



Research Article

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Managing the post-COVID-19 situation under the influence of anxiety levels among teacher education students at the Faculty of Educational Sciences, University of Shkodra

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Abstract

The management of the post-COVID-19 situation was accompanied by the influence of various factors, including psychological factors with differing levels of impact. Anxiety, stress levels, symptoms of post-traumatic stress, phobias, and depression are some of the key psychological factors that commonly emerge in response to such a threatening health crisis.

In this modest exploratory research study, we aim to assess how the post-COVID-19 situation was managed under the influence of anxiety among a sample of 85 students enrolled in teacher education programs. The findings suggest a generally good level of engagement with vaccination, which does not show a statistically significant correlation with anxiety. The relatively low levels of anxiety reported by the students indicate effective management of the post-COVID-19 period.

Keywords: COVID-19, student, anxiety, vaccination.

1. Introduction

This article presents the research contribution regarding the management of the post-COVID-19 period among university students. The study draws from a broader research project conducted at the University of Shkodra "Luigj Gurakuqi," specifically within the Faculty of Educational Sciences. It is important to note that the study sample included only students from teacher education programs, reflecting shared academic interest in this target group. The impact of the COVID-19 pandemic on human society, including the Albanian context, was manifested in multiple dimensions, particularly in the psychological domain. The psychological aspects of coping with the pandemic and their role in managing its effects among university youth are central to the rationale behind this research contribution. Main aim of this study is to analyze how education students have managed the post-COVID-19 period, with a particular focus

on the influence of anxiety levels. A secondary objective is to collect empirical data on students' experiences with COVID-19, including infection status, treatment methods, and frequency of vaccination. A third objective is to explore the correlation between anxiety levels and both vaccination frequency and treatment methods used during infection.

To achieve these aims, the study defines the following specific objectives:

- To provide a conceptual overview of relevant literature on COVID-19 and anxiety;
- To define a clear methodological framework for the research (including sample selection, assessment instruments, and methodological techniques);
- To administer and process empirical data;
- To interpret and present key research findings;
- To conduct a comprehensive analysis of the results.

Based on these aims and objectives, the study is structured around these research questions:

1. What is the personal experience with COVID-19 among students in the sample?
2. What treatment approaches were used during their COVID-19 infection?
3. What is the vaccination status of the students in the sample?
4. What are the reported anxiety levels, and are they associated with vaccination status?

In conclusion, the study adheres to a clearly defined structure and has been conducted in full compliance with required ethical standards and academic integrity principles. According to the World Health Organization (WHO), COVID-19 is an infectious disease caused by the virus known as SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2). This virus is part of the coronavirus family and can cause a wide range of symptoms, from mild ones (like the flu) to severe diseases, such as pneumonia, and can lead to death, especially in individuals at higher risk, such as the elderly and those with other pre-existing health conditions (WHO, 2020). The COVID-19 pandemic has had a significant impact on people's lives worldwide. It has disrupted work, education, healthcare, the economy and relationships. Anxiety is a psychological state marked by emotional tension, persistent worry, and physiological responses such as elevated blood pressure (American Psychological Association [APA], 2020, p. 66). People who struggle with anxiety disorders frequently deal with repetitive and intrusive thoughts or apprehensions, which can lead them to avoid particular situations out of emotional distress. Physical symptoms are also common and may include sweating, trembling, dizziness, and an accelerated heart rate. Although anxiety and fear are terms that are sometimes used interchangeably, they represent distinct experiences. Anxiety is typically future-oriented and sustained over time, often linked to vague or non-specific threats. In contrast, fear is an immediate, short-term emotional response to a well-defined and identifiable danger (Hoti & Hoti, 2021). Whereas anxiety reflects a generalized emotional condition, fear is associated with a direct reaction to present circumstances.

During COVID-19, impacts on people's anxiety were observed, as reflected in many studies. A systematic qualitative review was conducted by Saeed et al. (2022) to

investigate the prevalence and association of anxiety in different population samples related to the COVID-19 pandemic. The results of this systematic review indicate that the COVID-19 pandemic negatively affected the mental health of many populations in society. Anxiety is prevalent within the general population, healthcare workers, university students, and other vulnerable groups. The prevalence of anxiety among students was 34.7% (Saeed et al., 2022).

A study conducted in China on the consequences of COVID-19 on the population found that depression had a prevalence of 15%, anxiety 28.8%, and high-level stress 8.1% (Wang et al., 2020). Asmundson and Taylor (2020) studied the impact of the COVID-19 pandemic on mental health, identifying a significant increase in health-related anxiety among individuals. The researchers emphasized the factors contributing to the rise in anxiety during the pandemic, including insecurity and social changes, fear for health, and lack of control. They recommended psychological support and measures for managing anxiety and fear during crises (Asmundson & Taylor, 2020). This was further reinforced by Lima et al. (2021), who emphasized that anxiety is the most common response in the population to extreme situations such as a pandemic.

Halperin et al. (2021) reported that the prevalence of anxiety among university students was 30.6%. Islam et al. (2020) reported that anxiety among university students had worsened compared to pre-pandemic levels and with the duration of lockdowns. In contrast, Kim et al. (2021) did not report significant changes in anxiety during lockdowns. A study conducted in Kosovo with 657 students from 6 universities analyzed the impact of the COVID-19 pandemic on the mental health of students. The results showed that 79.2% of the study participants experienced anxiety, specifically 16.9% reported severe anxiety levels, 24.2% moderate, and 38.1% mild anxiety (Jetishi Çollaku, 2024). A study by Diana et al. (2023) showed that Filipino nursing students tended to engage in various health behaviors during the pandemic (Diana et al., 2023).

2. Methodology

This study is empirical in nature and follows an analytical-descriptive, exploratory, and correlational approach. It aims to interpret empirically collected data by describing and analyzing them in alignment with the research questions presented. To achieve its research goals, the study employs a diverse methodological framework that includes frequency analysis, percentages, cross-tabulations, and correlation techniques, among others.

The sample for this study consists of students enrolled in teacher education programs within the Faculty of Educational Sciences at the University of Shkodra. The selection was carried out through a census approach. Based on institutional data, over 70% of registered students were included in the study. Participation was voluntary, without any form of coercion. A total of 85 students met the inclusion criteria: they were Bachelor's level students enrolled in teacher training departments of the Faculty

of Educational Sciences. Only a small number of students declined to participate. The branches included in the study were those most directly related to the field of education, specifically: Elementary Education, Pre-school Education, Music Pedagogy, and Graphic Design & Painting.

To collect empirical data, a two-part instrument was developed. The first part includes four multiple-choice questions aimed at gathering information on students' experience with COVID-19, such as infection status, frequency of infection, treatment methods, and vaccination frequency. The second part consists of the Beck Anxiety Inventory (BAI). The instrument was adapted into Albanian and underwent a pilot testing phase to ensure clarity and reliability.

The questionnaires were administered during seminar sessions, in accordance with institutional regulations that require mandatory attendance. This strategy allowed for the inclusion of the highest possible number of regular students from each relevant department. Prior to filling out the questionnaire, students were informed about the purpose of the study and the method of completion. Anonymity and confidentiality were assured. Ample time was given to complete the questionnaire individually.

The completion process was supervised directly by the research team. Clarifications were provided when needed, although such instances were minimal. After completion, the questionnaires were collected, resulting in a total of 85 completed instruments.

Following this, data entry was conducted using Microsoft Excel, and statistical analysis was carried out using SPSS.

3. Results and discussion

A total of 85 students provided valid responses, all of whom belong to four teacher education programs. The distribution of the sample by field of study is presented in Table 1.

Table 1. Distribution of Students by Field of Study

Field of Study	Frequency	Percentage
Primary Education	30	35.3%
Pre-school Education	8	9.4%
Music Pedagogy	21	24.7%
Graphic Design & Painting	26	30.6%
Total	85	100%

Based on Table 1, the frequency and percentage distribution is as follows: 30 students (35.3%) are enrolled in the Primary Education program, 8 students (9.4%) in Pre-school Education, 21 students (24.7%) in Music Pedagogy and 26 students (30.6%) in the Graphic Design and Painting program.

Table 2. Students' Experience with COVID-19 by Field of Study

Personal Experience with COVID-19	Primary Education	Pre-school Education	Music Pedagogy	Graphic Design & Painting	Total
I have not been infected with COVID-19	11	5	13	10	39
I have been infected once	15	3	7	12	37
I have been infected more than once	4	0	1	4	9
Total	30	8	21	26	85

According to the data presented in Table 2, out of a total of 85 students, 39 students have not contracted COVID-19, while 46 students have tested positive. The experience with COVID-19 among our sample varies according to their field of study and is presented as follows:

“Primary Education” program: Out of 30 students in total, 11 students (36.7%) have not been infected with COVID-19, while 19 students (63.3%) have been infected. Among those infected, 15 students contracted the virus once, and 4 students were infected more than once.

“Preschool Education” program: This group includes 8 students. Among them, 5 students (62.5%) have not been infected by COVID-19, while 3 students (37.5%) have been infected only once. There were no reported cases of repeated infections in this program.

“Music Pedagogy” program: Out of 21 students in total, 13 students (61.9%) have not contracted the virus, 7 students (33.3%) have been infected once, and only 1 student (4.8%) has been infected more than once.

“Painting and Graphics” program: This program included 26 students. Of these, 10 students (38.5%) have not contracted COVID-19, 12 students (46.2%) were infected once, and 4 students (15.4%) have been infected more than once.

Table 3. COVID-19 Treatment Methods by Field of Study

If you were infected, how did you treat COVID-19?	Primary Education	Pre-school Education	Music Pedagogy	Graphic Design & Painting	Total
Managed it without isolation, using traditional/“folk” remedies	6	0	4	8	18
Isolated at home with a light treatment based on advice from non-medical acquaintances	8	2	3	6	19
Isolated at home with a standard treatment as prescribed by a medical professional	5	1	4	5	15
Total	19	3	11	19	52

The data presented in Table 3 illustrate the different ways students who contracted COVID-19 managed their illness. Out of the 52 students who reported having been infected with the virus, treatment approaches were as follows:

18 students (34.6%) managed the illness on an outpatient basis using traditional or “folk” remedies, without professional medical support. 19 students (36.5%) self-isolated and followed non-medical advice, typically obtained from individuals who had previously experienced COVID-19. 15 students (28.9%) treated the illness through self-isolation and adherence to a treatment plan recommended by healthcare professionals. No cases of hospitalization were reported among students in any of the academic programs.

With regard to the distribution of treatment approaches by field of study, the following patterns were observed:

The “Painting and Graphic Design” program had the highest number of students who followed folk or non-medical treatments (N = 8). The “Lower Cycle Education” program showed the greatest concentration of students who isolated and followed non-professional advice. The “Music Pedagogy” program had a relatively even distribution across all three treatment categories. The “Preschool Education” program did not report any cases of students using folk or informal treatments.

Table 4. COVID-19 Vaccination Frequency by Field of Study

COVID-19 Vaccination Frequency	Primary Education	Pre-school Education	Music Pedagogy	Graphic Design & Painting	Total
Unvaccinated	9	2	6	13	30
Vaccinated once	7	0	1	1	9
Vaccinated twice	13	6	11	11	41
Vaccinated three times	1	0	3	1	5
Total	30	8	21	26	85

Based on the data from Table 4, 55 students (64.7%) were vaccinated against COVID-19, while 30 students (35.3%) remained unvaccinated. Among those vaccinated, the majority (N = 41) received two doses, 9 students were vaccinated once, and 5 students received three doses.

Two-dose vaccination was the most common across all fields of study (48.2% of the sample). The “Painting and Graphic Design” program had the highest proportion of unvaccinated students (50.0%), while “Preschool Education” showed the highest rate of full two-dose vaccination (75.0%) and no students vaccinated only once or three times. The “Music Pedagogy” program had the highest percentage of students vaccinated three times (14.3%).

Overall, while most students followed basic vaccination guidelines, a considerable portion (over one-third) remained unvaccinated, potentially reflecting personal attitudes, skepticism, lack of information, or other sociocultural factors.

Table 5. Distribution of Anxiety Levels by Field of Study

Anxiety Levels	Primary Education	Pre-school Education	Music Pedagogy	Graphic Design & Painting	Total
No anxiety	14	4	15	17	50
Low anxiety	10	3	5	7	25
High anxiety	6	1	1	2	10
Total	30	8	21	26	85

According to Table 5, out of 85 students in the sample, 50 students reported no anxiety, 25 students reported low anxiety, and only 10 students reported high anxiety levels. This means that 59% of the students fall within the non-anxious category (N = 50). The data indicate that most students do not experience high levels of anxiety. However, a significant proportion (approximately 41.2%) report either low or high anxiety levels.

The Primary Education program shows the highest percentage of students with high anxiety (20%), while Music Pedagogy and Painting–Graphics report the lowest rates of high anxiety. Although the Preschool Education program includes a small number of students, it shows a relatively balanced distribution with some presence of both low and high anxiety.

These findings suggest that, although the majority of students do not report problematic anxiety, a considerable minority may require psychological support—especially in academic programs where professional stress is potentially more prevalent. It is recommended that educational institutions provide targeted psychosocial support to enhance the mental well-being of students.

The Pearson correlation coefficient is $r = 0.149$, indicating a weak positive correlation between the two variables. The p-value (Sig. 2-tailed) is 0.172, which is greater than the standard threshold of 0.05. This means the correlation is not statistically significant. Although there is a slight positive trend—suggesting that students with higher anxiety levels may be slightly more likely to have received more COVID-19 vaccine doses—this relationship is not strong enough to be considered meaningful in a statistical sense.

In conclusion, the data do not support a significant association between anxiety levels and vaccination status among the students in this sample. Therefore, it appears that students' decisions to get vaccinated were not primarily influenced by their levels of anxiety.

Table 6. Correlation between Anxiety Levels and COVID-19 Vaccination Status

		Anxiety levels	How many times have you been vaccinated to be protected against Covid?
Anxiety level	Pearson Correlation	1	.149
	Sig. (2-tailed)		.172
	N	85	85
How many times have you been vaccinated to be protected against Covid?	Pearson Correlation	.149	1
	Sig. (2-tailed)	.172	
	N	85	85

4. Conclusion

Below are the conclusions deriving from the presented results, which are structured around the research questions outlined in this study.

- What is the personal experience with COVID-19 among the students in our sample?** Based on the findings, over 50% of the students in the sample reported having been infected with COVID-19. Nonetheless, there remains a relatively high number of students who have not been infected, despite the pandemic having spread globally for more than a year. Only a small portion of those infected (just over 10%) reported having been infected more than once. Overall, the infection rate in our sample can be considered moderate.
- What treatment methods were used during their COVID-19 infection?** Among the students who were infected, approximately 70% reported having used non-medical treatment approaches. Only 30% received treatment based on medical recommendations. These findings suggest that many students either experienced mild symptoms, managed the illness informally, or neglected strict treatment protocols.
- What is the vaccination status of the students in our sample?** Around 65% of the students reported being vaccinated, with some having received more than one dose. Notably, vaccination was also reported by students who had not been infected with COVID-19, indicating a generally positive attitude and responsible behavior regarding protection against the virus.
- What are the reported anxiety levels among these students, and are they associated with vaccination status?** Most students exhibited non-clinical or low levels of anxiety. An exception was observed in approximately 12–13% of students, who reported anxiety levels that exceeded what might be considered normal in pandemic-related circumstances. The majority of students appear to manage the

situation without significant anxiety-related disturbances, and their emotional responses to COVID-19 are largely under control.

Anxiety levels appear to have little to no influence on vaccination behavior. This is supported not only by a low correlation coefficient ($r = 0.149$), but also by the fact that even students who had not been infected chose to get vaccinated.

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