

*Student Points of View – Pedagogical,  
Psychological, Social and Technical Issues*

## **OPPINIONS OF STUDENTS FOR THEIR SPORT ACTIVITY DURING COVID-19 PANDEMIC – CASE OF STUDENTS FROM TEACHING FACULTY IN STIP**

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**Abstract.** The COVID-19 pandemic changed our lives affecting all areas of living. Education, teaching, our movement habits, including our hobbies and leisure time activities has been changed. Changes occurs for everyday habits of university students and young people as well. This study was designed with aim to determine changes that occurs in students sport activity during leisure in period of pandemic, compared with their previous movement habits as well as to determine differences in their opinions regarded their place of living. The study sample was consisted from 119 students at Faculty of Educational Sciences at Goce Delcev University Stip, Republic of North Macedonia. Specially designed questioner was applied and was administrated online. The obtained results were analyzed using descriptive statistic parameters and non-parametric procedure: t-test. Results suggest on maintaining the same level of physical activity before and during the pandemic, but changes in manner of its realization (home workouts, use of online video exercises, individual outdoor sports activities, etc). The same level of satisfaction of personal use of leisure time is also maintained but changes occurs in possibility for doing things and hobbies that can not be done before due to luck of time and other factors.

*Keywords:* pandemic; physical activity; leisure time, students

### **Introduction**

The COVID-19 pandemic changed our lives and our everyday habits on the way that no one could imagine. Social distancing, wearing masks, lockdowns of schools, businesses, communities and overall social life, restriction of movements and traveling become our new reality. All these combined with fear for personal health and health of loving people, social isolation, restricted movement and switch on online work and reality affected humans physical, mental and emotional health.

Sport and physical activities were also disrupted. Sport events were canceled and postponed, sport clubs, fitness centers were closed, outdoor movement was restricted. These affected human's physical activity level and movement habits. By these, physical and mental health, emotional and social benefits from regular

physical activities that we were used to, were affected negatively as well. It resulted with reductions in daily energy expended, uncompensated energy intake, altered sleep (King, Burke, Halson & Hawley, 2020), less physical activity, longer screen time, worse diets resulting with weight gain and loss of physical fitness (Bas, Martin, Pollack & Venne, 2020). The lockdown and quarantine and in this regard the reduction of physical activity is also related with effects on mental health manifested as experience of unpleasant emotions such as sadness, anger, frustration, irritation, etc. (Lippi, Henry & Sanchis-Gomar, 2020). At the beginning of lock down, a significant decrease of physical activity level was noted. According data from Spain, decrease from 38% of physical activity level was recorded using data from FitBit in Spain after the first week of confinement and in April, Google data recorded 92% and 85% decrease of visits of recreational places and parks (Koch, Litt, Daher & Nieuwenhuljzen, 2020).

Immediately after the lock down, international organizations such as WHO, UN, National governments, Institutes for public health, sport associations created recommendations how to overcome the ongoing pandemic and maintain mental and physical health. WHO started a champagne Be Active aimed to help people all over the world to be active and have fun in same time. The general recommendations for physical activity in adults were to do at least 150 minutes of moderate-intensity physical activity throughout the week, or at least 75 minutes of vigorous-intensity physical activity throughout the week, muscle – strength activities involving major muscle groups 2 or more days a week massive. Beside this, short active breaks from sitting, by doing 3 – 4 minutes of light intensity movements were also recommended<sup>1)</sup>. Different forms of movements were recommended: climbing stairs, dancing, stretching, yoga, rope skipping, active video games, online exercise classes, YouTube videos, life streaming of different forms of physical activity classes were made freely available online (Bas et al, 2020; Koch et al, 2020; Lippi et al, 2020). Home activities such as walking in the house or to store, lifting and carrying groceries, lunges, chair squats are also recommended (Chen, Mao, Nassis, Harmer, Ainsworth & Li, 2020). The authors also suggest Tai Ji Quan and yoga as suitable forms of exercises that don't require special equipment, can be done in small spaces and can be practice in any time. Yet, there were some limitations in this. Some of the limitations were related with movement habits of people that were not active before the pandemic so becoming physically active during pandemic was a special challenge. For others that practices some forms of physical activity mainly in clubs and fitness centers, the switch to home exercises many times was challenging. In additions, using online resources which are not available for everyone. Limited space facilities at home for physical activity, number of members in the families with different needs, limited access to online resources for online classes are only some of the challenges that affect negatively on physical activity level during the pandemic.

Especially vulnerable to this are low-income families (Bas et al, 2020). Outdoor physical activity with proper social distancing is also recommended. Different forms of outdoor physical activities such as walking, cycling, hiking etc. It is especially important for people in apartments and leaving places with small balconies. Participation in outdoor physical activity has benefits that are related with boosting of immune system, exposure of sun and use of vitamin D which is found important for recovery patients. It has also positive benefits for respiratory, metabolic, cardiovascular and bone health as well as mental health (Koch, 2020). Recommendations are given not just for maintaining physically active, but also to maintain metabolic health and physical abilities on proper level. In this regard, HIIT (high intensity interval training) as a form of physical activity that lasts in period from 30 – 45 minutes, chrono nutrition and regular sleep patterns are recommended (King, Burke, Halson & Hawley, 2020). Several authors in their studies give recommendation for home – based physical training and exercises. Hammami, Harrabi, Mohr & Krstrup (2020) suggested different forms of home based – physical activity training that involves activities like aerobic exercise training, Zumba dancing, use of stationary bikes, bodyweight training etc. For all these activities they give recommendations for level of load and also give suggestions for their use by children and adolescence. Use of mobile application and self – monitoring training apps are suggested as a good way to improve motivation for physical activity during COVID 19 pandemic (Jakobsson, Malm, Furberg, Ekelund & Svensson, 2020; Chen et al, 2020).

The pandemic affected people from every generation on different ways. The population of young people, university students were also strongly affected by the pandemic in several different ways. They were not included in the high-risk category that can be infected but that doesn't mean that they were excluded from negative impact. Students were obligated to stay at home, universities were closed and transferred to online teaching. That increased their stress, insecurity. Social gettinger is a synonym for youth and pandemic cut that. Young people were forced to be at home, away from their friends and colleagues with restricted possibilities for social events, night parties, with no possibility to go for a coffee with friends, to visit cinema, to go at fitness centers etc. Many of them were away from their families, staying in cities where they go to university etc. All these has consequences on their everyday routine, habits etc. In our previous studies, we investigated the leisure time activities of students in normal circumstances (Popeska, Ignatov & Sivevska, 2015; Kvesic, Popeska, Sivevska, Ignatov & Jerc, 2019). Results from these and other studies referred to leisure time activities in students underline that structured and organize leisure time, filled with well selected and organized activities according personal interest, have positive effect on personal happiness, satisfaction of life, self – control, psychological well - being (Wei, Huang, Stodloska & Yu, 2015; Csikszentmihalyi & Hunter, 2003; Brkljačić, Lipovčan & Tadić, 2012). University

students that have more hours for leisure time are happier and with high self-control, have positive mood, better physical fitness and better social integration (Lu & Hu, 2002; Brkljačić, et al, 2012). Physical activity as “active form” of leisure time is important part of student’s leisure. Students participate in different types of sport activities and males are more active than females (Buckworth & Nigg, 2004; Bouillet, et al, 2008; Cardinal, Yan & Cardinal, 2013; Lapa, 2015). Related to pandemic and effects on student’s health and well-being, not many studies are published yet. A study conducted on sample of Croatian students confirmed a significant decrease of physical activity level of students during the pandemic that was especially emphasized in boys. The fitness status was also decreasing, and it was highly correlated with physical activity level (Sekulic, Blazevic, Gilic, Kvesic & Zenic, 2020).

Considering the changes that occurs in student’s life during pandemic with COVID-19 as well as our interests for changes that occurs during this period in their leisure time, quality of life and changes in everyday habits, we designed this study. Its aim is to determine changes that occurs in students sport activity during leisure during the pandemic, compared with their previous movement habits.

### **Methods**

Subject of this research are students of the Faculty of Educational Sciences at the UGD and their views and opinions regarding the practice of physical / sports activities in their leisure time before and during a pandemic Covid-19. The aim of the research was to determine students’ attitudes regarded their physical activity in leisure time during the pandemic with COVID-19, compared with their habits before and to determine the differences in their opinions according their place of living.

The study sample was consisting of 119 students at Faculty of Educational Sciences, at Goce Delcev University Stip, Republic of Macedonia. The presented results are part of a larger study that determined students' attitudes and experiences regarding their opinion on how they spend their leisure time during the pandemic with covid-19 and how this behavior directly / indirectly affects their personal and professional development. The survey was administrated online in period from May/ June, during academic year 2019/2020.

For the purpose of the study we used specifically designed questioner according the purpose of this research. Beside general data (faculty, major, year of study, gender, place of residence, employment during the pandemic), it also contains closed-ended questions – a scale of assessment where students determine the degree of agreement or disagreement with suggested claims.

The obtained results are analyzed and presented using descriptive statistics: frequencies (f), percentages (%), and non-parametric procedure: t-test. The data obtained from the research were processed using the statistical package SPSS 19.

### Results and analysis

The research included students from all four years at the Faculty of Educational Sciences at Goce Delcev University – Stip. Comparing the years of study, 25% from interviewed students were from the first year, 20% from the second year, 28% from the third year and 27% from them were in fourth year of study. Regarding the department of studies, 33% of them are the students from the department of primary education, 37% from the department of pre-school education and 30% of the department of pedagogy. In terms of gender, 71% were female and the remaining 29% were males. The dominance of female students is expected due to the general acceptance of the teaching profession mainly by females. According the place of residence, 76% of students live in a city, and the remaining 24% live in a village.

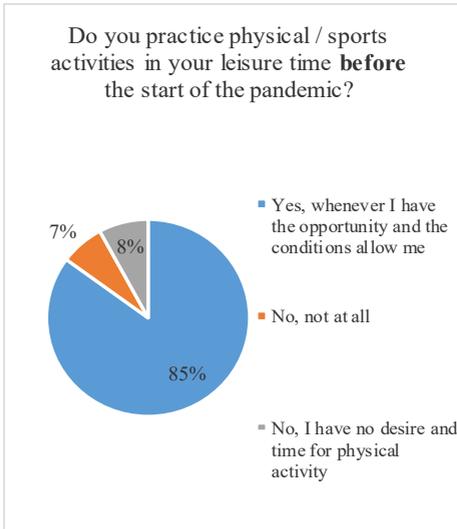
Considering the pandemic, we were interested whether students were occupied (work or volunteer) outside of home during the pandemic, The largest percentage (70%) answered that they were *not engaged*, 16% that they were *engaged*, and 14% that they were *occasional (1 – 3 hours during day / certain days) engaged* with work or voluntary activities.

For the purposes of the paper, we have selected those questions that includes students' opinions for their participation in sports and physical activities during the pandemic. The questions referred both to their movement habits before and during the pandemic, which gives us picture of changes that COVID-19 caused in this segment of living.

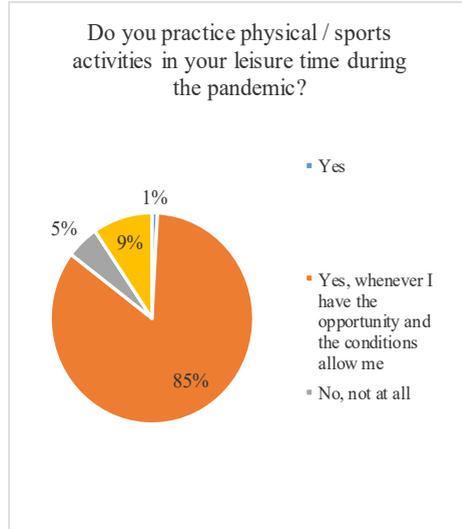
To the question Do you practice physical activities / sports in your leisure time *before the start* of the pandemic? most (83%) answered *yes, whenever they have the opportunity and allow me the conditions*, and a smaller percentage with *no* (6%) and 8% answered that they have *no desire and time for physical activity*. We received almost identical views and opinions from students regarding the practice of physical / sports activities in their leisure time *during the pandemic*. In this regard, most of the students, (82%) answered *yes, whenever I have the opportunity and the conditions allow*, 5% answered *no*, and 10% said they had *no desire or time for physical activity* (Figure 1 and 2).

Although with the advent of pandemics and bans on use of gyms, exercise room, outdoor playgrounds, etc, it was expected a decrease in the physical activity level of individuals, but it is interesting to note that many of the respondents included in the sample reported that they continued their physical activity by adapting to the conditions in which they found themselves.

Consequently, in that context, they were asked the question in which we asked them to determine how they practiced physical activity during the pandemic. Several statements were offered in which respondents were asked to determine the degree appropriate to them. Thus, to the statement that they practice *online physical activity of their choice*, many of them responded that they do it *occasionally* (40%) and *often* (32%). And the rest of them answered that they *never did / practiced it*.



**Figure 1.** Students opinion about practicing physical / sports activities in their leisure time before the start of pandemic



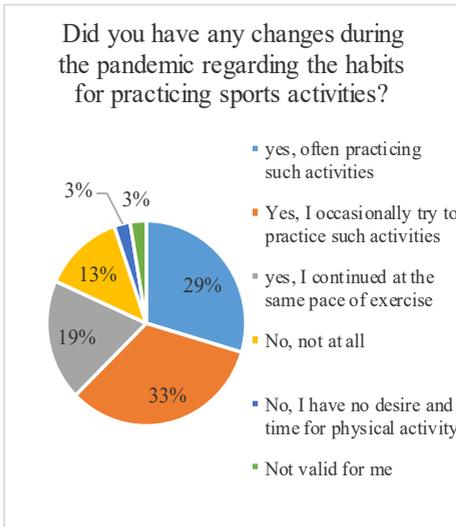
**Figure 2.** Students opinion about practicing physical / sports activities in their leisure time during the pandemic

Regarding the statement that they practice *online organized group classes with an instructor*, a high 63% answered that they *never* did it, a small part of them 19% that they practiced it *occasionally*, and the rest that they did it *often*.

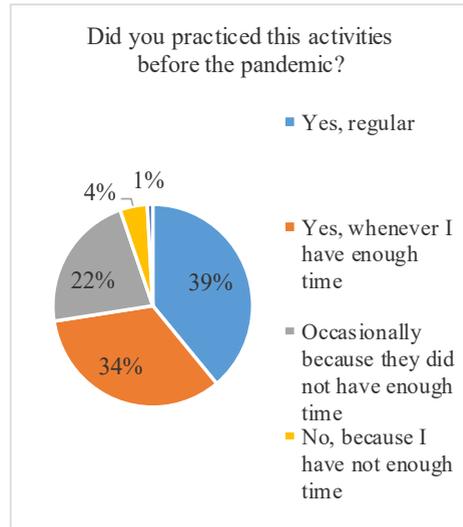
In a statement where is stating that they practice *various sports activities at home of their choice (climbing stairs, riding a static bike / orbitrek / running lane, shaping and strengthening exercises)* 45% of students answered that they practice it *often*, 36% answered that *occasionally* practice it, and to a lesser extent that they *never* do / practice it.

The last statement related to type of practiced physical activity, we were interested in their participation in *individual outdoor activities (walking, running, cycling, etc.)*. According the results, 62% practiced outdoor sports *often*, 30% did it *occasionally*, and the rest declare that they *never* practiced it.

Following question was related to changes of habits for physical activity during pandemic *Did you have any changes during the pandemic regarding the habits for practicing sports activities?* The results showed that most of students (29%) answered that they practice *physical activity more often* and (32%) *continued to occasionally try to practice such activities*. 19% of them answered that they *regularly continued with the same pace of exercise*, and the other respondents answered that they *do not have the desire and time for physical activity* and / or that they are *not interested in physical activities at all* (Figure 3).



**Figure 3.** Student’s opinion about changes regarding the habits for practicing sport activities during pandemic



**Figure 4.** Student’s opinion practicing mentioned sport activities before the pandemic

We were interested in other activities that students were occupied during leisure time in period of lock down. Therefore, we asked them to list five activities that they practiced the most during the pandemic and that help them to cope more easily with the whole situation. We received a variety of answers that we classified into several categories – sports, listening to music and watching TV, using social networks, cleaning at home. Of these categories, almost all respondents stated that during the pandemic they practiced at least one physical activity (mostly – hiking in nature, cycling, rollerblading, then shaping exercises, climbing stairs, yoga). The second choice is reading books, followed by work at home (landscaping, cleaning, planting flowers, etc.). Then, they have listed social networks as activities, as a way of communicating with each other and informing about the situation, watching movies and series.

When asked *if they practiced these activities before the pandemic*, a large percentage (39%) of the respondents covered with the sample stated that they *practiced these activities regularly before the pandemic*, 34% that they practiced them *whenever they had enough time*, and it is rejoice the fact that 22% of them said that they *did this occasionally because they did not have enough time*. (Figure 4). The imposed need to be at home, indoors, long intervals of the introduced police hour during lockdown and the limited opportunity for free movement of each

individual, in turn contributed to increasing awareness among respondents about their own health and greater practice of physical activity in home, or outside, when the weather allowed, in nature by walking and cycling.

We were also interested in the satisfaction of use of leisure time before the pandemic. In this regard, 39% of students answered that they are *generally satisfied* with the use of their leisure time before the announcement of the pandemic, and 33% that they are *quite satisfied*. The remaining answers were *neither satisfied nor dissatisfied* (24%) and *not satisfied at all* (3%). Similar answers were obtained for the level of satisfaction during the pandemic. Particularly, 38% of students answered that they are *generally satisfied*, 33% that they are *quite satisfied*, 22% are *neither satisfied nor dissatisfied*, *mostly dissatisfied* 4% of them and *quite dissatisfied* 3% of students.

The final question was: *Did the pandemic situation change your thinking about how to spend your leisure time properly?* Most of the respondents (62%) answered in the affirmative – *yes, I have more time for what is my hobby and it fulfills me*, and a smaller part (15%) answered *partially, despite the isolation I do not have enough quality leisure time*, and the rest negatively, that this situation *did not change their thinking* at all about how to properly spend and use their leisure time and 10% *did not think about it*.

Differences in students' answers to the questions / claims set out in the questionnaire were analyzed using a t-test. The obtained results did not show statistically significant differences in the analyzed answers, which indicates that the place of living (city / village) of the students covered in the research does not play an important role in terms of their attitudes towards practicing physical activity in their leisure time during the pandemic with COVID-19.

## **Discussion**

Although was expected to have a decrease of physical activity (PA) level during the pandemic and period of lockdown, our results confirmed that it was not a case with the largest number of students included in our study. Their answers evidenced their awareness for importance of PA as way to cope with stress, restricted movement and depression that occur in many people (King et al, 2020; Lippi et al, 2020). Many of them discovered different ways to adapt on new situation and turn it in positive experience. Different forms of PA were used, such as online exercises, home workouts, individual outdoor activities etc. These ways as manners to cope with negative effects of pandemic were also suggested in other studies (Koch et al, 2020; Lippi et al, 2020; Chen et al, 2020; King et al, 2020; Hammami et al, 2020) as well as recommended from WHO (WHO, 2020). Although expected, a large number of participations, online classes lead by instructor were not a frequent choice of students. This can be due to sharp terms for their participation or payment that was required for such classes. This

can suggest on need to plan the physical activity more flexible and in time that suits them best. Different types of physical activity were first on the list of choices of leisure time activities during lock down, followed by reading books, different types of working in the home (cleaning, planting flowers), social media etc. According the results, many students wanted to do these activities but did not have enough time before the pandemic. Therefore, they used the lockdown period to do so. This emphasize the fact that pandemic brings some positive changes as well, such as more time for hobbies.

When it comes to leisure time, often there is a difference between manners we use it and ways we use our leisure time. This is due to many factors such as: lack of time, other occupational activities such as working, academic obligations, family matters, lack of finances etc (Brkljacic et al, 2012; Popeska et al, 2015, Lu & Hu, 2002). Our results evidenced that more than a half of students, nearly 70% in general are satisfied with different load from their leisure time activities. These refers to periods both before and during the pandemic. Another positive thing is that pandemic positively impacted on their perception of leisure time and importance to have quality contents and activities during this period. This suggest that different activities that we chose by our personal interest are not just a manner to be fulfill our time, but also are effective way to cope stress, negative thinking and other negative emotions that can be caused by such unpredicted health crises. The positive impact of structure leisure time on personal physical, menthal and emotional health is also confirmed in other studies (Popeska et al, 2015; Kvesic et al, 2018; Wei at al, 2015; Brkljacic et al, 2012 etc).

We did not find differences between participant in sence of place of living. This means that pandemic had similar effects on students from both urban and rural settings and that place of living is not a defining factor for leisure time activities and contents.

### **Conclusion**

The aim of this study was to determine changes that occurs in students sport activity during leisure during the pandemic, compared with their previous movement habits and to determine differences in their opinions regarded their place of living and movement habits before and during the pandemic. It was realized on a sample of university students from Faculty of Educational Sciences, at Goce Delcev University Stip, using specially designed questioner. Results suggest on maintaining the same level of physical activity before and during the pandemic, but changes in manner of its realization (home workouts, use of online video exercises, individual outdoor sports activities etc). The same level of satisfaction of personal use of leisure time is also maintained but changes occurs in possibility for doing things and hobbies that cannot be done before due to luck of time and other factors.

Our recommendations are oriented to manners how to support students to cope with this situation and turn it in positive. In this regard, we suggest following:

– We should and must change our habits, including movement habits and adapt them.

– There are many forms of physical activity that can be done at home, online or outdoor using social distancing measures – we should promote them and make them easy accessible for students.

– Universities and educational institutions should support students and find ways to help them to adapt on new reality by offering different forms of online activities including physical activities as well.

– Our message is: to be active, to stay positive, stay mentally strong and healthy, find your hobby, wide your interests and don't forget that only structured and organized leisure time leads to quality life.

#### **NOTES**

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