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# The main life stressors of secondary school students during Movement Control Order (MCO) in Sabah, Malaysia

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## CITATION

Wider W, Chua BS, Mutang JA, et al. (2024). The main life stressors of secondary school students during Movement Control Order (MCO) in Sabah, Malaysia. *Journal of Infrastructure, Policy and Development*. 8(9): 5251. <https://doi.org/10.24294/jipd.v8i9.5251>

## ARTICLE INFO

Received: 15 March 2024

Accepted: 23 April 2024

Available online: 5 September 2024

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**Abstract:** The COVID-19 pandemic prompted global crises and enforced strict measures like the Movement Control Order (MCO) in Malaysia, significantly impacting societal norms, particularly affecting secondary school students. The current study employs a qualitative methodology to determine how COVID-19 affects the life stress experienced by secondary school students. Secondary school students were recruited in Sabah, Malaysia, from April to August 2022, after Malaysia entered the endemic phase on 1 April 2022. As part of a larger survey, students were asked to respond to an open-ended question about life stressors they face as a result of the pandemic COVID-19 or during home-based teaching and learning (PdPR). A total of 1069 secondary school students from various backgrounds were included in the study. However, only 714 students responded to the open-ended question. The pattern of meaning across the texts was determined using Birks and Mills's method of multilevel coding. The students' perspectives on life stressors were classified into five broad categories: restriction stress, emotional stress, online study stress, family-related stress, and others-related stress. Restriction stress, which refers to being confined at home, restricted movement, hampered family, friendship, and outdoor activities, and no freedom were rated as the most significant life stressors associated with the COVID-19 pandemic by students. This research provides valuable insights for policymakers, educators, and parents, emphasizing the profound effect of pandemic-induced restrictions on student life and the essential role of targeted interventions in fostering resilience among students.

**Keywords:** COVID-19; secondary school students; life stressors; Movement Control Order; mental health

## 1. Introduction

The emergence of COVID-19 in March 2020 caused widespread panic and an unprecedented health crisis around the world, including in Malaysia (Pang et al., 2022a; Wider et al., 2023). It arrived unexpectedly and halted the entire world. The pandemic was declared all over the world, prompting all countries, including Malaysia, to impose the Movement Control Order (MCO) to prevent the virus from spreading (Karim et al., 2020; Pang et al., 2022b; Rathakrishnan et al., 2023). On 18 March 2020, the Movement Control Order—which required the closure of all businesses except those offering necessities—was finally implemented due to a persistent rise in new

COVID-19 cases (Tang, 2020). It gave people, communities, and especially students no choice but to stay at home (Kaur et al., 2022; Malek et al., 2023). The MCO has had an indirect impact on both the domestic and international economies and the tourism industries (Menhat et al., 2021). People are barred from leaving the country, and all borders are immediately closed. Even universities, colleges, and schools were forced to close for an extended period (Effandi et al., 2023; Wang and Zhao, 2020; Wider et al., 2022). To ensure that schoolchildren do not miss out on their studies, the Education Ministry has implemented home-based teaching and learning (PdPR) (Mohamed et al., 2021). Nevertheless, the imposition of a movement control order, the closure of schools, and the decision to keep children at home were the consequences, either for the family or the schoolchildren themselves, at the time.

This study is based on the Stress-Coping Theory, which provides a framework for understanding how people manage stress caused by significant life changes, such as the COVID-19 pandemic and the resulting Movement Control Order (MCO) in Malaysia. According to Lazarus and Folkman (1984), coping mechanisms can be problem-focused, which aims to change the source of stress, or emotion-focused, which aims to manage the emotional response to stress. This theory is critical for understanding how secondary school students have reacted to the abrupt shift to home-based teaching and learning (PdPR) and extensive social isolation from peers and educators. The disruption of routine school environments, as well as the transition to online learning platforms, are significant stressors that may overwhelm students' normal coping mechanisms (Kee, 2021). Using the Stress-Coping Theory, this study aims to identify the specific stressors—such as isolation, academic pressure, and altered family dynamics—that have had the greatest impact on students. It also seeks to investigate the efficacy of students' coping strategies, whether they have reduced stress and promoted resilience, or if they have failed, exacerbating the students' psychological distress.

Bronfenbrenner's ecological systems theory strengthens this framework by emphasizing the role of various environmental systems in an individual's development (Crawford, 2020). The MCO has significantly altered students' microsystems, transforming their homes into schools and limiting their social interactions, while changes in the macrosystem, such as public health policies and community norms during the pandemic, have shaped students' broader social realities. These theoretical perspectives are critical for understanding how school closures and the transition to PdPR have disrupted routine educational processes while also introducing new stressors that affect students' psychological well-being and academic performance.

By combining these theories, the study hopes to provide a comprehensive analysis of the stressors that students face as a result of pandemic-induced changes, as well as recommendations for targeted interventions to mitigate these effects. This theoretical framework is critical for comprehending the complex dynamics at work and guiding future educational policies and practices during times of crisis.

## **2. Literature review**

As a result of the MCO and school closure, the students were forced to isolate themselves from their friends, classmates, and teachers, with whom they had

previously interacted (Mohamed et al., 2021a). In addition to education, going to school in person allows students to interact socially with their peers and friends, shape their conduct, and participate in extracurricular activities like sports. As of 2020, UNESCO (the United Nations Educational, Scientific, and Cultural Organization, 2020) reported that school closures affected more than 60% of the world's children and adolescents. Similar conclusions were reached by Hassan and Bao (2020), Cao et al. (2020), Lee (2020), and Ye et al. (2020) regarding the impact of COVID-19 on students' psychological health. According to the results, 71.60% of male students and 69.70% of female students, respectively, were not properly prepared for home learning during MCO (Mohamed et al., 2021b). Consequently, 79.81% of respondents concurred that studying at home is more stressful than attending classes in person.

According to Dangi et al. (2020), stress is more than just a physical reaction; it can also affect our emotions, behaviour, and cognition. Although some stress can be beneficial to our health, children may not be prepared or know how to cope. To some extent, stress can be used to motivate students to work harder, be more focused, and concentrate on their studies (Travis et al., 2020). However, if the students are overly stressed or lack knowledge of how to manage stress, the effect may backfire and negatively impact their studies (Gale et al. 2018). Stress can be said a normal part of life but it can have a negative impact on students' academic performance as well as their overall health (Barbayannis et al., 2022).

In addition, regular day-to-day inconveniences like persistent academic demands are among the many continuous normative stresses that students in secondary and tertiary education environments must deal with (Pascoe et al., 2019). These stressors include isolation (Loades et al., 2020), the effect of socioeconomic status (Zhang et al., 2022), the impact of interpersonal relationships (Kallander et al., 2021), limited access to technology and reliable internet (Adnan and Anwar, 2020), difficulty adjusting to new learning platforms (Dhawan, 2020), decreased autonomy (Šakan et al., 2020), decreased competence and motivation (Wong, 2023), and the impact on mental health and general well-being (Chaturvedi et al., 2021).

The onset of the COVID-19 pandemic in early 2020 led to unprecedented disruptions across the globe, significantly impacting educational systems. In Malaysia, the Movement Control Order (MCO) mandated the closure of schools and the rapid shift to home-based teaching and learning (PdPR), posing new challenges and stressors for students. This shift has potential long-lasting effects on students' academic performance and psychological well-being. Recognizing the critical nature of these impacts, this study aims to investigate the specific life stressors faced by secondary school students in Malaysia during the pandemic and while adapting to PdPR.

This research is particularly vital as it addresses a significant gap in current literature, which primarily focuses on university students, leaving a dearth of information on younger students who may experience different stresses due to their different developmental stages and educational needs. By examining these unique stressors via a qualitative approach, the study seeks to provide empirical insights that can guide educational policymakers and school administrators in developing targeted interventions to support students during such crises.

### **3. Methods**

#### **3.1. Research design**

This qualitative study is part of a larger survey aimed at understanding the life stressors faced by secondary students in Sabah, Malaysia, due to the COVID-19 pandemic and the shift to home-based teaching and learning (PdPR). The study was conducted between April and August 2022, capturing responses during a significant phase of the pandemic when educational systems were attempting to adapt to new normal conditions.

#### **3.2. Context of the study**

The study was situated in the context of prolonged school closures and the implementation of Movement Control Orders (MCO) which mandated remote learning, drastically altering the educational landscape and daily routines of students.

#### **3.3. Sampling strategy**

Participants were selected using a purposive sampling method to include a diverse group of secondary students who were directly experiencing the impact of MCO and PdPR. This sampling approach ensured that the study reflected a range of experiences from students of different ages, genders, and socioeconomic backgrounds.

#### **3.4. Data collection methods and measurement**

This study was a component of a research project that investigated the effects of the COVID-19 pandemic on secondary students in Sabah, Malaysia, specifically during the period when PdPR was in effect. For this segment of the study, we focused solely on responses to a single open-ended question extracted from the larger dataset, which asked: “What life stressors are you experiencing due to the COVID-19 pandemic?” An ad hoc measurement comprising this single open-ended question was utilized to gather data. The validity of the instrument in terms of content, clarity, and accuracy was confirmed through face validity by two seasoned researchers.

#### **3.5. Ethical consideration**

Ethical approval for the study was granted by the INTI International University Research and Ethics Panel (Approval Code: INTI/FBC/2022/001). All participants provided informed consent, and confidentiality was maintained by anonymizing personal information in the data analysis and reporting phases.

#### **3.6. Data analysis**

In this study, the data collected from open-ended survey responses were meticulously analyzed using a thematic analysis approach described by Birks and Mills (2011). Initially, each response was carefully examined, and key phrases or keywords that captured core sentiments or concepts were identified and coded. These initial codes were critically reviewed to identify patterns that suggested broader themes, which required several iterations to refine the relationships and meanings underlying these codes.

Additional scrutiny included reviewing each theme in the context of both individual data extracts and the entire dataset to ensure robustness and consistency. Following thematic structuring, a validation process was carried out to ensure that these themes accurately represented the range of responses, reducing researcher bias and anchoring the analysis firmly in empirical data. Along with thematic analysis, descriptive statistics were used to analyze the participants' demographic characteristics, calculating frequencies and percentages to better understand the distribution across different groups such as age, gender, and socioeconomic status. This demographic analysis provided critical context for the thematic findings, indicating whether certain themes manifested differently across demographics.

The final stage synthesized the validated themes within the framework of the study's theoretical orientation, referring to the existing literature on adolescent psychological effects of stress and coping mechanisms. This comprehensive synthesis not only detailed the direct effects of the Movement Control Order (MCO) on students but also revealed broader implications for educational policies and mental health interventions tailored to adolescents during crises. This detailed, step-by-step analysis process ensures that the study's findings are transparent, credible, and robustly supported by the data collected, laying the groundwork for understanding and addressing the needs of secondary students facing similar future disruptions.

#### 4. Results

The current study included 1069 secondary school students from Sabah, Malaysia. Only 714 students, however, provided qualitative information. **Table 1** shows the demographic profile of the participants. The profile depicted a diverse range of backgrounds, including the student's gender and age, ethnicity, religion, education, geographical region, and family income.

**Table 1.** Demographic characteristics of respondents (n = 714).

Variables	Frequency	Percentage (%)
<b>Gender</b>		
Male	320	44.8
Female	374	52.4
Missing Data	20	2.8
<b>Ethnicity</b>		
Malay	31	4.3
Chinese	34	4.8
Indian	4	0.6
Kadazandusun	470	65.8
Bajau	15	2.1
Murut	68	9.5
Melayu Brunei	12	1.7
Iban	4	0.6
Others	69	9.7
Missing Data	32	4.5

**Table 1.** (Continued).

<b>Variables</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Religion</b>		
Islam	203	28.4
Buddhism	31	4.3
Christian	476	66.7
Hinduism	4	0.6
<b>Education Level</b>		
Transition Class	6	0.8
Form one	91	12.7
Form two	205	28.7
Form three	106	14.8
Form four	159	22.3
Form five	121	16.9
Lower Six	2	0.3
Upper Six	20	2.8
Missing Data	4	0.6
<b>Residence</b>		
Rural area	560	78.4
Urban area	146	20.4
Missing Data	8	1.1
<b>Family Monthly Income</b>		
RM 4849 and below	474	66.4
RM 4850–RM 10,959	159	22.3
RM 10,960 and above	26	3.6
Missing Data	55	7.7

#### **4.1. Students’ Life Stressors due to MCO**

The current study aimed to explore secondary school students’ experiences in response to the COVID-19 pandemic situation in Sabah, Malaysia. We extracted five themes from the textual data using a descriptive, inductive approach. These themes provided detailed information on how the COVID-19 pandemic affected secondary school students in Sabah, Malaysia. The data was gathered after Malaysia entered the endemic phase from April to August 2022. The text that follows summarises key findings and supporting quotes for each theme.

The thematic analysis yielded five major categories of life stressors experienced by secondary school students in Sabah, Malaysia as a result of the COVID-19 pandemic situation. **Table 2** summarised the five major themes that emerged: 1) Restriction stress; 2) Emotional stress; 3) Online study stress; 4) Family-related stress; and 5) financial stress. The most common life stressors experienced by respondents during the COVID-19 pandemic were restriction stress (26.48%), followed by emotional stress (19.19%), and online study stress (11.62%).

**Table 2.** Categories and sub-categories of source of life stress during COVID-19 among secondary school students in Sabah, Malaysia.

Main Categories	Sub-Categories	Male	Female	Frequency	Percent (%)
Restriction Stress	Being confined at home	16	27	43	
	Restricted Movement	18	20	38	
	Friendship activities hindered	18	16	34	
	Outdoor activities hindered	10	20	30	
	No freedom	12	13	25	
	Family activities hindered	4	15	19	
				189	26.48
Emotional Stress	Boredom	29	23	52	
	Anxiety and depression	12	18	30	
	Fear of losing family/family health	8	9	17	
	Lack of confidence	5	8	13	
	Lack of motivation/ Laziness	7	4	11	
	Fear of infection	1	7	8	
	Anger	1	5	6	
				137	19.19
Online Study Stress	Difficult to understand	11	12	23	
	Difficult to Focus/learn	6	9	15	
	School workload	1	11	12	
	Internet connection	5	6	11	
	PdPR	3	7	10	
	Performance Decline	4	3	7	
	Home atmosphere	1	4	5	
				83	11.62
Family-Related Stress	Financial problems	20	21	41	
	Family relationship	5	13	18	
	Household Chores	5	10	15	
	General family problem	1	9	10	
				84	11.76
Others	Physical health (e.g., increase body weight)	7	3	10	
	Time management	7	3	10	
	General/Unidentified stress	23	30	53	
				73	10.22
Normal/No stress	148	84	64	148	20.73
	Total	325	456	714	100

#### 4.1.1. Theme 1: Restriction stress

There were 26.48% of students who weighed restrictions heavily and whose lives were affected in multiple ways. The students complained that they were confined at home, that their movement was limited, that their friendship, family, and outdoor activities were hampered, and that they had no freedom during the MCO. The following statements illustrate that: *“Feeling trapped in the house with the same activities every day.”* and *“Not being able to get out of my house whenever I want due to the restrictions, the restrictions caused me to give up and only stay indoors.”* The students also complained that normal activities and events with family and friends were cancelled. Activities and events included things like celebrating Hari Raya with extended family in the hometown, visiting relatives, and traveling with family or friends as mentioned in their statements like *“Couldn’t do outside activities with my peers.”* and *“Not being able to celebrate Raya with the big family.”* Participants also reported a loss of social connection, particularly with extended family and friends, according to their statements; *“I could no longer get along with other members of my family, and my performance at school was getting worse,”* and *“Going out less, little to no outdoor activities, constantly fighting with siblings even for the smallest things, feeling unmotivated. Nothing to do at home, more responsibilities, less sleep.”*

#### 4.1.2. Theme 2: Emotional stress

Many students expressed concern about their mental health deteriorating during the Movement Control Order (MCO) as a result of the COVID-19 pandemic. The most common symptom reported by students was boredom. They were bored because they had been stuck or trapped at home for too long, which caused them to miss out on or lose their usual activities. The following statements illustrate it: *“Felt bored because I was stuck at home for a year and had nothing to do other than playing on my social media.”* The students also reported feelings of anxiety and depression as a result of overthinking, worrying about their academic performance, and parental pressure according to statements like *“Questioning my self-worth. People misunderstood me. People see me as something I am not,”* and *“I get angry easily and stress with all the household chores I was told to do even when I already did everything they had asked but still say I am useless and didn’t do anything all even though I am taking care of my siblings and house at the same time.”* This appeared to be related to an exacerbation of pre-existing psychological issues at times.

During this critical situation, respondents stated that they feared losing loved ones, becoming infected by the virus, and being concerned about the health of their family members per the statements the students wrote: *“Scared of losing a close relative to the virus,”* and *“I faced great life stress, afraid of getting COVID-19. As a person who learns advanced medical knowledge from actual textbooks, anxiety has made me frustrated and always thinking about what will happen and what consequences will be faced if infected.”* Some students reported that when they were trapped at home and forced to participate in home-based teaching and learning (PdPR), forced to do household chores, and addicted to gadgets, their self-confidence and motivation decreased, they became lazier, and they easily became angry. The following statement mentions it: *“I have gone through several depressions in a way that might involve the pandemic. The feeling of being demotivated to study shows that gadgets like a phone*



*play a factor as well. There are more reasons why I've gone through depression but it's not related to COVID-19."*

#### **4.1.3. Theme 3: Online study stress**

When schools in Malaysia were ordered to close due to the COVID-19 pandemic, home-based teaching and learning (PdPR) was implemented. PdPR employs online learning platforms for teaching and learning. As a result, it was not surprising that online study ranked third among secondary school students in Sabah in terms of life stressors. Students complained that the online lessons were difficult to understand, learn, and focus on, as mentioned in the statement the student wrote: *"The main stressors are my ability to focus and concentrate during online class and the background noises that I have to deal with during online meetings."* Time spent on online study, the medium used for online study (our data showed that 73.5% of respondents use smartphones as their medium for online study), sharing the online study medium, home environment, and internet connection problems were some of the reasons why online study was not an appropriate and effective teaching and learning method for this group. The following statement describes it: *"None, probably an internet problem and the need to share phones."* Academic performance during PdPR was also one of the students' stressors. They reported that their academic performance had declined and was no longer as good as it had been before the COVID-19 pandemic, as mentioned in the statement the student wrote: *"I have fallen behind in my studies. I stress over not being able to perform well in my academics."*

#### **4.1.4. Theme 4: Family-Related stress**

During the pandemic, one of the most significant life stressors perceived by students was financial insecurity. Some students' families faced income insecurity, job loss, and job insecurity. Due to family income constraints, some students complained that they could not afford to purchase study stationery or internet access data for online study. The students also stated that the Movement Control Order (MCO) emphasized their relationships with their families. Some respondents complained that their parents were always mad at them, that they couldn't understand them, and that they were addicted to smartphones. The following statements illustrate it: *"My parents cannot understand me sometimes and get mad at me for being on my phone too much (I'm just doing PdPR),"* and *"I was always scolded by my parents for playing on the mobile phone, I was always compared to all my siblings and was always excluded."* Working from home for parents may also result in unique stresses in some families and cause conflict inherent in parents juggling work and family, while children juggle online study and household chores. The following statement mentions it: *"Families fighting, homework, house chores. Doing chores when I need to study. Being forced to do chores while I am on my PdPR."* As a result of being cooped up at home for the duration of the MCO, tensions rose between parents, between parents and children, and between siblings as mentioned in the statement the student wrote: *"Always getting scolded by parents and always fighting with siblings."*

#### **4.1.5. Theme 5: Others-Related stress**

Other life-related stressors reported by secondary school students in Sabah included physical health issues (e.g., increased body weight), time management

challenges, and general/unidentified stressors. The students observed that they were gaining weight throughout the pandemic, as one student noted: *“Gained weight because I ate a lot of food.”* Students also complained about feelings of discomfort with their appearance, with statements such as: *“Feeling uncomfortable with my appearance,”* and *“Being body-shamed.”* They were self-conscious about their physical appearance and increased body weight, which could be attributed to decreased participation in sports and unhealthy eating habits, as highlighted in the statement: *“Lack of exercise and health is affected.”*

During the Movement Control Order (MCO), the students also claimed that they were unable to manage their time effectively. They reported issues such as an unspecified sleeping schedule, difficulties in managing study time, and a general feeling of wasting time during the pandemic period. The following statements illustrate these challenges: *“Feel like wasting time,”* *“Sleeping schedule is not stipulated,”* and *“Unable to manage study time.”* Furthermore, a sizable proportion of participants (20.73%) claimed that the COVID-19 pandemic did not affect them. Their lives continued as normal, and they did not experience any significant life stress during the MCO as a result of the pandemic.

## 5. Discussion

According to the findings, secondary students in Sabah, Malaysia, faced a variety of stressors during the Movement Control Order (MCO) that had a significant impact on their lives. The most common types of stress are restriction, emotional, online study, family-related, and financial, reflecting the pandemic’s far-reaching consequences. These findings are consistent with those of Sprang and Silman (2013), who found that children subjected to quarantine conditions had significantly higher levels of post-traumatic stress disorder than their non-quarantined peers.

Ecological Systems Theory offers a lens through which to examine these stressors. By changing students’ microsystems and exosystems, such as moving from physical classrooms to home-based learning, the MCO disrupted their daily routines and social interactions, both of which are important for adolescent development. The closure of schools altered not only where students learned, but also how they interacted with peers and teachers, influencing their mesosystem interactions. Stress-Coping Theory provides insight into how students responded to these changes. The theory distinguishes between two types of coping: problem-focused, which modifies the problem causing stress, and emotion-focused, which modifies the emotional response to the problem. Our findings indicate that students’ ability to engage in effective problem-focused coping was limited by external constraints (e.g., restricted movement, online learning challenges), potentially leading to an increased reliance on emotion-focused coping strategies, such as seeking social support virtually. However, the pandemic’s prolonged nature may have tested their usual coping mechanisms, resulting in increased stress and anxiety.

The study discovered a lack of parental support for studying, as well as issues with body image, motivation, and physical inactivity, all of which, if not addressed, could lead to significant psychological distress. This requires immediate educational interventions and mental health support systems to assist students and their families in

better understanding and managing such stress. Schools and parents must be equipped with strategies for improving students' problem-solving and emotional coping skills. Furthermore, despite the overall high level of stress reported, approximately 20.73% of students said they were unaffected by the MCO. Individual differences in stress perception and resilience may be influenced by their existing coping strategies, social support systems, and possibly their positions within their ecological environments. Future research should explore into these coping mechanisms in order to provide targeted interventions.

## **6. Conclusion**

This study provides a comprehensive analysis of the life stressors experienced by secondary students in Sabah, Malaysia, as a result of the implementation of the Movement Control Order (MCO) during the COVID-19 pandemic. This study makes a significant contribution by exploring the psychological impact of prolonged home confinement on adolescents, a critical topic given the global reach and potential recurrence of similar crises. Theoretically, this study contributes to the broader literature on stress and coping by situating these concepts within a distinct, crisis-driven educational setting, as highlighted by the COVID-19 pandemic and its subsequent MCO. This study not only investigates the direct impact of such crises on student stress levels, but also explains how these effects can be mitigated by the multiple environmental systems envisioned by Ecological Systems Theory. This interaction was significantly altered during the MCO, as traditional learning environments were disrupted and replaced by remote schooling, which impacted not only students but also their families and educators. Furthermore, by utilizing Stress-Coping Theory, this study sheds light on the individual psychological processes that students use to manage the stressors introduced by these ecological changes. Understanding these dynamics provides a dual perspective on both external influences on students and internal responses, emphasizing the variability in students' ability to effectively manage stress, which is influenced by their individual, familial, and educational environments. In practice, the findings offer useful insights for educational policymakers, school administrators, and mental health professionals. They emphasize the importance of incorporating resilience training and mental health resources into schools' curricula to better prepare students for unexpected disruptions. Furthermore, acknowledging the role of parents and teachers in supporting students implies that training programs should be developed to equip them with the skills required to effectively manage adolescent stress.

However, the study has limitations. The reliance on data collected through open-ended survey responses may limit the depth of understanding of the various coping mechanisms used by students during the MCO. Furthermore, the time since the pandemic's onset may have an impact on the accuracy of participants' recollections, potentially influencing the findings. These limitations highlight the importance of conducting additional research closer to the events in question in order to reduce recall bias and improve data reliability. Future research should aim to longitudinally track students' stress levels and coping mechanisms during and after a crisis, allowing for real-time data collection and providing more immediate insights into the effectiveness

of various coping strategies. Furthermore, broadening the scope to include a larger and more diverse sample would allow for comparisons across demographic groups, potentially revealing differences in impacts and resilience factors based on socioeconomic status, geographic location, and other relevant variables.

Finally, this study is an important resource for understanding how pandemic-related disruptions can have a significant impact on adolescent mental health and educational outcomes. It advocates for a proactive approach to crisis management in educational settings, emphasizing the importance of preparation and the creation of comprehensive support systems to ensure students' well-being in the face of future challenges. By continuing to investigate and address these issues, stakeholders can better support secondary students not only during pandemics, but also in any high-stress situations that may arise in the future.

**Author contributions:** Conceptualization, WW, BSC and JAM; methodology, BSC; software, BSC; validation, WW, BSC and JAM; formal analysis, BSC; investigation, WW, BSC and JAM; resources, WW, BSC and JAM; data curation, WW, BSC and JAM; writing—original draft preparation, BSC; writing—review and editing, WW, JAM, JA, CTLO, CCT, RI and LNU; visualization, WW, BSC and JAM; supervision, BSC; project administration, BSC; funding acquisition, WW, BSC, JAM and LNU. All authors have read and agreed to the published version of the manuscript.

**Funding:** This study was funded by the Yayasan Hasanah Research Grant (LPS2205).

**Conflict of interest:** The authors declare no conflict of interest.

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