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## Long Paper

# Coping Mechanism among College Students on Stress in Laboratory Activities in Time of Pandemic

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## Abstract

Pandemic resulted in the closure of regular face-to-face classes, and students transitioned to homeschooling and flexible online learning, which impacted laboratory activities. This study assesses the coping mechanisms utilized by the students on stress during laboratory activities during the pandemic. In this study, researchers used the Cognitive theory of coping, which Folkman (1997) propound. This study identified significant variables based on the reviewed ideas, literature, and studies. These variables are divided into two groups: the demographic profile, which includes financial support, gadgets available, and their location, and the coping mechanism, divided into three categories: mental, emotional, and social aspects. This descriptive research uses qualitative



data from 183 randomly chosen technology students. The researchers used a purposive sampling method in selecting the respondents.

The statistics indicated that 75.1 percent of individuals who responded to the poll were female. Further study revealed that mental elements of all laboratory activities had the most significant mean of 3.10 and the lowest standard deviation of 0.81, with the highest mean of 3.10 and the lowest standard deviation of 0.81. It showed that the respondents cope with their mental aspects through positive reappraisal done through constant prayer. After further analysis via Pearson Moment Correlation, it was proven that the demographic profile; (financial income, gadgets available, and location) has significant relationships in coping with their stress in their laboratory activities in times of pandemic. It proves that despite the situation we are facing now, students are still finding ways of coping with their stress in their laboratory activities during the pandemic. If students keep on dealing with their anxiety, there is no reason they cannot surpass the challenges in this time of the pandemic. With this, we urge that the institution should evaluate the variables mentioned above before conducting laboratory activities.

*Keywords* – coping mechanism, laboratory activities, coping stress

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## **INTRODUCTION**

COVID-19 was declared a global pandemic, and as a precaution, governments worldwide ordered the closure of all educational establishments. Teachers, academics, and institutions were all impacted. According to the IATF Section 2, Face-to-face or in-person programs at all levels will be halted under the guidelines for areas classified under Enhanced Community Quarantine. The transition from the physical classroom norm to virtual classes created a drawback among students. One of the activities in school was student laboratory activities. Laboratory activities typically need a hands-on approach. But with the strict health protocols brought about by the Pandemic, students and instructors were not allowed to do face-to-face classes. Instead, students resort to doing their laboratory activities via technology through virtual classrooms. Most faculty respondents use one or more of the three classroom assessment methodologies described by Cuarto & Cuarto (2021) to improve student performance. It was also stated in the study's recommendation by Rivera and Tanghal (2021) that teacher training in online instruction, blended learning, and distance learning are also recommended to adjust to the new instructional format. Teachers should be trained in online instruction, blended learning, and remote learning.

As per CHED COVID Advisory No. 7, the Classes will begin in AY 2020-2021 per the mode of delivery of the HEI, subject to compliance with applicable health standards and local situations: i. HEIs that offer a fully online education may begin operations after May 31, 2020; ii. Flexible learning-based HEIs may open at any time in August 2020; iii. HEIs that rely significantly on face-to-face are not permitted to open before September 1, 2020. Having classes online produces Stress for students, specifically those with slow or limited

internet connectivity. Students usually feel unmotivated and anxious. According to Sillcox (2022) report, online learning made 75% of college students apprehensive or irritated. Most children currently endure emotional Stress from attending an online school Students have also reported increased anxiety due to online learning, citing home distractions, tight deadlines, and the national political climate as contributing factors.

Yazon et al. (2018) on their study pointed out that coping mechanisms are techniques that people frequently employ when confronted with complicated feelings or situations—coping mechanisms aid individuals in responding to stressful situations while also preserving their emotional well-being. In addition, coping skills improve students' attendance, participation, and perseverance in the face of difficulties or failure and provide them with a more challenging, more resilient self-capable of learning in a far more productive manner.

Yazon et al. (2018) added also that academic coping strategies aided undergraduate students in achieving academic success by addressing educational coping strategy factors; approach, avoidance, and social support are examples. Additionally, strategies for coping with academics were developed to assist undergraduate students in dealing with their lives. This includes physical, emotional, spiritual, and psychological well-being. Typically, first-year undergraduate students engage in dynamic coping strategies, while later years emphasize cognitively, confronting, and painful problem-solving.

Proactive issue resolution, seeking social support, confronting coping, distance, self-control, flight and evasion, and admitting responsibility were the eight unique coping techniques discovered and his colleagues. The following eight coping mechanism was categorized as active and passive. Effective coping tactics include confrontational coping, acting and confronting the problem, requesting social help-seeking information and emotional support, planned problem resolution planning to solve the problem, and constructive reappraisal creating two positive meanings and concentrating on self-improvement. Meanwhile, the passive coping strategy includes distance, emotional detachment is necessary to anticipate the situation's resolution, self-regulation attempting to regulate one's emotions and behaviors, admitting responsibility, and avoiding flight.

This study aimed to discover the students' coping mechanisms for Stress in their laboratory activities during the Pandemic. The present study hypothesizes that the department of technology teacher education students possesses coping mechanisms in taking their laboratory Activities in times of COVID-19 Pandemic.

### **STATEMENT OF THE PROBLEM**

This study aims to identify the coping mechanism of the technology teacher education on stress in laboratory activities during the COVID-19 Pandemic. An online survey was done via Google forms containing relevant questions to collect the necessary data. Specifically, it seeks to answer the following questions:

1. What are the student's coping mechanisms for stress in Laboratory Activities during the COVID-19 Pandemic in the following aspects?

- a. Mental
- b. Emotional
- c. Social

2. Is there a substantial connection between the financial income, gadgets availability, and location of the students to the outcome of the students in taking their laboratory activities?

#### **HYPOTHESES:**

Null: There is no substantial connection between the socio-demographic profile of the students and their ways of coping with their laboratory activities in times of Pandemic.

Alternative: There is a substantial connection between the socio-demographic profile of the students and their ways of coping with their laboratory activities in times of Pandemic.

## **METHODOLOGY**

### **RESEARCH DESIGN**

This research was the descriptive quantitative type of research because descriptive research shows the dependent variable's correlation with the study's independent variable. Therefore, this design deeply describes the respondents using quantitative data to determine the coping mechanism of DTTE students in MSU-IIT with qualitative support. An online survey was done via Google forms containing relevant questions to collect the necessary data.

### **PROCEDURE**

The respondents were presented with a consent form containing the summative background and purpose of the research before answering the google forms. Responding to the set of questionnaires consumes an average time of 10 minutes. And before the administration of questionnaires and other related constructs, the data collected would be given the confidentiality of personal information. All applicable ethical guidelines were followed throughout the research process. The procedures of the investigation were reviewed and approved by the committee.

### **SAMPLING**

The research used purposive sampling in selecting the respondents. Purposive sampling is a nonrandom sampling technique that allows the researchers to choose respondents who can provide information and possess the characteristics based on the researcher's interests of population technology students is 345, and the sample size needed is only 183. The researchers used the sample size calculator on the Raosoft website to determine the simple random sample size of the population of technology students. The 346 population joined, and 183 samples were taken to complete the survey. It was calculated along with a 5% margin of error, an 95% confidence level, and a response of 50% distribution to get 86 the final number of randomly selected respondents.

The researchers used a draw lot method to randomly select 189 target respondents, resulting in a sample size of 47 males and 142 females. According to information gathered from the STEP president's department, an overall number of learners enrolled by taking the total number of respondents. Upon computing the number of respondents needed in the study, researchers used Raosoft, an online sampling calculator with a margin error of 5% and 95% confidence. This online calculator computes the critical for the normal distribution. The respondents were surveyed regarding their coping mechanisms in their laboratory activities during the COVID-19 Pandemic.

### **DATA COLLECTION**

All questionnaires were administered through Google forms using the standardized questionnaires. Considering the COVID lockdown, the researchers emailed the word form link to the 183 participating students and distributed it through messenger, email, and Google forms. The collected response of the respondents was summarized on a spreadsheet and will be the basis of the result of the study. The respondents were given a maximum of 10 days to answer the survey.

### **MEASURES/INSTRUMENTS**

The questionnaire used was adapted. The questionnaire was modified and adjusted to account for the respondents' unique circumstances. Sixty-six coping statements were included in the initial questionnaire and were graded on a Likert scale of one to four. Sixteen coping statements were eliminated because they were considered unsuitable for the respondents' environment. The data was collected via google forms. To ensure the research instrument's validity, the questionnaire underwent pilot testing to evaluate the grammar, spelling, and other necessary criteria. – focused on the Demographic Factors of the Respondents. While Part II – contained scaled statements that would identify the respondent's coping method. The survey has 53 questions with three main categories: mental aspects, emotional aspects, and Social Aspects, which are Ways of Coping.

According to their category, the questions are in the order wherein the respondents rate their way of coping with a statement, typically in four points. (1) Never, (2) Sometimes, (3) Often, (4) Always. The respondents will evaluate based on personal feelings, perceptions, and experiences. The researcher will gather data through an online survey questionnaire using Google Forms. The respondents will confirm participating in the survey invitation upon ensuring the confidentiality and security of the Respondent's response. The researcher will provide the Google form link individually in their messenger accounts and answer the following questions.

### **DATA ANALYSIS**

Upon completing the administration and collecting questionnaires from the respondents, the data were encoded, organized, and cleaned. The following statistical tools were used:

Frequency - This was used to Tabulate survey data, assess the data, and detect outliers (extreme values).

Percentage - To calculate rates, divide one number by another, then rebase the result to 100. This was used to compare a difference to an original benchmark value.

Weighted Average - A weighted average (also known as a scaled average) will consider some data values more essential than others and thus contribute more to the final standard than other data values.

Standard Deviation - In statistics, the standard deviation is defined as the amount of variation in a group determined to represent the extent of variation in the group.  
Pearson Moment Correlation (Pearson R) - The Pearson correlation coefficient  $r$  is used to determine the relationship between two quantitative variables and their degree of linearity: change.

## **RESULTS AND DISCUSSION**

Researchers used Cognitive theory of coping with determining the students' coping mechanisms in their laboratory activities during pandemics. The researchers used the eight forms of active coping introduced by Folkman (1997) in this study, which most of us use for active coping. According to the survey, students' most commonly applied coping mechanisms to manage stress were positive reappraisal, escape and avoidance, self-control, strategic problem-solving, escape and avoidance, confrontation, emotional intelligence distance, radical acceptance, and social support. All Laboratory activities included these eight active coping mechanisms, divided into mental, social, and emotional categories.

Table 1 shows the Mean and Standard Deviation distributions of the respondent's mental components of all laboratory tasks – Self-Controlling. The highest mean was 3.27, with a standard deviation of 0.78, suggesting a quality description of a highly relevant coping technique. It shows that people manage mental components of self-control by keeping emotions separate. The lowest mean was 2.72, with a standard deviation of 0.86, which typically signified and described an appropriate coping method. It illustrates that respondents cope with their mental aspects of self-controlling by trying not to hide things. The mental element in all laboratory activities – Self-Controlling - got an overall mean of 2.98 with a broad standard deviation of 0.85, indicated as often with a quality description of an applicable coping mechanism. Self-control is a significant factor in coping with stress and problems; Self-control or the capacity to manage one's impulses, emotions, and actions to attain long-term goals, as defined by Inzlicht et al. (2014). The prefrontal cortex's planning, problem-solving, and decision-making area, significantly more prominent in humans than in other animals, is principally responsible for self-control.

Table 1. Mean and Standard Deviation distribution of the Respondent's responses on the Coping Mechanism in terms of their Mental aspects in all laboratory activities – Self-Controlling

<b>Self-Controlling</b>	<b>Mean</b>	<b>SD</b>	<b>Degree Of Response</b>	<b>Quality Of Description</b>
1. I tried to keep my feelings to myself.	3.27	0.78	Always	Very Applicable Coping Mechanism
2. Keep others from knowing how bad things were.	2.89	0.89	Often	Applicable Coping Mechanism
3. I tried not to burn any bridges, but I did leave some gaps.	2.72	0.86	Often	Applicable Coping Mechanism
4. I tried not to act too hastily or follow my first hunch.	2.90	0.80	Often	Applicable Coping Mechanism
5. I tried not to let my emotions get in the way of other things.	3.12	0.82	Often	Applicable Coping Mechanism
6. I imagined how someone I like would deal with this situation and used it as a model.	2.86	0.96	Often	Applicable Coping Mechanism
7. I tried to see things from the perspective of the other person.	3.14	0.84	Often	Applicable Coping Mechanism
Overall Weighted Mean:	2.98	0.85	Often	Applicable Coping Mechanism

Table 2 presented the Mean and Standard Deviation distributions of the Respondents' responses to the Coping Mechanism regarding their mental aspects of all laboratory activities – Positive Reappraisal. As indicated in the table, the fifth statement, "I prayed," got the highest mean of 3.48 and a standard deviation of 0.75, denoted as always with a quality description of "very applicable coping mechanism," indicating that the respondents cope with their mental aspects of Positive Reappraisal by constantly praying. The last statement, "I was inspired to do something creative," got the lowest mean of 3.09 and a standard deviation of 0.89, often denoted with a quality description applicable coping mechanism. It illustrates that the respondents cope with their mental aspects of Positive Reappraisal by inspiring themselves to do something creative. The category Emotional aspects in all Laboratory activities – Positive Reappraisal got the overall mean of 3.27 with the overall standard deviation of 0.81, denoted as always and with a quality description of an applicable coping mechanism.



Table 2. Mean and Standard Deviation distributions of Respondent's responses to the Coping Mechanism in terms of their mental aspects in all laboratory activities – Positive Reappraisal

Positive Reappraisal	Mean	Standard Deviation	Degree Of Response	Quality Of Description
1. Changed or grew as a person in a good way.	3.31	0.78	Always	Very Applicable Coping Mechanism
2. I came out of the experience better than when I went in.	3.22	0.77	Often	Applicable Coping Mechanism
3. Found new faith.	3.22	0.87	Often	Applicable Coping Mechanism
4. Rediscovered what is important in life.	3.38	0.78	Always	Very Applicable Coping Mechanism
5. I prayed.	3.48	0.75	Always	Very Applicable Coping Mechanism
6. I changed something about myself.	3.16	0.84	Often	Applicable Coping Mechanism
7. I was inspired to do something creative.	3.09	0.86	Often	Applicable Coping Mechanism
Overall Mean:	3.27	0.81	Always	Very Applicable Coping Mechanism

The data provided in table 2 shows that the respondent strongly agrees that they always used a positive reappraisal of mental aspects in coping with all laboratory activities. Nowlan et al. (2015) said that Positive reappraisal involves evaluating an event in a more positive light. Also, Folkman (1997) suggests that positive reappraisal is an active coping mechanism. In addition, according to Garland et al. (2009), Positive reappraisal allows individuals to adapt to stressful life events successfully. Nowlan et al. (2016) added also that every elderly person, positive reappraisal is a complex cognitive approach. It has been linked to considerable improvements in psychological well-being on a broad scale.

Table 3 presented the Mean and Standard Deviation distribution of the respondents' responses to the Coping Mechanism regarding their mental aspects in laboratory activities – Planful problem-solving. As shown in the table above, statement number 1, "knew what have to do, so I doubled my efforts to make things work." got the highest mean of 3.12 and a standard deviation of 0.80, which is often denoted with a description of an applicable coping mechanism. It demonstrates how respondents deal with the mental aspects of planned problem-solving by anticipating a positive outcome and exerting double effort to make things work. And the fourth statement, "Change something so everything will be fine," also got the highest mean of 3.12 and a standard deviation of 0.78, often denoted with a quality description of an applicable coping mechanism. It

illustrates that respondents cope with their mental aspects of planned problem-solving by changing something to make things all right. The second statement, "I made a plan of action and followed it," got the lowest mean of 3.01 and a standard deviation of 0.78, often denoted with an applicable coping mechanism description. It demonstrates how respondents deal with the mental aspects of planned problem-solving by developing a strategy and using it as a guide. The third statement, "Concentrate on what I need to do next – the next step," also got the lowest mean of 3.01 and a standard deviation of 0.88, which is often denoted with a description of an applicable coping mechanism. It demonstrates how respondents deal with the mental aspects of planned problem-solving by focusing on each step they take. Lastly, emotional elements in all laboratory activities – Planful problem-solving got an overall mean of 3.05 with a broad standard deviation of 0.78, often denoted by a description of an applicable coping mechanism.

Table 3. Mean and Standard Deviation distribution of Respondents' responses to the Coping Mechanism in terms of their mental aspects in all laboratory activities – Planful problem-solving

<b>Planful problem-solving.</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Degree Of Response</b>	<b>Quality Of Description</b>
1. I knew what had to be done, so I doubled my efforts to make things work.	3.12	0.80	Often	Applicable Coping Mechanism
2. I made a plan of action and followed it.	3.01	0.78	Often	Applicable Coping Mechanism
3. Concentrated on what i had to do next – the next step.	3.01	0.79	Often	Applicable Coping Mechanism
4. Changed something so things would turn out all right.	3.12	0.76	Often	Applicable Coping Mechanism
5. Drew on my past experiences; I was in a similar situation before.	3.02	0.78	Often	Applicable Coping Mechanism
6. Came up with a couple of different solutions to the problem.	3.05	0.79	Often	Applicable Coping Mechanism
Overall Mean:	3.05	0.78	Often	Applicable Coping Mechanism

The data provided in table 3 shows that the respondent agreed that they often used Planful problem-solving in mental aspects in coping with all laboratory activities. According to Liang et al. (2022), systematic problem-solving serves as a guide to assist people in approaching problems rationally, deliberately, and methodically. Mental aspects in all laboratory activities are a highly effective method of helping individuals achieve their goals. John Dewey's adage "measure twice, cut once" and "a well-defined problem is half solved"

imply that if we take the time to fully comprehend the nature of the issue at hand, resolving it will require less time and effort.

Table 4. Mean and Standard Deviation distribution of the Respondent's responses to the Coping Mechanism in terms of their Emotional aspects in all Laboratory activities

Emotional aspects	Mean	Standard Deviation	Degree Of Response	Quality Of Description
1. Made light of the situation; refused to get too serious about it	2.72	0.80	Often	Applicable Coping Mechanism
2. Went on as if nothing had happened.	2.80	0.90	Often	Applicable Coping Mechanism
3. Didn't let it get to me; refused to think too much about it.	2.72	0.82	Often	Applicable Coping Mechanism
4. Tried to forget the whole thing.	2.69	0.92	Often	Applicable Coping Mechanism
5 Looked for the silver lining, so to speak; tried to look on the bright side of things	2.97	0.83	Often	Applicable Coping Mechanism
6 Went along with fate; sometimes i just have bad luck.	2.89	0.83	Often	Applicable Coping Mechanism
Overall Mean:	2.80	0.85	Often	Applicable Coping Mechanism

Table 4 presented the Mean and Standard Deviation distribution of the respondent's responses to the Coping Mechanism in terms of their Emotional aspects in all Laboratory activities –Distancing. As shown in the table above, the fifth statement, "I looked for the silver lining, to speak and tried to look on the bright side of things," got the highest mean of 2.97 and with a standard deviation of 0.83, which is denoted often with a quality description of an applicable coping mechanism. It illustrates that respondents cope with their emotional distancing by always looking on the bright side. The fourth statement, "Tried to forget the whole thing," got the lowest mean of 2.69 and a standard deviation of 0.92, often denoted with a quality description of an applicable coping mechanism. It illustrates that respondents cope with their emotional distancing by forgetting things that happened. The category Emotional aspects in all Laboratory activities –Distancing got the overall mean of 2.80 and the overall standard deviation of 0.85, often denoted with a quality description of an applicable coping mechanism.

According to Roth et al. (2018), emotional distancing was introduced to help individuals deal with emotional labor. It protects healthcare workers from emotionally

draining interactions with patients. Additionally, it provides an outlet for caregivers' emotional exhaustion, compassion fatigue, and burnout. Emotional distancing enables health care personnel to protect nurses' emotional health while giving the most significant possible nursing care to patients. It contributes to reducing emotional labor and the maintenance of nurses' professionalism. Additional research is required to develop a specific tool capable of identifying the circumstances under which This strategy is feasible for healthcare workers. Emotional distancing is a critical term that requires conceptual analysis as a coping strategy for nurses to maintain their mental health while providing the best nursing care possible.

Table 5. Mean and Standard Deviation distribution of the Respondent's responses to the Coping Mechanism in terms of their Emotional aspects in all Laboratory activities – Radical Acceptance

<b>Radical Acceptance</b>	<b>Mean</b>	<b>SD</b>	<b>Degree Of Response</b>	<b>Quality Of Description</b>
1. Criticized or lectured me.	3.15	0.83	Often	Applicable Coping Mechanism
2. I realized i brought the problem on myself.	3.16	0.80	Often	Applicable Coping Mechanism
3. I made a promise to myself that things would be different next time.	3.22	0.82	Often	Applicable Coping Mechanism
4. I apologized or did something to make up.	3.31	0.80	Always	Vey Applicable Coping Mechanism
Overall Mean:	3.21	0.81	Often	Applicable Coping Mechanism

Table 5 presented the mean and Standard Deviation distribution of the respondents' responses to the Coping Mechanism in terms of their emotional aspects in laboratory activities – Radical Acceptance. The fourth statement, "I apologized or did something to make up," got the highest mean of 3.31 and a standard deviation of 0.80, always with a quality description of a very applicable coping mechanism. It demonstrates that respondents cope with their emotional aspects by apologizing and doing something to make up. The first statement, "Criticized or lectured myself," got the lowest mean of 3.15 and a standard deviation of 0.83, as shown in the table above, and is often denoted with a quality description of an applicable coping mechanism. It illustrates that the respondents cope with the emotional aspects of radical acceptance by criticizing or correcting themselves. In the category, Emotional aspects in all Laboratory activities – Radical acceptance got an overall mean of 3.21 and an overall standard deviation of 0.81, often denoted with a quality description of an applicable coping mechanism.

The data provided in Table 5 shows that the respondent agreed that they often used radical acceptance of mental aspects in coping with all laboratory activities. According to

Tapper (2016), radical acceptance helps people reduce unnecessary suffering and increase their ability to cope with difficult times. Acceptance radical teaches us to accept that painful experiences are a natural part of life. Rather than denial, we must accept the reality of these experiences. Furthermore, according to Cooper (2003), radical acceptance is about living life on your terms and not rejecting what you are unable or unwilling to alter about yourself. Accepting radical acceptance requires saying yes to the totality of one's life experience. Responding skills improve class attendance, participation, and persistence even when students are faced with setbacks or failure in general, according to the findings of the study conducted by Yazon et al. (2018). Coping skills equip students with the more substantial, self-resilient who can lead to a much more positive learning experience. Students can deal positively with academic demands, overcome personal difficulties consistently, and attain higher levels of academic achievement.

Table 6 presented the Mean and Standard Deviation distribution of the respondent's responses to the Coping Mechanism regarding their Emotional aspects in laboratory activities - Escape and Avoidance. The third statement, "Had fantasies or wishes about how things might turn out," got the highest mean of 3.35 with a standard deviation of 0.79, always with a quality description of a very applicable coping mechanism. It illustrates that respondents cope with their emotional aspects of escape and avoidance by thinking about how they would turn out. The seventh statement, "Took it out on other people," got the lowest mean of 2.23 and with a standard deviation of 0.98, denoted as sometimes with a quality description of a slightly applicable coping mechanism. It illustrates that the respondents sometimes cope with their emotional aspects by taking it out on others. In the category of Emotional aspects in all Laboratory activities - Escape and avoidance got an overall mean of 2.85 and a standard deviation of 0.91, often denoted with a quality description of an applicable coping mechanism.

According to Table 6, respondents agree that they often used escape and avoidance in emotional aspects across all laboratory activities. According to Connor (2016), escaping and avoiding emotional distress helps alleviate it. Escape and avoidance occur whenever people are put in an uncomfortable circumstance or provoked by a negative emotion (or anxiety); others believe it is better to leave or avoid the issue rather than address it. Dwyer et al., (2012) on their study pointed out that respondents used avoidance and evasion to get out of difficult situations. They were leaving stressful situations (to maintain control of their reactions) and liberating the mind (passively reducing tension). Some respondents made efforts to forget about work or divert their attention away from the stress. A second finding was that most people believe they have no control over the situation, leading them to rely on emotion-focused coping strategies such as religious coping, escape-avoidance, and distancing to deal with stressors. Others stated that doing something they enjoyed helped them deal with stressors, it is advantageous in some circumstances.

Table 6. Mean and Standard Deviation distribution of the Respondent's responses to the Coping Mechanism in terms of their Emotional aspects in all Laboratory activities - Escape and Avoidance

<b>Escape and Avoidance</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Degree Of Response</b>	<b>Quality Of Description</b>
1. Wished that the situation would go away or somehow be over with.	3.33	0.81	Always	Very Applicable Coping Mechanism
2. Hoped a miracle would happen.	3.31	0.85	Often	Applicable Coping Mechanism
3. Had fantasies or wishes about how things might turn out.	3.35	0.79	Always	Very Applicable Coping Mechanism
3. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.	2.50	1.12	Often	Applicable Coping Mechanism
4. Avoided being with people in general.	2.80	0.89	Often	Applicable Coping Mechanism
5. Refused to believe that it had happened.	2.55	0.86	Often	Applicable Coping Mechanism
6. Took it out on other people.	2.23	0.98	Sometimes	Slightly Applicable Coping Mechanism
7. Slept more than usual.	2.78	0.98	Often	Applicable Coping Mechanism
Overall Mean:	2.85	0.91	Often	Applicable Coping Mechanism

Table 7 presented the Mean and Standard Deviation distribution of the respondent's responses to the Coping Mechanism regarding their Social Aspects in laboratory activities- Confrontation. As shown in the table above, the sixth statement, " I did something which I didn't think would work, at least I was doing something," got the highest mean of 2.89 and a standard deviation of 0.77, often denoted with a quality description of an applicable coping mechanism. It illustrates that respondents agree that they continually cope with their social aspects of confrontation by doing something they



didn't think would work. The third statement, "I expressed anger to the person(s) who caused the problem," got the lowest mean of 2.29 and a standard deviation of 0.97, which is denoted as sometimes with a quality description of a slightly applicable coping mechanism. It illustrates that the respondents cope with their social aspects in confrontation by expressing their anger toward the person that caused the problem. The category Social Aspects in all Laboratory activities- Confrontation got the overall mean of 2.63 and an overall standard deviation of 0.86, often denoted with a quality description of a slightly applicable coping mechanism.

Table 7. Mean and Standard Deviation distribution of the Respondent's responses on the Coping Mechanism in terms of their Social Aspects in all Laboratory activities- Confrontation

<b>Social Aspects in All Laboratory Activities- Confrontation</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Degree Of Response</b>	<b>Quality Of Description</b>
.1 Stood my ground and fought for what i wanted.	2.83	0.82	Often	Applicable Coping Mechanism
2 Tried to get the person responsible to change his or her mind.	2.56	0.87	Often	Applicable Coping Mechanism
3 I expressed anger to the person(s) who caused the problem.	2.29	0.97	Sometim es	Slightly Applicable Coping Mechanism
4 I let my feelings out somehow.	2.56	0.87	Often	Applicable Coping Mechanism
5 Took a big chance or did something very risky.	2.67	0.88	Often	Applicable Coping Mechanism
6 Did something which i didn't think would work, but at least i was doing something.	2.89	0.77	Often	Applicable Coping Mechanism
Overall Mean:	2.63	0.86	Often	Applicable Coping Mechanism

According to Augsberger (2009), when confronting someone with compassion, the following guidelines are present: confront with compassion; confront with courage; confront with dignity. Do not confront until you have shown true care for the other person, and only for the express goal of exhibiting genuine concern. Confront in a kind manner. Speak gently, and in the manner, you desire to discuss a delicate issue. Consider the following example: "I understand your point of view. I, too, have been in that situation. "Please allow me to make a suggestion." You should not offer more than the relationship can bear, nor should you demand more than you have invested. Confront the situation positively. Avoid making your words seem like you are accusing, humiliating, or punishing someone (negative aspects of most confrontations). To provide an example, you may start

by saying, "You and I are close friends, John." "Can you tell me what you think about this concept?" Confront the situation with acceptance and trust. Even if the other person's actions are problematic, assume the best intentions of the other person. Good intentions should be acknowledged, for example, by expressing, "I appreciate your wish to help, however..." Confront the situation. Prepare a report detailing your observations, the emotions you feel or sense others feeling, and the conclusion you reach about the best next step to take with the person you're interacting with. For example, "I overheard what you said to Mary" may be uttered (observation). "Seemed to be an insult to her emotions" or "appeared to be an affront to her feelings" (emotion). "I'm confident that you had no intention of hurting her. Please communicate your apologies to her "or" to the best of your ability (conclusion).

Table 8. Mean and Standard Deviation distribution of the Respondent's responses to the Coping Mechanism in terms of their Social Aspects in all Laboratory activities- Seeking Social Support

<b>Social Aspects in All Laboratory Activities- Seeking Social Support</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Degree Of Response</b>	<b>Quality Of Description</b>
1. Talk to someone to find out more about the situation.	2.69	0.90	Often	Applicable Coping Mechanism
2. Talk to someone who could do something concrete about the problem.	2.59	0.93	Often	Applicable Coping Mechanism
3. I asked a relative or friend I respect for advice.	2.48	0.98	Sometimes	Slightly Applicable Coping Mechanism
4. Talked to someone about how i was feeling.	2.42	0.99	Sometimes	Slightly Applicable Coping Mechanism
5. Accept sympathy and understanding from someone.	2.79	0.96	Often	Applicable Coping Mechanism
6. I got professional help.	1.80	0.96	Sometimes	Slightly Applicable Coping Mechanism
Overall Mean:	2.46	0.95	Often	Applicable Coping Mechanism



Table 8 presented the mean and Standard Deviation distribution of the respondents' responses to the Coping Mechanism in terms of mental aspects in Social Aspects in all Laboratory activities- Seeking Social Support. The fifth statement, "Accepts sympathy and understanding from someone." got the highest mean of 2.79 with a standard deviation of 0.96, often denoted with a quality description of an applicable coping mechanism. It illustrates that respondents cope with the mental aspects of Seeking Social Support by accepting when others give sympathy and understanding to someone. The sixth statement, "I got professional help," got the lowest mean of 1.80 with a standard deviation of 0.96, sometimes with a quality description of a slightly applicable coping mechanism. It illustrates that respondents cope with the mental aspects of Seeking Social Support by seeking professional help to manage the problem. In the category, social elements in Laboratory activities –Seeking Social Support got an overall mean of 2.46 and an overall standard deviation of 0.95, often denoted with a quality description of an applicable coping mechanism.

Table 8 reveals that the respondent acknowledged that they often turned to Seeking Social Support to deal with the demands of all lab activities. Smith (1999), coping skills may enhance self-regulated learning regardless of whether or not one has access to social assistance. Gowda and Ayush (2020) makes the following claim. In the face of setbacks or failures in general, students' attendance, involvement, and tenacity increase, and they become stronger and more self-resilient. This results in a much more pleasant learning experience for all students. However, academic coping techniques, which include approach, avoidance, and social support, were shown to benefit undergraduate students in terms of their academic performance. Additionally, academic coping techniques have been established to aid undergraduate students in adapting to their lives, including their physical, emotional, spiritual, and psychological well-being and academic performance.

Table 9. Pearson Moment Correlation results from the significant relationship between the financial income, gadget availability, and location of the students and the outcome of the students in taking their laboratory activities.

	N	Correlation	Sig.	Decision		Interpretation
Financial Income	189	-.842(**)	0.00	Significant	Reject Null Hypothesis	Strong Relationship
Gadgets Available	189	-.821(**)	0.00	Significant	Reject Null Hypothesis	Strong Relationship
Location	189	-.783(**)	0.00	Significant	Reject Null Hypothesis	Strong Relationship

\* Correlation Is Significant at the 0.05 Level (2-Tailed).

Table 9 presented the Pearson Moment Correlation result of the significant relationship between the students' financial income, gadget availability, location, and the students' outcome in their laboratory activities. The table above shows that the variable

financial income correlated with  $-.842^{**}$ ), and a significance of 0.00015 indicated a significant relationship. It rejects the null hypothesis that states that there is no significant relationship between the socio-demographic profile of the students and their ways of coping with their laboratory activities in times of pandemic. The variable gadget available with a correlation of  $-.821^{**}$  got a significance of 0.00042, indicating a significant relation. It rejects the null hypothesis that states that there is no significant relationship between the socio-demographic profile of the students and their ways of coping with their laboratory activities in times of pandemic. The variable location with a correlation of  $-.783^{**}$ ) and a significance of 0.00021 indicated a significant relationship. It rejects the null hypothesis that states that there is no significant relationship between the socio-demographic profile of the students and their ways of coping with their laboratory activities in times of pandemic.

According to the data shown in the table, there is a statistically significant association between the socio-demographic profile of the students and their strategies for dealing with their laboratory work during a pandemic. As Cox et al., (2016), a student's education may be affected by their family's money, whether it is wealthy or poor. Some institutions and colleges may pay close attention to students' progress throughout their academic careers. Their family's income may be restricted because they are still in their infancy. They may want to know about the family's financial resources and how they intend to pay for their children's college tuition. Otherwise, they would have been refused entrance to that particular institution. If the family makes a lot of money early on in the student's schooling, it may be simpler to get them accepted into that particular institution. Compared to the kid whose family generates a substantial income throughout his late years of school, there is a considerable difference in outcomes. Similar also with the study of Machebe et al. (2017). Chua and Luyon (2019) added that educational gadgets assist pupils in the development of their abilities and knowledge. It is critical for them because they will need to increase their knowledge power to achieve future success. Teachers may also enhance their talents and tactics for instructing students. In the near term, although this technology is essential for both students and instructors, it does have certain negatives. Gadgets help make the world a better and more convenient place to live. The proliferation of devices of ever-increasing complexity creates a new horizon for human capability. Gadgets ensure a secure, comfortable, and well-nourished existence for billions of people. Individuals require advanced technology to remain active and healthy. Sung et al. (2016) added also that Smartphones have become reliable and ubiquitous. The Smartphone can equip learners attending online courses with a multitude of advantages, including the opportunity to participate in autonomous and collaborative learning experiences, receive prompt feedback from instructors, and engage in informal learning at any time.

## **CONCLUSIONS**

This study aims to identify the Coping Mechanism in terms of the mental, emotional, and social aspects of their laboratory activities in times of pandemic. The comprehensive data gathered through Google forms showed that mainly the respondents are practicing positive reappraisal in the category of mental elements. It was an essential cognitive

strategy with wide-ranging improvements in psychological well-being. The respondents cope with their mental aspects through positive reappraisal by constantly praying; this connotes that Filipinos have a strong faith in God. The data showed that the respondents are primarily practicing radical acceptance in the category of emotional aspects, where it's all about accepting life on life's terms and not resisting what you cannot or choose not to change. The respondents cope with their emotional aspects through radical acceptance by apologizing and doing something to make up. It proves that when you accept your mistake and apologize to a particular person, it makes you better and clarifies things. The third category is social aspects; respondents mostly do confrontation, where they cope with their social aspects through confrontation by doing something they didn't think would work. It statically examines the hypothesis to determine whether there is a significant relationship between the socio-demographic profile (financial income, gadget availability, and location) of the students and coping with their laboratory activities in times of pandemic proven to have a significant relationship. The data showed that the respondent's family income is below P10, and 957 is insufficient.

Regarding the respondent's gadget availability, it showed that they primarily use smartphones. In terms of location, researchers found out that respondents are mainly located in an urban area, which is more likely to attend online classes because they have enough internet availability. It proves that despite the situation we are facing now, students are still finding ways of coping with their laboratory activities during the pandemic. If students keep on dealing with their anxiety, there is no reason they cannot surpass the challenges in this time of the pandemic.

## **RECOMMENDATIONS**

The findings and conclusions of the study drew the following recommendations.

### **DEPARTMENT OF TECHNOLOGY TEACHER EDUCATION**

Due to the current pandemic, most students are experiencing various difficulties in the new educational system. The researchers aimed to address the financial income of the students. Faculty and Staff evaluate the financial income of the students before conducting laboratory activities, as these aspects make it difficult for students to cope with these activities.

### **MSU-IIT**

Institutions might strengthen and enhance their counseling program and make it available in all forms of communication. Institutions must expand their existing formal support system by staffing the Center for Student Management and equipping all university staff with the skills necessary to assist students experiencing difficulties in laboratory activities.

### **STUDENTS**

Students should be taught how to cope and deal with laboratory activities in pandemics and should inform students about available community support systems where they can seek assistance.

## **FUTURE RESEARCHERS**

Students use the eight coping mechanisms during the pandemic in dealing with laboratory activities. It could be helpful for future researchers as references in their study. The researcher recommends that the future researcher conduct further research on this study.

## **IMPLICATIONS**

Students commonly practice positive reappraisal in coping with their mental aspects by praying to God. Students commonly practice radical acceptance in coping with their emotional aspects by apologizing and doing something to make up. Confrontation is commonly the students practicing coping with their social aspects by doing something they didn't think would work. The family income of the respondents is below P10,957 and is considered inadequate. Students commonly use smartphones in attending online classes. The Urban area is the standard location for the students.

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