

Stress Management in the Situation of Coronavirus Disease 2019 (COVID-19) Epidemic: A Case Study of Students at an Autonomous University in Thailand

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Abstract

Background – Around the end of 2019, an outbreak of a new strain of the virus occurred in Wuhan, Hubei Province, China. "Coronavirus" by the World Health Organization (WHO) has named the respiratory disease caused by the novel coronavirus "Covid-19" (COVID-19). The World Health Organization has declared COVID-19 a pandemic with the number of patients and deaths increasing rapidly. Thailand has been severely affected in every aspect, including education. resulting in teaching and learning management is a limited effect the adaptation and student stress.

Objective – To study stress levels stress management and the influence of stress levels on stress management among students at an autonomous university in Thailand.

Methods – This research is exploratory. by using questionnaires to collect data. The sample consisted of 270 students at an autonomous university in Thailand. The statistics used were frequency, percentage, mean, and standard deviation. Multiple Linear Regression and Chi-Square.

Results – Most of the students had a high level of stress, of which 123 students (45.60%) had stress management levels. Most have overall stress management. In the moderate level with an average of 2.87. Stress levels influence stress management. with statistical significance at the .05 level and personal factors in terms of gender, grade, year, branch, grade, income, and congenital disease affect the stress level significantly at the .05 level.

Conclusion – Stress is a state of emotions or feelings that arise when a person is faced with a variety of problems. This can lead to feelings of pressure, discomfort, agitation, fear, and anxiety, which results in varying degrees of stress depending on the individual's stress management. Therefore, those involved in caring for students from the university care should be taken to help students better manage stress. As well as conducting various activities to relieve students' stress there should be a counseling center for students in every aspect when problems arise. So that students can live and have a good quality of life during the 2019 coronavirus epidemic. In addition, there should be studies in students in other universities and long-term studies. for more comprehensive research results.

Keywords: Stress, Stress Management, Coronavirus 2019.

Introduction

Around December 2019, the world became aware of a mysterious infectious disease. from the office of China, It has been confirmed that an outbreak of the novel coronavirus has occurred in Wuhan, Hubei Province, China. After collecting virus samples to be analyzed in the laboratory. indicates that this type of virus is the "Coronavirus" the World Health Organization (WHO) has announced the official name for respiratory disease caused by this new coronavirus is known as "Covid-19" (COVID-19). Later, on March 11, 2020, the World Health Organization declared COVID-19 a pandemic with the number of patients and deaths increasing rapidly death rate of this disease There is about 4.00%. The most common symptoms of COVID-19 are fever, tiredness, and dry cough. Some patients may experience aches, pains, stuffy nose, runny nose, sore throat, or diarrhea. These symptoms are usually mild. But it is reported that about 1 in 6 people are infected with COVID-19. Severe illness and difficulty breathing most of the patients with severe symptoms were the elderly. and people with congenital diseases such as heart disease, diabetes, etc. The incubation period of the disease (from exposure to the virus to onset of symptoms) is between 2-14 days (World Health Organization, 2020, 2021).

From a survey of domestic violence occurring in communities in Thailand by the Faculty of Medicine. Ramathibodi Hospital there was a marked increase in violence, from 34.60% in 2017 to 42.60% in 2020, reflecting that the situation with COVID-19 has caused an increase in domestic violence. In addition, Assoc. Prof. Dr. Suriyadew Trepatri said that from the survey of people's stress due to the situation of COVID-19 since 2020, it was found that Thai people began to have stress Over 52.00 percent of anxiety was moderate, while more than 44.00 percent were normal and 2.15 percent were overly stressed. From the results of the survey, it can be seen that most people have stress problems. (Department of Mental Health, 2021) During the time of the COVID-19 epidemic around the world, more than 1.38 billion students were affected by school closures. which is a widespread impact and there has been a change in the educational management system that must continue to work

without interruption. Because it will affect the quality of students (UNESCO, 2020). The Thai government has prescribed online teaching instead of attending classes. by adhering to the principles of policy unity and diversity in practice for students to be competent and the quality is consistent with the prescribed curriculum (Education Commission, 2020). Due to the epidemic situation of COVID-19 that resulted from teaching and learning management is limited affecting the adaptation and student stress followed (Thongkaew, 2020)

Mahidol University by Faculty of Nursing in collaboration with National Chen Kung University, Taiwan, and the University of Indonesia, Indonesia. research "Mental health problems of university students in the situation of the COVID-19 outbreak." It was collected from a sample of bachelor's, master's, and doctoral students from Thai universities. Comparison with both partner universities in Taiwan and Indonesia. The total number of samples was 1,985, divided into 313 from Taiwan, 938 from Indonesia, and 734 from Thailand. Of which 80.00 percent are bachelor's degree students In the overall results, it was found that Thai students are stressed highest anxiety and have the lowest confidence in COVID-19 prevention measures compared to students from the other 2 countries (Sitthimongkol, 2021). From the above information, therefore, the researcher is interested in studying the subject. Stress management in the 2019 coronavirus epidemic situation of university students to know your stress level and how to manage it to use the results of the research as a guideline for planning to help students who are suffering from stress.

Methods

Study Design

This research is exploratory. by using the stress level measurement questionnaire (SPST-20) of the Department of Mental Health. Ministry of Health. The reliability of the instrument was 95 percent, and Cronbach's Coefficient Alpha method was used to determine the reliability of all questions with a reliability greater than 0.70. and was significantly associated with EMG values (Mahatnirankul, et al., 1997). Stress Management Questionnaire The researcher

created from the concept of Jalowice, Murphy, & Powers. (1989). The concordance value was 0.95 and the confidence value was analyzed. Reliability using Cronbach's coefficient alpha method obtained a confidence value of 0.89 in the whole copy and 7 questions about personal information, namely gender, year, branch, grade, income, and congenital disease.

Setting and Sample

The sample population was 826 students at an autonomous university in Thailand. The sample was calculated according to Taro Yamane's concept (Taro Yamane, 1973) with a confidence level of 95 percent. The sample size was 270 people. Conducting probability sampling by using a stratified sampling method, the researcher then brought the research tool to collect the data with the sample who voluntarily participated in the research. Collect data until the total number of 270 people.

Instruments

This research tool collected data by using a questionnaire consisting of 3 parts:

Part 1 contains 6 questions about personal information, namely gender, year, branch, grade, income, and congenital disease.

The second part is the Stress Level Questionnaire (SPST-20) of the Department of Mental Health Ministry of Health 20 questions.

The third part is the stress management questionnaire. The 30 questions by the researcher are based on Jalowice's concept (Jalowice, Murphy, & Powers, 1989). This research tool has been studied to determine its reliability and confidence of the research tool.

Data Collection

Data were collected using questionnaires from February 2022 - April 2022 from a sample of students at an autonomous university in Thailand who voluntarily participated in the research. The researcher informed the sample group that If they wish to discontinue the research, it can be terminated at any time. The researcher then continues to collect the data until the total number of 270 people is complete, then checks the completeness, completeness, and

correctness of the data. The average time spent collecting data is 15-20 minutes/person.

Data Analysis

The statistics used in the data analysis were stress level data analysis and stress management level using frequency, percentage, mean, and standard deviation. Stress level analysis influences stress management. Using multiple linear regression and analyzing individual factors affecting stress levels using Chi-Square

Ethical Consideration

This research proposal was already considered by Suan Sunandha Rajabhat University Ethics Committee. Ethics Committee certificate number COA. 2- 018 / 2022. Ethics Committee agreed to the implementation of the proposal for this research.

Results

Demographics It was found that most of the samples were female, 227 people (84.10%) were in their second year, 83 people (30.70%) studied in the field of Public Health, and 83 people (30.70%) had academic results. Between 3.00-3.50, of 158 people (58.50%), the average monthly income of their families was between 10,000-20,000 baht, of 108 people (40.00%), and most of them had no congenital disease of 243 people (90.00%) as shown in Table 1.

Table 1 Demographic data of students at an autonomous university in Thailand (n=270)

Demographic	Number (person)	percentage
1. Gender		
man	43	15.90
female	227	84.10
2. Year class		
Year 1	60	22.20
2nd year	83	30.70
3rd year	74	27.40
4th year	53	19.60
3. Field of Study		
Applied Thai Traditional Medicine	36	13.30
Chinese	12	4.40

Demographic	Number (person)	percentage
medicine		
Public health	83	30.70
Public Health and Health Promotion	55	20.40
Health science	48	17.80
Secretary of Medicine and Public Health	26	9.60
Cannabis medicine	6	2.20
Health Service Business Management	4	1.50
4. Achievement		
below 3.00	43	15.90
between 3.00-3.50	158	58.50
above 3.50	69	25.60
5. Average monthly income of the family		
less than 10,000 baht	74	27.40
Between 10,000-20,000 baht	108	40.00
More than 20,000 baht	88	32.60
6. Congenital disease		
no underlying disease	243	90.00
have a congenital disease	27	10.00

Percentage of stress level (SPST-20) overall. It was found that most of the samples had a high level of stress, 123 people (45.60%), followed by severe stress, with 82 people (30.40%) the least. There were 65 subjects with moderate stress (24.10%), respectively, and no samples with low stress were shown in Table 2.

Table 4 An analysis of the influence of stress levels on stress management among students at an autonomous university in Thailand (n=270).

ตัวแปร	Unstandardized Coefficients		Standardized Coefficients	t	P-value
	B	Std. Error	Beta		
Constant	2.166	0.148		14.640	0.000*
Problem-solving stress management	0.095	0.079	0.102	1.209	0.228
Emotional stress management	0.011	0.092	0.010	0.122	0.903

Table 2 Number, percentage of stress level of students at an autonomous university in Thailand (n=270)

Stress level	Number (person)	percentage
Low stress	0	0.00
Moderate stress	65	24.10
High level of stress	123	45.60
Severe stress	82	30.40
Total	270	100.00

Mean Standard Deviation The level of stress management found that the overall stress management was a mean of 2.87 at a moderate level. Considering each aspect, it was found that most of the samples had problem-solving stress management with an average of 3.22 at a moderate level, followed by problem-solving stress management with a mean of 3.11 at a moderate level. The stress management was less beneficial or escaped with a mean of 2.29 at a low level, respectively.

Table 3 Mean, Standard Deviation Level of stress management among students at an autonomous university in Thailand (n=270)

Manage stress	\bar{x}	S.D.	Interpret
Problem-solving stress management	3.22	0.79	moderate
Emotional stress management	3.11	0.68	moderate
Minimized or Escaped Stress Management	2.29	0.78	little
Total	2.87	0.59	moderate

Multiple regression analysis Influence of stress level on stress management It was found that stress level accounted for 8.20% of stress management variability, meaning that stress level influenced stress management. statistically significant at the .05 level

Less Beneficial Stress Management or escaping	0.265	0.057	0.281	4.608	0.000*
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* $P < .05$, $R^2 = 0.082$, Adjusted $[R]^2 = 0.078$, $F = 23.906$

Individual Factors Affecting Stress Levels It was found that personal factors in terms of gender, grade, year, branch, grade, income, congenital disease, affect the stress level significantly Statistics at the .05 level see in Table 5.

Table 5 Personal factors affecting stress levels of students at an autonomous university in Thailand (n=270)

Variable	p-value
Sex	.000*
Year class	.000*
Branch	.000*
Grade	.000*
Income	.000*
Congenital disease	.016*

* $p < .05$

Discussion

This research is exploratory. The objective of this research was to study the level of stress affecting stress management among a sample of 270 autonomous university students in Thailand. The samples had high levels of stress during the epidemic of cattle. coronavirus 2019 and overall stress management was moderate. Stress management that most students choose to use is problem-focused coping Strategies are behaviors in which a person tries to act on things that directly trigger stress. It is the use of problem-solving processes in decision-making. Choose a way to deal with the situation. By focusing on the root cause of the problem, including accepting the situation. discussing problems with others Finding information about the problem Doing everything that is enough will solve the problem. consistent with the research of Sundaray, Sarangi, and Patra. (2021) do research on psychological vulnerability and coping among management students during the COVID-19 pandemic the results showed that fear of COVID-19" has a significant and considerable impact on the increased level of

anxiety and stress among the professional students and The responses reveal that students have developed anxiety and felt stressed mostly due to uncertainty in the upcoming academic plans, disturbances in their regular academic routines and concerns about their future careers. They also found that the COVID-19-related factors such as perceived challenges and COVID-19 awareness not only directly impact students' intention but also such effects are mediated through perceived usefulness and perceived ease of use of e-learning systems. causing students anxiety to adjust and lead to stress (Shahrokh Nikou, Ilia Maslov, 2021) This is inconsistent with research by Dada, Babatunde, and Adeleye. (2019) found that there was no difference in stress levels among female and male students. This study examined stress levels and stress management in different ways among students during the coronavirus outbreak. Before opening the teaching in an on-site format, administrators or those involved can apply the research data to plan the teaching style that is most suitable for students.

Conclusion

From the research, it was found that Stress levels were predictive of stress management by 8.20%. Proper stress management enabled students to eliminate stress and reduce stress, which enabled students to study and adapt to living properly. In this regard, the administrators or related persons should formulate policies, and promote as well as increase communication channels to be faster and more convenient for students to reduce anxiety. In caring for students, urgent care should be taken to help students manage stress better. as well as conducting various activities to relieve students' stress. And a counseling center should be set up for students in all aspects when problems arise, such as academic matters, exams, further studies, or adaptation to the changing environment as quickly as possible.

Declaration of Conflicting Interest

The authors declare no conflict of interest.

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