

DOCUMENT

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OCA1. - Surname awarded to the assessed person

Zvonař

OCA2. - Name awarded to the assessed person

Martin

OCA3. - Degrees awarded to the assessed person

prof. Mgr., Ph.D.

OCA4. - Hyperlink to the entry of the person in the Register of university staff

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1st evaluated output

1.

OCA5. - Area of assessment

Bc. Učiteľstvo telesnej výchovy/Physical education teaching, Mgr. Učiteľstvo telesnej výchovy/Physical education teaching, PhD. Teória a didaktika telovýchovného a športového vzdelávania/Theory and Didactics of Physical and Sports Education

OCA6. - Category of the research/ artistic/other output

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OCA7. - Year of publication of the research/artistic/other output

2018

OCA8. - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

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OCA9. - Hyperlink to the record in CRPA or CRAA

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OCA14. - Characteristics of the author's contribution

Autorský podiel 17%. Štatistická analýza, tvorba diskusie a záverov.

Author's contribution: 17%. Statistical analysis, development of the discussion and conclusions.

OCA17. - List of maximum 5 most significant citations corresponding to the output

- (1) [3] WALTER, S., PETERSEN, C., & BASU, A. (2021) Are there any differences in shoulder muscle strength and range of motion between fast bowlers with and without shoulder pain?. Official Journal of Sports Medicine New Zealand Inc, 48(1).
- (2) [3] WALTER, SBN. (2020) Shoulder injuries of cricket fast bowlers in New Zealand. Doctoral thesis. <https://ir.canterbury.ac.nz/handle/10092/100062>
- (3) [1] BOZDĚCH, M., et al. (2019) Effect of relative age in men's ice hockey: the analysis of playing positions, hand dominance, and the level of basic anthropometric characteristics at the ice hockey world championships 2017. J. Phys. Educ. Sport 19, 2429–2434. doi: 10.7752/jpes.2019.04368
- (4) [3] YOUNAS, A. S., AFZAL, W., MAHMOOD, T., MUBASHIR, M., & ABBAS, F. (2022) Quantitative Comparison of Right and Left Upper Extremity Muscles Strength among Tennis Players through Dynamometer. Pakistan Journal of Rehabilitation, 11(1), 126-134.
- (5) [1] GHEITASI, M., ZAREE, M., IMANIZADEH, S., & DANESHFAR, A. (2020) Comparison of the Shoulders and Hips Range of Motion in Elite Male Handball Players with and without Shoulder Injury. The Scientific Journal of Rehabilitation Medicine, 9(2), 125-134.

OCA18. - Characteristics of the output's impact on socio-economic practice

Charakter modernej tenisovej hry v poslednom desaťročí sa stal výrazne dynamickejším, rýchlejším a silovejším, čo je ovplyvnené novými technológiami (rakety a výplety), ale predovšetkým zvýšenou úrovňou kondičných schopností hráčov. Moderná súťažná hra predstavuje veľa úderov z otvorených pozícií, ktoré kladú veľký nárok na silový prejav hráčov a tým aj veľkú záťaž na kĺbový a svalový systém

The character of modern tennis in the last decade has become significantly more dynamic, faster, and more power-oriented, influenced by new technologies (rackets and strings) but primarily by the increased level of players' conditioning abilities. Contemporary competitive play involves numerous strokes from open positions, which place high demands on players' strength expression and consequently impose substantial stress on the joint and muscular systems.

OCA19. - Characteristics of the output and related activities' impact on the educational process

Poznanie silových parametrov vnútorných a vonkajších svalových pletencov ramena má didaktický význam vychádzajúci z predpokladu, že rýchlosť letu loptičky odohranej tenistom je priamo podmienená aj silovými parametrami svalov ramenného pletenca. Je zrejmé, že uvedené platí nielen pri dynamických tenisových úderoch, ale aj pri statických nastaveniach rakety do dráhy letu súperom zahranej tenisovej loptičky. Vo svojej podstate radíme tenis medzi individuálne (úpolové) športy a z tohto dôvodu poznatky o štruktúre výkonu, silových nárokoch a príprave tenistov môžeme využiť aj v iných športoch a tým skvalitniť výučbu napr. úpolov, gymnastiky ale aj iných.

Understanding the strength parameters of the internal and external shoulder girdle muscles has didactic significance, based on the assumption that the ball velocity in tennis strokes is directly conditioned by the strength characteristics of the shoulder musculature. It is evident that this applies not only to dynamic tennis strokes but also to static racket positioning in the trajectory of the opponent's ball. Essentially, tennis can be classified among individual (combat-type) sports, and therefore, knowledge of performance structure, strength demands, and tennis training can also be applied in other sports, thereby enhancing the teaching of disciplines such as combat activities, gymnastics, and beyond.

2nd evaluated output

1.

OCA5. - Area of assessment

Bc. Učiteľstvo telesnej výchovy/Physical education teaching, Mgr. Učiteľstvo telesnej výchovy/Physical education teaching, PhD. Teória a didaktika telovýchovného a športového vzdelávania/Theory and Didactics of Physical and Sports Education

OCA6. - Category of the research/ artistic/other output

scientific output

OCA7. - Year of publication of the research/artistic/other output

2019

OCA8. - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

ID - 194290

OCA9. - Hyperlink to the record in CRPA or CRAA

<https://app.crepc.sk/?fn=detailBiblioFormChildI6QD&sid=10A179E4A2FCBB3F0169DFC67A&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok>

OCA14. - Characteristics of the author's contribution

Autorský vklad 33%, zber dát, štatistická analýza, tvorba diskusie a záverov.

Author's contribution: 33%. Data collection, statistical analysis, development of the discussion and conclusions.

OCA17. - List of maximum 5 most significant citations corresponding to the output

- (1) [1] PAPADOPOULOU, SD., et al. (2020) Subcutaneous adipose tissue in female volleyball players: is it related with performance indices?, *Medicina*, 56(159), p. 1–13. DOI:10.3390/medicina56040159
- (2) [1] COSSIO-BOLAÑOS, M., VIDAL-ESPINOZA, R., ALBORNOZ, C. U., FUENTES-LOPEZ, J., SÁNCHEZ-MACEDO, L., ANDRUSKE, C. L., ... & CAMPOS, R. G. (2022) Relationship between the body mass index and the ponderal index with physical fitness in adolescent students. *BMC pediatrics*, 22(1), 231.
- (3) [1] PRIETO-GONZÁLEZ, P. (2022). Relationship between specific field-based physical fitness test results and selected health biomarkers in college-aged males: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 19(21), 14498.
- (4) [1] BAJ-KORPAK, J., ZAWORSKI, K., WOCHNA, M., CHMARA, S., & STELMACH, M. J. (2024) Physical fitness and body build parameters of children and adolescents participating in the physical activity promotion programme "Athletics for all!". *Archives of Public Health*, 82(1), 206.
- (5) [1] LEVUSHKIN, S. P., ZHUKOV, O. F., SKOBLINA, N. A., & SKOBLINA, E. V. (2022) Body mass index in Russian schoolchildren in the second decade of the XXI century. *Russian Bulletin of Hygiene*, 1, 10-4.

OCA18. - Characteristics of the output's impact on socio-economic practice

Aj keď sa nadváha a obezita stali hlavným problémom verejného zdravia na celom svete, skúsenosti ukazujú, že chudí adolescenti môžu byť tiež skupinou, ktorej hrozí riziko slabého výkonu pri testoch fyzickej zdatnosti. Preto by skrining chudosti a obezity na predpovedanie úrovne fyzickej zdatnosti mal byť pre budúcnosť veľmi zaujímavý a tieto zistenia by mohli slúžiť ako určité odporúčania pre optimálny stav výživy a lepšiu fyzickú zdatnosť u adolescentov.

Although overweight and obesity have become major public health concerns worldwide, evidence shows that lean adolescents may also represent a group at risk of poor performance in physical fitness tests. Therefore, screening for both thinness and obesity to predict physical fitness levels should be of considerable interest in the future, and these findings may serve as recommendations for optimal nutritional status and improved physical fitness performance in adolescents.

OCA19. - Characteristics of the output and related activities' impact on the educational process

Osvojenie si poznania pedagogicky zameraných študentov budúcich učiteľov obsahujúce najnovšie poznatky z výskumov skúmajúcich nadváhu ľudí významne prispieva k prípadnej zmene od predchodcov (rodičia, starí rodičia) zdedeného postoja ku kultúre stravovania hlavne z pohľadu množstva prijatej potravy a jej skladby. Takto sa budúci pedagógovia môžu stať pre obdobie viacerých desiatok rokov dôležitými pozitívnymi vzormi pre svojich žiakov - študentov. Poznatky výskumu sa dajú využiť pri výučbe Zdravotnej telesnej výchovy.

The acquisition of knowledge by pedagogically oriented students—future teachers—encompassing the latest research findings on overweight significantly contributes to potential changes in inherited attitudes toward dietary culture from predecessors (parents, grandparents), particularly with regard to the quantity and composition of food intake. In this way, future educators may become important positive role models for their pupils and students over several decades. The research findings can be applied in the teaching of Health-Oriented Physical Education.

3rd evaluated output

1.

OCA5. - Area of assessment

Bc. Učiteľstvo telesnej výchovy/Physical education teaching, Mgr. Učiteľstvo telesnej výchovy/Physical education teaching, PhD. Teória a didaktika telovýchovného a športového vzdelávania/Theory and Didactics of Physical and Sports Education

OCA6. - Category of the research/ artistic/other output

scientific output

OCA7. - Year of publication of the research/artistic/other output

2020

OCA11. - Characteristics of the output in the format of the CRPA or the CRAA bibliographic record, if the output is not available in a publicly accessible register or catalogue of outputs

ADM KASOVIC Mario, STEFAN Lovro, ZVONAR Martin: Domain-Specific and Total Sedentary Behavior Associated with Gait Velocity in Older Adults: The Mediating Role of Physical Fitness. *International journal of environmental research and public health*, 2020, 17(2), 593. ISSN:1661-7827 E-ISSN:1660-4601. <https://doi.org/10.3390/ijerph17020593>

OCA12. - Type of the output (if the output is not registered in CRPA or CRAA)

article

OCA13. - Hyperlink to the webpage where the output is available (full text, other documentation, etc.)

<https://www.mdpi.com/1660-4601/17/2/593>

OCA14. - Characteristics of the author's contribution

Autorský vklad 33 %, Rozbor teoretických východísk problému, tvorba diskusie a záverov.

Author contribution: 33%. Responsible for the analysis of the theoretical foundations of the problem, and for the formulation of the discussion and conclusions.

OCA17. - List of maximum 5 most significant citations corresponding to the output

(1) [1] LIU, CHANG-E., et al. (2020) The Moderated-Mediation Effect of Workplace Anxiety and Regulatory Focus in the Relationship between Work-Related Identity Discrepancy and Employee Innovation. *International journal of environmental research and public health*, 17(17).

(2) [1] UMIASTOWSKA, D., et al. (2020) Factors Differentiating the Level of Functional Fitness in Polish Seniors. *International journal of environmental research and public health*, 17(5).

(3) [1] SÁNCHEZ-SÁNCHEZ, J. L., HE, L., MORALES, J. S., DE SOUTO BARRETO, P., JIMÉNEZ-PAVÓN, D., CARBONELL-BAEZA, A., ... & VALENZUELA, P. L. (2024) Association of physical behaviours with sarcopenia in older adults: a systematic review and meta-analysis of observational studies. *The Lancet Healthy Longevity*, 5(2), e108-e119.

(4) [1] NASCIMENTO, M. D. M., GOUVEIA, É. R., MARQUES, A., GOUVEIA, B. R., MARCONCIN, P., FRANÇA, C., & IHLE, A. (2022). The role of physical function in the association between physical activity and gait speed in older adults: a mediation analysis. *International Journal of Environmental Research and Public Health*, 19(19), 12581.

(5) [1] JEOUNG, B., & PYUN, D. Y. (2022). Investigating functional fitness of older adults in Korea in the period 2013–2018. *Scientific Reports*, 12(1), 6073.

OCA18. - Characteristics of the output's impact on socio-economic practice

Ukazuje sa, že v súčasnom spôsobe života každá pravidelná, alebo občasná telesná pohybová činnosť založená na svalovom úsilí je významným prínosom k zdraviu človeka. Platí to pre všetky vekové kategórie ľudí a obidve pohlavia. Zameranie sa na pokročilý vek nevynímajúc. Potenciálne včlenenie akýchkoľvek pohybových aktivít ľudí v dôchodkovom veku do ich každodenného programu vplýva na prežívanie a kvalitu života. Redukuje sa tým výskyt fatálnych ochorení a duševné rozpoloženie. It has become evident that in the context of contemporary lifestyles, any regular or occasional physical activity based on muscular effort provides a significant contribution to human health. This applies to all age categories and both sexes, with a particular emphasis on older age. The potential integration of physical activities into the daily routines of retired individuals positively influences their life experience and quality of life. It also reduces the incidence of fatal diseases and improves mental well-being.

OCA19. - Characteristics of the output and related activities' impact on the educational process

Osvojenie si a stotožnenie sa s potrebou redukcie telesne pasívnych sedatívnych aktivít ľudí v dôchodkovom veku ovplyvňuje nielen ich samotných, ale v pozícii vzorov aj všetky mladšie generácie. Ak sme svedkami v súčasnosti platných, ale zdravotne nežiadúcich, cieľov výrobnopredajných činností firiem v podobe glorifikácie nevyhnutnosti predaja a zisku, tak je súčasne potrebné si uvedomiť, že negatívne dopady na kupujúcich sú utláčané do pozadia. Poznatky výskumu sa dajú využiť pri výuke Zdravotnej telesnej výchovy.

Adopting and internalizing the need to reduce physically passive, sedentary activities in retirement age influences not only the elderly themselves but, in their role as role models, also all younger generations. If we are currently witnessing commercially driven goals of companies—manifested in the glorification of sales and profit—which are often health-adverse, it is equally necessary to recognize that the negative impacts on consumers are being pushed into the background. The research findings can be applied in the teaching of Health-Oriented Physical Education.

4th evaluated output

1.

OCA5. - Area of assessment

Bc. Učiteľstvo telesnej výchovy/Physical education teaching, Mgr. Učiteľstvo telesnej výchovy/Physical education teaching, PhD. Teória a didaktika telovýchovného a športového vzdelávania/Theory and Didactics of Physical and Sports Education

OCA6. - Category of the research/ artistic/other output

scientific output

OCA7. - Year of publication of the research/artistic/other output

2016

OCA8. - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

ID - 666703

OCA9. - Hyperlink to the record in CRPA or CRAA

<https://app.crepc.sk/?fn=detailBiblioFormChildU1U6KQ&sid=9ACDA3C921959A81F7C9C7EFB8&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok>

OCA14. - Characteristics of the author's contribution

Autorský vklad 10%, Štatistická analýza

Author's contribution: 10%. Statistical analysis.

OCA17. - List of maximum 5 most significant citations corresponding to the output

- (1) [1] JUNGER, J., et al. (2019) Physical activity and body-mass-index relation in secondary-school students of the visegrad region, *Journal of Physical Education and Sport*, 19(1), p. 235-241. Scopus. <https://doi.org/10.7752/jpes.2019.s1035>
- (2) [1] CELIK, A., et al. (2020) Evaluation of hydration status of children with obesity—a pilot study. *Journal of Pediatric Endocrinology and Metabolism*, 34(3): p. 295-300.
- (3) [1] OKECH, VO. (2018) A literature review on methods of social work and their possible use in the field of work with patients and communities with nutrition disorders *Social Sciences in Health - Review article*, *Kontakt*, 20(3), p. 287-291 | DOI: 10.1016/j.kontakt.2018.07.001
- (4) [3] MARTIN, ETJ. (2016) Efeitos da cessação do tabagismo na alteração ponderal: estudo de coorte prospectiva de vida real. Doctoral thesis. Pontifícia Universidade Católica do Rio Grande do Sul. <http://tede2.pucrs.br/tede2/handle/tede/7530>
- (5) [3] REUNES, LTM. (2019) The determinants of body weight and body composition in healthy flemish brothers: a cross-sectional study. *Universiteit Gent. Faculteit Geneeskunde en Gezondheidswetenschappen*. <https://lib.ugent.be/catalog/rug01:002783193>

OCA18. - Characteristics of the output's impact on socio-economic practice

Stredoškolské vekové obdobie v živote človeka patrí k tým, kedy je ešte možné významne a celoživotne pozitívne ovplyvniť pohybovú a stravovaciu kultúru človeka. Získané výsledky lokálneho charakteru z Prešovského kraja majú svoje celoslovenské uplatnenie.

The secondary school age period in human life represents a stage when it is still possible to significantly and permanently influence an individual's physical activity and nutritional culture in a positive way. The results obtained from the Prešov region, although local in nature, have nationwide applicability.

OCA19. - Characteristics of the output and related activities' impact on the educational process

Implementácia poznania škodlivosti potvrdenej nadváhy a obezity skúmanej vzorky stredoškóľakov do vzdelávacieho procesu budúcich učiteľov telesnej výchovy sa stáva ekonomickou nevyhnutnosťou. Nerešpektovanie uvedeného vplyvu na hospodárske výsledky všetkých jednotiek hospodárstva. Poznatky výskumu sa dajú využiť pri výučbe Zdravotnej telesnej výchovy.

The implementation of knowledge about the harmful effects of confirmed overweight and obesity in the studied sample of secondary school students into the educational process of future physical education teachers becomes an economic necessity. Failure to address this issue affects the economic outcomes of all sectors of the economy. The research findings can be applied in the teaching of Health-Oriented Physical Education.

5th evaluated output

1.

OCA5. - Area of assessment

Bc. Učiteľstvo telesnej výchovy/Physical education teaching, Mgr. Učiteľstvo telesnej výchovy/Physical education teaching, PhD. Teória a didaktika telovýchovného a športového vzdelávania/Theory and Didactics of Physical and Sports Education

OCA6. - Category of the research/ artistic/other output

scientific output

OCA7. - Year of publication of the research/artistic/other output

2020

OCA8. - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

ID - 191098

OCA9. - Hyperlink to the record in CRPA or CRAA

<https://app.crepc.sk/?>

[fn=detailBiblioFormChildA1UNES&sid=E46EC5C652959FE81099738D9A&seo=CREP%C4%8C-detail-%C4%8CI%C3%A1nok](https://app.crepc.sk/?fn=detailBiblioFormChildA1UNES&sid=E46EC5C652959FE81099738D9A&seo=CREP%C4%8C-detail-%C4%8CI%C3%A1nok)

OCA14. - Characteristics of the author's contribution

Autorský vklad 10%, Zber dát, štatistická analýza, tvorba diskusie a záverov.

Author contribution: 10%. Responsible for data collection, statistical analysis, and formulation of the discussion and conclusions.

OCA17. - List of maximum 5 most significant citations corresponding to the output

- (1) [1] SAMODRA, Y. T. J., GUSTIAN, U., SELI, S., RIYANTI, D., SURYADI, D., & FAUZIAH, E. (2023) Somatotype of the Tarung Derajat martial arts athletes in the fighter category. *Journal Sport Area*, 8(1), 14-23.
- (2) [1] LEUCIUC, F. V., PETRARIU, I., PRICOP, G., ROHOZNEANU, D. M., & POPOVICI, I. M. (2022) Toward an anthropometric pattern in elite male handball. *International Journal of Environmental Research and Public Health*, 19(5), 2839.
- (3) [1] KOLENA, B., ŠVIRÍKOVÁ, B., & VONDRÁKOVÁ, M. (2024) From Strikers to Keepers: Somatotype of Football Players from Slovakia. *Sports*, 12(10), 271.
- (4) [1] MINX, J. (2024) ANALÝZA VNĚJŠÍHO ZATÍŽENÍ BĚHEM FOTBALOVÉHO UTKÁNÍ KATEGORIE U15. Analysis of the external load during an U15 football match. *Journal of Human Sport and Exercise*, 16, 2.
- (5) [3] BANKOLE, J. L., & ADEFISAN, I. E. (2024) Anthropometric Characteristics and Somatotype Profiles of University Athletes in Nigeria: A Cross-Sectional Study. *International Journal of Kinanthropometry*, 4(2), 67-79.

OCA18. - Characteristics of the output's impact on socio-economic practice

Práca je zameraná na analýzu a porovnanie somatotypov (telesných typov) mužských futbalistov zo Slovenska a Saudskej Arábie, rozdelených podľa ich konkrétnych herných pozícií na ihrisku. Somatotypovanie je metóda klasifikácie ľudskej telesnej stavby do troch hlavných kategórií: endomorfia (relatívna tučnosť), mezomorfia (svalnatá stavba tela) a ektomorfia (štíhlosť). Táto porovnávacia štúdia môže priniesť cenné poznatky do športovej vedy, najmä v oblasti pochopenia, ako somatotyp ovplyvňuje športový výkon a špecializáciu na herné pozície vo futbale.

The study focuses on the analysis and comparison of somatotypes (body types) of male football players from Slovakia and Saudi Arabia, categorized according to their specific playing positions on the field. Somatotyping is a method of classifying human physique into three main categories: endomorphy (relative fatness), mesomorphy (muscularity), and ectomorphy (linearity/slimness). This comparative study may provide valuable insights for sports science, particularly in understanding how somatotype influences athletic performance and specialization in football playing positions.

OCA19. - Characteristics of the output and related activities' impact on the educational process

Využitie výsledkov tejto štúdie môže viesť k modernejšiemu, vedecky podloženému prístupu vo vzdelávaní, čím by sa podporilo nielen zvýšenie športového výkonu, ale aj celkové pochopenie dôležitosti individualizácie v telesnej a športovej výchove. Štúdia zahŕňa prvky anatómie, fyziológie a biomechaniky. Vzdelávací proces by mohol byť rozšírený o tieto oblasti, čím by sa študenti pripravovali na holistický prístup k telesnej a športovej výchove.

The application of this study's results may lead to a more modern, scientifically grounded approach to education, supporting not only enhanced athletic performance but also a comprehensive understanding of the importance of individualization in Physical and Sports Education. The study incorporates elements of anatomy, physiology, and biomechanics. The educational process could therefore be expanded to include these areas, preparing students for a holistic approach to Physical and Sports Education.

Date of last update

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