#### Research Article

# Changes in Coping Strategies, Stress, Anxiety, and Depression among University Students

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#### Abstract

The COVID-19 pandemic has changed various aspects of human life. During the early pandemic, university students must deal with academic tasks and adjust to measures to reduce the spread of COVID-19, such as online learning. This condition can be burdensome and lead to mental problems. This study aimed to identify any changes in the coping strategies and the prevalence of depression, anxiety, and stress among students during the early phase of the COVID-19 pandemic. This study used a longitudinal study design involving medical and pharmacy students of Atma Jaya Catholic University of Indonesia, Jakarta, from August 2020 to January 2021. The Brief COPE was used to assess coping mechanisms. The DASS-21 was used to evaluate stress, anxiety, and depression. The changes in coping strategies differed between medical and pharmacy students. Medical students became less self-distracted and did less planning. The pharmacy students applied behavioral disengagement more. Self-distraction and acceptance were the most common coping strategies used by both groups. While medical student participants experienced less stress, anxiety, and depression during the study period, the pharmacy students were more stressed. Most of the students experienced anxiety during the early pandemic. The present study showed some changes in coping strategies during the early phase of the COVID-19 pandemic, although self-distraction and acceptance remained the most used strategies. Additionally, anxiety is the most common mental problem experienced by the students during the COVID-19 pandemic.

Keywords: coping strategies, mental health, medical students, pharmacy students.

# Perubahan Strategi Koping, Stres, Kecemasan, dan Depresi pada Mahasiswa

#### Abstrak

Pandemi COVID-19 telah mengubah berbagai aspek kehidupan manusia. Pada masa awal pandemi, mahasiswa harus menghadapi tugas akademis serta menyesuaikan diri dengan langkah-langkah pencegahan penyebaran COVID-19, seperti pembelajaran daring. Kondisi ini bisa memicu dan menyebabkan masalah mental. Penelitian ini bertujuan untuk mengidentifikasi perubahan strategi koping dan prevalensi depresi, kecemasan, dan stres pada mahasiswa selama fase awal pandemi COVID-19. Artikel ini menggunakan desain penelitian longitudinal yang melibatkan mahasiswa kedokteran dan farmasi Unika Atma Jaya, Jakarta, sejak Agustus 2020-Januari 2021. Brief COPE digunakan untuk menilai mekanisme koping. DASS-21 digunakan untuk mengevaluasi stres, kecemasan, dan depresi. Perubahan penggunaan strategi koping pada mahasiswa kedokteran dan farmasi berbeda. Mahasiswa kedokteran menjadi tidak terlalu sering mengalihkan perhatian dan kurang melakukan perencanaan. Mahasiswa farmasi lebih banyak menerapkan behavioral disengagement. Pengalihan perhatian dan penerimaan adalah strategi koping paling umum digunakan oleh kedua kelompok. Meskipun mahasiswa kedokteran mengalami lebih sedikit stres, kecemasan, dan depresi selama masa studi, mahasiswa farmasi menjadi lebih stres. Sebagian besar mengalami kecemasan pada awal pandemi. Penelitian ini menunjukkan terdapat perubahan dalam penggunaan strategi koping selama fase awal pandemi COVID-19, meskipun pengalihan perhatian dan penerimaan tetap menjadi strategi yang paling banyak digunakan. Selain itu, kecemasan merupakan masalah mental yang paling banyak dialami mahasiswa selama pandemi COVID-19.

Kata kunci: strategi coping, kesehatan mental, mahasiswa kedokteran, mahasiswa farmasi.

#### Introduction

The Corona Virus Disease 2019 (COVID-19) pandemic has changed various aspects of human life. Consequently, the pandemic requires people to adapt to life changes. To limit the transmission of COVID-19, it is necessary to avoid meeting in person and to perform most of the activities at home. People were also worried about contracting COVID-19. In university, academic activities must continue with some adaptations, such as transitioning to digital learning and decreasing practical learning. 1,2 These changes can add a burden to an already demanding academic life.1,3 Hence, university students must deal with both life and academic changes. All these situations can harm students' mental health. Adjustment to life changes is essential during the early pandemic. The coping mechanism plays a vital role in better adjustment. Coping is a set of actions a person applies in a stressful situation.<sup>4,5</sup> Studies from the previous pandemics showed that people used various coping mechanisms, which resulted in either improvement or worsening of psychological symptoms.6

University students utilized various coping strategies to adjust to stressful situations during their academic life. Fitzgibbon and Murphy<sup>7</sup> reported that health professional students, including those in medicine and pharmacy, mostly applied planning and acceptance coping strategies. These strategies were considered positive coping and associated with lower stress levels.7-9 Few students used coping strategies that were considered maladaptive, such as avoidance, behavioral disengagement, and venting, which were associated with a higher stress level.7 However, most previous studies evaluated coping using a cross-sectional design. Consequently, these studies did not provide information on variability in coping strategies that may emerge throughout the students' academic years or when an unforeseen event, such as a pandemic, occurs.

Mental problems among university students have been identified before the COVID-19 pandemic. The World Mental Health Survey published in 2016 reported that anxiety (11.7-14.7%) and mood (6-9.9%) disorders were college students' most prevalent mental health problems. <sup>10</sup> A meta-analysis of studies published before the pandemic showed that the global prevalence of anxiety among medical students reached 33.8%, of which the highest was in Asia. <sup>11</sup> A study from the United States conducted in 2018 reported that the

proportion of anxiety among pharmacy students (21%) was higher than that of medical students (11%), while depression rates were similar (18%). 12 These studies indicate that anxiety and depression were common among university students, including pharmacy and medical students, before the pandemic. During the COVID-19 pandemic, a higher prevalence of various mental problems among university students was reported. A meta-analysis revealed that university students experienced symptoms of depression (34%), anxiety (32%), and sleep disturbances (33%).13 Another metaanalysis reported that the prevalence of anxiety and depression was 24% and 22%, respectively.14 A systematic review focused on anxiety reported a prevalence as high as 41%.15 The studies included in these meta-analyses and systematic reviews were performed between 2020-2021. These data suggest a significant increase in the prevalence of anxiety and depression among university students, especially during the early pandemic. The increased prevalence may be associated with how students cope during that period.

The COVID-19 pandemic compelled people, including university students, to adjust to the stressful situation brought about by the pandemic. This type of stressor that influences many life aspects can trigger more variability in how people cope.4 The need for adjustment may change students' coping strategies and influence their mental health. Therefore, evaluating how students coped and their mental health conditions during the early pandemic is fundamental. The evaluation will provide information about the influence of an intense stressor, such as the pandemic, on students' coping strategies and their need for intervention. This current study aimed to identify any changes in the coping strategies and the prevalence of depression, anxiety, and stress among medical and pharmacy students at the School of Medicine and Health Sciences of Atma Jaya Catholic University of Indonesia during the early phase of the COVID-19 pandemic.

## Methods

This study applied a longitudinal observation design using convenience sampling to recruit participants. They were recruited from the medical and pharmacy study programs in the School of Medicine and Health Sciences of Atma Jaya Catholic University of Indonesia. First to fourth-year preclinical medical and pharmacy students enrolled in 2020/2021 were included. The data

were collected two times: the first period (baseline) was from 27 August to 14 September 2020 (early pandemic), and the second (follow-up) was from 14 December 2020 to 10 January 2021 (about one year after the pandemic began). By measuring the variables twice, without any intervention in between, the changes in coping strategies, stress, anxiety, and depression can be observed in line with the altered situations throughout the early pandemic.

Questionnaires were distributed to all students. In total, 607 (response rate=62.5%) and 654 (response rate=67.4%) data were collected at the first and second measurements. From the total questionnaires returned in both measurements, 14 participants did not consent, and 121 students filled in the questionnaires twice during the same data collection period. We did not assess the reason why they did so. For these students, only the first data they entered in each period were included in the analysis. To observe the change of each variable within the same person, only the participants who filled in baseline and follow-up measurements were included in the analysis, resulting in 315 eligible data for analysis.

The Indonesian version of Brief COPE<sup>16</sup> was used to assess coping mechanisms applied by participants during the current pandemic. The Brief COPE consists of 28 items reflecting activities performed by an individual faced with a stressful situation. Response to the items is a 4-point Likert scale (1: I have not been doing this at all, to 4: I have been doing this a lot). It produces 14 scales from the sum of two items. The scales measure various coping mechanisms: self-distraction, active coping, denial, substance use, emotional support, instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame.<sup>16</sup>

The Brief COPE was developed from the original COPE scale. <sup>17,18</sup> The 14 scales produced from the Brief COPE were similar to the original one, with factor loadings of all items exceeding 0.30, indicating moderate correlations for each item. <sup>17</sup> The Cronbach's  $\alpha$  of all scales were  $\geq$ 0.60, except for acceptance (0.57), denial (0.54), and venting (0.50). <sup>17</sup> The Indonesian version of Brief COPE was used to evaluate coping mechanisms and their roles in burnout among medical students. <sup>16</sup> A good internal consistency (Cronbach's  $\alpha$ =0.72) was reported. <sup>16</sup> The Cronbach's  $\alpha$  of each scale in our data was  $\geq$ 0.43, except for venting (0.01). Therefore, venting was not included in further analyses in this study.

The DASS-21 was used to assess depression, anxiety, and stress symptoms. Since the Indonesian version of DASS-21 was unavailable during this study, 21 items based on the original DASS-21 were selected from the Indonesian version of DASS-42. The Indonesian version of the DASS-42 has excellent reliability (Cronbach's α=0.95).19 Our data showed Cronbach's α>0.70 for all scales. Antony et al<sup>20</sup> reported that the original DASS-21 has excellent factor structures, similar to the DASS-42.20,21. The Cronbach's  $\alpha$  of the original DASS-21 was 0.94 (depression), 0.87 (anxiety), and 0.91 (stress). Items of the DASS-21 should be responded to using a four-point Likert scale (0: did not apply to me at all, to 3: applied to me very much, or most of the time). This instrument has three scales, namely depression, anxiety, and stress. The depression scale is established from the total score of 7 items that correspond to low positive affect, such as "I felt that life was meaningless". Seven other items reflect symptoms of physical and anatomic hyperarousal, situational anxiety, and anxious affect, such as "being aware of the action of my heart in the absence of physical exertion". The total score of these items constitutes the anxiety scale. The last seven items correspond to symptoms of nervous arousal, inability to relax, being easily upset, and irritability, such as "difficulty relaxing". The total score of these items creates the stress scale.

The Brief COPE, the DASS-21, and a list of questions about demographic characteristics, information about the study, informed consent were transformed into a digital questionnaire using the Microsoft Form application. A link to access the digital form was distributed through online classes. When accessing the link, the participants were directed to the first page, which explained the information about the study. At the end of this page, they were asked for their consent to participate by clicking the 'yes'/'no' options. Those who agreed to participate would be directed to the list of demographic characteristic questions and the questionnaires. If the participants did not consent, the session would end automatically, and no personal information would be recorded. The research ethics committee of the School of Medicine and Health Sciences AJCU approved this study (No: 08/08/KEP-FKIKUAJ/2020).

The proportion of stress, anxiety, and depression symptoms was calculated descriptively for each demographic characteristic. A non-parametric approach was applied since the

normality assumption was violated (Shapiro-Wilk: p<0.001) for all variables. The median (Mdn) and median absolute deviation (MAD) were calculated for the score of each measurement of all variables. For coping mechanisms, the higher the median, the more the coping is used. In addition, Cronbach's α was calculated to evaluate the internal consistency of each coping mechanism and depression, anxiety, and stress scales of the current data. The differences in the stress, anxiety, depression, and coping scores between pre and post-measurement were assessed using the Wilcoxon signed-rank test.<sup>22</sup> Mann-Whitney U test was applied to evaluate the differences in stress, anxiety, depression, and each type of coping score between study programs.<sup>22</sup> The p-value <0.05 indicated a significant difference. JASP version 0.17.3 was used to perform the analyses.<sup>23</sup>

## Results

In total, data from 315 participants were eligible for analysis. Most of them were medical students (76.83%), females (73.65%), and aged 18 years (30.79%). Table 1 describes the characteristics of participants. While medical students became less self-distracted and did less planning, the pharmacy students applied behavioral disengagement more during the observational period. This study also found that self-distraction and acceptance were the most common coping strategies used by both groups. Medical students experienced less stress, anxiety, and depression during the study period, whereas pharmacy students became more stressed. Moreover, most of the students experienced anxiety during the early pandemic.

**Table 1. Demographic Characteristics** 

Characteristics	n	%
Program		
Pharmacy	73	23.18
Preclinical medicine	242	76.82
Sex		
Male	83	26.35
Female	232	73.65
Age (mean, SD)	19.01	1.32

The use of some coping mechanisms changed throughout the pandemic for both medical and pharmacy students. The medical-student participants' scores of self-distraction and planning significantly decreased with small effect sizes (selfdistraction: W=7908, p=0.04,  $r_R$ =0.18 and planning: W=8763.5, p=<0.001,  $r_B=0.30$ ). The pharmacy students' behavioral disengagement scores significantly rose from the baseline to follow-up, with a moderate effect size (W=168, p=0.04,  $r_{R}$ =-0.40). Self-distraction and acceptance were the most common coping strategies used by the medical and pharmacy student participants. Table 2 describes the changes in and the most commonly used coping strategy between the two measurements.

The stress, anxiety, and depression scores reduced significantly from the baseline to follow-up for both medical and pharmacy student participants. Further sub-group analysis based on the study program revealed that medical students had a significant reduction in depression, anxiety, and stress. Meanwhile, pharmacy students had a significant increase on stress scale (baseline: Mdn(MAD)=10(4), follow-up Mdn(MAD)=12(6), W=621.5, p=0.03, rb=-0.32), but no significant changes on depression and anxiety scales after three months follow-up. Table 3 shows the change in stress, anxiety, and depression scores from baseline to follow-up.

Anxiety accounted for the highest proportion of mental problems in both measurements. At baseline, the proportion of anxiety was 50.83% (n=123) among medical and 46.58% (n=34) among pharmacy students. Three months later, the proportion decreased for medical students (39.67%, n=96), while it increased for pharmacy students (56.16%, n=41).

At baseline, the proportion of stress was 28.10% (n=68) and 24.66% (n=18) for medical and pharmacy students, respectively, while depression accounted for 26.03% (n=63) and 27.40% (n=20) of participants, respectively. At the follow-up, 19.42% (n=47) and 30.14% (n=22) of medical- and pharmacy students, respectively, had stress, while 22.73% (n=55) and 31.51% (n=23), respectively, had depression.

**Table 2. Changes in Coping Mechanisms** 

Program	Coping Mechanism	Baseline Median (MAD)	Follow-up Median (MAD)	Wa	р	r <sub>B</sub> b
Medicine	Self-distraction	7 (1)^	7 (1)^	7908	0.038*	0.18
(n=242)	Acceptance	7 (1)^	7 (1)^	5423.5	0.059	0.18
	Religion	6 (2)	6 (2)	5680.5	0.802	-0.02
	Active Coping	6 (1)	6 (1)	8363	0.081	0.15
	Positive Reframing	6 (1)	6 (1)	7725.5	0.054	0.17
	<b>Emotional Support</b>	6 (1)	6 (1)	7324	0.712	0.03
	Instrumental Support	6 (1)	5 (1)	6503	0.403	0.08
	Planning	6 (1)	5 (1)	8763.5	< .001**	0.30
	Humour	4 (2)	4 (2)	6520	0.188	0.12
	Self-blame	3 (1)	2 (0)	4125.5	0.25	0.12
	Denial	2 (0)	2 (0)	3446	0.752	0.03
	Substance Use	2 (0)	2 (0)	33	0.127	-0.45
	Behavioural Disengagement	2 (0)	2 (0)	3408	0.093	0.18
Pharmacy	Acceptance	7 (1)^	7 (1)^	539.5	0.606	-0.082
(n=73)	Self-distraction	7 (1)^	6 (1)^	623	0.355	0.15
	<b>Emotional Support</b>	6 (1)	6 (1)	718.5	0.982	0.00
	Positive Reframing	6 (1)	6 (1)	853.5	0.645	0.07
	Religion	6 (1)	6 (1)	605	0.311	0.169
	Active Coping	6 (1)	5 (1)	801.5	0.287	0.16
	Instrumental Support	5 (1)	6 (1)	598	0.536	-0.10
	Planning	5 (1)	5 (1)	565.5	0.629	-0.077
	Humour	4 (2)	4 (2)	522	0.55	0.104
	Self-blame	3 (1)	3 (1)	439.5	0.689	0.072
	Denial	3 (1)	2 (0)	385.5	0.4	0.16
	Substance Use	2 (0)	2 (0)	10	0.539	-0.29
	Behavioural Disengagement	2 (0)	3 (1)	168	0.037*	-0.40

<sup>&</sup>lt;sup>a</sup>W-statistic for Wilcoxon's signed-rank

Table 3. Changes in Stress, Anxiety, and Depression

Program	Baseline Median (MAD)	Follow-up Median (MAD)	W <sup>a</sup>	р	r <sub>B</sub> b
Medicine					
Stress	10 (6)	8 (6)	14778	< .001**	0.40
Anxiety	8 (6)	6 (4)	12439	< .001**	0.42
Depression	4 (4)	4 (4)	11190	< .001**	0.33
Pharmacy					
Stress	10 (4)	12 (6)	621.5	0.03*	-0.32
Anxiety	6 (4)	8 (4)	741.5	0.377	-0.13
Depression	4 (4)	6 (4)	783.5	0.331	-0.14

<sup>&</sup>lt;sup>a</sup>W-statistic for Wilcoxon's signed-rank

<sup>&</sup>lt;sup>b</sup>The effect size (Rank-Biserial Correlation)

<sup>\*</sup>The most used coping mechanism

<sup>\*</sup>Significant difference (p<.05)

<sup>\*\*</sup>Significant difference (p<.001)

<sup>&</sup>lt;sup>b</sup>The effect size (Rank-Biserial Correlation) \*\*Significant difference (p<.001)

There were no significant differences in stress, anxiety, and depression between both groups at the baseline. In contrast, pharmacystudent participants had significantly higher stress [Mdn(MAD)=12(6)],anxiety [Mdn(MAD)=8(4)],[Mdn(MAD)=6(4)]and depression than the medical students [Mdn(MAD)=8(6), Mdn(MAD)=6(4), Mdn(MAD)=4(4)], respectively) at the follow-up (stress: U=11326.50, p<0.001; anxiety: U=10977.00, p=<0.001; depression: U=10879.50, p=<0.001). These results indicate that pharmacy students had higher stress, anxiety, and depression than medical students, although the effect sizes were small (r<sub>g</sub>=0.28, 0.24, 0.23, respectively).

#### **Discussion**

The medical students used a planning coping strategy less in the second compared to the first measurement. Planning is regarded as problem-focused coping, and people who apply it consider and develop strategies to remove or evade stressful situations or diminish their impacts.<sup>18</sup> Seeing as the act of planning requires the individual to identify the problem causing stress, the complexity of a stressful situation may influence the time of deployment for the coping strategy. During the pandemic's early phase, one may be unable to develop a plan due to unknown situations and various co-occurring changes. When an individual starts to have more knowledge about the changes, they can plan their life accordingly. Therefore, it is intriguing to explore the reasons for the medical students' less, rather than more, use of planning throughout the study period. During second measurement, almost 40% of medical students still experienced anxiety. It is possible that the anxious students also planned less. It is because the ability to plan may be influenced by anxiety and its physical symptoms, which tends to manifest in a person with a neuroticism trait.4 Moreover, neuroticism is also associated with anxiety and the tendency to worry.<sup>24</sup> Students with high neuroticism may employ less planning. Nevertheless, this possibility cannot be proven since traits and personality remain beyond the scope of this study.

The pharmacy students applied more behavioral disengagement in the second than in the first measurement. They also experienced more stress, anxiety, and depression during this period, although only stress increased significantly. Carver et al<sup>18</sup> described behavioral disengagement as coping to reduce the person's effort to deal with

the stressor, which reflects helplessness due to the expectation of poor outcomes. The application of behavioral disengagement might be related to the psychological condition of pharmacy students. This relation was also proven by the logistic regression analysis that revealed behavioral disengagement as a significant predictor of stress and depression at the second measurement. Behavioral disengagement shows that the person does nothing to deal directly with stress.<sup>4</sup> Consequently, the stress remains, so such a coping strategy is ineffective. Hence, the increased use of behavioral disengagement also reflects that the pharmacy students opted to do nothing to deal directly with the stress. This may indicate a need for intervention.

Two points must be emphasized concerning pharmacy students' increased use of behavioral disengagement. First, behavioral disengagement was the least used coping strategy by all participants in both measurement periods. This means that only a small proportion of students have applied this coping strategy. Although the proportion was small, they significantly became more disengaged and, thus, helpless, which is concerning. Second, the pharmacy students were doing their final exam for that semester during the second measurement of this study. Exam conditions might also influence the way students cope. Using behavioral disengagement was associated with the burden of the pandemic and the exam.

While the pattern of coping strategy was generally the same between the medical and pharmacy students, the differences in the use of planning and behavioral disengagement were somewhat significant. Medical and pharmacy students may have different personalities, which can influence their coping styles. Lewis and Cardwell<sup>25</sup> reported that medical students in the UK had a higher openness score than pharmacy students. Therefore, it can be assumed that the changes in coping strategies found in the current study may be related to different personalities between medical and pharmacy students. The current study cannot prove this assumption since the participants' personalities were not evaluated.

Self-distraction and acceptance were the most used coping mechanisms by the students during the COVID-19 pandemic. These results were the same for the first and second measurements, with no significant changes, except for self-distraction used among the medical students. Both mechanisms demonstrate an accommodative strategy to adjust to uncontrollable circumstances

created by a stressor.4 Self-distraction reflects behaviors that a person intentionally engages in positive activities, such as working, going to movies, reading, or sleeping, as a strategy to adapt to stressful situations.4,17 The acceptance coping mechanism means accepting that a stressful situation has happened and learning to live with it.4,17 Most universities, including ours, did not stop their academic activities during the pandemic. They perform these activities through various online platforms; thus, students must keep studying and adapt to online learning. By doing this, they were distracted from the pandemic and learned to accept such a situation. We can hypothesize that engaging in academic activities helped students adapt to the stressful situation during the COVID-19 pandemic using accommodative strategies, namely selfdistraction and acceptance. Furthermore, the fact that self-distraction and acceptance remained the most used coping strategies may indicate that they had employed them even before the pandemic. The students did not apply these strategies more during the study period, which may also demonstrate the possibility of the ceiling effect.

The proportions of stress, anxiety, and depression among the medical students decreased from the first to second measurement, while these conditions increased in the pharmacy students. Similarly, the pharmacy students' stress score was significantly higher in the second than the first measurement, while all scores dropped for the medical students. These findings indicate that while the medical students' mental health conditions improved without any intervention during the evaluation period, the pharmacy students became more stressed. Lasheras et al<sup>26</sup> proposed several factors contributing to medical students' resilience compared to their peers from other majors. First, medical students have more access to scientific information regarding COVID-19. However, this factor was not evaluated in the current study. Second, medical students are known to have adaptive coping strategies.26 However, the current study found no significant difference between coping mechanisms used by medical and pharmacy students. Third, online learning was considered to reduce medical students' academic burden.<sup>26</sup> The current study could not prove this since both programs applied online learning, and its effect on the student's mental health was not assessed.

Around 50% of students in this study experienced anxiety, which accounted for the highest proportion among all evaluated symptoms.

In contrast, the proportion of stress and depression was about 20-30%. During the COVID-19 pandemic, university students have commonly reported mental problems. A meta-analysis of studies published from the beginning of the pandemic until October 2020 found that the prevalence of depression and anxiety among university students was 39% and 36%, respectively.27 A more recent meta-analysis evaluating studies published between the early pandemic and January 2021 reported a similar number (34% of depression and 32% of anxiety).13 Other meta-analyses reported mental conditions of students from various disciplines, including medicine (28% anxiety),26 dentistry (35% anxiety and 37% depression),<sup>28,29</sup> and nursing (52% depression, 32% anxiety, and 30% stress).30 These findings, in line with the current study, indicate that mental problems were significant issues among university students during the COVID-19 pandemic. Depressed and anxious medical students tend to have poorer academic performance, and these conditions may influence their competence in caring for patients.31 Therefore, addressing medical students' mental health is essential.

Some limitations should be considered when interpreting the findings of the current study. First, many pandemic-related factors were not assessed in the present study. For example, personal experiences of contracting COVID-19, having a family with the disease, and the perception of the pandemic were not explored. These factors may play a role in mental health conditions. Hence, future studies should consider assessing every aspect of stressors contributing to students' mental health. Second, the participants' history of mental problems was not evaluated. Consequently, the current study cannot completely rule out the possibility of existing anxiety and depression, which may not be related to the pandemic situation. Last, more characteristics need further evaluation, including personality traits, current living and financial situation, and academic performance. Such characteristics may also influence individuals perceiving and coping with a stressful situation.

# Conclusion

The present study showed some changes in coping strategies during the early phase of the COVID-19 pandemic, although self-distraction and acceptance remained the most used strategies. Additionally, anxiety is the most common mental problem experienced by the students during the COVID-19 pandemic.

Considering the abovementioned findings, several recommendations can be proposed. First, other factors influencing coping should be further explored using a longitudinal study to provide an understanding of coping strategies. Second, the high prevalence of anxiety indicates an urgent need to provide programs that focus on the prevention and intervention of this problem in the university. It would be essential for any mental health service provided in the university to consider interventions that focus on strengthening the use of accommodative coping strategies, such as self-distraction and acceptance.

## **Conflict of Interest**

None.

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