

Emotional States of People Attending Sports and Health Clubs During and After the Period of the Covid-19 Pandemic

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ABSTRACT

Background. The measures of social and physical isolation during the period of the Covid-19 pandemic had an influence on people's way of life and mental health. It was noticed one of the biggest problems during the period of the Covid-19 pandemic was an increase of negative emotions and decrease of physical activity among people that usually do sports. In the article, the main attention is paid to emotional states of people attending sports and health clubs during and after the period of the Covid-19 pandemic.

Methods. The following research methods were applied: SAN questionnaire, interview survey and the situation anxiety assessment scale by Spielberger and Khanin. A Chi square (χ^2) test was applied for the comparison of the results between the researched groups. The research was performed in the academic year 2021/2022 and 97 physically active people that did sports in sports and health clubs, including 35 women and 62 men, were researched.

Results. The results revealed the people attending sports and health clubs assessed their well-being during the period of the Covid-19 pandemic in the following way: even 46 percent of the researched assessed it as low, 37 percent indicated the average level and 17 percent – the high level. However, after the Covid-19 pandemic, just 24 percent of the researched assessed their well-being as low, 34 percent indicated the average level and 42 percent – the high level. The people that attended sports and health clubs assessed their activity during the pandemic: 48 percent indicated the low level, 31 percent – the average level, and 21 percent – the high level. These indexes became better after the pandemic: 28 percent assessed their activity as low and average, and 44 percent – as high. The pandemic restrictions also had a big influence on the mood of those researched: the level of the mood of the researched attending sports and health clubs was low with even 47 percent, average with 23 percent, and high with 30 percent. However, the mood indexes were distributed after the pandemic: 22 percent indicated the low level, 25 percent – the average level and 53 percent – the high level. It was noticed even 58 percent of the researched assessed their situation anxiety as high during the pandemic, 23 percent – as average, and 19 percent – as low. Meanwhile, after the pandemic, the same researched assessed their situation anxiety in the following way: 49 percent – as low, 25 percent – as average, and 26 percent – as high. *Conclusions.* The indexes of well-being, activity, mood and situation anxiety of people attending sports and health clubs were much better after the Covid-19 pandemic than during the period of the Covid-19 pandemic.

Keywords: Covid-19, sports and health clubs, emotional state, well-being, activity, mood, situation anxiety.

INTRODUCTION

Lately, there is more and more proof revealing that human physical activity is one of the most significant factors that affect the peculiarities of good health (Zaborskis, Raskilas 2011; Lippi et al., 2020). Today, physical activity is accentuated strongly in recommendations of most

researchers as it strengthens the development of a harmonious personality, physical and psychical well-being. However, after the global Covid-19 pandemic started, the conditions of normal life were hindered for most people; it was recommended that they stay at home, the activity of sports and

health clubs was prohibited and the closure of parks and other places reduced physical activity of the inhabitants. This pandemic brought big challenges and changed the psychological state of most people (Gamonal-Limcaoco et al., 2021; Lippi, Henry, Bovo, Sanchis-Gomar, 2020).

For example, Sfindla & Hadrya (2020) emphasize in the scientific research the Covid-19 pandemic affects the human lifestyle in a complex way, strict restrictions and changes of the emotional state have caused more cases of depression, and it is supposed the decrease of human physical activity and more frequent indulgence in bad habits have also contributed to these difficulties (Robert et al., 2020). Especially big changes of the emotional state were noticed in the studies (Limcaoco-Gamonal et al., 2021) where students were surveyed. Authors Rodríguez-Larrad, et al., (2021) also state the decrease of physical activity also differs in the aspect of students' sex, and a higher decrease of physical activity was notice in male students compared with female students. Meanwhile, the authors of other research Husky, Kovess-Masfety, Swendsen, (2020) emphasize psychological problems during the period of the Covid-19 pandemic were caused mostly due to travel restrictions and prohibitions on holidays. After starting the quarantine, there was another problem: people were unable to meet their friends and close people, but it was necessary to adapt to the situation and look for ways to communicate with their friends or close people. Some scientific studies also give proof (Gamonal-Limcaoco et al., 2021) that bigger emotional changes can be noticed during the period in children and adolescents. The pandemic period had an especially strong impact on the emotional state of children and adolescents as they had never experienced anything similar in their life. It is also indicated parents' worries about the present situation affected the emotional changes of their children, and that the pandemic environment increased fluctuations of their emotions (Spinelli, Lionetti, Pastore & Fasolo, 2020). Meanwhile, it is revealed in the studies of Park et al., (2020) frequent reasons for negative emotions are constant speaking about the non-improving situation, the indefinite duration of the quarantine and changes in social life.

Especially strict restrictions also affected the emotional state of physically active people as sports clubs were closed, it was difficult to leave without valid excuse and it was prohibited to do sports

outdoors (Yarrington et al., 2021). There are some publications (Matias, Dominski & Marks, 2020; Carriedo, Cecchini, Fernandez-Rio & Mendez-Gimenez, 2020) which aimed to overview the impact of the Covid-19 pandemic on physically active people. The research revealed people that tried to do sports at home were able to maintain a more stable emotional state, but not everyone was able to do it. People encountered difficulties, one of which was a lack of motivation to do sports at home, thus, it was difficult for people to transfer their sports activity home. For example, Rehm et al., (2020) tried to reveal the influence of stress suffered by people on their physical activity, sleep, smoking and abuse of alcohol. The data of this research confirmed all those aspects were related with the psychological difficulties caused by the Covid-19 pandemic. According to Pera (2020), it was noticed lower physical activity was related to people's more frequent stress, anger, anxiety and fluctuations of mood.

However, after reviewing the scientific studies, it can be stated the number of studies is insufficient for the analysis of these issues, and it was impossible to find any studies intended to assess the emotional states of physically active people during and after the period of the Covid-19 pandemic. The mentioned reasons enable the reasonable thought that it is relevant to prolong studies in this field. Taking this into account, a problematic issue is raised in our research regarding what way did the emotional state of people attending sports and health clubs change during and after the period of the Covid-19 pandemic. **Aim of the study** – to reveal the changes of the emotional state of people attending sports and health clubs during and after the period of the Covid-19 pandemic.

Organization of the research. The research took place in 2021/2022. The research participants were selected in the way of choice of the target researched group. Before the study, all the respondents were familiarized with the purpose and methods of the research. The researched were informed that the obtained data will only be processed in a generalized form in order to ensure anonymity and confidentiality. 97 physically active people doing sports in sports and health clubs at least 2 per week participated in the research. 97 participants consisted of 62 men and 35 women whose age ranged between 18 and 60. The duration of sports activity of the researched was at least 2 years.

Instruments. For the revelation of this issue, the SAN questionnaire was used (Райгородский, 2000). With the questionnaire, researchers tried to assess the mood of people attending sports and health clubs, their activity and well-being during and after the pandemic. The researched had to assess their emotional states in a 9-point scale. The questionnaire consists of 30 pairs of words with opposite meanings that are intended to define the mood, activity and well-being of the researched during and after the pandemic. Ten characteristics with opposite meanings are given for the assessment of mood, activity and well-being each. The results are assessed in the following way: 1– 4 points: low level, 5 points: average level, 6– 9 points: high level.

The Spielberger-Khanin situation anxiety assessment scale was applied for the assessment of situation anxiety of the researched (Маришук и Блудов, 1990). This scale consists of 40 statements, all of which are assessed according to a Likert scale: 1 – absolutely no; 2 – likely yes; 3 – yes; 4 – definitely yes. The results are assessed in the following way: up to 30 points – low situation anxiety level; 31–45 points – average situation anxiety level; 46 points and more – high situation anxiety level.

It is important to assess situation anxiety as a personal characteristic, because this factor has quite a big influence on behavior. Situation anxiety is the negative emotions suffered by a person: tension, concern, nervousness. These states are caused by the personal emotional reaction in complicated situations. Most situations, especially those related with the competence and prestige, cause anxiety to the persons whose situation anxiety level is high, and they also tend to consider many of them menacing.

Statistical analysis. The program package SPSS21.0 was used for the processing of the statistical research data. The Chi square (χ^2) test of was applied for the processing of the results of this research. The obtained data is considered statistically significant in case it complies with the significance level $p < 0,05$.

RESULTS

In order to compare the well-being indexes of people attending sports and health clubs during and after the Covid-19 pandemic, it was determined even 46 percent of the researched assessed their well-being as low. 37 percent stated their well-being was average, and 17 percent of the researched assessed it as high. However, the obtained results of the research revealed just 24 percent of the researched attending sports and health clubs assessed their well-being as low, 34 percent of the researched – as average, and 42 percent – as high after the Covid-19 pandemic.

By using criterion χ^2 , it was determined the people assessed their well-being statistically reliably better after the Covid-19 pandemic ($\chi^2(2)=18.21$; $p < 0.05$). It enables thinking the total mood depending on the physical and mental state was better after the Covid-19 pandemic (Fig. 1).

The results of the research show the activity of people attending sports and health clubs during and after the period of the Covid-19 pandemic was statistically reliably different ($\chi^2(2) = 10.28$; $p < 0.05$). For example, the people attending sports and health clubs assessed their activity during the pandemic in the following way: most of them, i.e., 48 percent, stated it was low, 31 percent – average and just 21 percent – high.

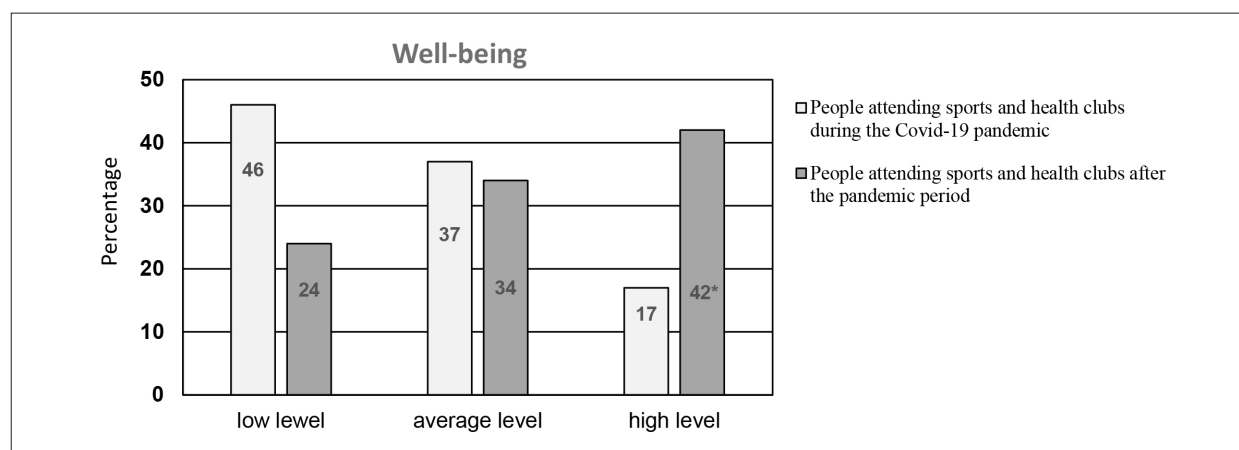


Figure 1. Distribution of indicators of well-being of people attending sports and health clubs during and after the Covid-19 pandemic (percent)

* statistically reliable ($p < 0.05$) difference between groups

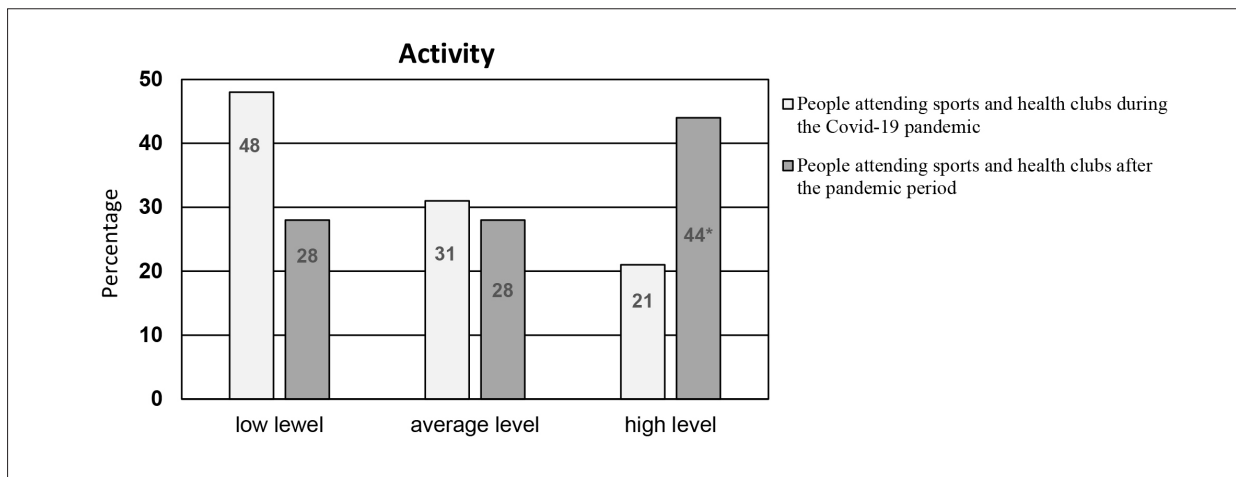


Figure 2. Distribution of indicators of activity of people attending sports and health clubs during and after the Covid-19 pandemic (percent)

* statistically reliable ($p < 0.05$) difference between groups

Meanwhile, after the pandemic, these indexes became better, and just 28 percent assessed their activity as low and average, and the people that did sports at a high level assessed their activity as high – 44 percent. It enables supposing the physical and mental ability of people to act was much better after the Covid-19 pandemic (Fig. 2).

On analyzing the data of this research, it was noticed the pandemic restrictions also had a big influence on the mood of the researched: the mood of even 47 percent of the researched attending sports and health clubs was assessed as low, that of 23 percent – as average, and that of 30 percent – as high. However, it can be mentioned the mood indexes of the researched distributed after the pandemic in the following way: 22 percent said it was low, 25 percent – average and 53 percent – high.

On assessing the mood of people attending sports and health clubs, the difference was statistically significant ($\chi^2(2) = 15,51; p < 0,05$), i.e., the general emotional state of the researched had a bigger positive effect on their activity and relations with the environment after the pandemic than during the period of the Covid-19 pandemic (Fig. 3).

After analyzing the situation anxiety levels of people attending sports and health clubs, it was noticed even 58 percent of the researched assessed their situation anxiety as high, 23 percent – as average, and just 19 percent as low during the pandemic. Meanwhile, the same researched assessed the situation anxiety differently after the pandemic: 49 percent stated it was low, 25 percent – average, and 26 percent – high.

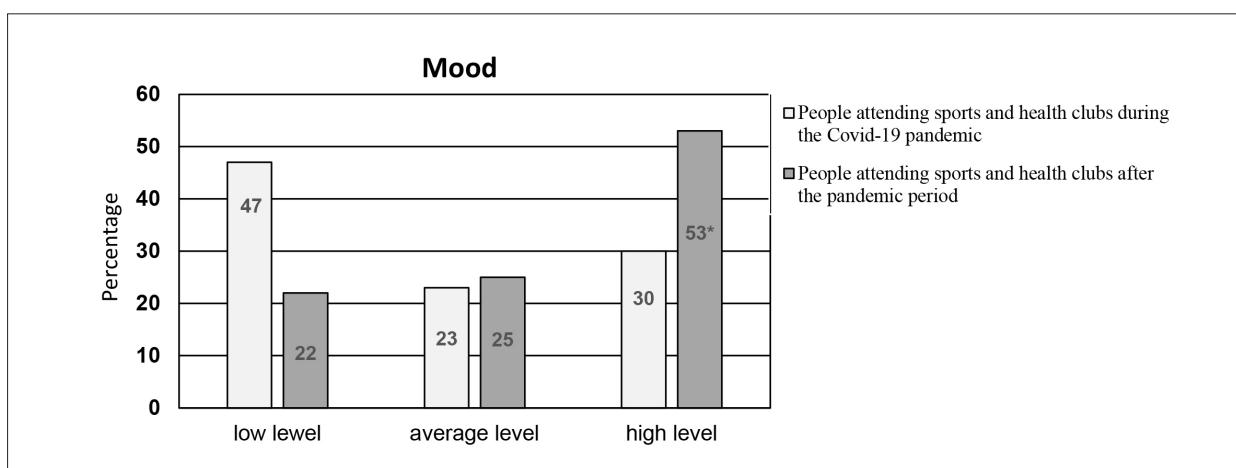


Figure 3. Distribution of indicators of mood of people attending sports and health clubs during and after the Covid-19 pandemic (percent)

* statistically reliable ($p < 0.05$) difference between groups

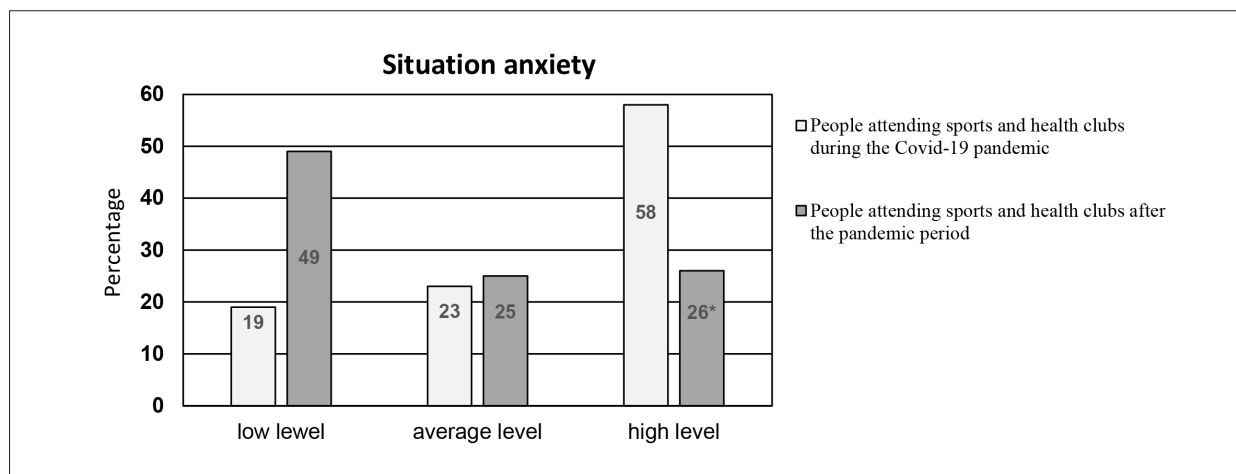


Figure 4. Distribution of indicators of situation anxiety of people attending sports and health clubs during and after the Covid-19 pandemic (percent)

* statistically reliable ($p < 0.05$) difference between groups

To sum up, it can be stated the assessment of situation anxiety by the people attending sports and health clubs was significant statistically reliably ($\chi^2(2) = 12.09$; $p < 0.05$), i.e., their situation anxiety was lower after the pandemic than during the period of the Covid-19 pandemic (Fig. 4).

DISCUSSION

In performing the declarative research, we paid special attention to the emotional states of people attending sports and health clubs during and after the period of the Covid-19 pandemic and did not analyze any other factors. On discussing the results of the research, we will analyze the components of the following emotional states: well-being, activity, mood and situation anxiety.

The results of our research showed the well-being, mood and activity of physically active people worsened significantly in relation with the Covid-19 pandemic. For example, even 46 percent of the researched indicated bad well-being, 48 percent – bad activity, and 47 percent – insufficient activity. However, the changes of the results of the researched attending sports and health clubs after the Covid-19 pandemic are significant, they revealed their well-being, activity and mood became better. We tend to support the statements of the research performed by some authors, for example, Leon-Zarceno, Moreno Tenas, Villela, Garcia-Naveira & Serrano-Rosa (2021), who state that physically active people suffered difficulties of their emotional state and psychological difficulties in relation with the Covid-19 pandemic as regards

home isolation and inability to do any sports in sports and health clubs. After introducing the quarantine restrictions, people had to observe them with no other choice, which caused emotional and psychological problems (Chtourou et al., 2020). This assumption also complies with the conclusions of the research performed by Mon-Lopez, Garcia-Aliaga, Bartolome & Solana (2020) that the mood of physically active people worsened after the introduction of the quarantine of the Covid-19 pandemic and its restrictions. It is supposed a worse mood was determined by the quarantine restrictions due to which the people were unable to do any sports in a usual way and were forced to stay at home.

Meanwhile, the study performed by Nienhuis & Lesser (2020) revealed men were more active physically than women during the pandemic. This may have been affected by the fact the men attending sports and health clubs had more motivation to support their physical activity level. Meanwhile, it is indicated in the other study performed by Barber & Kim (2021) men coped with anxiety better than women, but elderly men suffered from higher anxiety during the pandemic period. We can support this attitude partially, as our results showed physically active men and women felt higher situation anxiety during the pandemic period. There are some scientific studies contradicting this position: according to Turluc & Candel (2021), it was more difficult for men to cope with stress compared with women. A higher decrease of physical activity among the representatives of the male sex compared with the representatives of

the female sex was also noticed in the publication (Rodríguez-Larrad, et al., 2021).

However, a conclusion was drawn in the scientific studies performed by Schokkenbroek, Hardyns, Anrijs, Ponnet, Koen, (2021) that women had more stress-related problems during the pandemic and the closure at home and inability to practise any usual activities had the biggest influence. However, it should be noted the last scientific studies paid most attention to the revelation of causes for the emotional states of women and men during the period of the Covid-19 pandemic. It hinders the possibility to compare the results of our research, as we did not analyze the impact of the Covid-19 pandemic in the aspect of sex. Taking into account the results of the analysis of scientific literature and obtained results, it was possible to accentuate the main trends of further research and their limitations. Our research revealed scientists chose the trend of research analyzing the emotional states of people during the period of the Covid-19 pandemic mostly. We think the following answers should be answered in the future on performing scientific studies: in what way did the emotional states of sports-active people change during and after the period of the Covid-19 pandemic; which factors affected their alternation mostly and why; and how long have negative reactions of emotional states been felt?

We think it is also important to discuss the limitations of this research. The limitations of this research are also outlined by the fact a small sample of participants participated in the research. The participants of the research were also chosen by using the principles of non-probabilistic selection and personal acquaintanceships with specialists from sports and health clubs. For these reasons, the results of the performed research do not reflect any conclusions that are characteristic to the total population. Moreover, the researched sample was not homogenous in the aspects of sex or age. Nevertheless, higher distribution of sexes in the researched sample should be reached in the future research. The results of this research could be useful in compiling training programs or qualification improvement seminars for instructions or coaches from sports and health clubs, and including more information about the most popular false convictions about the analyzed topics.

CONCLUSIONS

The activity, mood and situation anxiety indexes of people attending sports and health clubs were much better after the Covid-19 pandemic than during the period of the Covid-19 pandemic.

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