

# **ACTIVITIES IN PHYSICAL EDUCATION AND SPORT**

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## CONTENTS

DEVELOPMENT OF A TRAINING PROGRAM FOR YOUTHS TO IMPROVE THE RELATIONSHIPS OF THE GENERATION Z CHILDREN WITH THEIR PARENTS AND COACHES THROUGH PRACTISING TAEKWON-DO <b>Ina Vladova, Plama Hristova, Snezana Jovanova - Mitkovska, Biljana Popeska and Misko Džidrov</b>	3-7
RELATIONSHIP AND INFLUENCE OF BODY COMPOSITION AND SOME SKIN FOLDS ON SPEED AND AGILITY PERFORMANCE <b>Altina Ademi and Astrit Iseni</b>	8-11
DIAGNOSTICS OF THE EXPLOSIVE POWER OF LOWER LIMBS OF CANDIDATE STUDENTS IN “PHYSICAL EDUCATION AND SPORT” AT “NEOFIT RILSKI” UNIVERSITY IN BLAGOEVGRAD <b>Daniela Tomova &amp; Yanko Rumenov</b>	12-14
EVALUATION OF BULGARIAN PHYSICAL SCHOOL EDUCATION <b>Stefan Miletiev</b>	15-17
PSEUDO SPORT IN A PSEUDO COUNTRY <b>Elitsa Stoyanova</b>	18-20
TRAUMAS AND THEIR PREVENTION IN THE INITIAL STAGE OF JUDO TRAINING FOR CHILDREN FROM 7 TO 10 YEARS OF AGE <b>Valeria Lukanova</b>	21-23
HYPODYNAMIA AND ITS RELATIONSHIP TO MENTAL FATIGUE <b>Boryana Tumanova</b>	24-26
COMPARATIVE ANALYSIS OF PLAYING STYLES OF ELITE BADMINTON PLAYERS <b>Rumiana Ivanova</b>	27-29
WOMEN’S REGIONAL RUGBY SEVEN AS A FORM OF CROSS-BORDER COOPERATION IN THE DEVELOPMENT OF WOMEN’S RUGBY <b>Pavel Velkov</b>	30-33
GUIDELINES FOR CONTRIBUTORS	34

## DEVELOPMENT OF A TRAINING PROGRAM FOR YOUTHS TO IMPROVE THE RELATIONSHIPS OF THE GENERATION Z CHILDREN WITH THEIR PARENTS AND COACHES THROUGH PRACTISING TAEKWON-DO

*Preliminary communication*

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### Abstract

*Physical activity in youth can help promote healthy physical and mental development, as well as maintaining an active lifestyle in adulthood. An alarming trend is that more and more generation Z children prefer to search for entertainment on the Internet at the expense of sports. This paper presents development of a training program for Taekwon-Do practitioners aged 12-17 years within the European project BeValue Reload in five European countries: Bulgaria, Greece, Northern Macedonia, Romania and Slovenia. The training program is based on the achievements and challenges identified in advance by the research team in the relationship between training children and their parents and on the ethical principles of Taekwon-Do. The activities of the program are aimed at improving the relationship between the children practising Taekwon-Do and their parents, as well as at training activities - in the direction of increasing motivation of the training youth for active participation in sports activities, which is in line with the EU HEPA policy to develop a healthy lifestyle based on physical activity. The program also encourages adherence to the ethical principles of Taekwon-Do. This beneficial impact is aimed directly at children, the target group of this program, but it is also transferable to generation Z children in Europe and around the world.*

**Keywords:** *sports, Taekwon-Do, healthy lifestyle, parents-children relation, ethical principles*

### INTRODUCTION

Adolescence is a very important developmental stage in human development because various health-related behaviours and habits that become part of a person's lifestyle are established at this time (Manić, Zelenović, Stamenković, Čaprić, & Božić, 2021). In order to raise healthy adolescents and healthy future adults, parents and school institutions should provide them with healthy nutrition and good night sleep, protect them from diseases and risk behaviours related to their age, and encourage regular physical activity (Ciampo, L & Ciampo, R. 020). Sport undoubtedly has a beneficial effect on physical and mental health (Frömel, Šafář, Jakubec, Grofik, & Žatka, 2020; Guddal, Stensland, Småstuen, Johnsen, Zwart & Storheim, 2019; Malm, Jakobsson, & Isaksson, 2019; Piola, Bacil, Watanabe, Camargo, Fermino, & Campos, 2019). Sport successfully serves as a "natural antidote to addictions to drugs, alcohol, cigarettes and marijuana" (Ciampo, L& Ciampo, R., 2020, p. 3). Sport also has a positive impact on the social aspects of adolescents' lives – with the help of team sports activities adolescents develop effective communication skills, increase social connectedness and create friendships with their peers (Ciampo, L& Ciampo, R., 2020, p. 3).

#### Characteristics of Generation Z

The representatives of the demographic cohort who were born between the mid-to-late 1990s and the early 2010s (Dolot, 2018) are referred to as the Generation Z. The Gen Z'ers are notorious for having grown up in front of the screens. They were born in a technology-rich environment (Sanalan & Taşlibeyaz, 2020) The intensive use of the information technologies and the Internet is one of the most salient characteristics of the Generation-Z making them more comfortable expressing themselves on social networks (Sanalan & Taşlibeyaz, 2020). They easily share content on the Internet with their peers around the globe and they also create content (Dolot, 2018). Generation Z show less social sensitivity, they are more in-

troverted, more egocentric, somewhat lacking empathy as compared to the previous generations. These adolescents find satisfaction in their personal appearance and care a lot about other people's opinion about them, expressed by the number of likes and the number of followers in the social media (Djedović, Mujkanović, & Mirković-Hajdukov, 2021). The Z'ers demand to receive everything quickly and consume everything instantly (Köktener & Algül, 2020). A meta-analysis dedicated to the Generation Z's motives to participate in physical activity and sport revealed that peer support and family support were listed as positive motives along with maintaining one's body shape and management of weight (Allender, Cowburn, & Foster, 2006). However, having sporting peers and friends is not always the case and most of the Generation Z teenagers continue searching for entertainment on the Internet. Screen time can be addictive and it wastes adolescents' leisure time at the expense of healthy physical activity and sport. Furthermore, the negative effects of screen time are more pronounced in adolescents than in younger children (Adelantado-Renau, et al., 2019).

#### The Importance of Sport for Adolescents

The information technologies that are widespread in the modern world have introduced stable unfavourable changes in the lifestyles of many people making them more sedentary and socially isolated. The results of the Eurobarometer 2018 survey (European Commission, Directorate-General for Education, Youth, Sport and Culture, 2018), 46% of the studied European citizens (N = 28,031) never exercise or practice sport, 14% seldom do, 33% practice sport with some regularity whereas only 7% of the respondents do sport regularly. For the studied European population, since the survey in 2009, there has been a steady increase of people who never exercise or sport as there has also been a trend for decrease of physical activity with age. These research findings, combined with the specifics of Generation Z, illustrate the objective risk of development of physi-

cal diseases and disturbance of psychosocial development of adolescents. On the one hand, the lack of physical exercise promotes development of lifestyle diseases (cardiovascular and musculoskeletal diseases, diabetes, overweight, obesity, cancers) but, on the other hand, regular physical activity at this age may effectively prevent such diseases (Bednarek, Bodajko-Grochowska, Zarzycka, Emeryk & Cichosz, 2018). In addition to disease prevention and health status improvement, regular physical activity and sport have a number of other benefits. As Yancheva & Vladova (2019, p.15) state, sport is a “magic” and a specific social phenomenon, one of the main social institutions and an important factor in the process of socialization. It is especially attractive to young people with its great psychological charge. Young people feel part of a community, they have a sense of belonging, justice and support. The formation of a value system and positive patterns of behaviour are supported, and in parallel with these, the abilities for self-control, self-regulation and self-development are improved. Sport helps to form respect, not only for one’s own personality, but also for teammates and opponents - both for their personality and for their achievements. Athletes also develop respect for the rules and their observance. In the modern world, sport provides a space where men and women have equal opportunities for physical activity and success (Angelova-Igova, 2018). In addition, parents who do sports also play a particularly important role. Fathers and mothers who have a better attitude towards physical activity also have a positive effect on their children’s attitude towards sport, which demonstrates the importance of parents as role models and their contribution to the transmission of health practices through the generations.

Another source of healthy influence on the adolescents can be found in their coaches. They are considered as sports role models but also as significant others and mentors outside the family who can play a key role in the processes of searching for autonomy from parents and identity on behalf of the adolescents through the sports club activity. As the major function and priority of sport is training of physically healthy and prepared, psychologically stable, emotionally intelligent and moral individuals, the coaches in martial arts should command and apply in practice the specific postulates, spirit and education based on tradition and philosophy of the Eastern martial arts (Yaneva, 2021).

#### **A Positive Example of Cooperation Between Taekwon-Do Coaches, Practitioners and Parents**

Despite the fact that the Generation Z children love the Internet communication and electronic devices, these children are obviously attracted by something all children crave at the age 12-17 – making friends and belonging to a group of peers. These strivings can be satisfied by team sports and martial arts. In this respect, the Bulgarian Association of Taekwon-Do, part of the International Taekwon-Do Federation, has achieved a lot during the years of its existence. We could share an example of working with children and parents that proved to be effective for all the practitioners, their parents and coaches. Taekwon-Do practitioners are taught team spirit and community spirit. Since the beginning of their practice children are taught that they are part of the “big Taekwon-Do family” in which all practitioners are friends. One of the major goals of attending spring and summer training camps is to make friends with children from all the clubs in the country. The practitioners are accommodated in rooms with children of the same gender and at the same age but from different Taekwon-Do clubs around the country. Thus, when they meet at Taekwon-Do competitions in other cities and towns, they have friends there. This sense of belonging to a big organization where

the peers share the same values and interests is very important for prevention of teenage risk behaviours even when the practitioners do not have friends at school or when they encounter risky situations outside the training hall. The parents are always welcome to these training camps as well, under the condition that they do not interfere with the training and education methods of the coaches. The parents are referred to as to “friends of Taekwon-Do”. They can watch the training process during the camp and contact their children in the free time zones of the day. Parents are also welcome to be present at the evening fun events. All these contacts of parents with Taekwon-Do create trust in the martial art and in the coaches and stimulate a better relationship between the parents and their children. They come to know their children’s coaches and friends, they become aware of the positive experiences related to practising Taekwon-Do. Also, for the Taekwon-Do competitions, the organization of these national and international events are aided by volunteering parents who have the opportunity to observe how health of the competitors is of utmost importance, how rules and traditions of the martial art are followed and respected and how their children learn important lessons from winning or losing in the different Taekwon-Do competition disciplines.

The above example of cooperation from the Taekwon-Do coaches, practitioners and parents could be used as a starting point for future development of this cooperation between them for the benefit of the Taekwon-Do practitioners from Generation Z in affirming the EU HEPA philosophy for health-enhancing physical activity. Because values and major life and social skills are not learned on the Internet but at home and in the training hall.

#### **Training Program for Youths to Improve the Relationships of the Generation Z with Their Parents and Coaches through Practising Taekwon-Do**

This article is focused on development of a training program for youths aged 12-17 having a primary objective to introduce a healthy lifestyle in the Generation Z adolescents through joint work with their coaches and parents. The activities of the Program are aimed at improving the relationship between the teenagers practising Taekwon-Do and their parents, as well as at training activities - in the direction of increasing motivation of the training youth for active participation in sports activities, which is in line with the EU HEPA policy to develop a healthy lifestyle based on physical activity. The program also encourages adherence to the ethical principles of Taekwon-Do. The Training Program Youths reflects the efforts in this direction made by the participants in the BeValue Reload Project, co-funded by the Erasmus+ Programme of the European Union (Project No 622351-EPP-1-2020-BG-SPO-SCP), from five European countries – Bulgaria, Greece, Northern Macedonia, Romania and Slovenia. The Training Program Youths is based on the achievements and challenges identified in advance by the research team in the relationship between the training adolescents and their parents and on the ethical principles of Taekwon-Do. The expected beneficial impact is aimed directly at children, the target group of this program, but it is also transferable to Generation Z in Europe and around the world.

The Training Program Youths offers continuous interactive training for the sporting participants aged 12-17 from 01.06.2021 to 30.11.2022. In terms of didactics, the program is designed to correspond to the specifics of children of generation Z aged 12-17 years. The project partner countries rely entirely on the rich pedagogical experience of the Leading Organization (Private Professional Sports College – Bulgaria) and the team of lecturers from Goce Delcev University in Shtip, North Macedonia. The implementation of the

activities set out in the Program will be integrated into the training dynamics of the sports partners and will be included in their work calendar. In this way, the Training Program Youths will increase the motivation of the target group of 12-17-year-old Taekwon-Do practitioners to actively participate in sports activities, thus laying the foundations of a healthy lifestyle including physical activity.

#### **Achievements of Generation Z Participants – a Stable Basis the Training Program Youths Builds on**

In the preliminary research conducted by the project research team based on the Generation Z practitioners' opinion we found out the following positive trends:

- They maintain good personal hygiene without reminders from their parents.
- They put their room in order and they know how to prepare some simple meals which are very important habits for all Taekwon-Do practitioners and teenagers in general.
- They also enjoy the freedom of deciding on their clothing style and choice of additional activities in the leisure time.
- An important positive characteristic of the relationship between the Taekwon-Do practitioners and their parents is that their parents know their friends, teach them tolerance to the different people and discuss what is good and what is bad, acceptable and unacceptable, moral and immoral.

The above listed achievements are very useful everyday life skills, health habits, values and attitudes of the Taekwon-Do practitioners. They will be used as a solid foundation on which to build on the activities of the Program for working with adolescents.

#### **Habits, Values, Attitudes and Relationships Requiring Further Development through the Training Program Youths**

The project research team also identified those habits, values, attitudes and relationships that require further development by employing the joint efforts of Generation Z Taekwon-Do practitioners, their parents and coaches. The two main directions that were chosen to work on in order to implement these necessary positive changes were improvement of the relationship between the Generation Z Taekwon-Do practitioners and their parents, as well as following and internalization of the Five Principles of Taekwon-Do.

#### **Improvement of the Relationship between the Generation Z Taekwon-Do Practitioners and Their Parents**

One of the main tasks of the project is to improve the relationship between Taekwon-Do practitioners from Generation Z and their parents. The main recommendation is to increase face-to-face communication between them, combined with purposeful interactions, characterized by parental warmth, encouragement and respect.

There needs to be a stronger focus on the activities that parents and their children involved in the BeValue Reload project do together offline - in-depth and daily meaningful conversations on topics that are interesting and relevant to the Generation Z Taekwon-Do practitioners, as well as on topics related to actions and their consequences, responsible relationships with other people in the community, promotion of adolescents' ability to put themselves in other people's shoes, discussions about what children want and why parents agree or disagree with what they want, conversations about music, movies and books that parents and their children have watched and read, sharing what they dream about in life and why it is important, encouragement in difficult times, etc.

#### **Following and Internalization of the Five Principles of Tae-**

#### **kwon-Do**

The studied Taekwon-Do practitioners demonstrated that the most important values for them are to be well educated, polite and well-mannered. Another often cited value was being healthy. Being healthy is a value that is central to the EU HEPA. The initial research conducted by the project team revealed that for Taekwon-Do coaches, practitioners and parents of these adolescents, good health is the most important concern and that they rely on Taekwon-Do to be a safe enough martial art for the practitioners. The other stated desirable values, such as being honest, responsible, friendly and balanced, along with being educated, correspond to and complement the Five Principles of Taekwon-Do: Courtesy, integrity, perseverance, self-control, indomitable spirit. Values such as being dedicated, loyal, grateful, good, cheerful, honest, energetic and organized are also important because they are needed to build good interpersonal relationships, maintain prosperity and achieve important goals in the gym and in life. Development of all these values generally leads to healthy, happy and successful young people.

The Five Principles of Taekwon-Do have survived and have proven their universality and importance for generations of Taekwon-Do practitioners. Moreover, they are constructive and conducive to European societies in the 21st century. These values are cultivated both at home and in the dojang (training hall). Taekwon-Do coaches, in addition to being coaches, also play the role of good role models and mentors for the Generation Z Taekwon-Do practitioners, and as such they pass on and teach by their own example the values embodied in the Five Principles of Taekwon-Do. Communication and training interactions with coaches are extremely important for the internalization of these principles and values by the Generation Z Taekwon-Do practitioners. By internalizing these ethical principles, adolescents who practise Taekwon-Do develop and establish very important habits, values and attitudes to success in martial arts and in life.

These program tasks will be implemented through the project little book created for the Generation Z Taekwon-Do practitioners, presented below, as well as through other project activities supporting the tasks.

#### **The Little Book of the BeValue Reload Bonus System**

The Program will be implemented through its main training tool – the little book incorporating the BeValue Reload Bonus System, in which the training participants of the project will be regularly given challenges and activities that bring them a certain number of points. The little book is not only a kind of a reference point for the activities of the program. It also provides clarity about immediate rewards in the form of points, which, in turn, provides an opportunity for winning Taekwon-Do degrees of the mind. In this way, the idea of the little book satisfies the Generation Z Taekwon-Do practitioners' need for rewards and demonstrates, through their personal experience, that pleasure of physical activity and fulfilling relationships with parents are achievable outside the Internet.

The little book for such personal development has two forms – a paper book and an online version of the book that is available on the project website. The little book is to be filled in mainly by the Generation Z youth engaged in the project but also by their parents and coaches. For this purpose, the following five sections are created:

1) Section 1: Questionnaire. This section offers a questionnaire of 15 statements, which is filled in by the parent of the trainee at the beginning of the project. An example statement from this questionnaire is: "My child and I are learning something new - what we like and dislike, what each of us thinks about something happening,

Taekwon-Do, experiences in the gym, etc.” The parent fills in the same questionnaire before the child starts working on the little book and at the end of the project. This questionnaire will provide objective quantitative evidence of the changes that we hope will take place during the project.

2) Section 2: Activities and Tasks for Filling in by the Taekwon-Do Practitioners. The activities that the participants in the project will have to complete are on a daily, weekly and monthly basis. For each daily task, adolescents receive 1 point per day. An example of a task that will be implemented daily is: “Less than 60 minutes of fun with digital devices, following the rules for safe Internet browsing.” For the successful completion of the weekly tasks, participants receive 5 points per week for the specific task. An example of a task, which is performed every week, is: “Self-improvement in Taekwon-Do, through additional practicing and theory.” The activities, which cover a period of one month, bring 30 points to the participants. For example: “New information received from your parents about their lives. (Please, write it down in a few words)”.

3) Section 3: Activities and Tasks Devoted to Family and Household. This section contains 5 tasks and it is dedicated to the acquisition of independence and useful habits related to the household, as well as tasks, the implementation of which improves the relationship between parents and adolescents involved in the project. Here, again, there are three types of tasks to be performed: the daily ones bring 3 points for successful implementation every day; the weekly ones bring 20 points; and the task that the parent sets for the whole month to his/her child brings 50 points.

4) Section 4: Coach Bonus Points. This is the space for tasks implemented within the month, set by the coach and reflecting his/her impressions on the work of the practitioner. This bonus brings 100 points to the adolescent. The tasks from sections 2-4 are performed simultaneously by all Taekwon-Do practitioners in the project. Each month, the points collected by them are calculated and, depending on the result obtained, the participant: a) does not receive a new degree “Taekwon-Do for the Mind”; b) receives one new degree; or c) receives two new degrees.

5) Section 5: Questionnaire Filled in by the Parent of the Taekwon-Do Practitioner at the end of the Project. The parent fills in the same questionnaire as in Section 1 once more, at the end of the project. In the paper form of the little book, this questionnaire appears at the end of the book and the parent has hopefully forgotten the items in the questionnaire in Section 1. So, the parent does not see directly his/her initial answers when completing the questionnaire. In the online form of the little book, the initial answers are not visualized on the website so the parent provides valuable feedback to the project team on the tasks his/her child has achieved or has not completed.

The adolescents are also provided the following tips how to win more points:

- Work on the book every day and complete the challenges and tasks in it.
- Seek help from your coach and your parents when something is unclear or difficult.
- Talk to your parents more often - ask them questions, offer them how to have fun together, tell them what you liked about Taekwon-Do training. Challenge yourself and them to talk about more things, not just about “How was school today?”
- Show your parents that you have grown up by doing something for your family every day - for example, help in the household, learn to wash and iron your own dobok (training clothes), etc.
- Be more independent every day - wake up in the morning with the phone alarm, be responsible for your schedule, your dobok, etc.

- Challenge yourself, your teammates and your family to discover more fun offline.
- Practice Taekwon-Do regularly and follow its Five Principles.

Other planned activities under the Program include two on-going interactive trainings for Generation Z adolescents and their parents, games, shooting of amateur videos during the implementation of challenges set by coaches or parents, activities in leisure time done with the family and with the team, etc.

In addition to implementation of the Program, a European network of ambassadors will be established for popularisation of Taekwon-Do and its values amongst youths as a beneficial form of health-enhancing physical activity. It will also foster synergy with, and between, local, regional, national and international policies to promote sport and physical activity and to address sport-related challenges. There will also be one multiplier sport event at the end of the project for 260 participants which will celebrate the achievements of the project and promote the EU HEPA and support of Erasmus+.

The information regarding the above listed activities will be provided on the project website, as well as on the websites of the partner organizations as training resources with free access for the general public. In addition, training presentations and tools will be available in the Library Module of the BeValueR ICT Multi-Platform Application. The project materials, which are an open-source training resource, developed in English and in several other European languages, can be used to increase the motivation of athletes from all other sports, i.e. sharing all the materials of the project is a pledge to multiply this beneficial effect in other countries and sports.

## CONCLUSION

This paper presents the main accents of the Training Program for Youths aiming at improvement of the relationships of the Generation Z adolescents with their parents through practising Taekwon-Do. Its main objective is to introduce a healthy lifestyle in the Generation Z adolescents aged 12-17 years through joint work with their Taekwon-Do coaches and parents. It also fosters adherence to the Five Principles of Taekwon-Do: Courtesy, integrity, perseverance, self-control, indomitable spirit. These moral principles have proven their universality and importance for generations of Taekwon-Do practitioners and they are doubtlessly in harmony with the modern European mentality. The Program activities have been designed in such a manner that employs most of the aspects of the computer games – proposing challenges, different levels based on the achievements, as well as immediate rewards for each achievement. But through its weekly and monthly activities, the Program also stimulates the ability to postpone pleasure and fight for the rewards with more perseverance. And last, but not least, the implemented tasks and activities are evidence to the Generation Z Taekwon-Do practitioners that valuable relationships with their parents, life-long friendships, and funny and healthy interactions and events can happen offline while practicing Taekwon-Do and following its moral principles in a big training community.

## REFERENCES

- Adelantado-Renau, M., Moliner-Urdiales, D., Cavero-Redondo, I., Beltran-Valls, M., Martínez-Vizcaino, V., & Álvarez-Bueno, C. (2019). Association between screen media use and academic performance among children and adolescents: A systematic review and meta-analysis. *JAMA Pediatrics*, 173 (11), 1058–1067. DOI:10.1001/jamapediatrics.2019.3176.
- Allender, S., Cowburn, G., & Foster, C. (2006). Understanding participation in sport and physical activity among children and adults: a review of qualitative studies, *Health Education Research*, 21(6), 826–835, <https://>

- doi.org/10.1093/her/cyl063
- Angelova-Igova, B. (2018). Gender and participation in sport. *Eticheski Izsledvania [Ethical Research. In Bulgarian]*, 3(1), 70-78, ISSN 2534-8434.
- Bednarek, A., Bodajko-Grochowska, A., Zarzycka, D., Emeryk, A. & Cichosz, E. (2018). Physical activity of adolescents in the prevention of lifestyle diseases. *Nursing in the 21st Century*, 17(3) 32-37, <https://doi.org/10.2478/pielxxiw-2018-0025>.
- Ciampo, L. A. D., & Ciampo, R. L. D. (2020). Physical Activity and Adolescent Health: What Should We Know?. *Archives of Current Research International*, 19(4), 1-6. <https://doi.org/10.9734/acri/2019/v19i430163>.
- Djedović, V., Mujkanović, E., & Mirković-Hajduk, M. (2021). Post-millennials: Meet Generation Z. *Social and Humanistic Studies [Društvene i Humanističke Studije. In Croatian]*, Vol. 6, 1(14), 389 – 406, DOI: 10.51558/2490-3647.2021.6.1.389.
- Dolot, A. (2018). The characteristic of Generation Z. *e-mentor*, 44–50, <http://dx.doi.org/10.15219/em74.1351>.
- European Commission, Directorate-General for Education, Youth, Sport and Culture, (2018). *Sport and physical activity: report*, Publications Office. <https://data.europa.eu/doi/10.2766/483047>
- Frömel, K., Šafář, M., Jakubec, L., Groffik, D., & Žatka, R. (2020). Academic stress and physical activity in adolescents. *BioMed Research International*, 1-10, <https://doi.org/10.1155/2020/4696592>.
- Guddal, M., Stensland, S., Småstuen, M., Johnsen, M., Zwart, J., & Storheim, K. (2019). Physical activity and sport participation among adolescents: Associations with mental health in different age groups. Results from the Young-HUNT study: a cross-sectional survey. *BMJ Open*, 9(9), doi: 10.1136/bmjopen-2018-028555.
- Köktener, A. & Algül, A. (2020). YouTube Use Motivations of Generation Z. *Manisa Celal Bayar University Journal of Social Sciences*, 18 (4), 417-434. DOI: 10.18026/cbayarsos.679505
- Malm, C., Jakobsson, J., & Isaksson, A. (2019). Physical activity and sports—real health benefits: A review with insight into the public health of Sweden. *Sports*, 7(5), 127. <https://doi.org/10.3390/sports7050127>.
- Manić, M., Zelenović, M., Stamenković, A., Čaprić, I., & Božić, D. (2021). Barriers to physical activity in adolescents: A systematic review. *Turkish Journal of Kinesiology*, 7(1), 22-30. DOI: 10.31459/turkjin.840536.
- Piola, T.S.; Bacil, E.D.A.; Watanabe, P.I.; Camargo, E.M.; Fermino, R.; Campos, W. (2009). Sexual Maturation, social support and physical activity in adolescents. *Cuadernos de Psicología del Deporte*, 19(3), 125-138
- Sanalan, V., & Taşlıbeyaz, E. (2020). Discovering Turkish Generation-Z in the context of educational technology, *Journal of Educational Issues*, 6(2), 249-268, DOI: 10.5296/jei.v6i2.17552.
- Yaneva, A. (2021). Personal and professional competencies of the lecturer of martial arts at the Sofia University “St. Kliment Ohridski”. In: Kralikova, G. (Ed.). *Izmerenia na kompetentnostta [Dimensions of Competence. In Bulgarian]*, 479-491.
- Yancheva, T., & Vladova, I. (2019). Development of tolerance through sport. *Profesionalno Obrazovanie [Vocational Education. In Bulgarian]*, 21(1), 11-19.

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