

was granted to the International SAMBO Federation (FIAS) pursuant to Rule 25 of the Olympic Charter. **PURPOSE:** The aim of the present study was to determine somatotype and anthropometric profiles of elite cadet sambo athletes divided by weight categories. **METHODS:** A total of 96 elite cadet sambo athletes from 28 countries, participants of the World Cadet Sambo Championships 2018 participated in the study (40 females and 56 males from 10 weight categories). Anthropometrical variables were taken in order to calculate somatotypes. **RESULTS:** A typical somatotype in male sambo athletes was endomorphic mesomorph with indicating a predominance of musculoskeletal tissue, while female athletes were classified as endomorphic mesomorph in relation with weight division. **CONCLUSION:** Future research should attend to these differences by category to generate appropriated conclusions about the role of anthropometric characteristics in sambo performance. It is necessary to reduce the number of weight categories.

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#### P5

##### Physical activity mediates the association between perceived stress and subjective well-being among university students

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Physical activity improves subjective well-being; however, how physical activity mediates perceived stress has not been studied. **PURPOSE:** The present study investigated whether physical activity buffers the association between perceived stress and subjective well-being. **METHODS:** A sample of 300 university students (65.3% women) with a mean age of  $19.63 \pm 2.13$  years participated in this study. The questionnaires consisted of socio-demographic characteristics, The Satisfaction with Life Scale (5 items), Subjective Happiness Scale (4 items) and Perceived Stress Scale (10 items). In addition, physical activity was measured, which was based on regular exercises in the sports sections. Data were analyzed using Mplus 7.2. **RESULTS:** The study revealed that students who were more physically active, compared to those who were less active, were less susceptible to stress and experienced higher levels of subjective well-being. The findings also indicated that physical activity buffers the association between perceived stress and subjective well-being (indirect effect = -0.029, SE = 0.014,  $p=0.035$ ). **CONCLUSION:** This study concluded that a physically active lifestyle could mediate the negative effects of stress and improve the level of subjective well-being.

#### P6

##### The effects of the comprehensive rehabilitation method on strength outcomes in ACL patients

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**PURPOSE:** The aim of this study was to determine the effectiveness of a novel rehabilitation protocol on quadriceps muscle strength in ACL patients. Experimental protocol consisted of stabilographic platform workout, remedial gymnastics and therapeutic massage aimed

to increase knee range of motion and post-isometric relaxation as well as knee mechanotherapy with workout machines. **METHODS:** All patients (52) underwent the rehabilitation treatment in the rehabilitation department of ITO NAMS of Ukraine and were operated in the hospitals of the institute. According to the proposed program, 21 patients (experimental group) underwent a novel rehabilitation protocol after ACL reconstruction while 31 patients received the traditional program of physical rehabilitation. **RESULTS:** In the early postoperative period (from the 3rd to the 16th week after surgery), the average statistic of muscle strength of the affected limb in experimental group was significantly ( $p < 0.05$ ) higher than the control group's patients/ In the control group, according to the dynamometry, there was a significant decrease in the injured vs non-injured leg strength ( $p < 0,05$ ). When performing reduction - on 25,02%, withdrawal - by 26,45%, bending in the knee joint - by 58,64% and extension - by 67,63%. **CONCLUSION:** The use of the experimental program increased the effectiveness of ACL-patients rehabilitation.

#### P7

##### Differences in parameters of functional and motor capacities in football players of different age category and position

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Football is a highly complex activity where an important component of the developmental path of every football player are technical-tactical and strength and conditioning coaches. Their role is reaching every player's potentials by using various training and selection methods. **PURPOSE:** The aim of the study was to determine differences in parameters of functional and motor capacities between football players of different age categories and positions. **METHODS:** Fifty-one lower league Football Club "HAŠK" player (age: 11 to 32) was divided in groups according to age category: young pioneers (n=12), older pioneers (n=17), cadets (n=10), juniors (n=6), seniors (n=6); and playing position: goalkeeper (n=6), central defender (n=11), full-back (n=9), midfielder (n=14), forward (n=11). Participants performed standing long jump test, Sargent test, sprint 20m, 9-3-6-3-9 sprint test, Ajax test 5x10m, and beep test. **RESULTS:** Univariate analysis of variance (ANOVA) for independent samples revealed statistically significant differences in all motor and functional ability tests (standing long jump test, Sargent test, sprint 20m, 9-3-6-3-9 sprint test, Ajax test 5x10m,  $p=0,000$ ; and beep test,  $p=0,002$ ), between players of different age categories. **CONCLUSION:** We conclude that appropriate assessment of football-specific motor abilities provides valuable information for coaches on player's fitness and allows a higher quality of training planning and programming, as well as proper development of the muscular-skeletal system of younger age groups.

#### P8

##### Exercise for cognitive health as a proxy for the social inclusion of older people: a systematic review

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Some previous studies suggest social isolation is associated with poor cognitive health in later life, while cognitive outcomes may increase the social inclusion of older people and cognitive health may be an important aspect of healthy aging. **PURPOSE:** The goal of this study is to review the available literature on research related to the relationship of exercise for cognitive health and social inclusion of the elderly. **METHODS:** Specific keywords "exercise", "cognitive", "health", "social", "inclusion", "elderly", and "people" were used to search relevant electronic databases, such as PubMed, Web of