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O87 MOTOR AND FITNESS ABILITIES OF YOUNG WRESTLERS PERTAINING TO DIFFERENT WEIGHT GROUPS
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Based upon findings of previous research, wrestlers of different age and weight categories should variably and individually develop their motor and fitness abilities. However, most of these studies were performed with advanced wrestlers (Starosta 1984; Glaz, 1998; Bać, 2006). The aim of the present study is to establish the differences between different weight groups ("light", "light heavy", "heavy") of 11-year-old wrestlers in the variables assessing motor and fitness abilities.

The sample of subjects consisted of 141 boys, Greco-Roman wrestlers, aged 11 yrs±6 months. Their average sports experience was 14.22±13.96 months, and they had 3.01±0.81 training sessions per week. According to their body weight, they were divided into weight groups: "light" (n=37), "light heavy" (n=61) and "heavy" (n=43). For testing motor and fitness abilities the battery of 11 measuring instruments were used. The description of the tests can be found in the book "Norms" (Findak et al., 1996) and the research project "Follow-up of changes in the anthropological status of children in wrestling sports", financed and granted by the Croatian Ministry of Science and Technology. Motor abilities were assessed with: coordination – obstacle course backwards, agility on the floor, side steps; strength/power: bent arms hang, standing broad jump, sit-ups in 60 seconds, squats in 60 seconds, push-ups in 60 seconds; flexibility: straddle-seat forward bent; movement performance speed: hand tapping. Fitness abilities were assessed by 6-minute running (cardio-respiratory endurance). For each weight group central and dispersive parameters were calculated. The intergroup differences was established with discriminant analysis of variables in the space of motor and fitness abilities.

Discriminant analysis of the used variables was powerful in discriminating three weight groups of 11-year old wrestlers of classical style since the discriminant function had the value of Wilks' lambda of 0.51, and of chi-square test 59.90, accompanied by 22 degrees of freedom (p<0.01). The highest correlations of the significant discriminant function with any of the used measuring variables were obtained for the following ones: push-ups in 60 sec and bent arms hang. Therefore, the discriminant function was defined as strength of arms and shoulders.

The obtained differences indicate, even when wrestlers are only 11 years of age, it is advisable to develop their motor and fitness abilities differently and individually, respecting a weight group young wrestlers (novices) pertain to. The obtained results thus corroborated the findings of previous research studies.

O88 GROWTH OF MECHANICAL AND NEUROMUSCULAR CHARACTERISTICS OF PRESCHOOL AGE CHILDREN IN GAIT AND BALANCE
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Introduction: A major milestone in a child's life is to no longer have to hold on to any of the surrounding surfaces to balance the body in an upright position and attain independent walk. The child also has to be able to stabilize the body's center of gravity (1). Stable control of