PROGRAM FOR THE SCIENTIFIC SYMPOSIUM AT THE 2022 BELGRADE WORLD CHAMPIONSHIPS
"Using the Scientific Foundations of Olympic Wrestling to Advance Our Sport."

Wednesday, September 14th 9:00 – 2:00
Holiday Inn-Belgrade – 1st Floor – Meeting Room 1

Welcome and Introductions of Distinguished Guests

Daulet Turlykhnov-President of Scientific Commission
Nenad Lalovic-President of United World Wrestling
Carlos Roy-Secretary General for UWW
Prof. Dr. Milorad Dokmanac

9:20 KEYNOTE LECTURES -These lectures will be followed by 5 minutes for Questions or Comments

9:20- 9:50
Bahman Mirzaei, PhD
Director, physical preparation and conditioning for Iranian Wrestling Federation
University of Guilan, Director of Physical Education and Sport Sciences Department
Member UWW Scientific Commission

Rayko Petrov Lecture:
Challenges Confronting the Preparation and Performance of Elite Wrestlers.

10:00 – 10:30

Valdemar ŠTAJER, PhD
Faculty of Sport and Physical Education, University of Novi Sad, Serbia

Quantifying the Training Load In Wrestling

10:35 – 11:05

Georgiy Korobeynikov
PhD, Dr. Science (Biology), Professor Head of Department of combat sport and strength sports, National University of Ukraine on Physical Education and Sport.

Member UWW Scientific Commission

PSYCHOPHYSIOLOGICAL STATE AND DECISION MAKING IN ELITE WRESTLERS

Break and Refreshments 11:10 – 11:25

MINI-LECTURES

11:25 – 11:45

Professor Ahmed Al Timimi, PhD
Professor of Sport Science
Baghdad University, Iraq

The effect of a High Intensity Training Session on the Wrestler's Weight and Blood Components

11:45 – 12:05

DR.SC. Mario Baić, PhD (co-author Damir Pekas, PhD)
Faculty of Kinesiology, University of Zagreb, Croatia
Dean of the Faculty of Kinesiology
Member UWW Scientific Commission

Importance of International Unification of Diagnostic Procedures for Basic and Specific Preparation of Advanced Wrestlers

12:05 – 12:25

David Curby, EdD
Director of the International Network of Wrestling Researchers
Editor of the International Journal of Wrestling Science
Secretary of UWW Scientific Commission

History of Doping Violations in Olympic Wrestling

12:25 – 12:45

Tibor Barna, PhD
Associate Professor
University of Physical Education Combat Department-Budapest
Member UWW Scientific Commission

Electromagnetic Stimulation in the Training of Wrestlers

12:45 – 1:05

Ioannis Barbas, PhD
Democritus University of Thrace
Member UWW Scientific Commission

An overview of the Eurasmus Project - W*restling* ***A****thletes* ***T****raining* ***CH****allenges (****WATCH****).*

1:05 – 1:25
Jose Maria Gullon, PhD
Universidad de Murcia Faculty of Sport Sciences. University of Murcia, Spain
Member UWW Scientific Commission

Overview of Current Research Project: CONDITIONS FOR EFFECTIVE EQUALITY IN WOMEN'S WRESTLING.

1:25 – 2:00 REVIEW OF ABSTRACTS

DIFFERENCES IN SELECTED VARIABLES FOR ASSESSMENT OF SITUATIONAL EFFICIENCY IN BEGINNER WRESTLERS DEPENDING ON THE METHOD OF LEARNING AND IMPROVING TECHNIQUES ***Author Present**

Vračan Dalibor[1], Mario Baić[2], Kristijan Slačanac[3], Damir Pekas[2]
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ABSTRACT INTRODUCTION: Wrestling is a very complex and energy-demanding kinesiology activity and quite often the improvement of techniques takes place only in the dominant side, which is criticized by wrestling experts and scientists. The goal of this manuscript is to compare the situational efficiency of beginer wrestlers who trained symmetrically to the left and right side with the situational efficiency variables of beginer wrestlers who trained asymmetrically only to the dominant side. **METHODS**: The sample consisted of 115 beginer wrestlers who were divided into two groups. The experimental group performed training symmetrically in both sides (n=61), while the control group performed training asymmetrically only in the dominant side (n=54). During the training process included in this research, 48 hours of training were conducted. The competition was held according to the Scandinavian competition system with 5 wrestlers in each group. Six variables were observed to assess the situational efficiency of wrestlers (General efficiency, Point efficiency, Pure efficiency, Activity, Success, Superiority). Differences between the control and experimental groups were determined using univariate analysis of variance. **RESULTS**: Univariate analysis of variance for each variable separately determined a statistically significant difference between the arithmetic means in four of the six variables for assessing situational efficiency in wrestling - General efficiency, Point efficiency, Activity, Superiority. **CONCLUSION**: It is evident from the results that beginer wrestlers who practiced symmetrical learning and improving techniques in training are better in all variables for assessing situational efficiency. Because of this, we can conclude that in order to improve competitive efficiency in a wrestling match, wrestling elements must be learned and improved in both sides symmetrically.
Key words: symmetric learning and improvement, asymmetric learning and improvement, dominant side

DIFFERENCES IN ANXIETY AND SOME BEHAVIORS CAUSED BY COVID BETWEEN CROATIAN AND FOREIGN WRESTLERS ***Author Present**

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ABSTRACT INTRODUCTION: In 2020, 2021 and part of 2022, COVID 19 caused changes in the lives of a large number of people. The media has greatly influenced the behavior and anxiety of people in the world. This problem has especially resonated in sports, where training and a large number of competitions are prohibited. The aforementioned was expressed in wrestling.
The aim of this work is to determine the differences in anxiety and behaviors caused by the COVID 19 pandemic between Croatian national wrestling representatives and national wrestling representatives from foreign national teams (Arm, Aus, CZ, Fin, Lit, Hun, Mol, Pol, Ned, Por, SAD, Esp, Srb, Swe, Sui, Ukr). **METHODS:** The sample of respondents consisted of 45 Croatian national team wrestlers and 71 foreign national team wrestlers. Each respondent filled out a survey questionnaire consisting of demographic data. After that general information, the questionnaire was followed by questions about recovering from COVID-19 and vaccination. It was further followed by the part of The COVID-19 Anxiety Scale, which refers to the self-assessment of anxiety caused by COVID-19, which consists of 5 questions. This was followed by The COVID-19 Safety Behavior Checklist (CSBC), which consists of 7 questions related to some behaviors related to COVID 19. Differences between the two groups were established using the Mann–Whitney U test. **RESULTS:** Statistically significant differences were observed in seven variables. The difference was first noticed in variable V2 (Have you received the corona virus vaccine). Regarding the part of the survey for self-assessments of anxiety, a statistically significant difference was observed only in one variable: V7 (How much, in your opinion, is this virus more dangerous than the flu virus?). Furthermore, in the part of the survey related to behaviors related to COVID 19, statistically significant differences were observed in 5 variables: V8- I wash my hands more often and more thoroughly than usual, V9- I avoid places with a lot of people, V10- I follow news related to the spread of COVID more often. 19, V12- I use hand sanitizers, V13- I avoid shaking hands with other people. **CONCLUSION**: Although foreign wrestlers are vaccinated less than Croatian wrestlers and although they think that COVID is not much more dangerous than the flu, they adapt their behavior to the recommended measures to fight against COVID to a greater extent than Croatian national team members and thus significantly contribute to reducing the spread of this disease.
Keywords: mental health, pandemic, forms of behavior, national team

AMPLITUDE-TIME CHARACTERISTICS OF BRAIN ACTIVITY AND ITS RELATIONSHIP WITH INDIVIDUAL-TYPOLOGICAL PROPERTIES OF THE WRESTLERS' NERVOUS SYSTEM

Volodymyr Lyzogub, Liliia Yukhymenko, Tetiana Kozhemiako, Sergii Khomenko
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ABSTRACT The peculiarities of amplitude-time characteristics of cortical reactions in Greco-Roman wrestlers with different individual-typological properties of the nervous system were studied.
METHODS: The 27 elite Greco-Roman right-handed wrestlers, aged 18-27, took part in the research. During the competitive activity, a video recording and analysis of the technical and tactical actions (TTA) were carried out. In the research the EEG-testing methods were used and the amplitude-time characteristics of the wrestlers' brain activity were determined, related to the implementation of the motor reactions in the Go-No Go-Go task paradigm. Cognitive evoked potentials were analyzed in frontal, central and parietal cortex. We determined the latency periods of N_2 and P_3 components and amplitudes of N_2 and P_3 waves. Also, we studied individual-typological properties of the nervous system – functional mobility of nervous processes (FMNP). The mathematical statistics were used.
RESULTS: We established a pronounced dependence of TTA indicators and the effectiveness of competitive activity of wrestlers on genetically determined individual characteristics of the wrestlers' FMNP. Wrestlers, who had a higher level of FMNP of the nervous system, were characterized by higher expert evaluations of fighting efficiency and TTA of fighting. Performance of the motor task in the Go-No Go-Go paradigm was accompanied by the predominance of the latent component N_2 in the areas of the parietal cortex mainly in the right hemisphere

and the amplitude of the component P_3 in the frontal region of the left hemisphere. In wrestlers with a high level of FMNP, a statistically significant higher response of the cortex, according to the latent component P_3 and the interpeak amplitude of the P_2N_2 interval were found, than in wrestlers with a low level of the examined typological property of the nervous system. A local potential shift in the interval of N_2P_3 peaks was registered in the right central and parietal regions with greater amplitude in the left hemisphere, which indicated a higher power of the inhibitory process of wrestlers with a high level of FMNP.
CONCLUSION: Amplitude-time characteristics of brain activity in elite Greco-Roman wrestlers with a high level of FMNP were characterized by higher expert evaluations of the effectiveness of the fight and TTA of conducting the match, than individuals with a low gradation of the studied typological property. EEG characteristics of induced brain activity under the condition of cognitive information processing in the Go-No Go-Go paradigm of elite wrestlers with a high level of FMNP revealed statistically significant higher power and speed of the braking process, than in wrestlers with a low level of the studied typological property. Amplitude-time EEG characteristics of brain activity and individual-typological properties of the nervous system, together with technical and tactical preparation, can be recommended as criteria for evaluating the prospects of wrestlers.

UKRAINIAN ORIGINS OF IVAN PODDUBNY ***Author Present**

Anatoly Samokha[1], Andriy Blojeiko[2]
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ABSTRACT PURPOSE: The research of origins of legendary wrestler of first part of 20 century Ivan Poddubny
METHODS: Records of church metric books of the end of the 19th century in the State Archives of Ukraine, archival documents of the village of Krasenivka, Cherkasy region (in the 19th and early 20th centuries - Poltava province) and historical sources were studied.
RESULTS: Ivan Poddubny was born on September 26, 1871 in the family of Ukrainian Cossack Maksym Piddubny in the village of Krasenivka, Zolotonosha district, Poltava province. Form his sport carrier Ivan Poddubny was win six World Championships (1904-1947) and did not lose a single fight. Our research showed that in total there were more than 250 families, about 700 people, in the genealogical tree of the great Poddubny family. For a long sports life, Ivan Poddubny won a lot from great wrestlers. In 1920, at the age of 56, Ivan Poddubny won the USA freestyle wrestling championship. He finished his sports careered at age 70. Ivan Poddubny is very popular in Ukraine. By a resolution of the Parliament of Ukraine, the 150th anniversary of Ivan Poddubny was celebrated at the state level. A Greco-Roman wrestling tournament, an International Scientific Symposium (UWW Scientific Commission) and commemorative medals were organized.
CONCLUSION: By origin and self-identification, in life, Ivan Poddubny is Ukrainian. He lived in difficult times, despite this, he never gave up his Ukrainian origin and considered himself a Ukrainian.

METRIC CHARACTERISTICS OF THE SPECIFIC WRESTLING FITNESS TEST AND SPECIFIC WRESTLING PERFORMANCE TEST

Milan Marković[1], Lazar Toskić[1,2]
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ABSTRACT PURPOSE: Measuring in sports is one of the most complex issues since it represents an intertwining of several correlated specific characteristics and abilities which in most cases cannot be measured in a direct manner which wouldn't violate the unity of the body. Since wrestling is a sport that implements open and closed motor patterns of applied technical elements, it is very challenging to test a wrestler in any given combat conditions, i.e. situations in which the opponent offers active resistance, because the levels of physical, technical, and tactical readiness in a match/testing is an important variable that cannot be controlled, so the use of a wrestling dummy is often resorted to. Although laboratory tests are scientifically valid, reliable, and sensitive, it is often the case that they fail to reproduce the situational sporting and competitive exertions. It should also be noted that, based on the analysis of previously published research papers, i.e. created specific tests, the number of which is insufficient, none offers completely and precisely defined basic metric characteristics. Due to this state of affairs, two new tests have been created – the Specific Wrestling Fitness Test (SWFT) and Specific Wrestling Performance Test (SWPT), both of which can be utilized in field and laboratory conditions. Each metric characteristic of said tests has been individually analyzed in a series of publications, therefore the goal of this paper is to display and unify obtained results.
METHODS: Metric characteristics are determined by the conditions and standards that qualify a test or a measuring instrument for measurement purposes and are crucial for the application of said instrument in scientific research as well as in practical terms for diagnostic and selection purposes. Reliability is defined twofold, by using the "trial-to-trial" and "day-to-day" methods (Marković et al., 2017; 2021). Validity is defined by the degree of correlation between designated tests and the Specific Judo Fitness Test (Marković et al., 2021). Finally, sensitivity is determined through an analysis of the differences between the contrasted competitive groups of varied success: national league, first league, and second league competitors (Marković et al., 2022).
RESULTS: The tests have shown reliability at the level of Cronbach's Alpha = 0.721 - 0.958 and ICC = 0.779 - 0.977, the degree of validity in the range of R^2 = 0.850 - 0.904, and sensitivity at the level of p = 0.000 - 0.021.
CONCLUSIONS: The SWFT was developed to mimic the physical and metabolic loads of wrestling combat, while the SWPT additionally mimics the structure of combat as per the current rules. While the SWPT showed higher validity and could be recommended for periodical assessments, the SWFT is simpler, easier to administer and could be performed within a training session for quick screening. Therefore, both tests are reliable, valid and sensitive and can be used practically and scientifically as part of a short, medium and long term planning process.

REFERENCES

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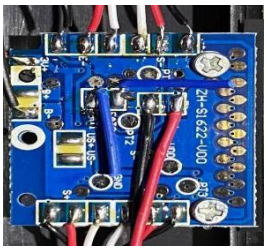
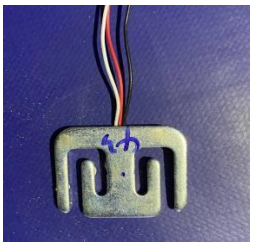
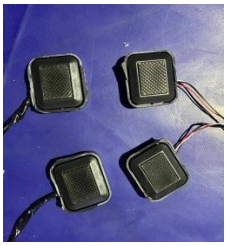
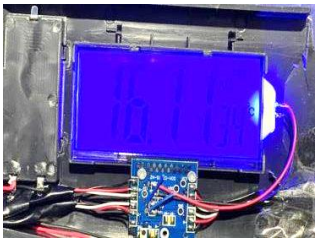
3. Marković, M., Toskić, L., Kukić, F., Zarić, I., & Dopsaj, M. (2022). Sensitivity of field tests for assessment of wrestler's specific fitness. *Journal of Human Kinetics*, 83(3):267-276.

THE DESIGN AND APPLICATION OF A MAXIMUM ARM RESISTANCE TEST FOR PAR TERRE DEFENSE IN IRAQI NATIONAL SENIOR TEAM GRECO ROMAN WRESTLERS ***Author Present**

Dr. Ahmed Shams Uldeen - Iraq - Ministry of Youth and Sports
Dr. Wisam Yaseen Burhan- Iraq - Ministry of Education
Hadi Hassan Ismail- Iraq - Ministry of Education
Dr. Nabil Hosni Al-Sharbaji – Egypt -Egyptian Wrestling Federation

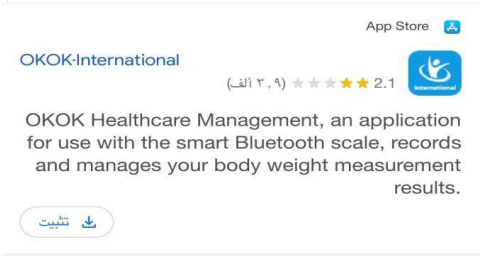
There is no doubt that every sports game has characteristics that characterize it and goals that it works to achieve through training, testing and measurement to achieve these goals. The fact that the sport of wrestling requires a great effort that does not stop when learning its tactics.

Testing and measurement is one of the important things that a wrestler needs and the coach needs to know their true level in order to develop their capabilities and draw the training map accordingly, and since the par terre defense for the gut wrench hold from requires maximal physical effort, especially on the arm, to resist the competitor's attempt to break the moment of inertia of the wrestler, who in turn tries to increase the force imposed on the mat by the palm


For this reason, the descriptive approach was used in the survey method, and the research community included the wrestlers of the Iraqi national team for Greco roman wrestling for senior for the year 2021-2022 in Al-Qadisiyah Governorate in Iraq, which numbered (8) wrestlers. The mean was arithmetic and the standard deviation of the body mass was (54 ±5.50) and preparations were made to design the test of the maximum arm resistance to counter the gut wrench hold in Greco roman wrestling for men, following a review the studies and discussing with experts and specialists in this matter.

Test name: The Maximum arm resistance to the gut wrench hold in Greco roman wrestling
Purpose of the test: To measure the maximum resistance of the arm to the gut wrench hold
Tools used: the factory electronic palm, iPad or mobile device, straps.



Description of the performance: The wrestler rises from a defensive position with him wearing the electronic palm manufactured with his hand resting on it and the palm of the palm containing sensors that measure the weight imposed on the mat. At the top of the palm there is an electronic screen that gives us a reading of the weight imposed and the competitor wrestler tries to press the upper arm trying to spin (Wrap the wrestler to score a point, and the electronic palm device can be linked to the (Koko international) program, which can be installed on smart mobile devices and iPads via (Bluetooth) to synchronize reading the screen in the palm with the program on the mobile to facilitate reading the maximum resistance. Recording: Recording the highest reading a wrestler reaches in kilograms.

After applying it to wrestlers to see the results, it appeared to us as shown in the following table:

Variable	Measuring unit	Average	Stdev	Median	Skew	Max	Min
Maximum	Kgrm	36.875	6.512	37.500	0.105	45	30

As for the most important conclusions reached by the researchers: The maximum test gives us a real reading of the resistance placed on the rug by the wrestler while resisting the gut wrench. The reading corresponds 100% between reading the screen on the top of the palm and the reading in the (Koko international) program located in the mobile or iPad.

Recommendations:

The test can be used to give quantitative values of the gut wrench hold resistance of wrestlers in seasonal tests

The quantitative values extracted from the test can be used in building training programs according to individual differences.

PRE-START CONDITIONS IN FREESTYLE WRESTLERS

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ABSTRACT PURPOSE: This study revealed the characteristics of pre-start anxiety in freestyle wrestling athletes. The task of the study was to find out the intensity in the structure of athletes' pre-competition anxiety. **METHODS:** The object of the study were the athletes of the wrestling team of the National Sports Academy – "Vasil Levski" from Sofia/Bulgaria. The study included 24 athletes aged 18-25 years, divided into two groups of 12 subjects each. The Competitive State Anxiety Inventory - 2 (CSAI - 2) was used, the scale contains 27 items, 9 in each subscale: cognitive anxiety, somatic anxiety and self-confidence. **RESULTS**: Analysis of pre-start anxiety scores revealed no statistically significant difference between the two groups with respect to cognitive, somatic anxiety and self-confidence. The studied wrestlers were characterized by moderately pronounced pre-start anxiety scores. Significant correlations were found on neuroticism with cognitive and somatic anxiety (r=0.42; r=0.36) and on psychoticism with somatic anxiety and self-confidence (r=0.43; r=-0.42). **CONCLUSIONS:** The obtained results reveal the significant influence of neuroticism, as a component of their typological features, on the psychological state and, respectively, pre-start anxiety of wrestling athletes. This also determines the need to apply targeted influences in the process of training to increase their emotional stability. This information could be useful for coaches and wrestling competitors, as it was found that each competition is a task of increased difficulty and with an unclear solution.

EATING DISORDERS ASSOCIATED WITH WEIGHT-LOSS PROCESSES IN SPANISH HIGH-PERFORMANCE WOMEN'S OLYMPIC WRESTLING ATHLETES. A QUALITATIVE STUDY ***Author Present**

Marina Rueda Flores[1], Daniel Mon López[1], Salvador Angosto[2], José María López-Gullón[2]
[1]Polytechnic University of Madrid, Spain. [2]University of Murcia, Spain.

OBJECTIVE: The aim of this study is to qualitatively analyse the eating behaviours and possible eating disorders associated with weight-loss processes in Spanish high-performance women's Olympic wrestling athletes.
METHOD: The sample consisted of 22 elite female wrestlers selected by purposive sampling, establishing as inclusion criteria: (i) having been Spanish champion in any age category; (ii) having been part of the Spanish national team participating in at least one international championship; and (iii) suffering or having suffered from an eating disorder. Semi-structured interviews were conducted online, by video call, due to the pandemic, with a duration between 20 and 40 minutes. Statistical analysis was conducted using NVivo10 software.
RESULTS: The results showed that wrestlers made dangerous weight losses, using inadequate procedures (i.e. cessation of intake in previous days). Within this theme, the following categories were highlighted: a) Lack of adequate information, related to the health risks involved in weight loss processes, and b) Risky practices, regarding the methods used to perform weight loss processes.
CONCLUSIONS: In Olympic Wrestling, many of the sportswomen have to drop down to lower categories in order to obtain a certain advantage over their rivals. However, they do not take into account how these practices influence their health by using inadequate procedures. These rapid and significant weight losses produce negative effects, especially in the female population, generating, among other pathologies, an incidence of eating disorders. The information obtained coincides with some existing aspects in the literature that have addressed this issue and provides some elements of interest for reflection on possible solutions to prevent this poor relationship of nutrition in the new generations and the treatment of existing eating disorders.

COMPARISON OF ANAEROBIC PERFORMANCE BETWEEN PUBESCENT AND POST-PUBESCENT WRESTLERS

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Abstract The research aimed to compare the anaerobic performance of pubescent and postpubescent wrestlers. **Methods**: 29 Freestyle and Greco-Roman Wrestlers were part of the study sample, with the following physical characteristics (mean ± SD): age: 14.99±1.83 yrs.-old, body mass: 54.68±16.80kg, height: 161.06±12.78cm, body fat: 12.09±4.11%, BMI: 20.58±3.79 kg/m^2, sports experience: 3.66±2.27 years, of the different wrestling clubs of the Barinas State, Venezuela. The qualification of the wrestlers in pubescent and post-pubescent, was performed by evaluating secondary sexual characteristics following Tanner's criteria. Anaerobic performance was measured with the lower and upper body's Wingate test (WAnT). **Results:** statistically significant differences were reported between the two groups of wrestlers classified by maturity category (pubescent vs. post-pubescent) when compared with the anaerobic performance indices obtained in the Wingate test [Peak Power (PP-Watts and Watts/kg); Average Power (AP-Watts y Watts/kg); Fatigue index (FI-%)] for the lower and upper body. For the PP absolute (Watts) of arms and legs (**p <0.01), PP relative (Watts/kg) of arms and legs (*p <0.05), AP absolute (Watts) of arms and legs (***p <0.001) and the AP relative (Watts/kg) of arms and legs (**p <0.01). Meanwhile, the percentage of fatigability (FI) of both lower and upper body did not show statistically significant differences. **Conclusion:** the Wingate test for the lower and upper body, performed in isolated form, discriminates the anaerobic performance of adolescent wrestlers in sports training when the maturation categories classify them.
Key words: wrestlers, sexual maturity, performance anaerobic.

ANALYSIS OF COMPETITIVE ACTIVITY IN GRECO-ROMAN WRESTLING

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ABSTRACT PURPOSE: to carry out a study and comparative analysis of the competitive activity indicators of the Greco-Roman style wrestlers of a high level of skill of different weight groups to identify trends in the dynamics of technical actions and technical and tactical preparedness. **METHODS:** analysis of protocols and videotapes of the final fights of Greco-Roman wrestlers at the competition 2021 year (European Championship, Asian Championship, Pan American Championship and World Military Championship). In total 118 final matches of high-qualified athletes were analyzed, the following indicators were recorded: duration of bouts; number of technical actions; efficiency of standing and parterre techniques; effectiveness of defense in standing and parterre; productivity of standing and parterre techniques. **RESULTS:** wrestlers were divided into three weight groups: lightweight (55 kg, 60 kg, 63 kg, 67 kg); middleweight (72 kg, 77 kg, 82 kg, 87 kg); heavyweight (97 kg, 130 kg). Analysis of technical skills made it possible to establish that the wrestlers of the lightweight group perform most often and effectively: knocking over (20 % of all technical actions), turnovers (15 %), back belt throws (11 %), counter hold in parterre (10 %), counter hold in standing position (9 %), reverse turnovers (8 %), reverse belt
throws (7 %), pushing out of mat (6 %), takedowns (4 %), twisting throws (4 %), back arch throws (3 %) and other technical actions (3 %). Wrestlers of middleweight group perform: turnovers (27 %), back belt throws (17 %), pushing out of mat (17 %), knocking over (11 %), takedowns (11 %), twisting throws (7 %), counter hold in parterre (6 %) and other technical actions (4 %). Wrestlers of heavyweight group use: pushing out of mat (24 %), turnovers (21 %), counter hold in parterre (14 %), takedowns (13 %), knocking over (10 %), twisting throws (10 %), back arch throws (6 %) and other technical actions (2 %). The analysis of dynamics of attacking actions showed that the number and effectiveness of attacks by the end of the fight among wrestlers of light and middle weight groups increases and in wrestlers of a heavy weight group – decreases. It was established that the key characteristics of the preparedness of highly qualified fighters with equal volume of technical and tactical actions were their speed and strength capabilities, special endurance and the ability to overcome the growing difficulty of combining high rates of combat and maintaining the effectiveness of technical actions. it is determined that the study of competitive activity allows the trainer-teacher to organize the training process more efficiently, timely identify shortcomings in the athlete's preparedness and make certain adjustments to the training plan.
Key words: elite wrestlers, comparative analysis, weight groups, technical actions, technical and tactical preparedness.

IN MEMORIUM - A TRIBUTE TO PROFESSOR BORIS PODLIVAEV

***Maria Ogurtsova* *Author Present**
Sport scientist, Psychologist Innovation Center of the Russian Olympic Committee, Moscow

I was lucky enough to work together with Professor Podlivaev. I'd like to share with you his work principles, which he taught me, ideas and directions of the future work that he planned. We met him in the ROC Innovation Center, where he came for scientific support for a women's wrestling team. Our scientific team always finds individual approach to the specific coaches' and athletes' tasks, but not many of them are ready to really integrate scientific knowledge into their work. Boris Anatolyevich knew exactly which goals and objectives to achieve, what tasks needed to be performed in the national team and how we could be useful on that way.
During our work together:
1. We have set up a systematical testing of the national team and reserve - 3 times a year, with 12 tests.
2. We tested different methods of physical characteristics monitoring during training camps and the year cycle
3. Made analysis of how athletes' qualities, which have been previously defined by tests, affect the personal wrestling style
4. Implemented objective tests to be done during competitions. 5. Conducted testing for injury prevention.

The following items have proved as a successful strategy for the introduction of scientific knowledge for making coaching decisions:
1. Identification of issues that require support and additional information.
2. Optimal testing schedule and flexible approach to work schedule (convenient for athletes)
3. Design of reports with individual integral indicators that are understandable for everyone
4. All-hands regular team meetings to review results, discuss use of the data.

According to Professor, it is a very important task to record experience and transfer the knowledge to trainers. A large book has been created based on inputs shared by many of you. A course was developed for trainers in (technique, physical training, nutrition and psychology), which has not yet been launched. Some chapters about psychology of wrestling was about: Periodization of mental training, Motivation, Injury and other important issues. Unfortunately, they still are as he and I wrote it about a year ago.
Now I work in the Moscow sports system and we have planned an educational program for wrestling coaches and are developing screening for young athletes. Professor Podlivaev would be happy to know that his work goes on and more and more athletes and coaches interact with scientific support.