

IMPORTANCE OF INTERNET IN PHYSICAL EXERCISE OF MODERN MAN

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UDK 796.012:004.738.5
796:316.736

SUMMARY

The axiological assumptions of the modern society have been called into question under the challenges of today, which has also been reflected in the aspects of individual physical exercise and the development of the value of society's awareness of this important segment. The modern forms of communication via internet and social networks are some of the basic features of the modern way of life. Therefore, it is important to examine their role in various forms of values of consciousness, both in morality, art, law and politics, as well as in physical exercise and sports. In parallel with the examination of all types of social consciousness and the analysis of the value function in social life that internet communications and virtual reality have, another 'new reality' caused by the coronavirus pandemic has emerged. It can be said that people's awareness of the importance of physical exercise for the quality of their own life is an axiological assumption for their survival. The key values, such as: preservation of health, prevention of obesity, prevention of cardiovascular diseases, high blood pressure, osteoporosis and depressive-anxiety conditions cannot be disputed in any segment. The new virtual reality has therefore sought ways to support, enhance and encourage these core values of physical exercise. Numerous platforms and applications have been developed that can have an impact on the complete improvement of health and quality of life of all age groups. Regular physical activity also brings benefits to a person's mental health. It is also a segment where internet platforms cannot negatively affect the fact that regular physical exercise with internet apps or YouTube trainers cannot challenge the increase in dopamine and serotonin levels in the brain associated with improved pleasure or the secretion of endorphins, hormones responsible for improving mood and energy.

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What 'new reality' and 'virtual reality' cannot provide when it comes to physical exercise, is face-to-face communication, eye contact, socialising, fun and laughter in the gym while performing exercises in group programs. This paper will try to find the answers on how much the mentioned socialisation has been reduced by the new situation and whether the likes and the emoticons can be stimulating as much as the living word during the physical exercise.

Keywords: physical exercise, internet, socialisation, new reality, virtual reality.

1. INTRODUCTION

The phrase physical exercise means muscle work, which causes increased work of the bloodstream and respiration, which also means metabolism. Although these activities are naturally performed under control of the nervous system, it is not recognised as having a decisive role, as is the case with intellectual activities. However, if we talk about the axiology of physical exercise, we cannot ignore the intellectual effort, awareness and perception of all the benefits it brings to a person. Once all the values of physical exercise are adopted, it remains for them to be further nurtured in different circumstances, to be realised continuously and to defend themselves from all external social and natural factors. To what extent are modern humans able to defend themselves from physical inactivity if it is known that they have been hit by numerous processes that have jeopardised the necessary physical activity, starting with a sedentary lifestyle, both at work and in movement and fun. The most common habitats are: rooms, offices, cars and other enclosed spaces in which one sits in front of computers, tablets, televisions, smartphones and other electronic devices. All the above-mentioned devices are valuable when it comes to the informing of a modern human. Data that used to be available only to a certain professional public is now available to everyone through the Internet and other media. The same applies to the data of the World Health Organisation, which states that physical activity, together with a healthy diet and non-smoking, is the main component in the prevention of chronic diseases. It is estimated that physical inactivity causes 1.9 million deaths worldwide each year. Almost a quarter of heart diseases (22%), and 10-16% of cases of breast and colon cancer or diabetes are caused by inactivity.¹ Although physical activity is a broader concept than physical exercise, it is interesting to

¹ Darko Bogojević, Influence of Regular Physical Activity on Quality Of Life, final thesis, Faculty of Sports and Physical Education, Nikšić, 2018, p. 3.

examine to what extent the availability of information available on the Internet on the importance of physical activity for a person raises his/her awareness about it and if the existence of specific internet applications for organising exercise or tracking movement really encourages people to do physical exercise. Regular physical activity is known to bring numerous benefits to physical, mental and social health. In the conditions of the state of emergency caused by the coronavirus, the importance of engaging in physical activity was emphasised, numerous creative solutions were offered for the realisation of exercise independently, in a small space and with the help of the media in order to preserve physical and mental health. The question remains how much social health has remained on a side track if we take into account that the social component of health is built by the ability to act successfully and work with people with closeness, respect and tolerance. We build our health-related behaviour from the day we were born under the influence of the community or social environment made up of different groups. What happens to the behaviour of young people related to physical exercise when there is no influence of social groups: schools, colleges, sports and recreational clubs, working environment and others? We tried to give an answer to this question in this paper by surveying students about the frequency of exercise during a state of emergency.

Method

The subject of the research was to study the attitudes of young people about the importance of virtual reality for physical exercise, with the aim of determining whether the new reality caused by the coronavirus pandemic influenced the attitude towards the importance of physical exercise. We started from the assumption that students of sports and health are familiar with the principal benefits of physical exercise for psycho-physical condition of people and we especially tried to examine one of the benefits – namely, physical activity in a group and the importance of socialisation, which was especially threatened during the conditions caused by coronavirus.

The first hypothesis was set that the students of VSŽŠ (College of Sports and Health) are aware of the importance of physical exercise during a state of emergency (COVID 19). The second hypothesis sought to examine the importance of the Internet for student physical exercise. A special hypothesis was used to examine how much contact means to students in real space and time when it comes to physical exercise, which is why the hypothesis set was that physical exercise is better in a group. Applied research, methods of theoretical analysis, descriptive method and comparative analysis were used in this scientific research. An analysis of different understandings of current reality was performed, which explores both virtual and new reality. Previous research, scientific papers, professional articles, studies and textbooks directly related to the research

problem were analysed. The descriptive method was used through the survey process to gather students' views. The research was conducted on a sample of 147 students of the College of Sports and Health in Belgrade, who attend the study programs of: sports coach, sports manager, professional physiotherapist and professional nurse. A questionnaire specially constructed for the research purposes was used as an instrument. The internet service of the Office for Social Research was used for statistical data processing. The questionnaires were delivered to students by e-mail at the beginning of August 2020, and their answers were recorded in the online database BIRODI – Your Attitude service, Research Centre.

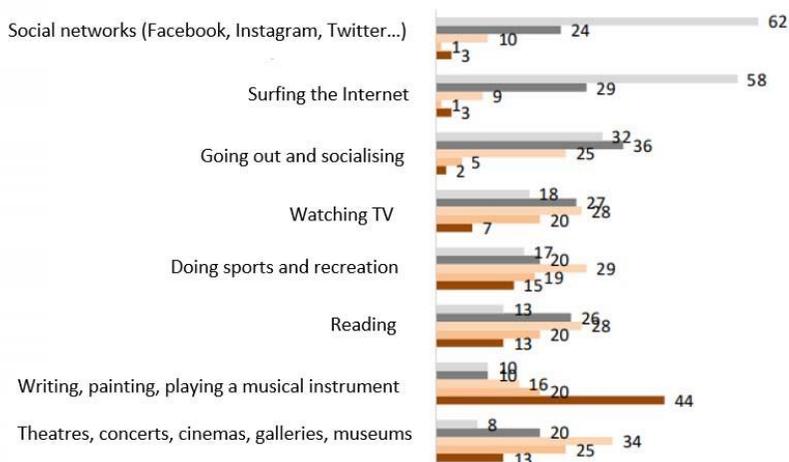
2. RESEARCH RESULTS

Young people have always represented a significant innovative resource of a society and examination of their needs, status and attitudes has become the subject of continuous monitoring of state institutions. In Serbia, the Ministry of Sports and Youth conducts such research, emphasising the importance of youth as a special social group which is "inherently ambivalent, which reflects its contradictory status between protection from responsibility, isolation from the rest of society and autonomy one the one hand, and dependence, nonindependence and even subordination (authority, public sphere, adult sphere), on the other hand.²" The way and style of life of young people are subject to criticism, both professional and that of the general public, especially when it comes to the way they spend their free time. According to the 2019 CESID survey for the needs of the Ministry of Youth and Sports, conducted on a sample of 1,500 young people, aged 15 to 30, it was confirmed that 86% of young people spend their free time on the Internet, and 17% of young people exercise regularly, while 20% often engage in recreation. (Chart 1). Such indicators support the criticism regarding the physical inactivity of young people and excessive internet consumption in all possible ways, but what is encouraging is the fact that 68% of young people go out and socialise in real time regularly or often. It is an encouraging fact that shows us that new technologies cannot challenge the essential assumption of a human as a social being. Alienation, staying in the virtual world, replacing face-to-face communication with online communication – all of these still failed to deter a large percentage of young people from socialising.

² Smiljka Tomanović and others. Young People - Our Present. Research of social biographies of young people in Serbia. (Belgrade: *Čigoja štampa*, Sociological Research Institute of the Belgrade Faculty of Philosophy, 2012) p.11

Graph 1- Research of the Ministry of Youth and Sports of Serbia on the status and needs of young people in Serbia

Graph 10.5 – In which of the following ways do you spend your free time and how often do you practice the following activities? Year 2019, in %



The social context is of particular importance for each study, so the fact that young people in Serbia are in the phase of "double transition" - which is a phenomenon of transition to adulthood in a society in transition, means that young people face problems specific to our society and those that are characteristic at the global level. Therefore, it was important to examine how young people reacted in the altered social conditions – the state of emergency caused by COVID-19, which globally affected the lives of all people, including youth. We were interested in the level of awareness of the students of sports and health regarding the importance of physical exercise in this emergency situation. The result that 67% (Chart 2) of students continued to exercise the same or even more during the state of emergency confirms our first hypothesis of their awareness of the importance of exercise and its overall usefulness but also their mental strength and responsibility for their physical and mental health, as they continued physical exercise in conditions of isolation, limited movement and exposure to continuous stress.

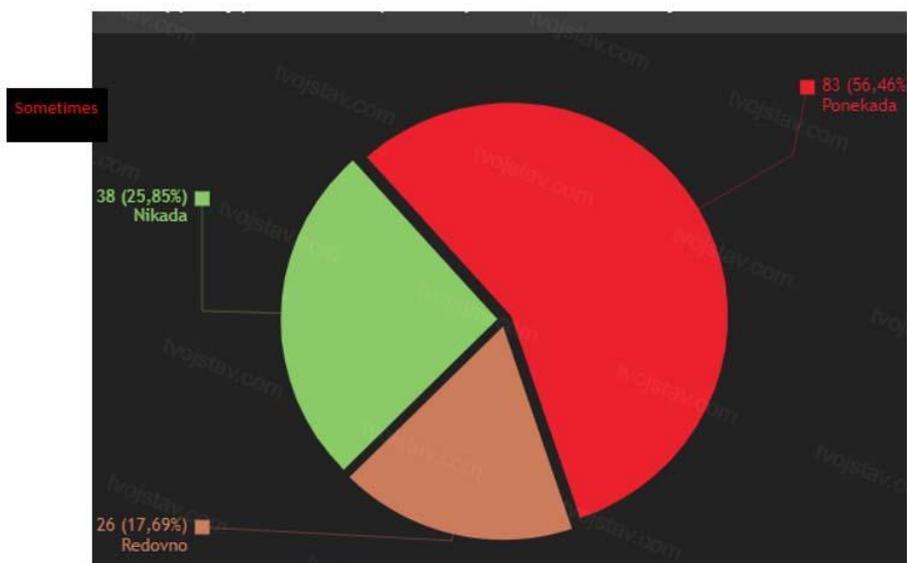
Graph 2. How much I physically exercised during the state of emergency, coronavirus pandemic



Although there has been a rapid increase in internet applications to support physical exercise during the state of emergency, it must be noted that such applications were present much earlier. Some of them are completely free, some are paid for and are adapted to smartphones and all kinds of new technological devices. Some of the best known apps are: Run Keeper, Strava, Yoga Studio, Sworkit, Official J&J 7-minute workout, Your Coach to 5K, Jefit, Zombies, Run!, Charity Miles, Carrot Fit. Through these applications you can monitor your own, running, walking or other physical activities. They applications bring together cyclists, runners, yogis, fitness users. The applications measure exercise time and intensity. They offer tutorials for performing the exercises correctly. They count the calories burned, remind you when to rest, offer suitable music and other motivational tools. Announcing the state of emergency has led to a new offer in exercise support on the internet market, so in addition to the existing applications, numerous fitness clubs, dance clubs, yoga instructors and others have been activated, offering online content in the so-called live, as well as with podcasts or delayed video files. All you have to do is type a request for online trainings on Google search and an array of links will appear (www.nonstopfitness.rs; www.hocudabudem.fit; www.fithub.rs; www.fitnesstribe.rs; www.marijasavic.fitness; www.fitlife.rs, etc.) Of course, this is only one part of the internet offer for physical exercise, because there is a great deal of it on social networks. In this situation of strong growth of the above-mentioned applications, we were interested in what the students of the College of Sports and Health

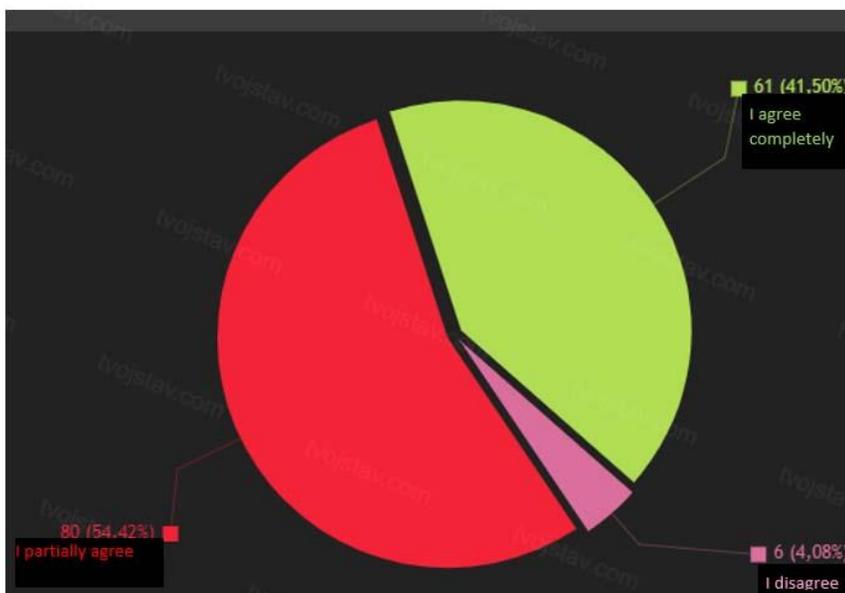
thought about whether the Internet can be a support to physical exercise and whether they were users of it as well. The largest percentage of students – 56%, answered that they sometimes used the Internet for physical exercise (Chart 3). Together with the percentage of those who regularly use the Internet, this makes 74% of respondents who use the Internet for physical exercise.

Graph 3. I use the Internet (applications, social networks, YouTube) for physical exercise:



A high percentage of the respondents agree that the Internet can be useful for supporting physical activity. Although 26% of the students answered that they had never exercised with the aid of the Internet, only 4% of the students disagree with the statement that the Internet can be useful for supporting physical activity (Graph 4). So, even those students who have never used the Internet to support their physical exercise, think that it can be useful in that sense. The highest percentage of respondents – 96%, believe that the Internet can be fully or partially useful for supporting physical activity.

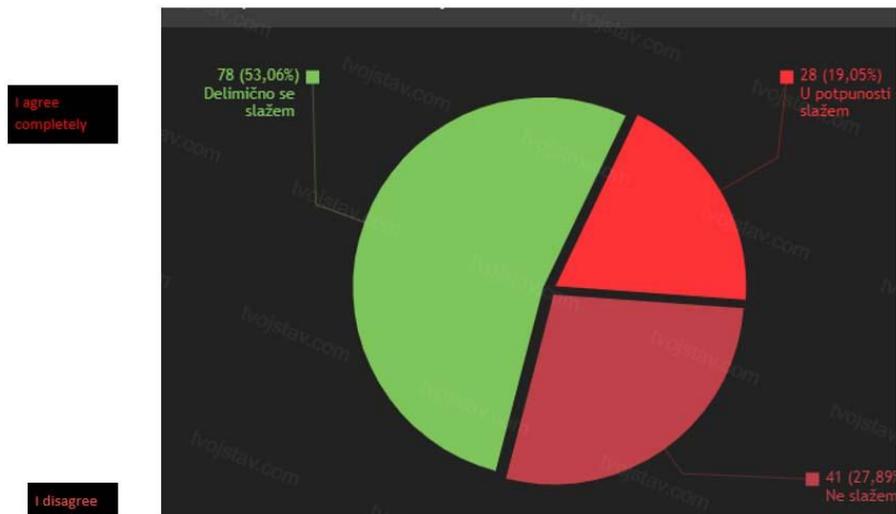
Graph 4. The Internet can be useful to support physical activity



Although Mark Prensky introduced the term "digital natives" in the 1990s, for generations born after 1980, and said that their "mother tongue" was the digital language of computers, video games and social networks, the term "Millennials" was later introduced for those born before 2000. Finally, the term "Generation Z" was introduced for those born with smartphones by 2010. Today, almost three decades into the "digitalisation of young people's lives", we can say that some doubts and fears have been justified, while some have not proved to be reasonable.

In a sample of 147 students, Millennials and members of Generation Z, we tried to find out whether the Internet is an inviolable form of communication and a significant mediator when it comes to socialising. The question of whether the Internet encourages socialising should have implied whether the initial contact from the virtual world has a stimulating effect on socialising in the real world. The percentage of those who fully agreed with the statement that the Internet encourages socialising is the lowest – only 19% (Chart 5), while 28% of students think that the Internet does not encourage socialising, and the highest percentage (53%) of the students think that it partially encourages socialising. Since the topic of the paper concentrated on the importance of physical exercise for students and through that to determining the level of their awareness of all the values of physical exercise for people, it remains to examine the importance of socialisation through physical exercise for students.

Graph 5. The Internet encourages socialising with each other



Social support, which we define as the existence or availability of people we rely on, who let us know that they care for us, love us and appreciate us, is an important factor in a child's adjustment to society, and the role of physical education teacher as a primary source of social support is essential.³ At a school age, the teacher support is as valuable as in an older age when direct support is also valuable. Science says that group exercise brings twice as good results.⁴ Not only physical exercise in a group, but if we look at sports activities in the broadest sense, we will discover numerous points of permeation in the field of social interaction and sports. Sport is considered a specific form of social action, more precisely a social activity, as a conscious human activity within which a person, a subject, employs his/her psychophysical energy in order to satisfy certain individual and social needs.⁵ At the very core of group exercise lies the need for a sense of belonging, and the competitive spirit is a very common part of human nature. Exercising in a group is only one of the forms of sociability when it comes to physical activity, yet it is one of the good possibilities to solve two large problems of a modern human, and that is physical inactivity and loneliness or alienation due to great advances in technology. Although young people rely on "new technologies" in all segments of their lives: entertainment, education,

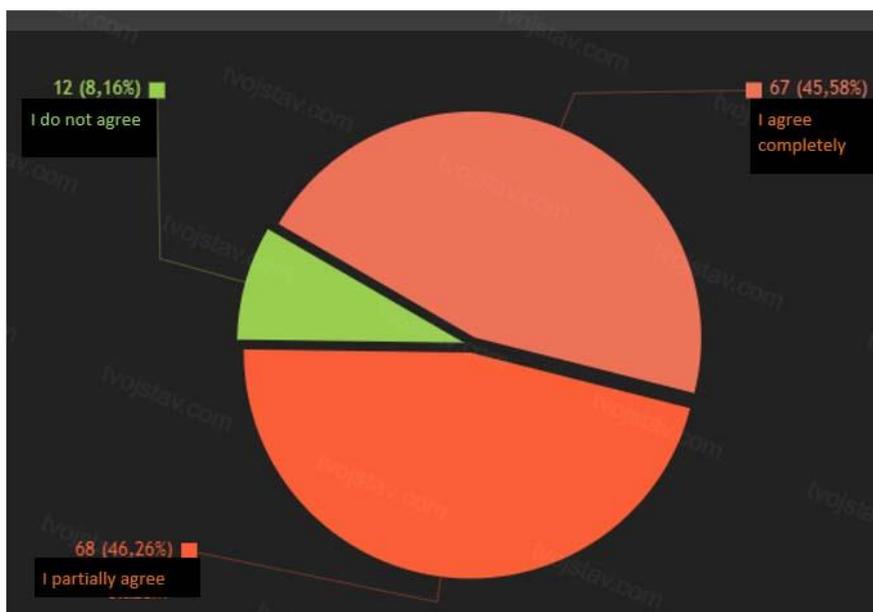
³ Susan F. Auers, Mary Jo Sariscsany, *Physical Education for Lifelong Form*, Datatstatus, Belgrade, 2013.

⁴ <https://link.springer.com/article/10.1007/s12160-012-9367-4>

⁵ Sandra Radenović, *Sport and Society*, Faculty of Sports and Physical Education, University of Belgrade, 2017, p. 150.

communication, socialising, information and even exercise, it was important to examine their attitude towards group exercise, after expressing their opinion that they believe that the Internet is very useful for supporting physical exercise but not crucial for encouraging socialising. When asked whether physical exercise was better in a group, 92% of the respondents fully or partially agreed with that statement. Only 8% of the respondents disagreed with the statement that exercise was better in a group, while the percentage of those who fully or partially agreed with this statement was about the same (46%). (Chart 6).

Graph 6. Physical exercise is better in the group



CONCLUSION

The aim of the paper was to remind of all the values of this important segment of life within the axiology of physical exercise and to examine whether emergencies and new technologies in society can change the perception of these values, primarily the value of socialisation through physical exercise. The value of physical exercise has been emphasised during the state of emergency by numerous social institutions. On the website of the Institute of Public Health of Vojvodina from April 4, 2020, there are tips and recommendations in favour of a strong health basis for continuing physical activity at home; that conducting regular physical activities and routine exercise in a safe home environment is an important strategy for maintaining a healthy life during the coronavirus crisis.

There are also presented some key ways in which physical activity helps our body and mind: exercise releases chemicals in our brain, such as serotonin and endorphins, which are great for improving mood, increasing energy and better sleep. Physical movements can ease shoulder contractions and neck, which is often associated with stress and anxiety, they strengthen the immune system, affect the regulation of body weight and reduce the risk of worsening chronic diseases.⁶ The Institute of Public Health has posted these and many other recommendations on its official website and many other institutions have sought various forms of online communication in the field of physical exercise. As many as 67% of the respondents, students of the College of Sports and Health, confirmed that they exercised the same or more during the state of emergency, which speaks of their awareness of mental and physical health and the way of perceiving the value of physical exercise. Also interesting is the result that the largest percentage – 96% of students believe that the Internet can be useful to support physical exercise; however, only 18% of the students regularly use the Internet for this purpose and 56% of the students sometimes use the Internet for this purpose. When it comes to examining the importance of the Internet for socialising with each other, it is interesting that only 19% of students completely agree with this statement, while 53% of them agree only partially. The students are unanimous when it comes to the benefits of group exercise, so a high percentage (92%) of them fully and partially supported the claim that exercise is better in a group.

These results indicate the need to strive for a normalisation of relationships when it comes to exercising and socialising of young people in real time. Although the state of emergency has indicated the importance of the Internet when it comes to the entire life of a modern human, both for work and for exercise and leisure, the fact is that it can only be a secondary means in emergencies, such as the coronavirus pandemic but primarily a dominant desire for real socialising and exercising in a group remains.

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ЗНАЧАЈ ИНТЕРНЕТА У ФИЗИЧКОМ ВЕЖБАЊУ ЧОВЕКА ДАНАШЊИЦЕ

САЖЕТАК

Аксиолошке претпоставке савременог друштва доведене су у питање под изазовима данашњице што се одразило и на аспекте физичког вежбања појединца и развој вредности свести друштва о овом значајном сегменту. Савремени облици комуникације путем интернета и друштвених мрежа један су од основних обележја савременог начина живота. Због тога је значајно испитати њихову улогу у различитим облицима вредности свести, како у моралу, уметности, праву и политици, тако и у физичком вежбању и спорту. Паралелно са испитивањем свих видова друштвене свести и анализом функције вредности у друштвеном животу који имају интернет комуникације и виртуелна реалност, појавила се још једна „нова реалност“ изазавана пандемијом вируса корона. Свест човека о значају физичког вежбања за квалитет сопственог живота можемо рећи да је аксиолошка претпоставка за његов опстанак. Кључне вредности попут: очувања здравља, превенције гојазности, превенције кардиоваскуларних болести, високог притиска, остеопорозе и депресивно-анксиозних стања не могу се оспорити ни у једном сегменту. Нова виртуална реалност због тога је потражила начине како да подржи, унапреди и подстакне ове суштинске вредности физичког вежбања. Развиле су се бројне платформе и апликације које могу утицати на комплетно побољшање здравља и квалитета живота свих узрасних група. Редовна физичка активност доноси бенефите и на ментално здравље човека. То је такође сегмент где интернет платформе не могу негативно утицати на чињеницу да редовно физичко вежбање уз интернет апликације или јутјуб тренере не могу оспорити повећање нивоа допамина и сератонина у мозгу који су повезани са побољшањем задовољства или лучење ендорфина,

хормона задуженог за побољшање расположења и енергије. Оно што „нова реалност“ и „виртуелна реалност“ не могу да обезбеде када је у питању физичко вежбање, јесте комуникација лицем у лице, контакт очима, дружење, забаву и смех у сали док се изводе вежбе на групним програмима. Колико је поменута социјализација умањена новонасталом ситуацијом и да ли лајкови и емотикони могу бити подстицајни колико и жива реч у току физичког вежбања овај рад ће покушати да пружи одговор.

Кључне речи: физичко вежбање, интернет, социјализација, нова реалност, виртуелна реалност.

ЗНАЧИМОСТЬ ИНТЕРНЕТА ДЛЯ ФИЗИЧЕСКИХ УПРАЖНЕНИЙ СОВРЕМЕННОГО ЧЕЛОВЕКА

АННОТАЦИЯ

Аксиологические предпосылки современного общества были поставлены под сомнение в связи с вызовами сегодняшнего дня, что также нашло отражение в аспектах индивидуальных физических упражнений и развитии ценности осознания обществом этого важного сегмента. Современные формы общения через Интернет и социальные сети являются одними из основных особенностей современного образа жизни. Поэтому важно изучить их роль в различных формах ценностей сознания, как в морали, искусстве, праве и политике, так и в физических упражнениях и спорте. Параллельно с изучением всех типов общественного сознания и анализом ценностной функции в социальной жизни, которую выполняют интернет-коммуникации и виртуальная реальность, возникла еще одна "новая реальность", вызванная пандемией коронавируса. Можно сказать, что осознание людьми значимости физических упражнений в повышении качества их жизни является аксиологически ценным для выживания. Ключевые ценности, такие как: сохранение здоровья, профилактика ожирения, профилактика сердечно-сосудистых заболеваний, высокого кровяного давления, остеопороза и депрессивно-тревожных состояний, не могут быть оспорены ни в одном аспекте. Поэтому новая виртуальная реальность искала пути поддержки, укрепления и поощрения этих основных ценностей для физических упражнений. Были разработаны многочисленные платформы и приложения, которые могут оказать влияние на полное улучшение здоровья и качества жизни всех возрастных групп. Регулярная физическая активность также приносит пользу психическому здоровью человека. Это также сегмент, где интернет-платформы не могут негативно повлиять на тот факт, что регулярные физические упражнения с помощью интернет-приложений или тренеров YouTube не могут оспорить повышение уровня дофамина и серотонина в мозге, связанное с улучшением удовольствия или секрецией эндорфинов, гормонов, ответственных за улучшение настроения и энергии. однако "новая реальность" и "виртуальная реальность" в плане физических упражнений не могут обеспечить общение людей лицом к лицу, зрительный контакт, коммуникацию, веселье и смех в тренажерном зале во время выполнения упражнений в групповых программах. В этой статье

предпринята попытка найти ответы на вопрос о том, насколько упомянутая социализация была снижена новой ситуацией и могут ли лайки и смайлики быть такими же стимулирующими, как живое слово во время физических упражнений.

Ключевые слова: физические упражнения, интернет, социализация, новая реальность, виртуальная реальность

Received on 10.04.2021.

Accepted on 15.05.2021.