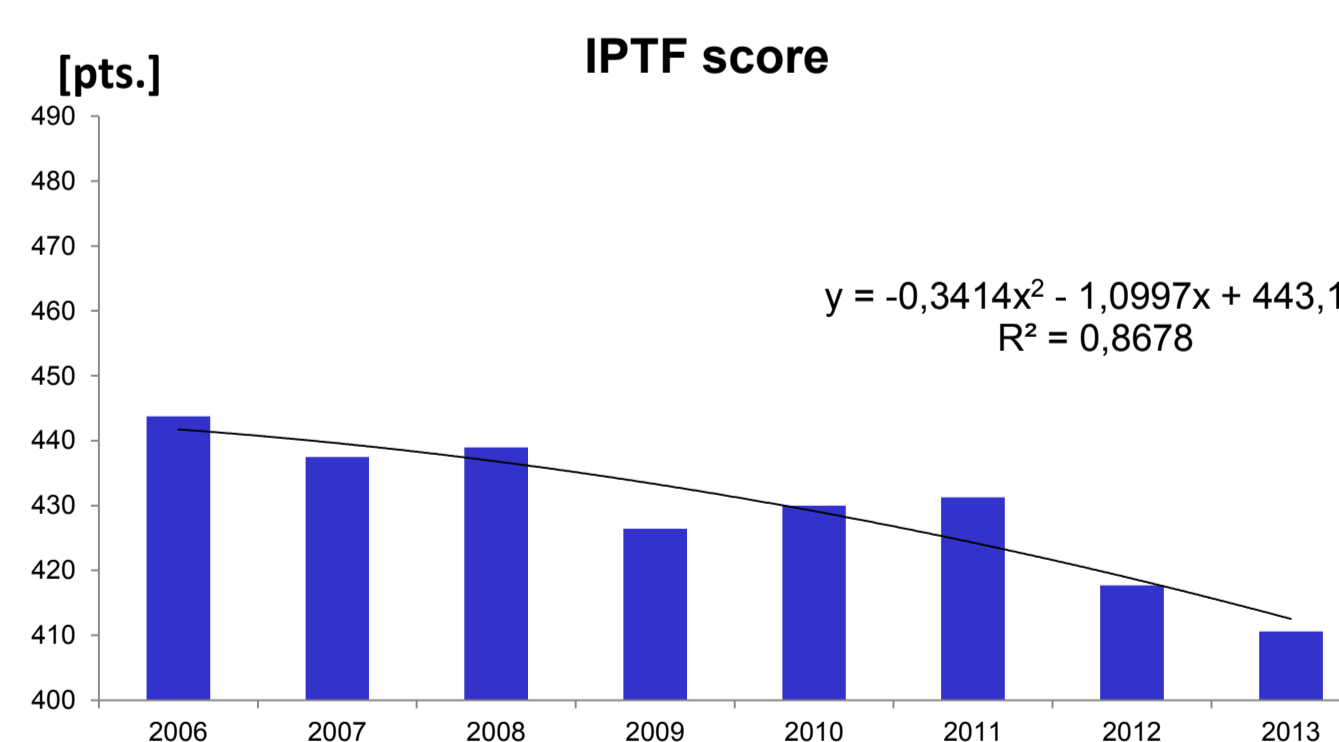
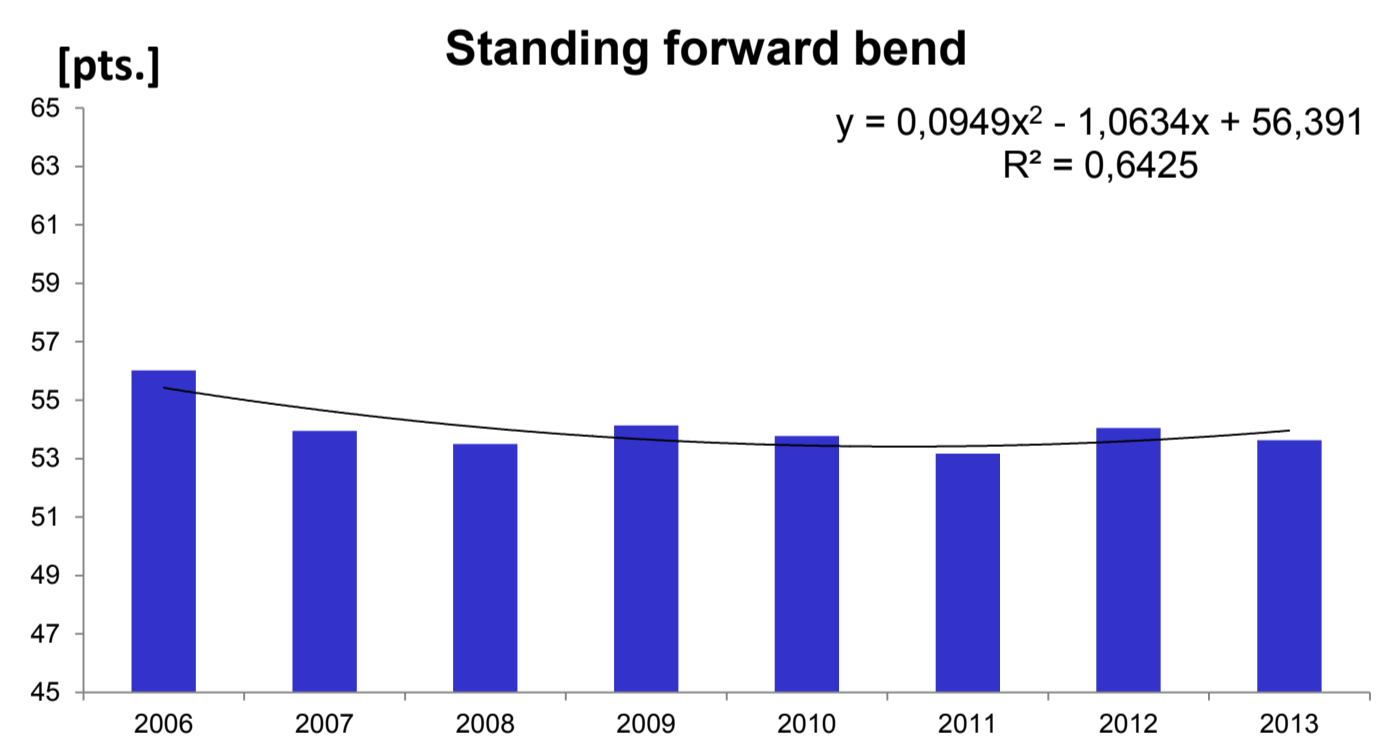
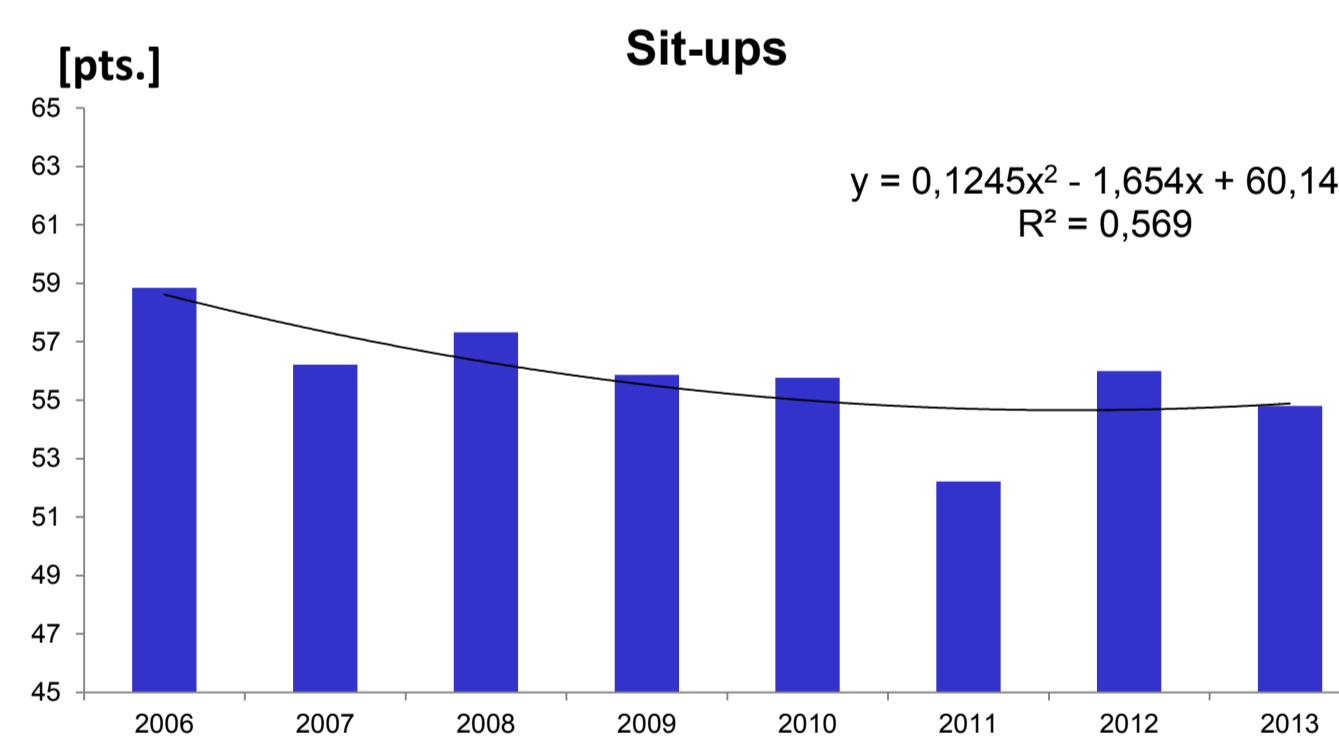
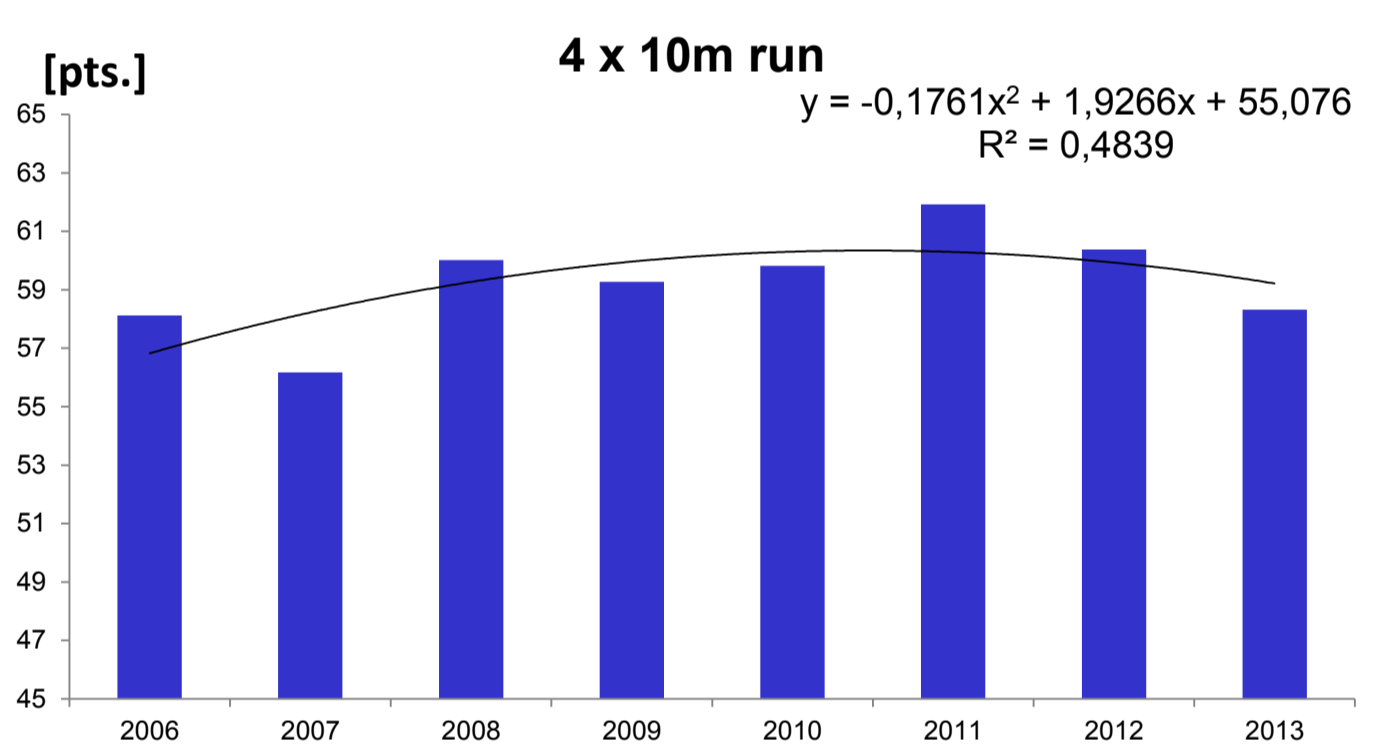
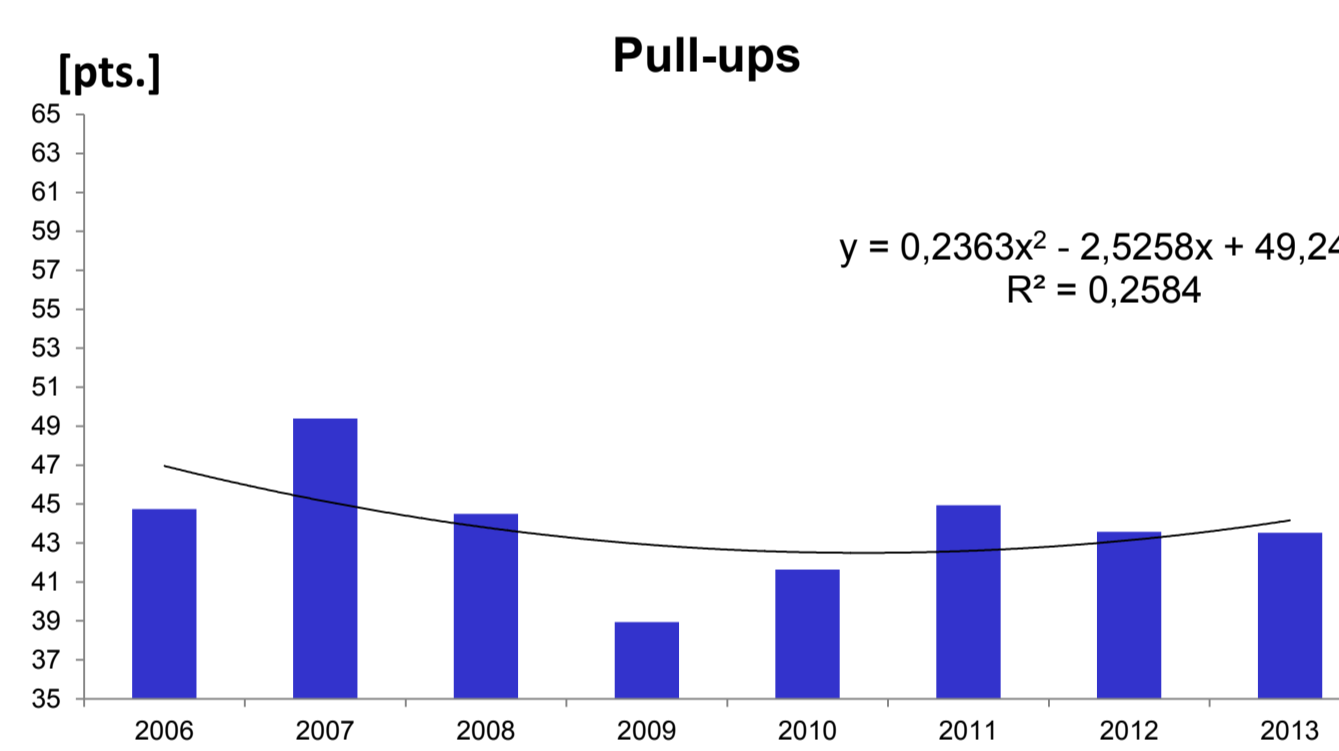
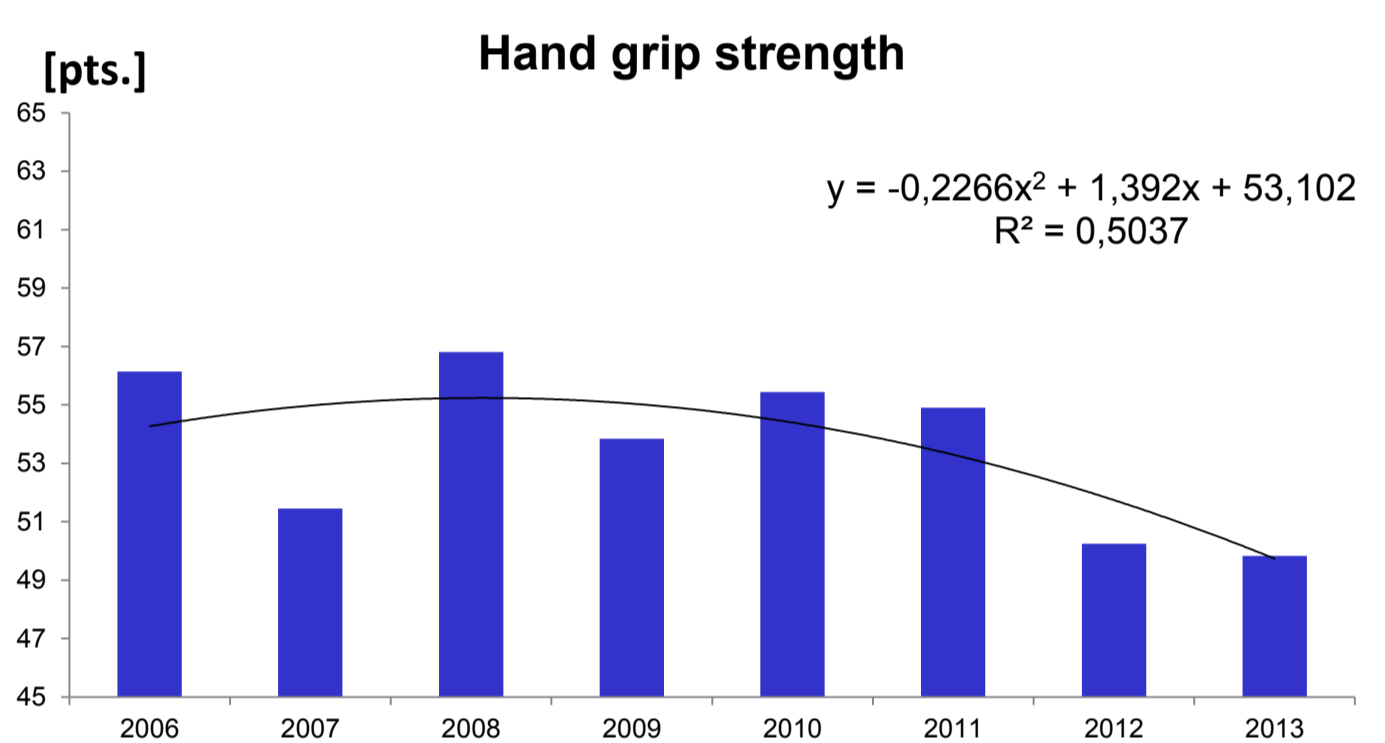
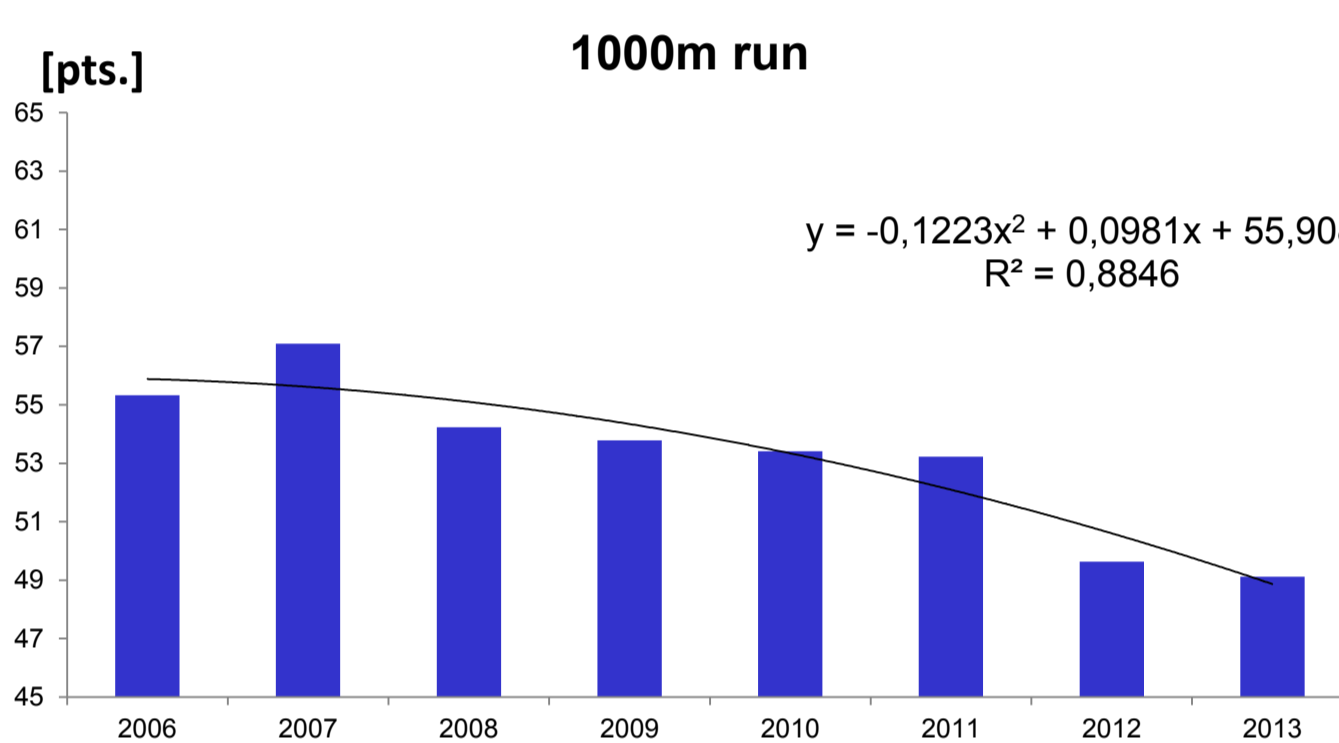
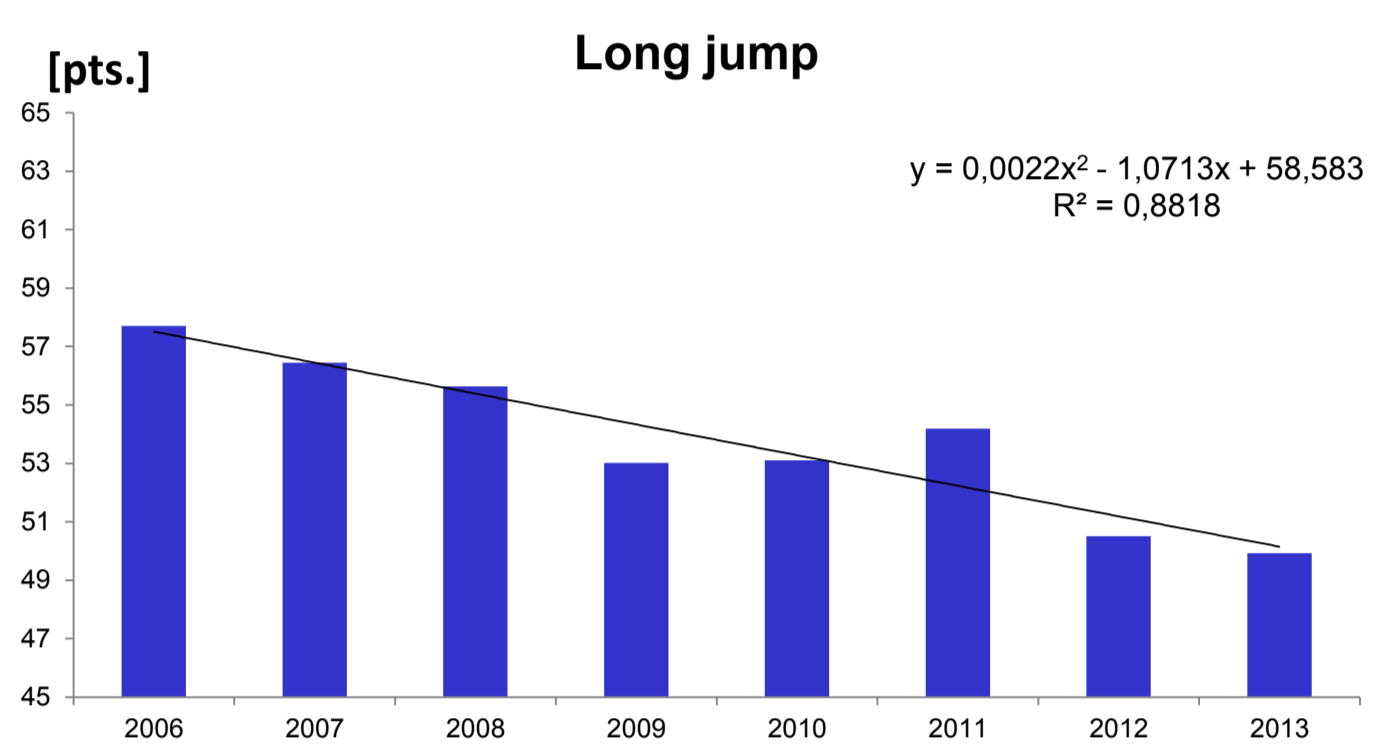
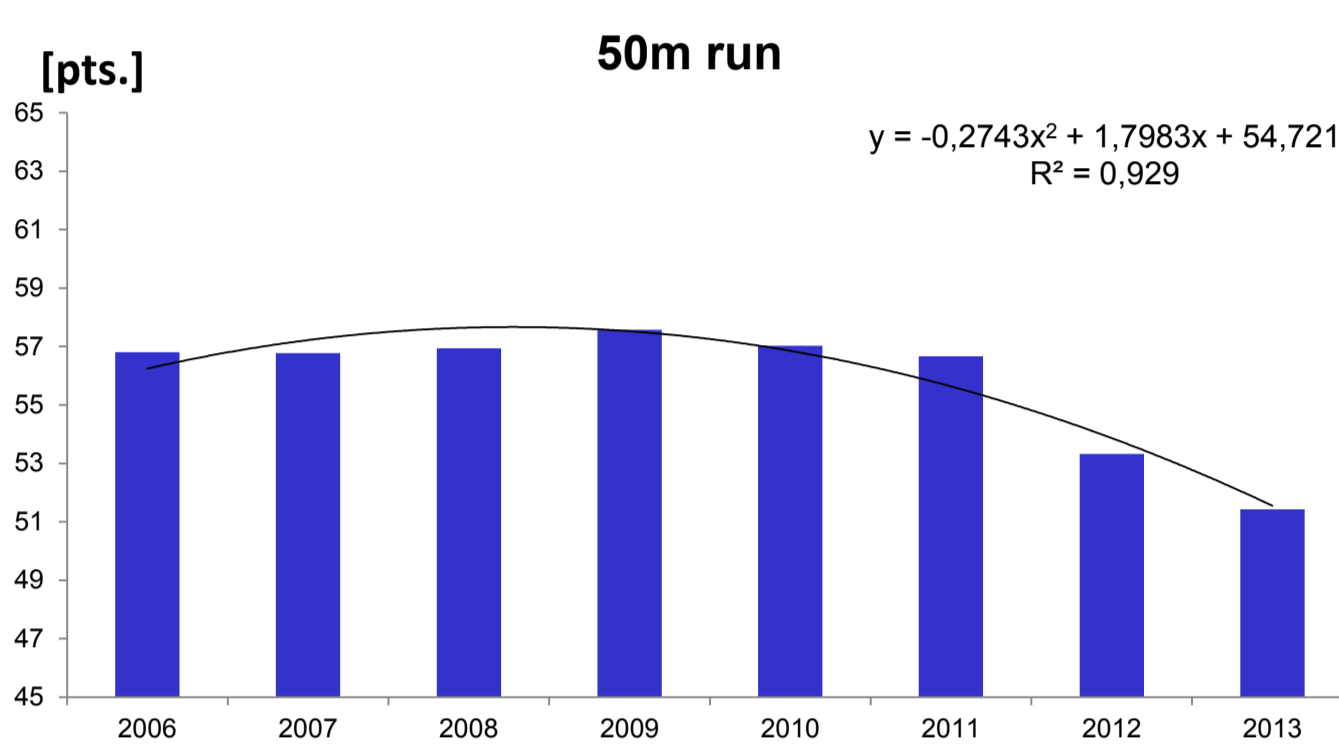
The research material constituted the results of measurements performed on the Junior Athletes from the Greater Poland in 2006-2013. There were **1306 girls, aged 15-16** and **1414 boys, aged 14-15**, representing 34 sports disciplines, who took part in the study.

The International Physical Fitness Test (Rosandich, 1999) was used to determine the level and structure of motor effects among young male and female athletes. The results obtained in particular trials were converted into 0-100 point scale, depending on the age and sex of the subjects.

## GIRLS



## BOYS



## CONCLUSIONS

The analysis of the results obtained from the consecutive age groups of the youth talented at sports indicates that their general physical fitness, measured with the use of the International Physical Fitness Test, was decreasing perpetually in subsequent years. Unfortunately, this phenomenon is consistent with the general regressive trend in intergenerational changes. This appears to be logical when we take into consideration the fact that the subjects were selected from the population, and thus, the changes should reflect those characteristic to the general public. Although positive changes could be expected from the participants of the study, who were to a certain extent selected in terms of showing higher physical activity levels, the impact of current tendencies is inevitable.

The tendency towards reduction in motor effects levels among the population of young athletes in the subsequent years, which was revealed by the study, seems to confirm the assumption of Przewęda (1999) concerning the structure of physical fitness among young people in Poland. He claims that if the tendencies for change sustain, one could anticipate that the speed and agility related types of physical fitness will outnumber the strength ones.

The presented research results support the notion that the character of changes in the case of physical fitness is not explicit, but multidirectional. In the recent years, there has been a modification of the physical fitness structure among young people – the strength abilities have given way to the speed ones. The latter one are characterised by, among others, adjusting movement behaviour to quickly changing situations. Such ability appears to be close to the needs of a life of a contemporary human being and indicates demonstrating better motor adaptation to the surrounding reality. The research results presented in the study in general coincide with the long prevailing view on the state of the physical condition of Polish youth. The observations are not optimistic. The majority of the observed changes indicate that physical fitness is deteriorating especially in terms of the level of strength and endurance.