Psychological Problems in Working and Learning Online

LEVEL OF FEAR, OPINION AND QUALITY OF STUDY DURING THE CORONAVIRUS PANDEMIC (COVID-19). HOW HARD IS IT TO GET BACK TO DAILY COMMITMENTS?

Mima Stanković, Katarina Nejić, Nenad Stojiljković

University of Niš, Faculty of Sport and Physical Education (Serbia)

Abstract. The appearance of the corona virus (COVID-19) occurred in China in December 2019, and after that it spread to other countries of the world, causing fear, anxiety and stress among people. The spread of the epidemic, strict isolation measures and the closure of schools, colleges and universities across the country have also affected students, who are also encountering a new form of learning for the first time. All higher education institutions in Europe, due to the impossibility of conducting classes, were forced to find the most suitable solutions for online learning and ensure the quality of learning in this form. In this research, a sample of 58 students from Nis who attend the Faculty of Sports and Physical Education, University of Nis, was analyzed. Respondents conducted a survey on the level of fear, opinion, and quality of study at the time of the Corona virus pandemic (COVID-19). The aim of this study was to determine the level of fear, opinion and quality of study during the Corona virus epidemic (COVID-19) and how difficult it is to return to daily commitments. A large percentage of students showed fear and concern about the pandemic (75%). The students felt that the material was clear to them, as well as greatly facilitated by the situation in the country. They also agreed that the availability of teaching content was at the highest level. As for wearing protective equipment, as many as 80% of students said that it was difficult for them to have that type of protection. This pandemic has taught us that online teaching is the only means of communication in emergency conditions, so it is necessary to include this type of teaching in every level of education.

Keyword: students; online teaching; anxiety

Introduction

The appearance of the coronavirus (COVID-19) occurred in China in December 2019, and after that virus spreads to other countries around the world, causing fear, anxiety and stress among people (Montemurro, 2020). First of all, there is a high risk of infection, and the concerns of family and friends also increase the stress rate.

COVID-19 has globally changed the lifestyle, daily routine, business, economy, and even the education system.

The majority of the population is depressed and at risk due to the growth of infection and the increasing number of deaths. In order to avoid the mass, spread of this virus, a decision was made on strict isolation measures. Without doubt, this has saved many lives, however this locking has also created big difficulties for people (Sharma et al., 2020). Due to the impossibility of conducting classes, all higher education institutions in Europe were forced to find the most appropriate solutions for online learning and ensure the quality of learning in this form. During this new situation, it is very difficult to prepare and teach students, because most professors are not trained to effectively use web resources for teaching. The spread of the epidemic, strict isolation measures and the closure of schools, colleges and universities across the country have also affected students, who are also encountering this type of learning for the first time. Exams that students prepared in recent months have also been postponed, without knowing when and how they will be conducted, which causes frustration and stress among them.

Previous research has addressed the impact of the epidemic on patients, medical staff and older adults (Li et al., 2020). A recent survey conducted in China surveyed 1,210 respondents and found that more than 50% of respondents reported moderate or severe psychological impact (Wang et al., 2020). It has recently been discovered that COVID-19 is associated with neurological impairments (Wu et al., 2020), which can violate cognitive functioning (Wu et al., 2020) and work performance (Lee et al., 2018). However, there is a lack of research on the psychological state of students and the way they study during the epidemic.

The aim of this study was to determine the level of fear, opinion and quality of study during the Corona virus epidemic (Covid-19) and how difficult it is to return to daily obligations. In this paper, a survey created by the author was used. The survey was compiled with the questions that are frequently asked in researches dealing with the consequences of pandemic.

Methods

Sample of respondents

In this research, a sample of 58 students from Niš was analyzed. The respondents were first-year students attending the Faculty of Sports and Physical Education of the University of Niš. The average age of students was 19 - 20 years, while students of both sexes participated in the research. All students listened to the subject "Methodology of games in physical education".

Sample measuring instruments and data processing (Test procedure)

As part of the testing in the exercises from the mentioned subject, the students filled in a survey (attached). A survey contained questions about the level of fear, opinion, and quality of study at the time of the Corona virus pandemic (COVID-19).

Also, the authors of the survey sought to find out how difficult it is to return to everyday obligations after the pandemic that struck us in mid-March. The results of the analysis are presented as numerical values and in percentages as frequencies of results. Table 1 shows the percentage distribution of answers for all questions covered by the survey.

Results and analisys

Respondents answered on 25 questions in the survey. Out of that, 13 questions were with two offered answers, and the other 12 with five. Questions with two offered answers contained an affirmative and a negative possibility (yes or no). As for the question with five offered answers, a scale with values from 1 - 5 was offered. In terms of motivation, 54% of students answered positively to the question of whether their motivation decreased during the pandemic. The other 46% had a negative answer to this question. On a scale of 1 to 5, 37% of students consider that the reduction was minimal and deserve a 1 on the scale, 15% rated the reduction with 2, 21% with 3, 13% with 4, while 14% of students felt that their motivation decreased in great measure.

When asked whether teaching content were available during the pandemic, all 100% of students answered positively to this question. On a scale from 1 to 5, there were no answers for 1, 3% of students rated accessibility with 2, 7% with 3, high 39% with 4, while 51% of students thought that the availability of teaching content was highly represented. The students confirmed with 100% affirmative answers that they had certain tasks by professors during the pandemic. 88% of them decided that the given tasks were clear and unambiguous. In terms of clarity, on a scale of 1-5 there was no answer for 1, while only 1% of students choose 2. The rest, 19% of them rated clarity with a score of 3, 36% of them choose 4, while even 44% rounded up on scale 5. When asked whether the professors provided adequate information, as many as 95%had a positive opinion, while only 5% said the opposite. For the same question on a 1 -5 scale there were no answers for 1, while for 2 and 3 there were 5% of respondents each. 31% decided for grade 4, and even 59% of students for 5. 89% thought that the teaching contents were adapted to the situation during the pandemic, while 11% of students did not think so. As for the distribution, there were no ones who rounded 1 on the scale, 5% of them decided for 2, 36% for 3, 39% for 4, while 20% rounded 5.

When asked if they lacked daily obligations, as many as 63% answered "yes", while 37% said that they did not lack obligations. The distribution on the scale was approximate and 13% of them answered with 1, 8% with 2, 27% with 3, 32% with 4 and 20% with 5. That students were scared for themselves and their loved ones during the pandemic said as many as 75%, while 25% answered no. On a scale of 1 to 5, 3% of students said 1, 13% of them 2, 31% said 3, 16% said 4, while the largest 37% rated fear with a score of 5. Students were asked if too much was expected of them during a pandemic and 57% felt it was not, while 43% thought the opposite.

On a scale from 1 to 5, with a score of 1, 15% of them rated the requirement, 21% with a score of 2, 28% with a score of 3 and 4, while only 8% opted for 5. 69% agreed that the material was facilitated during the pandemic, while there are those who did not think so (31%). Only 7% of students opted for 1, 18% for 2, the largest 33% for 3, 29% for 4, while there were 13% of students for 5.

When asked if it was difficult for students to adjust to obligations after the virus pandemic, as many as 62% said yes, while 38% said no. The percentage distribution showed 12% of students with answers 1 and 2, 33% with answers 3, 20 with 4, while 23% opted for 5. When it comes to wearing protective equipment, as many as 80% of students said that is difficult for them to carry protective equipment, while there were those who did not have such an opinion (20%). On a scale of 1 to 5, 6% opted for 1 and 2, 20% for 3, 14% for 4, while as many as 54% opted for 5.

Questions	YES (%)	NO (%)		2	3	4	5
1. Has your motivation for faculty obligations decreased during the state of emergency?	54	46					
2. On a scale of 1-5, how much has your motivation decreased?			37	15	21	13	14
3. Were the teaching contents available?	100	0					
4. On a scale of 1 – 5, how many teaching contents were available?			0	3	7	39	51
5. Did you have certain tasks by the professor during the pandemic?	100	0					
6. Were the tasks clear and unambiguous?	88	12					
7. On a scale of 1 – 5, how clear was the task?			0	1	19	36	44
8. Were professors available and provided with adequate information?	95	5					
9. On a scale of 1 – 5 rate the availability of professors?			0	5	5	31	59
10. Were the teaching facilities adapted to the situation at the time of the pandemic?	89	11					
11. On a scale of 1 – 5, to what extent were the teaching contents adapted to the situation?			0	5	36	39	20
12. Did you miss your daily college responsibilities during the pandemic?	63	37					
13. To what extent did you miss your daily responsibilities?			13	8	27	32	20
14. Were you scared for yourself and your loved ones during the pandemic?	75	25					
15. On a scale of 1 – 5 how scared were you?			3	13	31	16	37

Table1. Survey results presented in numerical values

16. Do you feel that you have been required too much during a pandemic?	43	57					
17. On a scale of 1 – 5 how much do you consider required?			15	21	28	28	8
18. Do you feel that your material was facilitated during the pandemic?	69	31					
19. On a scale of $1 - 5$, how much do you think the material is easier for you?			7	18	33	29	13
20. Was it difficult for you to adjust to your obligations after the pandemic?	62	38					
21. On a scale of 1 – 5, how hard was it for you?			12	12	33	20	23
22. Is it difficult for you to wear protective equipment (masks, gloves)?	80	20					
23. On a scale of 1 – 5, how difficult is it for you to wear protective equipment?			6	6	20	14	54
24. Are your exercises hard?	15	85					
25. On a scale of 1 – 5 how hard are they?			38	31	19	10	2

Discussion

It has been shown that an increase in the number of patients, as well as an increasing number of countries affected by the virus, cause public concern, which has increased anxiety (Bao et al., 2020). Previous research has shown that emergencies can have numerous psychological effects on students and can cause anxiety, fear, and worry (Mei et al., 2011). A study conducted during the early stages of the pandemic in the United States and Canada, confirms that 28% of the total sample of the population has elevated anxiety, and 22% experienced clinically significant depressive symptoms (Taylor, 2020). These data are also consistent with studies showing that approximately 25% of the general population of China experienced moderate to severe levels of anxiety, in response to COVID-19 (Wang et al., 2020). A study conducted in China on a sample of 7143 students shown that about three quarters (75.1%) had no symptoms of anxiety, while the proportion of students with mild, moderate and severe anxiety was 21,3%, 2,7% and 0,9%. These studies are consistent with studies of responses to some form of trauma (e.g., earthquakes, fires, floods), which show that most people are resistant to stress, although a significant minority are prone to stress-related psychopathology (Galatzer-Levy, Huang & Bonanno, 2018).

The main goal of this paper was to determine the level of fear, opinion and quality of study during the Corona virus epidemic (COVID-19) and how difficult it is to return to daily obligations, but the question is which factors affect the anxiety occurrence. That students during the pandemic were scared for themselves and loved ones said 75% of them, while 25% answered negative. Concerns of students about COVID-19 are related to the impact of the virus on their studies (Cornine et al., 2020). Student anxiety may have been caused by a gradual increase in the distance between quarantined people, while it is

known that anxiety disorders will occur in the absence of interpersonal communication (Xiao, 2020). Due to the outbreak of an epidemic, some families will lose their source of income, and students may feel worried about paying tuition (Peng et al., 2012). The lack of masks and disinfectants, the spread of inaccurate information through the media, also further contribute to the development of fear (Ayittey et al., 2020).

Concern for academic delays and the impact of the epidemic on daily life is also moderately and positively correlated with levels of anxiety. The strict measures taken by the government inevitably affected everyday life (Tang et al., 2020). When asked whether it was difficult for students to adjust to their obligations after the virus pandemic, as many as 62% answered that they did, while 38% thought that they did not. All higher education institutions in Europe were forced to use distance learning methods due to the impossibility of conducting classes (Kwok et al., 2020). These measures undoubtedly have a specific impact on education, professors and students. Regarding the quality of teaching, when asked whether teaching content were available during the pandemic, all 100% of students answered positively to this question, 95% answered in the affirmative that professors were available and provided adequate information and 89% that teaching contents were available.

As there are no effective vaccines and treatments against COVID-19, and a return to daily life and obligations is a necessity, the authors of Kim & Su, 2020, proposed personal preventive measures (wearing a face mask, hand hygiene) and organizational measures (good ventilation, social distance, COVID-19 testing). These measures can protect mental health and minimize the spread of COVID-19, improve self-esteem, financial situation and restore social cohesion while increasing the productivity of society, which will lead to a better quality of life, less depression and stress and better immunity (Evans & Repper, 2000). When it comes to wearing protective equipment, 80% of students said that they find it difficult to wear protective equipment, while there were 20% of them who did not have such an opinion. It is necessary to work on raising student's awareness of compliance with preventive measures that can prevent further consequences and spread of the virus. The limitations of this study are that for the purposes of this research only students of sports and physical education participated, as well as the fact that respondents were only one- year students. Also, the used questionnaire is not standardized, but can serve as an aid in identifying individuals at risk of fear, and it can also serve as feedback on the conduct of teaching and the quality of studies during a pandemic. In the following studies, a larger number of respondents is recommended, as well as the inclusion of other faculties.

Conclusion

The long prevalence and duration of this pandemic can lead to the creation of negative consequences for students. The consequences of this pandemic can be exacerbated for students who have had increased anxiety and decreased motivation, so social support and a fear management course are necessary to be able to overcome fear and find motivation for faculty obligations in similar events. In addition, it is very important that the teaching content is clear, tailored and accessible to students. This pandemic has taught us that online teaching is the only means of communication in emergency conditions, so it is necessary to include this type of teaching in every level of education. All educational institutions should organize workshops related to the use of online learning and teaching.

Acknowledgments. The authors would like to thank the students of the Faculty of Sports and Physical Education for their cooperation, who conducted a survey for the purposes of this research. Special thanks for the support belong to the Ministry of Education, Science and Technological Development of the Republic of Serbia, which made this research possible within the project "Physical activity and fitness components of the elderly" no. OI179056.

REFERENCES

- Ayittey, F. K., Ayittey, M. K., Chiwero, N. B., Kamasah, J. S. & Dzuvor, C. (2020). Economic impacts of Wuhan 2019-nCoV on China and the world. *Journal of Medical Virology*, 92(5), 473 – 475.
- Bao, Y., Sun, Y., Meng, S., Shi, J. & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. *The Lancet*, *395*(10224), 37 38.
- Cornine, A. (2020). Reducing nursing student anxiety in the clinical setting: An integrative review. *Nursing education perspectives*, 41(4), 229 – 234.
- Evans, J. & Repper, J. (2000). Employment, social inclusion and mental health. *Journal of psychiatric and mental health nursing*, 7(1), 15 24.
- Galatzer-Levy, I. R., Huang, S. H. & Bonanno, G. A. (2018). Trajectories of resilience and dysfunction following potential trauma: A review and statistical evaluation. *Clinical Psychology Review*, *63*, 41 55.
- Kwok, K. O., Wong, V., Wei, V. W. I., Wong, S. Y. S. & Tang, J. W. T. (2020). Novel coronavirus (2019-nCoV) cases in Hong Kong and implications for further spread. *Journal of Infection*, 80(6), 671 – 693.
- Lee, Y., Rosenblat, J. D., Lee, J., Carmona, N. E., Subramaniapillai, M., Shekotikhina, M. & Yim, S. J. (2018). Efficacy of antidepressants on measures of workplace functioning in major depressive disorder: a systematic review. *Journal of affective disorders*, 227, 406 – 415.
- Li, S. W., Wang, Y., Yang, Y. Y., Lei, X. M. & Yang, Y. F. (2020). Analysis of influencing factors of anxiety and emotional disorders in children and adolescents during home isolation during the epidemic of novel coronavirus pneumonia. *Chinese Journal of Child Health*, 28(3), 1–9.

- Mei, S. L., Yu, J. X., He, B. W. & Li, J. Y. (2011). Psychological investigation of university students in a university in Jilin Province. *Medicine and Society*, 24(05), 84 86.
- Montemurro, N. (2020). The emotional impact of COVID-19: From medical staff to common people. *Brain, behavior, and immunity*.
- Peng, L., Zhang, J., Li, M., Li, P., Zhang, Y., Zuo, X. & Xu, Y. (2012). Negative life events and mental health of Chinese medical students: the effect of resilience, personality and social support. *Psychiatry research*, 196(1), 138 – 141.
- Sharma, S., Sharma, M., & Singh, G. (2020). A chaotic and stressed environment for 2019-nCoV suspected, infected and other people in India: fear of mass destruction and causality. *Asian journal of psychiatry*, 51, 102049.
- Tang, B., Bragazzi, N. L., Li, Q., Tang, S., Xiao, Y., & Wu, J. (2020). An updated estimation of the risk of transmission of the novel coronavirus (2019nCov). *Infectious disease modelling*, 5, 248 – 255.
- Taylor, S. (2019). *The psychology of pandemics: Preparing for the next global outbreak of infectious disease*. Cambridge Scholars Publishing.
- Wang, C., Horby, P. W., Hayden, F. G., & Gao, G. F. (2020). A novel coronavirus outbreak of global health concern. *The Lancet*, *395*(10223), 470 473.
- Wu, Y., Xu, X., Chen, Z., Duan, J., Hashimoto, K., Yang, L., ... & Yang, C. (2020). Nervous system involvement after infection with COVID-19 and other coronaviruses. *Brain, behavior, and immunity*.
- Xiao, C. (2020). A novel approach of consultation on 2019 novel coronavirus (COVID-19)-related psychological and mental problems: structured letter therapy. *Psychiatry investigation*, 17(2), 175.

Mima Stanković ORCID ID: 0000-0003-3328-0830

Katarina Nejic ORCID iD: 0000-0003-4191-7061

Nenad Stojiljkovic

ORCID ID 0000-0002-6059-1899

Faculty of Sport and Physical Education University of Niš Niš, Serbia E-mail: mima.stankovic974@gmail.com