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Media exposure, attitude, anxiety and practices among university students during the COVID-19 pandemic

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ABSTRACT

The coronavirus disease 2019 (COVID-19) pandemic, which originated from China, went global within weeks. At the time of writing, almost 300 million people around the world have been infected by this potent and fast-spreading disease, which in many cases has paralysed economies and normal daily activities. University students are among the people that have been badly affected by the pandemic, as the movement control order (MCO) has resulted in university closure. Hence, many students are unable to proceed with their regular studies and have to be extra vigilant in dealing with the pandemic. During the MCO period, they rely heavily on media for guidance and information. This study was conducted to examine media exposure, attitude, anxiety, and practices towards COVID-19 amongst the students of Universiti Pendidikan Sultan Idris (UPSI), Perak, Malaysia. A quantitative research design was used to achieve the research objective. A total of 505 respondents answered an online survey and the findings revealed that respondents were highly dependent on various media for updated information about the pandemic, with the majority of them anxious about their safety. These findings are useful for higher education institutions in developing a better learning environment for students and understand the impact of the pandemic on students.

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1. INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic is forcing change on almost every aspect of human life and has triggered a tremendous shift in global political, economic, health, social, and religious practices. Moreover, several schools and institutions have remained temporarily closed because to the pandemic, and many schools, universities, and colleges have discontinued face-to-face communication [1]. The ways in which people habitually communicate, socialise, learn, work, consume and interact have changed because of the pandemic. People face a nightmare daily when there is news of deaths, newly confirmed cases, or suspected cases of COVID-19 [2]. The victims could be family members, relatives, friends or neighbours and people are concerned about sustaining their livelihoods. Many of us are confronted with a mix of complicated emotions during the pandemic which could easily become overwhelming if

mismanaged. Some scholars believe physiological mechanisms (i.e. breathing evenly), physical activation, and social support seeking are effective techniques that can be used to control and stabilise people's emotions [3] However, the normal social support-seeking strategies like getting together with friends, family or colleagues, are not available whilst practicing physical distancing. This loss of personal connectivity leads to further struggles for many especially those already carrying the burden of mental illness [4]. To the authorities, every day is a busy one thinking about the fate of the people, the economic aftermath, financial aid to distressed people, and measures to combat the COVID-19 pandemic [5]. There is an urgent rush to implement strategies to "flatten the curve" of the pandemic whilst at the same time preserving healthcare capacity. This 'nightmare' scenario has been experienced internationally.

Adding salt to the wound, there are conflicts among politicians, activists, and people on social media about human values, responsibility, and priority. Those on the front line of the fight against the disease face challenges throughout the day whilst hoping they will see the end of the COVID-19 pandemic. They are in a highly-stressed situation and the pandemic makes them even more vulnerable and exposed to a range of issues including marital problems, not getting sufficient rest brought about by long working hours, serious mental health concerns, even post-traumatic stress disorder and substance abuse, that are all potentially magnified during the pandemic. According to Ainslie *et al.* [5], the situation the world is currently facing can be described as a social phenomenon with physical distancing and the adoption of the "new normal" being central to efforts to control the pandemic. To be effective and to obtain the upper hand, physical distancing must be rapidly and universally adopted across a society, which has been practised at a varying degree globally. Risk perception and the sense of being in harm's way will likely be a significant lever on the degree to which populations embrace a physical distancing approach and adhere to the new norms in their daily life [5], [6].

The COVID-19 pandemic has created significant stressors across many domains of our lives that become more apparent as time goes by. To survive COVID-19 and its aftermath require deep and well-thought-out action plans for care to be directed toward our patients as well as ourselves and our families. Whilst tending to personal wellness is always important, it has become even more crucial during these extraordinary times. Understanding the risks involved and consequences of burnout brought about and magnified by COVID-19 whilst identifying historical parallels of the pandemic will be crucial. During stressful times, there is a serious temptation to self-medicate resorting to less productive and self-harming solutions [7] like taking drugs and alcohol which may increase the risk of both suicide and domestic violence. It is also undeniable that appreciating the new challenges of the media and social media; leveraging new technologies to care for patients, staff, colleagues, and ourselves whilst managing responsibilities at home; and utilizing wellness resources will stand paramount. Unquestionably, the constant barrage of information, including disinformation, can be daunting for anybody, particularly doctors and front-line workers who are already dealing with daily difficult issues in their work and personal life. As such, assessing individual restlessness and individual responses to information during a pandemic is critical, given that the availability and accessibility of technology increase the likelihood of the presence and transmission of incorrect information, the spread of rumours, and misinformation [6], [8]. Even before the pandemic, internet addiction was identified as a menace that is contributing to social anxiety, difficulty paying attention, excessive activity, and acting without regard to consequences, and other negative implications, all of which may intensify the pandemic. However, on a brighter note, social media utilization can be advantageous to deliver updates of vital information related to current precautions, measures, best practices and provide connections to much-needed resources [6], [9].

The sudden closure of universities nationwide carries the unexpected challenge of a transition from a face-to-face study environment to distance learning. Talking within the scope of other studies, the sudden closure of universities nationwide carries the unexpected transition from a face-to-face study environment to distance learning are not equal among students. Even in Malaysia, many students are abruptly plunged into a resource-limited or stressful domestic situation that is not conducive to learning [10]. Students from low-income families may not have adequate space options at home and limited access to the internet, but are nonetheless pressured to do assignments or other academic-related work. The opportunists believe that learning online can be more effective, with students being able to retain more material as compared to when they are in class. They are able to learn faster online spending less time in travel to study compared to a traditional classroom environment. This is basically brought about by the opportunity to learn at their own pace, re-reading topics, skipping, or fast-forwarding through the concepts as they choose. From the perspective of public health and well-being, several recent studies discovered that COVID-19 has increased stress levels, anxiety, and depressive symptoms in university students, as a result of the changed delivery and unpredictable decision of university education, technological concerns of online courses, and social isolation, all of which exacerbate the risk of mental health issues [11]–[13]. Furthermore, numerous reviews have found that mental health difficulties among university students increase the likelihood of dropping out, lower academic performance, low motivation and decreased study satisfaction among them [11].

However, we are left with questions about how this pandemic affects university students' attitudes, anxiety, and practices towards COVID-19 and whether the 'new normal' will be just a temporary measure? This study thus examined media exposure, attitude, anxiety, and practices towards COVID-19 among the students of Universiti Pendidikan Sultan Idris (UPSI), Perak, Malaysia and predicts contributing factors to the practice of UPSI students in containing the COVID-19 pandemic. In doing so, various parties can work collaboratively to arrive at education-specific solutions to address university students' challenges and improve current health practices during the transition phase of living with the COVID-19 endemic state. The next section discusses media exposure on the COVID-19 pandemic and how health-related information has been communicated to the public.

2. LITERATURE REVIEW

2.1. Media exposure on the COVID-19 pandemic

Over the past few years, the occurrence of several infectious disease outbreaks around the world such as Ebola, Zika, middle east respiratory syndrome coronavirus (MERS-CoV), severe acute respiratory syndrome (SARS), and influenza have shed light on not only the importance of successful communication strategies but also the significance of timely and accurate reporting of diseases to the public [14]–[16]. What the world has learned from the Chinese government's response to the COVID-19 outbreak until it spread around the world and killed hundreds of thousands of people should be taken as a serious lesson. When a public health issue, especially a contagious disease, occurs, no authority should attempt to conceal the facts for fear of people misinterpreting the information, but should constantly communicate health-related information to the public via mass media so that they can understand the issue and respond accordingly [17].

In tandem with the rapid shift in digital technologies, people have recently shown increasing usage of social media as a source of health information, such as WhatsApp, Telegram, Facebook, Instagram, and Twitter. Therefore, social media have functioned as first-hand information platforms from which the public can obtain information on the disease and share it in real-time with their family members, friends, and neighbours [16]. Sadly, misinformation may also spread on social media and increase perceived risk and concern over health-related issues, making the responsible use of social media imperative [7], [18]. In the case of Malaysia, the daily updates by the Ministry of Health Malaysia (MOH) on COVID-19 cases, deaths, and preventive measures via social media (Twitter and Facebook), official website, press conference, and media briefing [19] has at least helped counteract fake information through social media about the disease. Whether or not the information circulated through social media is true, there is no doubt that there is growing anxiety among certain individuals during this COVID-19 pandemic. As described by Oh *et al.* [16], media plays a crucial role in today's world as a whole. It does not mean that all the functions it performs are damaging, but we are expected to remain vigilant about its negative, dire impacts as well. The next section discusses anxiety development during this infectious disease outbreak.

2.2. Anxiety development during the COVID-19 pandemic

Anxiety is the feeling of being anxious with disturbing anticipation of an uncertain yet threatening occurrence and a sense of uncomfortable suspense [20], [21]. Like anxiety, fear is often a mixture of 'tension and unpleasant anticipation' that is usually used to describe emotional reactions to a specific, perceived danger or threat [20]. In the case of the COVID-19 outbreak, fear and anxiety about contagion can be intimidating when it is assumed and predicted that a dangerous or an unpleasant situation will occur, and thus inducing intense feelings in people that can impact upon them both physically and mentally.

Previous studies on the incidence of the H1N1 epidemic revealed that ambiguity led to increased anxiety or risk assessments when the information was communicated ineffectively or unknown to officials [7]. Moreover, the use of social media can affect people's perceptions of risks because users of social media also communicate their emotional responses to infectious diseases. For example, during the MERS outbreak, [17] discovered that social media users predominantly expressed negative words such as anxiety, fear, confusion, risk, and suspicion about the infectious disease. It is also not unusual for confirmed or suspected COVID-19 patients to experience tremendous psychological pressure and other health-related issues besides physical suffering [4]. As a consequence, they may experience mixed feelings such as anxiety, loneliness, depression, insomnia, and frustration which may decrease adherence to interventions [4], [16].

2.3. New normal and attitude during pandemics

Since March 18, 2020, the Malaysian government has imposed the movement control order (MCO), which has proven to be effective in flattening the curve as, during the third phase of the MCO, the country started witnessing a decline in the number of active COVID-19 cases [19]. While Malaysians adapted to the MCO restrictions, most businesses took a beating particularly those that were struggling to stay afloat [22]. The New Straits Times newspaper reported that the former Prime Minister of Malaysia urged the public to

adapt to the MCO implementation as well as embrace a 'new normal' in the attempt to contain the COVID-19 pandemic [23].

Whilst shifting behaviours and altering everyday habits are challenging for some people, the new normal requires people to forego physical contacts by avoiding shaking hands and hugging, practising physical distancing by keeping a distance of at least two meters apart, avoiding touching public surfaces, and stifling coughs and sneezes [24]. Moreover, people are reminded to practise good hygiene at all times, wear face masks, and wash their hands regularly with either soap or hand sanitizer, and the safest approach is to stay at home, go digital and venture into e-business or e-commerce - these are the new normal [25].

3. RESEARCH METHOD

This study was carried out at UPSI, Perak, Malaysia. An online questionnaire was designed and pre-tested by using Google forms. This study was conducted during the movement control order (MCO) period, which commenced on 18 March 2020. Therefore, online research was the most appropriate and effective way to reach respondents. Although this research involved a human subject, data collection was exempted from ethical review and approval as this existing study adopted survey procedures (questionnaires) with no collection of identifiable private information. Moreover, this study did not collect any medical or laboratory report from respondents as the focus was more on educational inquiry with no further processing or testing on the specimen. Given the contextual landscape of current university education's strategy to combating COVID-19, which differs slightly from developed countries, it is important to look at media exposure, attitude, anxiety, and practices towards COVID-19 among university students. It is through such an enquiry that education-specific solutions can be provided that is context-specific to current situation of health practices and well-being of students from UPSI, Perak. While some researchers find an online survey to be problematic due to sampling issues, especially in determining between probability sampling and non-probability sampling [26], the researchers of this study managed to control the sampling procedure in the sense that this study's sample population had an equal probability of being selected. The reliability test result in Table 1 shows that Cronbach's alpha values for all variables were above the minimum of 0.7.

Table 1. Reliability test result for all research variables

Variables	Items	Cronbach's alpha
Media exposure	9	0.759
Anxiety	11	0.877
Attitude	8	0.909
Practice	9	0.901

The online questionnaires were distributed randomly to all UPSI students from diploma to Ph.D level via email invitations. The researchers used students' official email domains from the UPSI directory to reach all UPSI students. Email reminders were sent multiple times to follow up with the students, requesting their cooperation to complete the online survey. Other follow-up methods were done on social media such as through WhatsApp, personalised messages, and opinion leaders by including the link to the online questionnaire. By reaching opinion leaders or reference groups such as club presidents and board members of the student association, this study managed to obtain increased responses towards the online survey.

From the total population of nearly 13,000 active students, 505 of them managed to complete the survey. As some students had already returned to their hometown, it is understandable that internet connectivity was a problem, particularly for students living in rural areas. The data collection process took place between March 30, 2020 and April 17, 2020, using a random sampling technique. UPSI students were chosen as the respondents of this study because they are the main customers of UPSI. As an organisation, UPSI needs to understand its customers' attitudes and practices in containing the COVID-19 pandemic. Moreover, some students remained on-campus during the MCO period. Therefore, it is impertinent to find out whether they had exposure to information on COVID-19 and more importantly if they developed a feeling of anxiety due to the MCO implementation. Data were analysed using SPSS software version 26. Descriptive, correlation and multiple regression analyses were done to answer to achieve the aim of this current study.

4. RESULTS AND DISCUSSION

The reporting of the results of this study begins with the respondents' demographic and psychographic data, followed by their opinion about their levels of anxiety towards the COVID-19 outbreak. Finally, this study reports the results of correlation and multiple regression analyses to measure the

relationships among variables (media exposure, anxiety, attitude, and practice of UPSI students towards the COVID-19 outbreak), and confirming the contributing factor of this ongoing study.

4.1. Demographic and psychographic analyses

Table 2 shows that more than three-quarters of the respondents were female (74.7%). This representation is consistent with the higher proportion of female students in UPSI when compared to male students. The majority of respondents were in the age range of 18–25 (79%), followed by those in the 26–40 (17.2%) age group. Only 3.8% of the respondents were 40 years or older. Therefore, the majority of the respondents were from the 'youth' category. Meanwhile, three-quarters (77.2%) of respondents were bachelor's degree students and the rest were master's degree (13.1%), diploma (4.6%), Ph.D (4%), and certificate (1.2%) students.

Table 2. Demographic and psychographic data

Characteristics	Frequency	Percentage
Gender		
Male	128	25.3
Female	377	74.7
Age group		
18–25	399	79.0
26–40	87	17.2
41–50	17	3.4
51–60	1	0.2
61 and above	1	0.2
Level of education		
Certificate	6	1.2
Diploma	23	4.6
Bachelor's degree	390	77.2
Master's degree	66	13.1
Ph.D/Specialised	20	4.0
Status		
Student (Malaysian)	470	93.1
Student (International)	35	6.9
Accommodation		
In campus	131	25.9
Outside campus	374	74.1
Total	505	100

The 93.1% of respondents were Malaysian citizens and only 6.9% were international students. Moreover, the study found that the majority of the respondents were living outside UPSI (74.1%) during the MCO period while 25.9% remained on campus. This is because UPSI had decided to extend the mid-semester holidays in response to the MCO, which did not allow students to attend classes and mass gatherings. However, some students were not able to return home during the MCO period for a variety of reasons.

4.2. Experiences of anxiety

This section explains the respondents' experience of their level of anxious feelings during the COVID-19 pandemic outbreak. Table 3 shows that 72.9% of the respondents slightly agreed to strongly agreed that their heartbeats were not normal when they read the news about COVID-19. One of the symptoms that indicate a person is anxious is their heart palpitations. Usually, when a person is feeling worried about something, their heartbeat will be fast when they discover information related to it [27].

Table 3. Respondents' opinion on their heart rate when consuming information about the COVID-19 pandemic

Statement	Level of agreement	%
My heart beats fast when I read about COVID-19.	Strongly disagree	7.9
	Disagree	19.2
	Slightly agree	36.6
	Agree	23.6
	Strongly agree	12.7
Total		100

When people feel anxious about an issue, they will feel worried when the situation gets worse [27]. Hence, the results in Table 4 show that more than three-quarters (81.1%) of the respondents slightly agreed to strongly agreed that they felt worried when they found out that the numbers of infected people were increasing every day.

Table 4. Respondents' opinion on feeling anxious about the COVID-19 pandemic

Statement	Level of agreement	%
I feel worried with the increase in the number of infected people.	Strongly disagree	1.4
	Disagree	1.6
	Slightly agree	15.8
	Agree	35.0
	Strongly agree	46.1
Total		100

Table 5 indicates that 73.9% of the respondent slightly agreed to strongly agree that they were thinking too much about the dangerous effect of COVID-19. Anxious people will spend most of their time thinking about the negative possibilities of issues that make them worry [27]. Therefore, the results show that the respondents' thoughts were focused on the COVID-19 pandemic.

Table 5. Respondents' opinion on their thinking pattern during the COVID-19 pandemic

Statement	Level of agreement	%
I think too much about COVID-19.	Strongly disagree	5.1
	Disagree	21.0
	Slightly agree	34.1
	Agree	26.3
	Strongly agree	13.5
Total		100

Anxiety may cause sleeping difficulties. The results in Table 6 show that 36.9% of the respondents slightly agreed to strongly agreed that they could not sleep due to overthinking about the pandemic. This is because when one overthinks, they will have trouble sleeping and will exhibit symptoms of increased wakefulness after sleep onset (WASO). This finding is in line with the study conducted by [27] in which acknowledged the existence of a relationship between anxiety and sleeping problems.

Table 6. Respondents' opinion on sleeping disorder during the COVID-19 pandemic

Statement	Level of agreement	%
I can't sleep because I think about COVID-19.	Strongly disagree	27.7
	Disagree	35.4
	Slightly agree	24.4
	Agree	7.7
	Strongly agree	4.8
Total		100

Table 7 shows that 76.4% of the respondents slightly agreed to strongly agreed that they felt restless when going out to public areas. This means that the respondents did not feel comfortable being in public, knowing that the coronavirus that causes COVID-19 is easily transmitted, especially in public areas where it is not known who could be the carrier of the virus. This knowledge had led them to develop a feeling of agitation. This finding correlates with the study conducted by [27] in which restlessness was found to be one of the symptoms of anxiety.

Table 7. Respondents' opinion about feeling restless to go out to public areas during the COVID-19 pandemic

Statement	Level of agreement	%
I feel restless to go out to public areas.	Strongly disagree	7.1
	Disagree	16.4
	Slightly agree	30.5
	Agree	27.1
	Strongly agree	18.8
Total		100

In addition, Table 8 illustrates the respondents' opinion about communicating with people that do not wear a face mask. The data shows that more than three-quarters (79.4%) of the respondents slightly agreed to strongly agreed that they avoided talking to people who do not wear a face mask. This finding shows that the respondents were worried that another person might intentionally or unintentionally pass the coronavirus to them. Therefore, they developed a defence mechanism by averting the possibility of contracting the virus. This finding is supported by the study by [27], which argued that when a person feels anxious, they tend to develop a defence mechanism by avoiding the source of anxiety (avoidant coping strategies).

Table 8. Respondents' opinion about communicating with people that do not wear a face mask

Statement	Level of agreement	%
I avoid talking to people who do not wear a face mask.	Strongly disagree	4.8
	Disagree	15.8
	Slightly agree	27.7
	Agree	28.5
	Strongly agree	23.2
Total		100

Based on the results in Table 9, more than half (58.4%) of the respondents slightly agreed to strongly agreed that they were at risk of being infected with COVID-19. The findings reveal that the respondents considered the coronavirus as a threat and thought that the possibility of them contracting the virus was high. When a person thinks that he or she might be in danger, the possibility of developing an anxious feeling is very high [27]. They discovered that when health anxiety and high cyberchondria are combined, virus anxiety is highest (in which health anxiety as moderator) - that is, when these two variables come together, people suffer from extreme SARS-CoV-2 anxiety [27].

Table 9. Respondents' opinion about their risk of contracting COVID-19

Statement	Level of agreement	%
I think I am at risk to get infected by COVID-19	Strongly disagree	14.3
	Disagree	27.3
	Slightly agree	29.5
	Agree	15.8
	Strongly agree	13.1
Total		100

The results in Table 10 highlight that the majority of the respondents were worried about the COVID-19 pandemic. Some respondents worried a lot (21.2%), very worried (23.2%), and 2.4% of them had a feeling of phobia about the outbreak. This is not surprising as this outbreak is a new experience for the entire world. More worrying is that the coronavirus spreads faster than other severe acute respiratory syndrome-like viruses such as MERS-CoV, Ebola, bird flu virus, and SARS. Until today, the world is still in the race of researching for an answer on how to cure this disease. These findings are in line with the studies conducted by many researchers who argued that when the respondents perceived a pandemic as threatening and they were uncertain about how it spread and how it can be cured, their levels of anxiety were elevated [28], [29].

Table 10. Respondents' opinion on their overall feeling about the COVID-19 pandemic

Statement	Level of agreement	%
Generally I feel_____ about the COVID-19 Pandemic	Relaxed	1.2
	Slightly worry	9.7
	Fairly worry	11.7
	Worry	30.7
	Worry a lot	21.2
	Very worry	23.2
	Phobia	2.4
Total		100

Generally, the results show that the respondents were worried and felt anxious about the COVID-19 pandemic outbreak. Symptoms of anxiety could be seen based on their responses to the questionnaire. However, it is normal for them to feel anxious about the pandemic as the disease is new and not much information has been found about the treatments for the coronavirus. Hence, this study added anxiety as one of the variables together with media exposure and attitude to predict the prevention practice taken by the students to combat the outbreak. Correlation and multiple regression analyses were conducted to further confirm the relationship.

4.3. Correlation analysis

Correlation analysis was performed to measure the relationship between media exposure, anxiety, attitude, and practice of UPSI students towards the COVID-19 outbreak, as shown in Table 11. In general, all variables were significant and the strength of the relationships among variables varied from very weak to moderate.

Table 11. Correlation analysis between media effect, anxiety, attitude, and practice

Variables	1 Media exposure	2 Anxiety	3 Attitude	4 Practice
1. Media exposure	1			
2. Anxiety	.396**	1		
	.000			
3. Attitude	.565**	.235**	1	
	.000	.000		
4. Practice	.570**	.354**	.572**	1
	.000	.000	.000	
Total	505	505	505	505

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

Based on the results of the correlation analysis, attitude and practice (r=.572; p=.000) had the strongest relationship, followed by practice and media exposure (r=.570; p=.000) and attitude and media exposure (r=.565; p=.000). Meanwhile, the relationships between anxiety and media exposure (r=.396; p=.000) and anxiety and practice (r=.354; p=.000) were found to be weak. In addition, anxiety and attitude (r=.235; p=.000) was found to have a very weak relationship.

The relationships among the variables indicate that the respondents' attitudes and practices were strong and positive in preventing COVID-19 from spreading. Moreover, media exposure was found to have a connection with the practice of the respondents in protecting themselves from getting infected with the virus. Meanwhile, exposure to media was found to be one of the reasons that the respondents developed an anxious feeling towards the pandemic. In addition, the anxious feeling was found to have a link to the practices of combating the pandemic from spreading. This explains the very weak relationship between attitude and anxiety. This is because the pandemic was perceived to be threatening and when someone is anxious, they tend to translate it directly into practice. Figure 1 summarised the correlation analysis results in our suggested model, which shows that respondents' attitudes and practices in controlling COVID-19 spread were strong and positive, followed by practice and media exposure as well as attitude and media exposure.

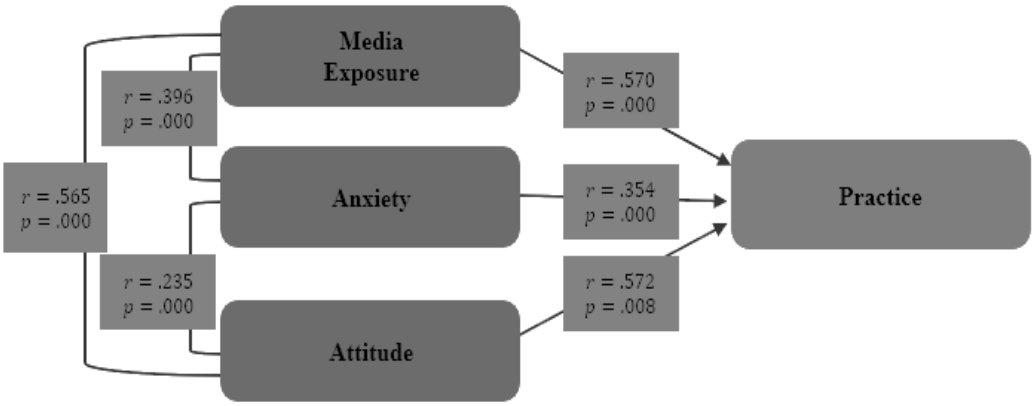

Figure 1. Summary of correlation analysis results

4.4. Regression

Regression analysis was conducted to predict the contributing factors to the practice of UPSI students in containing the COVID-19 pandemic. The result in Table 12 shows a significant regression equation was found (F (3,501) =128.501; p=.000), with an R^2 value of .435. The respondents' practice is equal to .377+.351 (media exposure) +.419 (attitude)+.137 (anxiety), where media exposure, attitude and anxiety is measured based on the level of agreement. The overall model suggested that the independent variables explained 43.5% of the variance in the practice of the respondents towards containing the COVID-19 pandemic.

Table 12. Regression analysis for media exposure, attitude, and anxiety with practice

Variables	Unstandardized B	Coefficients Std. Error	Standardized coefficients Beta	t	p
(Constant)	.377	.196		1.925	.055
1. Media exposure	.351	.050	.305	7.086	.000
2. Attitude	.419	.047	.365	8.965	.000
3. Anxiety	.137	.034	.147	4.020	.000

F =128.501; p=.000; R^2 =.435; R^2 Adj.=.431

The results indicate that the respondents' practice increased when they were exposed to the media about COVID-19, had a positive attitude in containing the virus from spreading, and felt anxious about the pandemic situation. In this context, constant information about how to protect oneself from the virus is essential to maximise students' capability to act appropriately during the pandemic. At the same time, there is the obligation to prepare students with critical thinking skills [30] which could help them to differentiate between accurate and false information. Hence, all the three variables of media exposure (β=.351; t=7.086; p=.000), attitude (β=.419; t=8.965; p=.000), and anxiety (β=.147; t=4.020; p=.000) were found to be significant factors of practice. However, attitude was the strongest predictor of practice.

This analysis confirmed that student attitude plays a key role in helping them to practise daily activities that keep them safe from the pandemic. It is important for them to feel emotionally safe, especially among teenagers who are still learning about the world and how to keep a safe distance from any potentially dangerous circumstances [31]. Moreover, the role of media was found to be important in educating and disseminating information to the respondents so that they became aware of and better understood the COVID-19 epidemic. Drawing from the functional approach of attitude change, the rational model explains that human beings are intelligent and critical thinkers who can make wise decisions when provided with ample information [30]. Furthermore, anxiety was also considered an important factor that triggered practice among the respondents in protecting themselves from getting infected by the virus and in containing it from spreading. Figure 2 summarises the result of regression analysis based on our conceptual framework of this study.

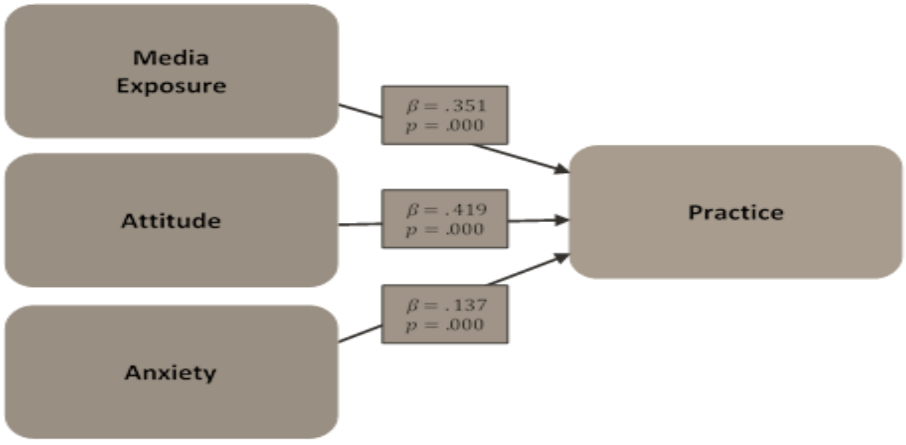

Figure 2. Summary of regression analysis based on our conceptual framework

5. CONCLUSION

This study found that students in this study experienced stress and anxiety as a result of changes in university education mode during pandemics. This study also affirmed that media influence mental well-being and increase the level of anxiety during a pandemic breakout. It is worth noting that the present study was carried out at the end of the first phase of the MCO period when the number of confirmed COVID-19 cases in Malaysia had reached more than 2,600 cases. At the end of the survey, the number had exceeded 2 million cases with more than 27,000 fatalities. This study argues that students' anxiousness towards the pandemic would make them more vigilant and increase compliance towards adopting preventive measures against the disease. In the process of achieving herd immunity through vaccination, the respondents' readiness to adopt health practices (e.g. wearing a face mask at public places, frequently washing hands with water and soap, observing physical distance) is the only way to save lives in the situation of living with COVID-19 endemic phase. In addition, this finding also confirmed that those with higher levels of fear and believed themselves to be at risk showed better compliance with health practices. Furthermore, the correlation analysis revealed a significant relationship between media exposure, anxiety, attitude, and health practice of the respondents amid the COVID-19 outbreak. Attitude and health practice displayed the strongest relationship, followed by health practice and media exposure. This highlighted the significant role of positive attitude among Malaysians in overcoming the pandemic. In the battle against COVID-19, a positive attitude and practice towards containing the virus are necessary.

In addition, media exposure could influence the health practice of students during the pandemic. During an emergency such as the COVID-19 outbreak, information is vital as it prepares the public on what to do to keep them safe. The government of Malaysia, particularly the MOH, has been using multiple media platforms to communicate about the pandemic in their effort to empower the public, including students, to take necessary actions to mitigate the risk of infection. Likewise, regression analysis in this study revealed that health practices among respondents increased when they received more information about COVID-19 from the media, had a positive attitude towards mitigating the risk of infection, and was anxious about the pandemic. The attitude was found to be the strongest predictor of health practices amongst respondents. In the context of the COVID-19 pandemic, information played an instrumental role as it helped respondents to understand more about the new coronavirus and its potentially devastating effects, and more importantly, learn how to protect themselves from the risk of contracting the disease. Such knowledge would help to form a more positive attitude and empower students in containing the infection and transmission of the virus. Therefore, this study suggests the consistent distribution of information using multiple media platforms to educate, instruct, and motivate the public, including students, to take appropriate measures to mitigate the risk of a severe pandemic such as COVID-19. Clear and believable messages will help in shaping the public's attitude and increasing compliance with good health practices.

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