

# Evaluation of the physical and psychological well-being of nursing students during the COVID-19 Pandemic

## Hemşirelik bölümü öğrencilerinin COVID-19 Pandemisinde fiziksel ve psikolojik iyi olma durumlarının değerlendirilmesi

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### ABSTRACT

**Introduction and Objective:** The research aimed to assess the relationship between the levels of physical exercise and the psychological well-being of nursing students during the pandemic period. **Method:** A cross-sectional and descriptive research was conducted with 314 nursing students during the 2020-2021 academic year at a university in Turkey. Data were collected using the Perceived Stress Scale, The 7-item Generalized Anxiety Disorder, The Patient Health Questionnaire, Post-traumatic Stress Disorder Checklist-Civilian Version, Perceived Impact of Coronavirus, the Satisfaction with Life Scale, and weekly physical exercise duration during the pandemic. Data analysis was performed using SPSS 21.0 software. Statistical significance was accepted at  $p < 0.05$ . **Results:** A negative weak correlation was found between religious belief and stress, post-traumatic stress disorder, anxiety, and depression ( $< .05$ ), while a positive weak correlation was found with life satisfaction. Physical activity during the pandemic was excluded from the regression model due to its insignificance in terms of perceived stress. Female students with low religious belief perception and fear of not being able to graduate due to the COVID-19 pandemic had higher perceived stress levels. Female students constituted 28% of the fear of not being able to graduate during the pandemic. According to the relationship explorer analysis, female students with low religious belief perception had concerns about graduating during the pandemic that were 35% higher than others ( $p < .05$ ). **Conclusion:** Despite the negative effects of the pandemic on the psychological well-being and physical exercise levels of nursing students, religious belief positively influenced students' psychological well-being during the adverse conditions of the pandemic.

### ÖZ

**Giriş ve Amaç:** Araştırma, pandemi sürecinde hemşirelik öğrencilerinin fiziksel egzersiz düzeyleri ve psikolojik iyi olma durumları arasındaki ilişkinin değerlendirilmesi amacıyla yapılmıştır. **Yöntem:** Araştırma, Türkiye'deki bir üniversitenin 2020-2021 eğitim-öğretim döneminde 314 hemşirelik öğrencisiyle kesitsel ve tanımlayıcı bir şekilde gerçekleştirilmiştir. Veriler, Algılanan Stres Ölçeği, 7 Maddelik Genelleştirilmiş Anksiyete Bozukluğu Ölçeği, Post-travmatik Stres Bozukluğu, Post-traumatic Stress Disorder Checklist-Civilian Version, Koronavirüsün Algılanan Etkisi, Yaşam Doyumu Ölçeği ve pandemi sürecinde haftalık fiziksel egzersiz süresi kullanılarak toplanmıştır. Araştırmamızdan elde edilen veriler, SPSS 21.0 yazılımı kullanılarak analiz edilmiştir. İstatistiksel anlamlılık düzeyi  $p < 0.05$  olarak kabul edilmiştir. **Bulgular:** Dini inanç ile stres, post-travmatik stres bozukluğu, anksiyete ve depresyon arasında negatif zayıf, yaşam doyumunda ise pozitif zayıf korelasyon belirlenmiştir ( $< .05$ ). Pandemi sürecinde fiziksel aktivite algısının stres düzeyi açısından önemsiz olduğu bulunduğu, regresyon modelinden çıkarılmıştır. COVID-19 pandemisi nedeniyle mezun olamama korkusu yaşayan ve dini inanç algısı düşük olan kadın öğrencilerin algılanan stres düzeylerinin yüksek olduğu bulunmuştur. Pandemi sırasında mezun olamama korkusunun %28'ini kadın öğrenciler oluşturur. İlişki araştırması analizine göre, dini inanç algısı düşük olan kadın öğrencilerin pandemi sırasında mezun olma konusundaki endişelerinin diğerlerine göre %35 daha yüksek olduğu bulunmuştur ( $p < .05$ ). **Sonuç:** Pandemi hemşirelik öğrencilerinin psikolojik iyi olma hali ile fiziksel egzersiz düzeyleri üzerine olumsuz etkilere sahip olmasına karşın dini inanç pandemisinin olumsuz koşullarında öğrencilerin psikolojik iyi olma hali üzerinde olumlu etki oluşturmuştur.

**Key Words:**  
COVID-19, Exercise, Students,  
Psychological Well-Being

**Anahtar Kelimeler:**  
COVID-19, Egzersiz, Öğrenci,  
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### INTRODUCTION

University students representing the young population of the society, have faced many uncertainties due to changes such as the closure of schools and coursework during the pandemic. Online learning was implemented in a short time that proper preparation could not be done and educators and students were partly supported

during the COVID-19 pandemic due to the urgency of the situation and restrictions around the World. While protected from infectious diseases during pandemic processes, psychological well-being can be ignored. People were tried to be protected from infection during the quarantine process. But, they remained vulnerable to psychological problems such as depression, anxiety, and post-traumatic stress disorder (PCL-C) during

the pandemics in previous years. (Khoshaim et al., 2020). Distance learning, academic pressure, losing track of studies and assignments, financial difficulties, social isolation related to restrictions, mandatory curfews, increasing unemployment, and decreased activities developed mental health disorders during this pandemic among university students. The lockdown was found as the main reason for mental problems such as depression, anxiety, sleeping disorder (Aslan et al., 2020; Matthewman et al., 2020). It was aimed to determine the psychological well-being and physical activity levels of nursing department students during the pandemic in this study. The prevalence of PTSD, anxiety, depression, and perceived stress among students during the COVID-19 pandemic was measured in that study. This study assumes that the well-being of nursing students was worsened due to the risk of being infected and the uncertainty of the pandemic.

Well-being is affected by economic problems, the fear of infections, negative information in social media, life satisfaction and mental problems such as stress, anxiety, depression (Aslan et al., 2020; Lopez & Snyder, 2003). Increased stress, anxiety, depression and fear were found during the pandemic in different countries, related to isolation, economic and social changes, career concerns and study challenges (Ahmed et al., n.d.; Aslan et al., 2020). Academic, financial and social difficulties and lack of interpersonal communication were found as the main reasons of mental changes (AlAteeq et al., n.d.) High connection between stress and well-being was found in the previous studies. Psychological stress results from an imbalance between an individual's perception and external demands (Cao et al., 2023) Perceived stress is an assessment of how stressful the situation in one's life is; therefore, it is related to the subjective evaluation of life events (Braun et al.; Khoshaim et al., 2020). Failure to adapt to virtual learning assignments, exams, reduced learning time and low interpersonal relationships have caused to high stress (Lopez & Snyder, 2003). Also, poor internet connectivity, lack of money for buying internet, abilities to work with new technologies such as computer self-efficacy or students' digital competence, too much material for self-study, insufficient time to write final papers and disruption of the course of exams were challenges for students as a source of more digital stress, affecting students' attitude toward e-learning (Colás-Bravo et al.; Economics & 2020; Shafiq et al., 2023)

Alcohol and tobacco consumption and high objectless usage media entertainment leading to social media addiction were found among students (Aslan et al., 2020; Bourion-Bédès et al., 2023). Lack of physical exercise, more internet browsing time, shifts in eating habits, less exposure to sunlight and dissatisfaction with sleep

behavior due to negative psychological effects during the lockdown were found during the pandemic period (Bourion-Bédès et al., 2023; Mamun et al., 2020). Less stress, optimism, self-esteem, higher life satisfaction and the development of positive relationships are indicators better well-being. One of the effective and recommended methods for coping with negative moods is physical activity. It has been found that doing a total of 150 minutes of exercise suggested by WHO per week has positive effects on physical and mental health. A correlation was found between the decrease in the physical exercise level of the students during the pandemic process, and sleep disturbance and depression (López-Bueno et al., 2020; Stanton et al., 2020). In studies conducted in China in the early days of the COVID-19 pandemic, 16.5% of the country's population had depression and 28.8% had anxiety symptoms (Wang et al., 2020; Zhang et al., 2020). High rates of stress, anxiety, depression, and PCL-C have been detected, especially in the female and young population in Italy, one of the first countries with the highest number of COVID-19 cases. (Mazza et al., 2020). The prevalence of depression, anxiety, and stress symptoms among senior university students in Turkey before the pandemic was found to be 30%, 50%, and 40%, respectively (Turan et al., 2019). It is thought that this worrying high level of anxiety, stress, and depression may increase during the pandemic process (Jones et al., 2021; Rogowska et al., 2020). The depression levels of nursing students studying in Spain, Greece, and Albania during the pandemic process were found as 59% in Spain, 35% in Albania, and 22% in Greece. 28 The prevalence of depression and anxiety among medical students in China was determined as 29% and 21%, respectively (Wang et al., 2020).

## METHODS

### Aim

The aim of the study is to evaluate the relationship between nursing students' levels of physical exercise and their psychological well-being during the pandemic period.

### Population and Sample of Study

The population of the research is 864 nursing students at a XXXXX XXXXXX University in Turkey in the 2020-2021 academic year, the sample of the study is at least 267 nursing students at the 95% confidence interval and 5% margin of error and with the unsure information from  $p$  (proportion of students with psychological problems) = 0.5 through the Cochran formula. The study was completed with a total of 314 students, meeting the minimum sample size criteria.

**Inclusion criteria:**

Inclusion criteria were being a student in the nursing department of the university where the study was conducted during the academic year 2020-2021, being 18 years of age or older, and voluntarily consenting to participate in the research.

**Exclusion criteria:**

Exclusion criteria were not being enrolled as a student during the academic year 2021-2022 and not wishing to participate in the research.

**Data Collection**

The students included in the research were reached via e-mail. In the first part of the form, information about the research was given and the consent of the participant was requested. The forms filled online by those who wanted to participate in the study voluntarily were directed to the researchers. The average completion time of data collection forms is 10-15 minutes. The data were collected using the following scales.

**Data collection tools**

Participant information form; demographic data included questions about age, gender, place of residence, the current level of study, year of study, and types of faculty.

Perceived Stress Scale (PSS-10); consisting of 10 items referring to the frequency of stressful events in the month preceding the study, assessed on a 5-point scale.

The 7-item Generalized Anxiety Disorder (GAD-7) scale; rating how often they experienced anxiety symptoms in the two weeks preceding the study on a 4-point Likert scale, ranging from 0 to 21 with the minimal 0-4 and severe 15-21 anxiety levels.

The Patient Health Questionnaire (PHQ-9); consisting of 9 items and ranging scores: 0-4, normal, severe 20-27.

Post-traumatic Stress Disorder Checklist-Civilian Version (PCL-C); scale is a self-report measure used to assess symptoms of post-traumatic stress disorder (PTSD) in civilian individuals. The total score ranges from 17 to 85, with higher scores indicating more severe PTSD symptoms.

Perceived Impact of Coronavirus (PIC); an exposure to COVID-19 assessment based on 8 questions about the coronavirus' consequences the on the students' lives using 5 statements, The Satisfaction with Life Scale (SWLS); assesses an individual's subjective well-being, overall life satisfaction, and contentment with life.

Physical activity during the coronavirus-related days of a week physical exercise and physical exercise minutes per week parts were taken from Rogowska et al. (2020) study through permission.

The scales used in this study have been translated from English to Turkish by using previous studies and the reliability and validity of PSS-10, GAD-7, PHQ-9, and PCL-C scales were checked in Turkey (Dadfar et al.,2023;Kaya et al., 2021;Khoshaim et al.,2020). Cronbach's alpha is used to measure reliability scales  $\geq 0.6$  as acceptable.

**Data Analysis**

The data acquired from our investigation underwent analysis utilizing the SPSS 21.0 software. Descriptive statistics, correlation, and regression methodologies were employed in scrutinizing the dataset. Prior to applying statistical tests, a preliminary examination of the prevalence of all variables was conducted. Statistical significance was accepted at  $p < 0.05$ .

**The Ethical Approval**

Approval from the university's ethics committee (Decision No. 2021-04/31, dated 14.04.2021) and institutional permission were obtained for the study. Students were provided with information about the study in the online survey form, and their consent was obtained before proceeding to other questions.

**RESULTS**

**Table 1.** Coronavirus-related and psychological variables (n=314).

Variable	n	%
<b>Gender</b>		
Female	254	80.9
Male	60	19.1
<b>Year of study</b>		
First	44	14.0
Second	67	21.3
Third	96	30.6
Fourth	107	34.1
<b>Place of residence</b>		
Village	53	16.9
Town	24	7.6
City	237	75.5
<b>Religious level</b>		
Not Religious	7	2.2
Low level religious	50	15.9
Religious	224	71.3
Conservative	33	10.5
<b>Level of spirituality</b>		
Not spiritual	10	3.2
Low level spiritual	48	15.3
Spiritual	219	69.7
Very spiritual	37	11.8
<b>Exposure to COVID-19 (yes)</b>		
Symptoms of coronavirus infection	116	36.9
Tested for coronavirus	68	21.7
Hospitalization due to coronavirus	2	0.6
Strict quarantine for at least 14 days	62	19.7
Coronavirus infection in close relatives	276	87.9

Death of close relative due to coronavirus	113	36.0
Job loss because of coronavirus	91	29.0
Deterioration of economic status	180	57.3
<b>Perceived stress (PSS-10)</b>		
Low (0-13)	8	2.5
Medium (14-19)	79	25.2
High (20-40)	227	72.3
<b>Anxiety (GAD-7)</b>		
Normal (0-4)	34	10.8
Mild (5-9)	135	43.0
Moderate (10-14)	89	28.3
Severe (15-21)	56	17.8
<b>Depression (PHQ-9)</b>		
Normal (0-4)	26	8.3
Mild (5-9)	109	34.7
Moderate (10-14)	73	23.2
Moderately severe (15-19)	53	16.9
Severe (20-27)	53	16.9
<b>Post-traumatic stress disorder checklist - civilian version (PCL-C)</b>		
Mild (17-29)	38	12.1
Moderate (30-44)	102	32.5
High Severity (45-85)	174	55.4
<b>Satisfaction with life (SWLS)</b>		
Low (5-17)	154	49
Medium (18-23)	107	34.1
High (24-35)	53	16.9

The mean age of the participants in the study was 21.52±1.76, only 19.1% were male, and the majority (34.1%) were senior students mainly living in cities. Students are mainly religious and spiritual as shown in Table 1. At least one relative of 87.9% of the students was infected with the virus, more than half (57.3%) experienced economic difficulties, and 36% of them stated that close relative died due to due to coronavirus shown in Table 1. 36.9% of the students showed symptoms of COVID-19, 21.7% had a test at least once, 19.7% of them remained in quarantine due to COVID-19, and only 2 students were hospitalized for COVID-19. Considering the psychological variables, nearly half of the students (46.1%) had anxiety symptoms, more than half (56%) had depression symptoms, and nearly all (87.9%) had moderate or high post-traumatic stress. Low satisfaction with life was expressed by 49% of the students, while high satisfaction was expressed by only 16.9% of students. Almost all of the students (97.5%) reported that they felt moderately or highly stressed.

**Table 2.** Correlation matrix (n =314).

Variables	Religious Level	Spirituality	Physical Activity	Stress	PCL-C	Anxiety	Depression	Satisfaction	Impact of COVID-19
Religious Level	1	.427**	-.076	-.120*	-.118*	-.183**	-.241**	.197**	.032
Spirituality	.427**	1	-.098	-.002	-.137*	-.148**	-.188**	.234**	.118*
Physical Activity	-.076	-.098	1	.046	.011	-.021	.039	-.054	.016
Stress	-.120*	-.002	.046	1	.158**	.263**	.190**	.004	.143*
PCL-C	-.118*	-.137*	.011	.158**	1	.649**	.652**	-.290**	.330**
Anxiety	-.183**	-.148**	-.021	.263**	.649**	1	.822**	-.303**	.229**
Depression	-.241**	-.188**	.039	.190**	.652**	.822**	1	-.392**	.275**
Satisfaction	.197**	.234**	-.054	.004	-.290**	-.303**	-.392**	1	-.042
Impact of COVID-19	.032	.118*	.016	.143*	.330**	.229**	.275**	-.042	1

\*Correlation is significant at the 0.05 level (2-tailed); \*\*Correlation is significant at the 0.01 level (2-tailed).

It was determined that the perceived stress levels of nursing department students were high, their anxiety and depression levels were moderate, and their life satisfaction was low during the pandemic. It was determined that almost half of the students (46.1%) had an anxiety disorder, more than half (57%) had at least one symptom of depression, and (51%) had thoughts of committing suicide or harming themselves.

There was a negative significant correlation between life satisfaction and anxiety, depression, and PCL-C shown in Table 3. There was a negative significant correlation between spirituality and PCL-C, anxiety, and depression. Moreover, the religious level has significant negative correlations with stress, anxiety, depression, and PCL-C. Both religion level and spirituality have a positive significant correlation with life satisfaction that religion and spirituality have better reliance against mental problems and they are happier with life. It was revealed as a result of the correlation that the perception of spirituality and religious belief was evaluated by the students as a method of coping with the negative psychological effects caused by COVID-19. No significant correlation was found between physical activity and mental variables, explained by low-level physical activities during the pandemic. Anxiety and depression were determined as predictors of PCL-C with high significant correlations, while anxiety and depression levels were found to have a strong positive effect on each other. Perception of the impacts of COVID-19 on well-being had significant correlations with stress, anxiety, depression, and PCL-C with the highest impact on PCL-C that changes in economic situation, job, professional life, and relationships can lead to PCL-C and depression.

During the COVID-19 pandemic, in the stepwise linear regression analysis conducted to determine the perceived level of stress among students, the following dependent variables were identified: gender, the impact



**Table 3.** Linear Regresyon between perceived stress, gender, howreligious, PCL-C, religious general anxiety disorder, completion of the semester and graduation Pearson's r coefficient (n = 314).

Model		B	SD	$\beta$
1	(Constant)	22.26	0.28	
	Gender	-1.96	0.65	-0.17*
2	(Constant)	22.59	1.20	
	Gender	-2.16	0.65	-0.19*
	Howreligious	-1.25	0.44	-0.17*
	The concern of not being able to graduate due to COVID-19	0.54	0.21	0.14*

Model 1: R<sup>2</sup> = 0.28 (p < 0.05); Model 2: Adjusted R<sup>2</sup> = 0.63 (p < 0.05); \*p < 0.05

of COVID-19 on well-being, life satisfaction, anxiety, religious belief, level of physical activity, and fear of not being able to graduate. However, physical activity during the pandemic was excluded from the regression model as it was found to be insignificant in terms of perceived stress. It was found that female students with low religious belief perception and fear of not being able to graduate due to the COVID-19 pandemic had high perceived stress levels. Female students constitute 28% of the fear of not being able to graduate during the pandemic. When low religious belief perception is added to this situation, 63% of the fear of not being able to graduate can be explained. According to the relationship explorer analysis, female students with low religious belief perception have concerns about graduating during the pandemic that are 35% higher than others (p < .05).

## DISCUSSION

In this study, it was revealed that the students' perceived stress levels were high and 97.5% of them experienced moderate or severe stress. The results of the study's perceived stress level were found to be higher than other studies conducted with nursing students. It is known that students' stress levels were lower in the pre-pandemic period than in the pandemic period out. This situation is thought to be caused by the uncertainty of the education process during the pandemic period. Approximately half of the students (43.0%) in the study were at abnormal anxiety levels. When the results of other studies are evaluated, the anxiety levels of university students during the pandemic process are similar to our findings (Cao et al., n.d.; Khoshaim et al., 2020). It is stated that young people feel lonely and helpless in quarantine practices and this situation triggers stress, anger, anxiety, and depression. It revealed that 35 of them experienced severe anxiety at the onset of COVID-19. More than half of (91.7%) the students were at the level of depression and had thoughts of harming themselves. During the COVID-19 pandemic, depression levels of university students were found to be 47% in England, 9% in China, 19% in Slovakia, 32% in Ukraine, and 29% in Japan

(Huang et al., n.d.; Nomura et al., 2021). Although it is difficult to make a direct comparison due to the different conditions of the countries during the pandemic period, it can be said that the value for depression in this study is quite high compared to many countries. The differences in depression levels can be explained by the problems in the financial and education system in Turkey.

A high level of positive correlation was found between anxiety and depression. It is also very worrying that 13% of students feel themselves on the edge of the abyss and think about harming themselves. It is not surprising that the temporary closure of universities in Turkey from March 2020-September 2021 and the imposition of curfews on individuals under the age of affect individuals psychologically in this way. Certain periods in this date range caused many university students to show symptoms of anxiety and depression. At this point, it may be necessary to underline once again that students' satisfaction with life in Turkey is low. The PCL-C level of 87.9% of the students was determined as medium or high in the study. Compared to other studies, our study findings can be said to be quite frightening. There is a need for studies on regular evaluation of PCL-C level in order to reveal what kind of psychological problems await students after the pandemic. Precautions against suicides are to be taken and the effects of PTSD are to decrease.

It was found that 49% of the students participating in the study were not satisfied with their lives, a positive relationship was found between life satisfaction and religious belief and spirituality, and a negative significant relationship was found between perceived stress, anxiety, PCL-C, and depression. In a study comparing the life satisfaction of adolescent students during the 2018 and 2020 pandemic period; the proportion of men who are satisfied with their life has dropped significantly to 88% in 2018, to 92% in 2020, and 71% due to COVID-19 restrictions. In three European countries, 4-6 weeks after the COVID-19 outbreak, during the isolation measures period, students It was observed that they

consumed more cigarettes, drugs, and alcohol during the quarantine period, which they had negative perspectives on their life satisfaction, physical activity, family, friends, and financial situation. concerns are included (Patel et al., 2021). On the other hand, a sharp decrease in students' life satisfaction is a remarkable finding. This situation raises concerns that it may negatively affect both the psychological and physical health of students.

No relationship was found between physical activity level and any psychological variable in that study. This situation shows that only 36% of the students participating in the research do physical exercise, but the fact that the activity is 21 minutes/week is far below the WHO standards. In other studies conducted during the pandemic period, students' physical activity levels appear to be below WHO standards, but longer than our study (Jones et al., 2021; López-Bueno et al., 2020). Long quarantine processes, online classes and indoor gyms may have caused withdrawal from physical activity. Zhang et al. (2020) found that physically active individuals are less psychologically affected by COVID-19 restrictions. WHO attaches great importance to the "Be Active During COVID-19" campaign due to the effects of physical activity on immunity and the musculoskeletal system. More studies are needed to reveal the contribution of physical activity to students' psychological well-being during the pandemic period.

Two of the students participating in the study received inpatient treatment due to COVID-19. When this figure is evaluated in terms of students in Turkey, it is relatively low. In the study, a family member of 8 out of 10 students became infected with COVID-19 during the COVID-19 pandemic. More than half of the students (57%) experienced financial difficulties during this period, and about a third of them lost a job with family members. In a study, while the families of the students experienced a loss of income, the vast majority stated that they were worried about being homeless and had difficulty in reaching food (I. Aslan et al., 2020; Chhetri et al., n.d.; Mamun et al., 2020). is one of the striking results of the COVID-19 pandemic, in which anxiety and financial distress are related to each other, and being sick or a family member's illness increases the anxiety level. The importance of continuing their access to education, accommodation and health services without interruption during the pandemic process emerges.

The important result of this study was that we determined that gender, religious belief, and graduation anxiety were associated with psychological well-being. It has been determined that religious belief, which is one of the coping methods, reduces negative coping methods such as internalizing and expressing the

problems experienced by individuals. While there was a weak positive relationship between religious belief and spirituality on life satisfaction, a weak negative relationship was found between PTSD, anxiety, and depression. However, when we added physical activity to the model, it turned out that psychological well-being was an insignificant predictor. 32% of the variance of the study was explained by physical inactivity and high anxiety was the strongest predictor. One of the working hypotheses was that physical activity has a positive effect on anxiety, depression, PTSD, life satisfaction, perceived well-being of COVID-19, and perceived stress levels. In the research findings, it was determined that this hypothesis could not be confirmed. Contrary to our findings, studies confirm the importance of physical activity on psychological well-being (Bourion-Bédès et al., n.d.; Chhetri et al., n.d.). The reason for the results of our study at this level can be explained by the fact that the students were in quarantine restrictions. In addition, there has been concern that the COVID-19 pandemic will seriously affect the professional careers of students who are at the graduation stage of universities. It is also possible for students who are in the last year of university to experience disruptions in their education and exams, to be more affected by the possibility of delay in their graduation and the recessions caused by the pandemic in the global economy and trade (Ahmed et al., n.d.; Khoshaim et al., 2020). On the other hand, in some countries, medical and nursing students are encouraged to serve voluntarily in hospitals and the community due to the lack of workforce, or early graduation is on the agenda. The inexperience of this group of students in emergency situations causes them to experience more stress during the pandemic crisis.

### Study Limitations

Study data was collected only once during the pandemic period. Conducting repeated evaluations can provide a better assessment of students. The study was conducted only with nursing students and a comparison could not be made with other university students studying in different departments. We do not have a baseline pre-pandemic prevalences, and longitudinal research is required in the future to verify the present findings. Self-reported measures may also include some sources of bias. In our study, 19.1% of participants were male, a better gender balanced study is required to check gender differences.

### CONCLUSION

The results of the study provide a clear message that there is a need for special sanctions for the psychological well-being of the students, who constitute the vulnerable

population of the society, and the negativities at the level of physical exercise. In addition, while the psychological well-being levels of female students and those who are worried about graduating were determined to be lower than the others, it was determined that having a religious belief positively affected their psychological well-being. It is seen that having a religious belief contributes to individuals' feeling safe and able to cope with negative emotions. At this point, it is thought that it is important to identify the more vulnerable group and support coping methods in maintaining psychological well-being. Also, more physical activity is suggested during this kind of situations.

### Contribution to the field

This study demonstrates that nursing education programs fall short in adequately supporting the psychological and physical health of students during extraordinary situations such as the pandemic. The rationale for restructuring nursing education curricula with current insights in this field has been elucidated.

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