



COVID-19 pandemic and student health: analysis of the correlation between psychopathologies and *Burnout* syndrome

Pandemia de COVID-19 e a saúde dos estudantes: análise da correlação entre psicopatologias e a síndrome de Burnout

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ABSTRACT

To analyze the correlation between stress, anxiety, and depression with the Burnout syndrome in undergraduate students at a federal public university. This is an exploratory-descriptive study, with a quantitative approach, which used an online questionnaire for data collection, which took place from December 2021 to March 2022, available by email. 169 students participated in the study, in which the correlation between sociodemographic variables and the dimensions stress, anxiety and depression showed that Brazilians, especially women and practitioners of some religion, showed higher scores. As for the Burnout syndrome, high values were observed for the emotional exhaustion and professional efficacy dimensions, but low scores for the disbelief dimension. When verifying the correlation between the anxiety, depression and stress scale and the Burnout syndrome, a negative relationship between its domains and student effectiveness was noticed. A correlation was also revealed between depression and emotional exhaustion.

Keyword: Anxiety. Burnout. Depression. Stress psychological.

RESUMO

Analisar a correlação entre estresse, ansiedade e depressão com a síndrome de Burnout em estudantes de graduação de uma universidade pública federal. Trata-se de um estudo exploratório-descritivo, com abordagem quantitativa, que utilizou um questionário *on-line* para coleta de dados, que ocorreu entre dezembro de 2021 e março de 2022, disponibilizado por *e-mail*. Participaram 169 discentes, e a correlação entre as variáveis sociodemográficas e as dimensões estresse, ansiedade e depressão evidenciou que os brasileiros, principalmente as mulheres e praticantes de alguma religião, mostraram escores mais elevados. Quanto à síndrome de Burnout, notaram-se valores altos para as dimensões exaustão emocional e eficácia



profissional, mas escores baixos para a dimensão descrença. Ao verificar-se a correlação entre a escala de ansiedade, depressão e estresse e a síndrome de Burnout, percebeu-se uma relação negativa entre seus domínios e a eficácia estudantil. Revelou-se também uma correlação entre a depressão e a exaustão emocional.

Palavras-chave: Ansiedade. Burnout. Depressão. Estresse psicológico.

INTRODUCTION

In higher education, health institutions around the globe were affected by the COVID-19 pandemic. Physical distancing measures required adapting several aspects of daily life, including the adoption of remote education¹. The changes thus provoked led to a decline in the mental health of university students, due to the suspension of academic activities².

Currently, stress, anxiety and depression are the mental disorders that affect the working population the most, especially in the case of university students. The same is true for burnout, which, in the university context, is a mental disease strongly tied to working conditions in academic life^{3,4}. In this environment, students are more susceptible than the general population. Their psychosocial wellbeing, interpersonal relations, and academic performance are affected, leading to feelings of personal ineptitude and low self-esteem. In addition, COVID-19 increased the prevalence of said disorders in universities, and, according to literature, depression is one of the most common among students⁵.

With the arrival of the pandemic, graduation students were affected by a “digital burnout syndrome”, term derived from the time they spend exposed to technological devices, be it for leisure or learning. Work demands and difficulties had a negative influence on the reduction of academic involvement, contributing to a predictable mental exhaustion⁶. An exploratory study carried out with Portuguese students to assess the levels of anxiety, depression, and stress from 2018 to 2019, and compare these values with those from the period of COVID-19, showed a significant increase in these psychological disturbances in the pandemic era, with an impact on higher education⁷.

Thus, considering the challenges proposed by the COVID-19 pandemic, as well as its impacts on mental health and its effects on academic performance, this study aimed to analyze the co-regulation of stress, anxiety, depression, and the burnout syndrome, in graduation students from the University for International Integration of the Afro-Brazilian Lusophony (UNILAB).

METHODOLOGY

This is an exploratory, descriptive, and qualitative study, carried out via data collection. We used an on-line questionnaire made available from December 2021 to March 2022 in the platform Google Forms. Said questionnaire was sent to the e-mails of students from the in-person courses of the University for International Integration of the Afro-Brazilian Lusophony (UNILAB), for all campuses in the state of Ceará.

We decided to carry out an on-line study, even though in-person activities had already been resumed in the institution, in order to mitigate the potential dissemination of the SARS-CoV-2 virus, which causes COVID-19, due to its high rates of infection and death. This measure was adopted considering that, at time of study, the student population was not yet entirely vaccinated. Furthermore, in this period, scientific information was intensely divulged, including COVID-19 symptoms and forms of dissemination, which was also considered in our choice to collect data in this manner.

UNILAB is a federal higher education institution, which aims to integrate Brazilian students and those from the Community of Portuguese Language Countries. It has campuses in two Brazilian states (Ceará and Bahia) and several graduation and post-graduation courses. For this research, we included students of in-person graduation classes from the campuses at Ceará, who were actively enrolled in these courses, were 18 years old or older, and agreed to participate by signing the Free and Informed Consent Form (FICF). We excluded students who were on medical or other types of leave during collection, as well as those who did not respond to at least 80% of the questionnaire.

The sample was formed using a sample calculation for a finite population, considering a confidence level of 95% and a sample error of 5%. We also applied a stratified sampling technique, in order to increase the confidence level of the study. Thus, considering this calculation, we determined that the research should include 350 students. However, only 169 participated, that is, those who attended the established criteria. It is worth highlighting that the students were invited individually, via e-mail, using the tool “hidden recipients”. The e-mail addresses were requested to the Board of Academic Registry and Control (DRCA) and were sent a link with the FICF and the questionnaire.

The study was approved by the Research Ethics Committee (REC) at UNILAB, through Plataforma Brazil, receiving opinion No. 5.148.754 and Certificate of Submission for Ethical Appreciation (CAAE) No.53128521.6.0000.5576. Furthermore, we followed the

recommendations and ethical precepts of Resolution No. 466/2012, from the National Council of Health, and those from the Declaration of Helsinki. It should be noted that the FICF informed students about the nature of the work, its goals, methods, and expected benefits, as well as potential for risks and discomfort.

The first part of the instrument, used to identify the sample, was formed by items related to the pandemic and to the graduation course at UNILAB. To verify anxiety, stress, and depression levels, we used the brief version of the depression anxiety stress scales (EADS-21) by Lovibond and Lovibond, as translated and adapted to Brazil by Ribeiro, Honrado, and Leal⁸. This version attributes 7 points to each dimension (anxiety, depression, and stress), using a Likert scale from 0 to 1 to measure it. It enables determining the state relative to the week prior to its application.

The classification of scores according with degrees of severity was as follows: normal (anxiety 0-7; depression 0-9; stress 0-14); light (anxiety 8-9; depression 10-13; stress 15-18); moderate (anxiety 10-14; depression 14-20; stress 19-25); severe (anxiety 15-19; depression 21-27; stress 26-33); and very severe (anxiety ≥ 20 ; depression ≥ 28 ; stress ≥ 34)⁹.

To investigate burnout in the students, we used the instrument Maslach Burnout Inventory – Student Survey (MBI-SS)¹⁰, validated by Schaufeli *et al.* (2002)¹¹. The MBI-SS is formed by three dimensions that correspond to emotional exhaustion (five questions), cynicism (four questions), and professional efficacy (six questions). The answers vary on a Likert scale from 1 (never) to 6 (every day).

Scores were standardized for analysis. At first, the score of each answer for the dimensions was added up; then, it was subtracted by the sum of the minimum values of all dimensions; finally, they were divided by the sum of the maximum values and the sum of minimum values of each dimension. As Bianchi, Schonfeld e Laurent¹², we categorized the dimensions in high and low levels. Students with standardized scores below 50% were classified as low, while those with scores above 50% were classified as high. Nonetheless, we adopted, as an indicator of burnout, scenarios where students showed, simultaneously, high levels of emotional exhaustion and cynicism, in addition to low levels of professional efficacy.

For analysis, we stored data on a Microsoft Excel[®] 2019 spreadsheet, after what it was exported into the statistical package IBM-SPSS 22.0, where all statistical analyses were conducted. We found means and percentages of correlations between sociodemographic variables and the three dimensions of EADS-21, and between the three dimensions of MBI-SS

and the classification of high and low. Finally, we applied Spearman's correlation to verify the association and the significance of data from MBI-SS and EADS-21.

RESULTS

169 in-person undergraduate students from the University for International Integration of the Afro-Brazilian Lusophony were part of this study. As we analyzed the sociodemographic aspects, we found that most participants were Brazilian ($n=131$; 77.5%) and female (56.8%). In addition, 66.2% practiced some religion, and 67.4% did not drink. Regarding their academic progress, 49.7% were from the first to the third semester of the course and presented a Student Development Index (SDI) above 7, as Table 1 shows.

Results show that the correlation between variables and the dimensions of stress of EADS-21 indicated that foreign students, despite not being the majority in the study population, had better levels of normality than Brazilian ones. That is, they presented severe scores less often (p -value = 0.001), as Table 1 shows.

Furthermore, other variables also presented worrisome findings, when related to severe and very severe scores in the dimension of stress of EADS-21, such as gender (p -value=0.015), with 20.1% of students from severe to very severe, 10.7% of whom were women. Accordingly, nearly 11.7% and 11.9% of individuals who, respectively, practiced no religion (p -value=0.001) or did not drink (p -value = 0.014) were represented in both severe scores (Table 1).

In addition, individuals with suspected or confirmed COVID-19 cases (p -value = 0.021) were more likely to present moderate to very severe scores (23.7%) than those who answered that they had no suspected or confirmed case (10%), although most participants fit into the latter description. This data shows that there is a higher degree of stress associated to those which could be affected by the disease, or have it confirmed that they were infected (Table 1).

Table 1. Classification of the dimension stress (EADS-21) in higher education students, correlated to sociodemographic variables, UNILAB, Ceará, 2022

Variables	EADS-21 – Stress											
	Not normal		Mild		Moderate		Severe		Very severe		p-value	
	N	%	N	%	N	%	N	%	N	%		
Semester in the course	From 1st to 3rd	52	30.8	6	3.6	13	7.7	6	3.6	7	4.1	0,380
	4th to 6th	24	14.2	4	2.4	5	3.0	7	4.1	4	2.4	
	7th or later	21	12.4	5	3.0	5	3.0	9	5.3	1	0.6	
SDI	< 7	2	1.2	0	0	1	0.6	1	0.6	1	0.6	0.186

	> 7	68	40.2	13	7.7	20	11.7	20	11.8	9	5.3	
	Did not answer	27	16.0	2	1.2	2	1.2	1	0.6	2	1.6	
Country of origin	Brazil	62	36.7	14	8.3	23	13.6	20	11.8	12	7.1	0.001*
	Foreign	35	20.7	1	0.6	0	0	2	1.2	0	0	
Sex	Female	48	28.4	10	5.9	20	11.8	13	7.7	5	3.0	0.015*
	Male	49	29.0	5	3.0	3	1.8	9	5.3	7	4.1	
Religious practice	Yes	77	45.6	8	4.7	12	7.1	9	5.3	6	3.6	0.001*
	No	20	11.8	7	3.6	11	6.5	13	7.7	6	3.6	
Drinking	Yes	22	13.0	6	3.6	13	7.7	8	4.7	6	3.6	0.014*
	No	75	44.4	9	5.3	10	5.9	14	8.3	6	3.6	
Confirmed or suspected COVID-19 case	Yes	45	26.6	8	4.7	16	9.5	13	7.7	11	6.5	0.021*
	No	52	30.8	7	4.1	7	4.1	9	5.3	1	0.6	
Disrespected social distancing	Yes	14	8.3	3	1.8	3	1.8	3	1.8	1	0.6	0.512
	No	46	27.2	5	3	10	5.9	5	3	7	4.1	
	Moderate	37	21.9	7	4.1	10	5.9	14	8.3	4	2.4	

* Significant correlation

Source: Research data, 2022.

Regarding the dimension of anxiety, foreign students showed lower levels when compared to Brazilians - their scores were mostly from moderate to very severe (43.7); however, as opposed to the dimension of stress, some students were present in all classifications. In addition, 67.4% of participants who reported not drinking had some level of anxiety, from mild to very severe (p-value = 0.014). In accordance with the dimension of stress, students with confirmed or suspected COVID-19 cases were more likely to be classified as moderate (7.1%), severe (11.2%), or very severe (20.7%), when compared to those who answered "no" to this variable (Table 2).

Table 2. Classification of the dimension anxiety (EADS-21) in higher education students, correlated to sociodemographic variables, UNILAB, Ceará, 2022

Variables	EADS-21 – Anxiety										p-value	
	Not normal		Mild		Moderate		Severe		Very severe			
	N	%	N	%	N	%	N	%	N	%		
Semester in the course	From 1st to 3rd	41	24.3	8	4.7	9	5.3	17	10.1	9	5.3	0.266
	4th to 6th	15	8.9	1	0.6	10	5.9	9	5.3	9	5.3	
	7th or later	14	8.3	4	2.4	7	4.1	11	6.5	5	3	
SDI	< 7	1	0.6	1	0.6	1	0.6	0	0	2	1.2	0.064
	> 7	52	30.8	7	4.1	19	11.2	35	20.7	17	10.1	
Country of origin	Did not answer	17	10.1	5	3	6	3.6	2	1.2	4	2.4	0.035*
	Brazil	47	27.8	10	5.9	20	11.8	32	18.9	22	13	
Sex	Foreign	23	13.6	3	1.8	6	3.6	5	3	1	0.6	0.609
	Female	35	20.7	7	4.1	16	9.5	23	13.6	15	8.9	
Religious practice	Male	35	20.7	6	3.6	10	5.9	14	8.3	8	4.7	0.130
	Yes	53	31.4	9	5.3	17	10.1	22	13	11	6.5	
Drinking	No	17	10.1	4	2.4	9	5.3	15	8.9	12	7.1	0.012*
Yes	14	8.3	6	3.6	7	4.1	19	11.2	9	5.3		

Confirmed or suspected COVID-19 case	No	56	33.1	7	4.1	19	11.2	18	10.7	14	8.3	0.013*
	Yes	29	17.2	7	4.1	14	8.3	25	14.8	18	10.7	
	No	41	24.3	6	3.6	12	7.1	12	7.1	5	3	
Disrespected social distancing	Yes	11	6.5	2	1.2	5	3.0	5	3.0	1	0.6	0.397
	No	35	20.7	6	3.6	9	5.3	11	6.5	12	7.1	
	Moderate	24	14.2	5	3.0	12	7.1	21	12.4	10	5.9	

* Significant correlation

Source: Research data, 2022.

The depression dimension, in turn, was quite worrisome, considering the high prevalence of students in the worst levels of the EADS-21 index (severe and very severe). A large portion of students with an SDI above 7 presented a "normal" stage of depression, that is, they could damage control to carry their activities well; however, nearly 36.7% expressed severe and very severe levels (p-value = 0.003) (Table 3).

Regarding sex, male results were better and more often within normal ranges. On the other hand, women had a proportionally higher prevalence in moderate (11.8%), severe (11.2%), and very severe (17.2%) results, which was statistically significant (p-value = 0.007). As in Tables 1 and 2, the highest results in the first levels (severe and very severe) of this dimension added up to 32% among those who stated they suspected or confirmed cases of COVID-19 (Table 3).

Table 3. Classification of the dimension depression (EADS-21) in higher education students, correlated to sociodemographic variables, UNILAB, Ceará, 2022.

Variables	EADS-21 – Depression										p-value	
	Not normal		Mild		Moderate		Severe		Very severe			
	N	%	N	%	N	%	N	%	N	%		
Semester in the course	From 1st to 3rd	26	15.4	6	3.6	21	12.4	11	6.5	20	11.8	0.067
	4th to 6th	14	8.3	5	3.0	6	3.6	3	1.8	16	9.5	
	7th or later	13	7.7	5	3.0	3	1.8	11	6.5	9	5.3	
	< 7	1	0.6	0	0	1	0.6	0	0	3	1.8	
	> 7	41	24.3	8	4.7	19	11.2	22	13.0	40	23.7	
SDI	Did not answer	11	6.5	8	4.7	10	5.9	3	1.8	2	1.2	0.003*
Country of origin	Brazil	30	17.8	10	5.9	25	14.8	22	13.0	44	26.0	
	Foreign	23	13.6	6	3.6	5	3.0	3	1.8	1	0.6	0.001*
Sex	Female	20	11.8	8	4.7	20	11.8	19	11.2	29	17.2	0.007*
	Male	33	19.5	8	4.7	10	5.9	6	3.6	16	9.5	
Religious practice	Yes	44	26.0	13	7.7	19	11.2	15	8.9	21	12.4	0.002*
	No	9	5.3	3	1.8	11	6.5	10	5.9	24	14.2	
Drinking	Yes	11	6.5	3	1.8	9	5.3	11	6.5	21	12.4	0.034*
	No	42	24.9	13	7.7	21	12.4	14	8.3	24	14.2	
Confirmed or suspected COVID-19 case	Yes	21	12.4	6	3.6	12	7.1	19	11.2	35	20.7	0.001*
	No	32	18.9	10	5.9	18	10.7	6	3.6	10	5.9	

Disrespected social distancing	Yes	9	5.3	4	2.4	2	1.2	6	3.6	3	1.8	0.084
	No	28	16.6	4	2.4	11	6.5	11	6.5	19	11.2	
	Moderate	16	9.5	8	4.7	17	10.1	8	4.7	23	13.6	

* Significant correlation

Source: Research data, 2022.

Concerning the analysis of the impact on the health of students, the burnout syndrome was evaluated according with the classification in the three dimensions of MBI-SS, presenting higher values in emotional exhaustion (65.1%) and professional efficacy (73.4%), with low values in cynicism (71.6%) (Table 4).

Table 4. Sample according with the classification of MBI-SS, UNILAB, Ceará, 2022

Classification	Emotional exhaustion		Cynicism		Professional efficacy	
	N	%	N	%	N	%
Low	59	34.9	121	71.6%	45	26.6
High	110	65.1	48	28.4	124	73.4

Source: Research data, 2022.

Finally, Spearman's correlation showed a negative and significant relationship between EADS-21 domains and student efficacy. On the other hand, other MBI-SS domains, when it comes to EADS-21 dimensions, showed a stronger correlation between depression and emotional exhaustion (Table 5).

Table 5. Correlations between stress, anxiety, depression (EADS-21) and burnout syndrome, UNILAB, Ceará, 2022.

Burnout/EADS-21	Anxiety	Stress	Depression
Emotional exhaustion	0.468**	0.424**	0.478**
Cynicism	0.312**	0.450**	0.449**
Student efficacy	-0.292**	-0.290**	-0.234**

** Significant correlation at a 1% level - Spearman.

Source: Research data, 2022.

DISCUSSION

This study aimed to analyze the correlation between stress, anxiety, and depression (EADS-21), and the burnout syndrome, in the context of the pandemic. We found significant impact on the health of undergraduate students at the University for International Integration of the Afro-Brazilian Lusophony.

According to the correlation between variables and the dimensions stress, anxiety, and depression of EADS-21, we found that foreign students have better normality levels than Brazilian ones, since they were less likely to present mild, moderate, severe, and very severe scores for stress, anxiety, and depression. The same was found in literature, where the levels in Brazilian university students were increased in the pandemic. Although authors did not evaluate this comparison, the extreme levels of inequality in the country were discussed as potentially having a negative impact on the population during the pandemic¹³.

Furthermore, regarding a correlation between variables and the dimensions stress and depression of EADS-21, we found that women, when compared to men, were more likely to present light, moderate, and severe stress; in addition, half the members of this population present some level of depression. This result is similar to the findings by Maia and Dias⁷, who compared the pandemic period with normal periods, finding that females, in both periods, showed stress subscales above than those presented by men. Silva *et al.*¹³, on the other hand, evaluated the impact of the COVID-19 pandemic on the quality of life of dentistry students, finding that, among women, depression levels were significantly higher than in men.

Scorsolini-Comin *et al.*¹⁴ believe that religious practices can be used individually or collectively as a resource in the attempt to understand and even confront and reduce the infections by Sars-CoV-2, the virus that causes COVID-19. This study found that most students with religious practices presented normal stress levels and some degree of depression, as opposed to the findings of said authors.

Araújo¹⁵ indicates that, due to the consequences imposed by the COVID-19 pandemic, such as stress, anxiety, and depression, the intake of alcohol was highly encouraged. This research indicated that more than half the students who drink presented some level of stress, anxiety, or depression. This finding encourages further studies to analyze the direct and indirect influence of the pandemic in this behavior, since drinking with no moderation not only harms one's physiological health, but also their functioning in society.

Also, we found that students with suspected or confirmed COVID-19 cases presented higher levels of stress, anxiety, and depression. This may have been generated by their awareness of the worldwide situation of the pandemic, including the number of hospitalizations and deaths caused by the disease. Hossain, Sultana, and Purohit¹⁶ proposed that, during the pandemics, the emergence of psychological symptoms in individuals is expressive, in addition to worsening preexisting situations, especially due to the factors mentioned above.

According to Algazal *et al.*¹⁷, the pandemic setting undeniably increased depression levels among university students. This corroborates the findings of this study, where this dimension was quite worrisome, since there was a high prevalence of individuals in the worst EADS-21 indices.

We also found that more than half the students with SDI above 7 were associated with some level of depression, 23.7% of whom presented a very severe level. The study above also indicated that the academic performance in this period was a determining factor in the increase of depression indexes, since university courses demanded more exercises and video classes, increasing the concerns of private institution students regarding their tuition¹⁷.

Regarding the burnout syndrome, a research carried out by Amaral *et al.*¹⁸ found that the students they included did not have the syndrome, presenting a low level for emotional exhaustion and professional fulfillment, despite a high level of cynicism. Our study, in turn, found that UNILAB undergraduate students had higher rates of emotional exhaustion and professional efficacy, despite low levels of cynicism. This shows that, although they were emotionally exhausted, they were certain of the efficacy of their efforts, which contributed to their personal and academic fulfillment.

The study also pointed at a negative and significant relationship between EADS-21 domains and student efficacy. Results were inversely proportional, considering that, when stress, anxiety, and depression increase, student efficacy tends to drop. According to Freitas *et al.*¹⁹, the student's ability to integrate into higher education, as well as their abilities to adapt to cognitive, social, and affective processes, leads to a good academic performance. Considering the challenges imposed by the pandemic and the transition into remote education, this process was limited and made more difficult. It also reduced the opportunities for personal, social, and professional development. As a result, students presented more symptoms of anxiety, stress, and depression in the period. This study suggests that this setting is responsible for reducing student efficacy.

The prolonged duration of social isolation, added to the lack of socialization with colleagues and friends and to the fear of being infected reduced motivation, and as such were aspects of the pandemic that were harmful for the educational trajectory of UNILAB undergraduates. That is because, when one thinks about a learning process, individuals who are motivated can manage said process, thus becoming apt to control, regulate, and evaluate this stage of education²⁰.

In this study, we found a stronger correlation between depression and emotional exhaustion, similar to the findings by Ernst *et al.*²¹, who noticed a moderately strong relation. In addition, the authors suggested that burnout and depression are intimately tied, despite the fact they have unique distinguished features. Thus, considering this evidence, burnout should not be considered an isolated syndrome, but a multifactorial one. A study by Pokhrel, Khadayat, and Tulachan²² with medicine students from Nepal, showed a high prevalence of depression, anxiety, and burnout, with depression being significantly tied to emotional exhaustion, corroborating our findings.

As a result, there was a significant relationship between the domains of the Scale of Anxiety, Depression, and Stress and the syndrome of burnout in higher education students during the Sars-CoV-2 pandemic. Nonetheless, this study also shed light on other aspects of stress, anxiety, depression, and burnout in what is soon to be the post-pandemic period, showing the impact of COVID-19 on the health of students in different periods. Furthermore, it is noteworthy that outlining potential strategies involving affirmative action in the scope of mental health for university students is extremely important, especially in the case of those targeted at increasing the potential of health, both individual and collective, and the reduction of vulnerabilities and risks to health stemming from the several determinants imposed by the pandemic.

This study was limited in regard to its target audience, since the number of students who responded was lower than the number predicted in the sample. The restricted population prevents generalizing results for a larger number of people; the fact that the study was carried out in a single specific location is another hindrance in this regard, since socioeconomic, cultural, and demographic population characteristics can vary between regions. Another important factor, which prevents the generalization of the results is associated with the fact that the questionnaire was self-applicable, meaning that participants may interpret the questions differently.

However, the importance of this study is shown in the way it uncovers the impact of COVID-19 on mental health, showing that it can indeed trigger psychopathologies such as stress, anxiety, and depression. Furthermore, it is helpful to identify a specific group that was directly impacted and encourage public awareness about the relevance of mental health and its monitoring during a pandemic, as well as the rehabilitation after such an event. In addition, after the morbidity and mortality indexes decreased due to vaccination campaigns, it became clear to go back to university activities. This suggests that further health investigations should

be conducted, in order to provide up-to-date information about the health and wellbeing of the students after the pandemic.

CONCLUSION

This study showed that the COVID-19 pandemic had a significant impact on the health and quality of life of university students, especially in regard to the parameters analyzed in association with stress, anxiety, depression, and burnout. As a result, positive correlations between variables from MBI-SS and EADS-21 showed that, in summation, the students were vulnerable to the development of traces of stress, anxiety, depression, and even burnout syndrome, as a result of pandemic stressors, also showing how its negative effects were associated to their academic performance.

We recommend future studies to analyze this topic further, since the COVID-19 pandemic was an atypical period in the lives of the students, in order to understand the effects brought forth by this event. It should be noted that some studies in this regard are already available in literature. Also, we recommend higher education institutions to create methods to minimize the consequences of COVID-19 on the lives of the students, so its impacts on the psyche of this population can be reduced.

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