



Post-Covid Adaptation: Students' Mental Health and Higher Education System in Indonesia

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Abstract

The pandemic brought many changes, including for students. Various negative things experienced by students have an impact on their mental health. However, there are coping mechanisms that can bring positive changes to students' lives and help them survive the post-pandemic period. This research aimed to explore: the problems, level of stress, coping mechanisms carried out by students, and resilience level during the pandemic; the student's mental health situation during post-pandemic; and the recommendation for higher education (HE) institutions to support students' mental health. The research included 5018 students in bachelor's programs from 20 universities of APTIK members via quota sampling method on gender and class year (stage 1); and reports from students about their psychological symptoms during classes (n = 5 classes) and counseling (n = 10 cases) and literature review from explore 13 articles via Google scholar and Google search engine (stage 2). The study results show that students had many learning and social life challenges. Students who can develop positive coping with stress will be resilient and benefit from the experience during the pandemic, such as increased online learning skills, health awareness, and good time management. A positive coping strategy empowers the students to develop good mental health and survive during the pandemic, together with the support of the education system in higher education institutions. The institution should provide leadership, a good governance system, conducive teaching and learning system, and an appreciation for diversity and inclusivity to support students' mental health. The system should support the various changes experienced by students. With a good strategy and governance, there will be clarity and comfort so that it does not exacerbate the mental health problems encountered by many students. The impact is that students are more prepared and confident to connect with the industry world.

Keywords: higher education, mental health, coping mechanism, students, post covid

1. Introduction

The pandemic brought many challenges for university students, and most of the impacts were negative. A study among students in China found that they were experiencing anxiety about their health and those they loved. They also had difficulty concentrating, sleep disturbances, and negative thoughts. Further, they also found decreased social interactions due to physical distancing and increased concerns about academic performance. These findings were also relevant to results in the US (Acharya et al., 2020; Cao et al., 2020; Son et al., 2022). In the UK, of 1173 students, more than 50% experienced anxiety and depression levels above the clinical cut-offs, and females scored significantly higher than males (Chen & Lucock, 2021). The pandemic forced students to study online, with limited access to facilities and less contact with peers and teachers, while at the same time being exposed to more autonomy. These negative experiences have an impact on poor mental health.

Further, mental health issues are the leading impediment to academic success. Mental illness can affect crucial factors for students to succeed in higher education, such as motivation, concentration, and social interactions (Son et al., 2022). However, there are coping mechanisms that can bring positive changes to students' lives and help them survive the post-pandemic period (Biwer et al., 2021).

When the students cannot handle the problems effectively, they will encounter stress. Stress is a response from the human body to all the demands it faces, both positive and negative (Seyle, in Ridner, 2004). Mulhall (in Barnes & Montefusco, 2011) suggests that stress is an individual response to a stressor. A stressor is a stimulus, both internal and external, which has the potential to become the leading cause of stress (Aneshenhel, in Barnes & Montefusco, 2011). In this study, we defined stress as individuals perceive his/her stress level.

To adapt, students need adequate stress-coping strategies to help produce comfortable conditions in various aspects of their life. Coping is the effective use of multiple resources and strategies in dealing with stressful situations (Harrington, 2013). Lazarus and Folkman in Harrington (2013) suggest that there are two main categories of coping with stress, namely problem-focused coping and emotion-focused coping. In this study, we utilized the coping strategy proposed by Carver, Scheier, and Weintraub (1989, 1997). They extended Lazarus and Folkman's coping strategies became 14 approaches. The approaches are:

- a) Active coping
- b) Planning
- c) Seeking social support for instrumental reasons
- d) Self-distraction
- e) Seeking emotional social support
- f) Positive reframing
- g) Denial
- h) Acceptance
- i) Turning to religion
- j) behavioral disengagement
- k) humor
- l) Self-blame
- m) substance use
- n) venting (expressing negative emotions). Some coping strategies above are adaptive (healthy), and some are maladaptive (unhealthy).

Another variable that can support students in managing their stress is resilience. Resilience is a person's ability to assess, overcome, and improve themselves or change themselves from adversity or adversity in life (Reivich & Shatte, 2002). This research included students' reports on questionnaires asking aspects of resilience, such as emotion regulation, impulse control, optimism, causal analysis, empathy, self-efficacy, reaching out, and problem-solving.

The pandemic had an impact on the emergence of digital technology for online learning. The system in Higher Education needs to support the various changes experienced by students and also the lecturers involved. There is no model that can be generally accepted, so each university needs to identify the problems it faces and decide on the most appropriate solution (Rashid & Yadav, 2020). Meanwhile, Tadesse and Muluye (2020) state the need for every educational institution to design curricula and prepare new strategies for learning in the post-pandemic because the pandemic period has brought many behavioral changes. Learning design also needs to undergo changes because of the acceleration of technology and to improve lost learning.

This research aimed to explore:

- a) What are the problems, level of stress, coping mechanisms carried out by students, and resilience level during the pandemic?
- b) What is the student's mental health situation during post-pandemic?
- c) What is the recommendation for HE institutions to support students' mental health?

2. Materials and Methods

2.1. Materials of Survey Participants

We included five thousand eighteen (N = 5018) Indonesian university students from 20 APTIK members (The Indonesian Catholic University Association) via non-probability sampling by implementing quota sampling based on class and gender. The majority were female (66%) and bachelor level in the third and fourth years.

2.2. Instruments Method of Survey during the Covid-19 pandemic (the year 2021)

Stress; We measure participant perceived stress using the Perceived Stress Scale 10 (PSS-10) from Cohen, Kamarck, and Mermelstein (1983). The scale comprised ten items and was reliable, with an alpha of 0.78. We also asked participants about their problems during the pandemic with learning, family, and friendship.

Coping strategy; We applied Brief COPE by Carver (1997), Carver, Scheier, and Weintraub (1989) to measure coping response. We adapted the scale and found 28 items valid. The reliability of each strategy was good (problem-focused (n = 6; $\alpha = 0.74$), emotion-focused (n = 10, $\alpha = 0.74$), and less-useful approach (n = 14, $\alpha = 0.78$)).

Resilience; We utilized 16 items of the Resilience scale developed by (Reivich & Shatte, 2002). The reliability of the scale was satisfactory with Cronbach's $\alpha = 0.86$ (recommended 0.70 (Anastasi & Urbina, 2004)).

2.3. Reports from students and literature studies on mental health and the HE system during the post-pandemic

Reports from students. We include student reports about their psychological symptoms during classes (n = 5 classes) and counseling (n = 10 cases).

Literature. We explore 13 articles via Google scholar and Google search engine by applying stress, coping, students, learning, education, and post-pandemic as keywords.

2.3.1. Analysis method of survey reports data

We implemented descriptive statistics such as frequency, mean, and standard deviation to illustrate the distribution of participants and variables measurements. We also employed ANOVA repeated measures to test whether there was a significant difference among the three coping strategies.

3. Results

3.1. Survey during the pandemic Covid-19 (the year 2021)

3.1.1. Changes and problems in the academic setting

Changes in learning can be seen in the Table 1 and Figure 1.

Table 1. Changes in learning

No.	Changes	Total	Percentage
1.	All learning is online	4295	86%
2.	More tasks	3332	66%
3.	Doing group assignments becomes more difficult	3074	61%
4.	Relation with lecturers became more tenuous	2229	44%
5.	Longer learning time	1014	20%

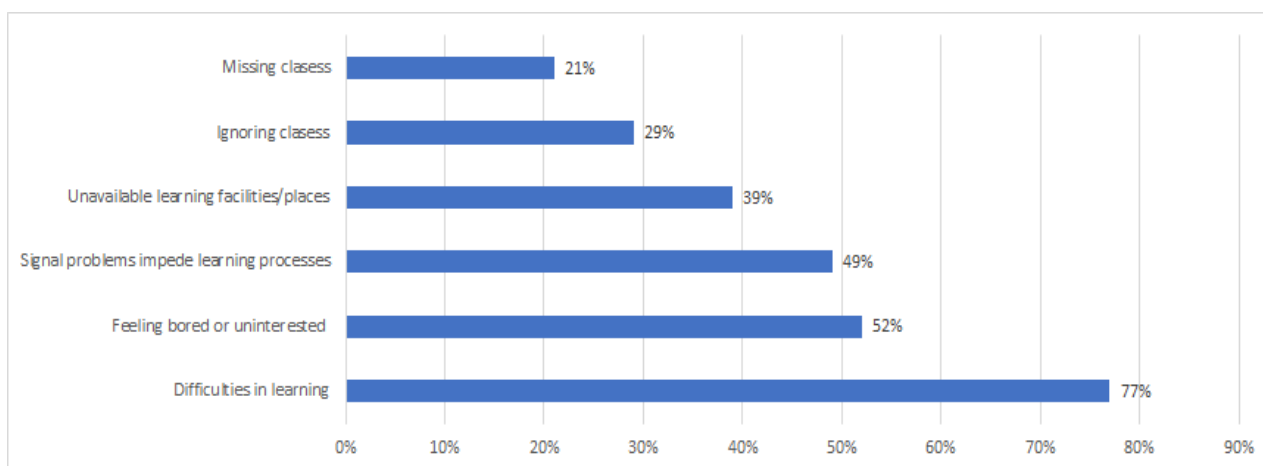


Figure 1. Learning problems

Besides, students also experience problems in the family and friendships, including the family economy decreasing (60%), issues in the family increasing (27%), and relationships with family members becoming more tenuous (10%). Some students feel pressured (28%), feel increasingly uncomfortable at home (20%), get angry more easily with other family members (20%), and because their family's economy is disrupted, they also have to work hard to improve family finances (15%). In friendships, the problems experienced include less free time spent with friends (64%). Relationships with close friends become more tenuous (50%), and students feel increasingly lonely (44%).

3.1.2. Stress level, coping strategies, and resilience level

We found the participants perceived stress at the medium level (from a scale 1 to 5, $M = 2.96$, $SD = 0.52$) and practiced more problem-focused ($M = 3.39$, $SD = 0.64$) than emotion-focused ($M = 3.35$, $SD = 0.59$), and less useful strategy ($M = 1.98$, $SD = 0.48$) with F -value of 15547.724 ($p < 0.001$) and partial eta square of 0.756 (large effect). The post-hoc analysis with the Bonferroni formula showed that significant differences were found between the problem-focused with the other two strategies ($Mdiff_{PF-EF} = 0.046$, $p < 0.001$; $Mdiff_{PF-LU} = 1.148$, $p < 0.001$), and between emotion-focused and less useful strategy ($Mdiff_{EF-LU} = 1.372$, $p < 0.001$). The student's resilience level was at the medium level ($M = 3.83$, $SD = 0.58$ on 5 point scale).

The students who can develop positive coping with stress will be resilient and benefit from the experience during the pandemic. From the qualitative results of this study, the positive things that students obtained included increased online learning skills, increased health awareness, gaining new skills, and good time management. Some students have new habits in some aspects, such as maintaining health, gaining new skills (such as knowledge of trades, and the

ability to do programming designs. They also can do business online, have an improvement in language skills, and have the ability to edit photos. Some skills are also enhanced, especially in online lectures (using online facilities for access to journals, viewing course lessons on YouTube, and immediately doing assignments when there is free time).

The results of the study show that there are many challenges in student learning and social life. It's in line with research results in other countries (Cao et al., 2020; Chen & Lucock, 2021; Son et.al, 2022; UNESCO, 2022). Students who can develop positive coping with stress will be resilient and benefit from the experience during the pandemic.

3.2. Reports from students and literature reviews

“Students need to adapt because there are still restrictions, confusion, and anxiety. There is a desire to have a lot of interaction, but on the other hand, the students are still worried because the pandemic is not completely over”

“Economic difficulties are still also felt”.

“Because the students don't always meet lecturers face to face, they feel confused about the expectations and demands that must be met. There is an assumption that the academic performance shown is minimal, there has not been more effort to reach beyond the capacity one has.”

“At the beginning of lectures, students feel the need to readjust themselves to activities that they are very busy and physically tiring. They need to adapt to manage time, for example when preparing to go to campus but feel happy because they feel the real world of college. Students do a lot of activities outside of lectures to add experience because during the pandemic they felt minimally busy.

“Students must be able to organize themselves to study independently. Adaptation skills must be high, students must be very flexible, must be able to empathize, tolerate, and compromise.”

“For online learning, it was found that the conditions and learning process were considered less effective, the provision of material was felt to be monotonous and uninteresting.”

From the results above, it can be seen that during the post-pandemic period, students experienced mental health problems. In the post-pandemic period, students cannot fully return to the situation as it was before the pandemic because major changes have occurred (UNESCO, 2022). Anxiety, depression, and post-traumatic stress disorder (PTSD) are reported as symptoms among college students in the post-covid 19 era (Wang et al., 2022).

3.3. Recommendation for HE Institution to develop a strategy to support students' mental health in post-pandemic

The system of Higher Education needs to support the various changes experienced by students. In developing countries, the challenge for distance learning is the lack of network, computer, and internet infrastructure facilities. Various strategies are needed so that distance learning can be carried out and a zero-fee internet facility is needed. With online learning, mental health problems also arise (Tadesse & Muluye, 2020). Positive stress coping can develop and survive with the support of the environment, in this case, the education system in tertiary institutions. With a good system and governance, there will be clarity so that it does not exacerbate the mental health problems experienced by many students. The impact is, students are more prepared and confident to connect with the world of industry. UNESCO (2022) stated several things to do about the pandemic. Prepare in advance of potential crisis, plan to execute a response strategy, training for staff in crisis management, identify possible trouble and develop an early warning system, activate a crisis management team, communicate to the academic community, and evaluate processes and lessons learned should be implemented in higher education management, teaching and learning, and other areas.

Price (2022) states approaches that can be taken to support students' well-being. Psychological approaches are generally used to develop resilience through mindfulness training to increase self-efficacy, self-esteem, motivation, and emotional intelligence. For students who lack control over their environment, a cognitive psychology approach through Cognitive Behavior Therapy is carried out to help overcome anxiety and depression. Another approach is positive psychology, which states that negativity can help a person grow.

For 2 years, higher education institutions carry out adaptation and transformations. They have to re-evaluate their role. The first response of higher education institutions to the pandemic was to turn to the internet and screens to continue their activities while prioritizing pedagogical continuity, and the health and well-being of students, faculty, and staff. However, such a sudden shift has had profound consequences, both positive and negative, in all areas of higher education (UNESCO, 2022).

Related to students' well-being, openness about mental health tends to be less common among Asian students, especially those with lower-income backgrounds. In addition, cultural norms against publicizing mental health issues may help explain the lower rates reported in countries like China and Bangladesh. Meanwhile, those universities aware of the psychological implications of the pandemic made substantial efforts to continue providing their counseling and mental health services online during campus shutdowns. In many universities, a hotline or virtual desk for psychological support was created. To support these initiatives, some programs hired additional psychologists to

provide counseling in one-on-one meetings with students while others in countries like Italy, Japan, and Malaysia organized peer support networks. However, at least in some cases, it appears that health services have not been used as needed. In one university, evidence suggests that contrary to what was expected, scheduled sessions had a downward trend, the same for group therapy, and there were no differences in the attendance of individual therapy sessions and usage of therapeutic platforms. Similarly, in another case, most students with moderate to severe symptoms of stress, anxiety, and depression did not receive the help of an on-campus or off-campus professional (UNESCO, 2022).

Another problem relates to learning loss. Learning loss can affect students' mental health (Munaroh & Nurmalasari, 2021). Due to COVID-19, Aucejo, French, Araya, dan Zafar (2022) found large negative effects across many dimensions on students' current and expected outcomes: 13% of 1500 students have delayed graduation, 40% lost a job, internship, or job offer, and 29% expect to earn less at age 35. Moreover, these effects have been highly heterogeneous. One-quarter of students increased their study time by more than 4 hours per week due to COVID-19, while another quarter decreased their study time by more than 5 hours per week. This heterogeneity often followed existing socioeconomic divides; lower-income students are 55% more likely to have delayed graduation due to COVID-19 than their higher-income peers. The economic and health-related shocks induced by COVID-19 vary systematically by socioeconomic factors and constitute key mediators in explaining the large (and heterogeneous) effects of the pandemic.

Efforts to improve the curriculum need to be made, and the Indonesian government has made this effort by launching the Merdeka Curriculum (Kemdikbud, 2020). Students can gain direct learning experience from the industrial world.

In Atma Jaya Catholic University (Unika Atma Jaya – UAJ), a private HE Institution in Jakarta, the learning system in higher education also changed during the pandemic. Learning is not completely offline, but there is a percentage of online and offline. This continues to be evaluated in line with the development of the pandemic. The impact is a new way of social interaction between students and lecturers and also between students. New learning methods were developed through various pieces of training for lecturers. There are new self-regulations for lecturers and students, new policies, and changing field techniques.

Various efforts have been made by UAJ to maintain or improve students' mental health, including providing services at the Campus Ministry and providing peer counselor services. Offline meetings are arranged indirectly 100%, but gradually. This form of learning takes place in two models, namely online and offline. If needed, blended models can also be done.

Interdisciplinary research and collaboration are needed in overcoming post-pandemic problems because there are situations that force us to adapt to a new context. Humans will get better results when collaborating (Cole et al., 2022). Therefore, mental health problems in students also need to be solved in a society-based manner, not only in universities.

Changes during the post-pandemic period in the higher education system still require a lot of studies. The effectiveness of changes currently being made by universities to support mental health needs to be seen in future research.

4. Conclusion

The pandemic has had an impact on students' mental health. However, there are coping mechanisms that can bring positive changes to students' lives and bring success for students to survive in the post-pandemic period. Positive stress coping can develop and survive with the support of the environment, in this case, the education system in tertiary institutions. There needs to be leadership, a good governance system, conducive teaching and learning system, and an appreciation for diversity and inclusivity to support students' mental health. The system of Higher Education needs to support the various changes experienced by students. With a good system and governance, there will be clarity so that it does not exacerbate the mental health problems experienced by many students. The impact is, students are more prepared and confident to connect with the world of industry.

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