



COPING WITH COVID-19: THE LIVED EXPERIENCES OF MEDICAL TECHNOLOGY STUDENTS FROM A UNIVERSITY IN MANILA

Dannyce Joeline T. Lorenzo, Keane Darren L. Chua, Maria Sophia G. Nicolas, Denson S. Putungan,
Paula Marie B. Quito, Aleina Red T. Ramirez, Joemarie T. Malana, RMT, Msc

*Department of Medical Technology, Faculty of Pharmacy,
University of Santo Tomas
Manila, Philippines*

Corresponding Author: dannycejoeline.lorenzo.pharma@ust.edu.ph

Abstract: Since the onset of the COVID-19 pandemic, it had a profound impact worldwide. In which, the next generation of Medical Technologists had a completely different experience in terms of learning as a result of the health crisis and government regulations. This study investigates the challenges encountered due to the personal and environmental factors surrounding the students, as well as characterizes and understands their experiences and their coping mechanisms. The students of the University of Santo Tomas from the Bachelor of Science Medical Technology course were interviewed for this phenomenological study, highlighting their COVID-19 experiences, the challenges, and coping techniques. A non-random, purposive selection of 12 Filipino Medical Technology students was used for the interview. The findings revealed that the Filipino Medical Technology students who faced such challenges during the COVID-19 pandemic were as follows: (1) academic challenges such as underdeveloped practical skills, feelings of burnout, lack of confidence, future anxiety, underdeveloped practical skills, and difficulties in feedback; (2) ergonomic challenges consisting of environmental factors, external factors cognitive, organizational, and object; (3) Economic difficulties surrounded by leisure constraints, unstable employment, and harsh working conditions, inequitable expenses, financial adaptation, and functional discomfort; and (4) socio-civic challenges centered on physical distance, a lack of support system, social media use, emotional and mental capacity, and miscommunication. The researchers analyzed the findings from the interviews using the Lazarus and Folkman (1984) Theory of Stress and Coping and noteworthy remarks from the transcribed interviews to discover both the problems and coping techniques utilized by the interviewees.

Keywords: *COVID-19, coping mechanisms, challenges, Medical Technology students*

I. INTRODUCTION

One of the biggest threats that the world faces today is the Coronavirus (Guterres, A., n.d). Ever since its spread, the rest of the world has realized its drastic need for more healthcare workers (Bailey, V., 2022). Every day, Medical Technologists are exposed to dangerous viruses and diseases. From gathering samples to examining them, these individuals are one of the first lines of defense against ailments (MedTech Europe, 2021). Since the beginning of the pandemic, their importance has been highlighted more than ever. However, due to the pandemic and the regulations the government has implemented, the next generation of Medical Technologists have a completely different experience in terms of studying and practical knowledge compared to the older generations. The research aimed to understand and characterize the experiences and opinions the current Medical Technology students from the University of Santo Tomas have during the pandemic. This included the global and local response to the virus, the different challenges faced by the health system, the economy, and the educational landscape, and their overall perception and awareness of the virus. Through interviews translated through a phenomenological reduction, the central question that needed to be answered is “What characterizes the Lived Experiences of Medical Technology Students amidst the COVID-19 pandemic?”.

Coronavirus is an infectious disease that comes from the SARS-CoV-2 virus. The disease is transmitted through the liquid droplets that come from an infected person when they talk, sneeze, cough, or breathe. Last January 30, 2019, the Department of Health (DOH) announced the first case in the Philippines from a woman who originated from Wuhan and traveled to the country. Around the same time as the first incident, the World Health Organization (WHO) declared the outbreak as a Public Health Emergency of International Concern (PHEIC). With these situations at hand, President Rodrigo Duterte, the President of the Philippines, was compelled to order a temporary travel ban on those coming from Wuhan City (Baclig, 2021). By March, the Philippines was in a state of emergency when the number of cases started climbing, and on the 18th of the same month, the entire island of Luzon was placed under Enhanced Community Quarantine (ECQ). During the ECQ, many businesses had to stop operating due to the nature of the activities that involved numerous people. Examples of these businesses are amusement parks, cockpit arenas, lotteries, and playgrounds (Manuel, 2021). Additionally, during this time, only authorized people were allowed to leave their homes.

On March 24, 2020, President Duterte signed the “Bayanihan to Heal As One Act” that granted him special authority or “powers” necessary to combat the health crisis in the country. In a results-based analysis done by Miral, Bronce, Dumangas, and Estrada, they identified the key factors from the result of the law’s implementation. The community quarantine that the country was put under was the strictest, longest, and most expansive one in the world and required huge economic and social costs (Miral, Bronce, Dumangas, & Estrada, 2020). Despite the efforts, the number of cases still did not go down. In regard to the health response, despite the testing and treatment rates increasing, the mortality rate continued to rise due to weak response in contact tracing and quarantine of individuals. The suspension of public transport and other community measures negatively affected businesses. Credit support was provided by the government, but due to delays and the limited scope of businesses provided support, small businesses were not able to remain open. Additionally, the implementation of the community quarantine stranded a huge number of civilians away from their homes and families because of weak institutional arrangements to help them (Miral, Bronce, Dumangas., & Estrada, 2020). Besides these, the education system was also one of the greatly affected institutions due to the sudden halt in physical classes.

According to Pokhrel and Chhetri (2021), the largest disruption to the education systems in human history is the COVID-19 pandemic. In order to contain the spread of the virus, educational institutions all over the world had to temporarily close. This affected over 1.2 billion students worldwide and more than 28 million in the Philippines (UNESCO, 2020). Even before the pandemic started, disparities between school, districts, and students have always been present and acknowledged, however, in crises like the pandemic, this problem is further highlighted. According to Paul Reville, the former secretary of education for Massachusetts, students come from different backgrounds and have access to different opportunities thus their learning experience will be determined by this. There are students who would be fine with the virtual learning set up because they can provide the adequate materials needed for such, however there will also be students who will not have access to the material and will be at a disadvantage. Since the existing socioeconomic disparities have widened, students who thrived in physical classes, are experiencing interruptions in their studies resulting in a deteriorating academic performance (Garcia & Weiss, 2020).

The Philippines' pandemic response has been described as "one of the longest and strictest lockdowns in the world" (Olanday et al., 2020). Various classifications of community quarantine such as, General Community Quarantine (GCQ), Modified General Community Quarantine (MGCQ), GCQ with heightened restrictions, Enhanced Community Quarantine (ECQ), and Modified Enhanced Community Quarantine (MECQ), are enforced in areas of low risk and high risk accordingly. Furthermore, the Philippine government has mandated that everyone must wear full-coverage face shields together with face masks while in public places. Local governments continue to implement additional requirements to slow the virus' spread.

Under the Duterte administration, the Philippines responded to the COVID-19 crisis through a militarized approach such as travel bans, border closure and increased border control, detainment, along with legalizing the military and the police's use of force. Simultaneously, policies and programs for social distancing, mass testing, contact tracing, and vaccination rollout were implemented. However, without a science advisory body with a wide source of expertise for emergencies such as a pandemic, the government instead opts for the "securitization" of the virus (Barredo, 2020; Vallejo & Ong, 2020).

Since the beginning of the pandemic, the pandemic hasn't been perceived nor dealt with in a scientific approach. Instead, the entire country was put into lockdown to control man-to-man transmission, transportation was restricted to minimize interactions, and new rules were strictly enforced including the stern use of face masks, face shields, and constant social distancing with corresponding punishment if violated. Some scholars and observers even describe the government's response as "draconian," "militarized," or "police-centric" (Maru, 2020) without consideration to a more practical and timely approach.

As the government prioritizes the use of its extremist powers to win the war against COVID-19, our resources are exhausted towards projects of relative unimportance and triviality. One of these controversial projects during the pandemic includes the Manila Bay dolomite sand project. Aside from the initial Php 398 million budget, an additional Php 265 million budget will be allotted by the Department of Environment and Natural Resources (DENR) for the second phase of the said project. Largely unnecessary projects similar to this, while the Philippine public health system remains ill-equipped, are a huge contribution to the stagnant development of the country against effectively coping with the COVID-19 situation in the country.

In perusing the current state of the Philippine health care sector, a plethora of issues are readily identified. First, the lack of personal protective equipment (PPE) has been a recurring challenge for medical front liners since the onset of the pandemic in the Philippines (Baron, 2020). Especially in the first

few months of the pandemic back in 2020, some hospital staff resolved to wear garbage bags as improvised protective gear. Furthermore, during this time, hospitals relied on donations from private groups and individuals (CNN Philippines, 2021).

Moreover, the DOH still has no plans to carry out ‘mass testing’ even as cases pile up at an alarming rate, instead opting for ‘risk-based testing’ (Cabico, 2021). In a palace briefing, Vince Dizon, the deputy chief implementer of the National Task Force Against COVID-19, stated his disapproval for mass testing as this was allegedly not recommended by experts both in and out of the Philippines. As the country’s testing czar, Dizon explained that testing should instead be “risk-based and targeted,” coupled with speedy contact tracing and isolation of the suspected individuals (CNN Philippines, 2021).

Lastly, the WHO expressed its concern towards the country's slow vaccination rollout. According to Calonzo, the Philippines is lagging among its peers in Southeast Asia in the vaccine rollout, with about 23% of the population fully vaccinated, compared with 63% in Malaysia. At this rate, it is estimated that the country’s goal of fully vaccinating 70% of the population would most likely be achieved in February 2022, instead of later this year.

The country's weak foundation in health care and its reliance on extensive quarantines, as well as the use of guns and violence, is what hinders the Philippines from seeking the counsel of medical experts and using science-based approaches to effectively addressing the pandemic.

Given the unprecedented nature and the magnitude of the current COVID-19 pandemic, it clearly caused disruption in medical education and healthcare systems all over the world. The virus has made it difficult to carry on with regular lectures, affecting the medical education process, which is based on lectures and patient-centered education. It poses a number of issues for medical education, as medical professors must provide lectures safely while maintaining the integrity and continuity of the medical education process, and medical students must remain at home and follow social distancing guidelines. To stay up with their academics, medical students opt to utilize online learning methods. In addition, students are missing out on valuable educational opportunities and months of clinical training, which could have an impact on their present well-being or career path.

Given the unique circumstances that the current batch of Medical Technology students are in due to the pandemic, the aforementioned students possess certain experiences that are distinct to them only, and not to the previous batches of students. Therefore, gathering information on the lived experiences and perceptions of Medical Technology students in the midst of the pandemic can provide valuable insight on the various challenges that Medical Technology students face during the pandemic, along with the possible ways of coping with the said challenges. Moreover, in conducting this study, the researchers aim to uncover challenges that are apart from the usual academic challenges and focus on challenges that are due to the personal and environmental factors surrounding the students.

Consequently, the findings of this phenomenological study will redound to the benefit of the Filipino Medical Technology students from the University of Santo Tomas in Manila as it will provide an in-depth understanding and analysis of the socially constructed issues regarding the lived experiences of the students studying amidst the pandemic. Furthermore, it will bring forth the perspectives, insights, and experiences of the students, the targeted participants, on the factors that they faced as students during the pandemic. As well as the various aspects that contribute to their learning experiences and coping mechanisms. Thus, this study can recommend the adjustments that need to be implemented in order to provide a practical and effective learning process and system in the Medical Technology department.

It does, however, come with restrictions, limitations, and research gaps. The survey response rate is one of the limitations of our study, which was expected considering the obstacles students were facing.

Limited access to email and internet communication are anticipated, and some participants would likely be dealing with additional personal issues and challenges as a result of the pandemic. Another constraint is that participants will be chosen solely from the researchers' acquaintances in the baccalaureate program of Medical Technology. With this, only the educational system and procedure of the university and the department will be covered.

Research Problem

The study was conducted to shed light on the coping mechanisms of Medical Technology students from a University in Manila amid the COVID-19 pandemic. Since 2020, the COVID-19 pandemic has subjected numerous individuals worldwide to severe affliction and distress. This has caused limitations to educational institutions in terms of course delivery. With this, the future generations of Medical Technologists experienced a different mode of learning in comparison to the pre-pandemic generations. This goes in regard to the learning environment, theoretical knowledge, and practical application in the Medical Technology field.

Qualitatively, this study aims to answer the following central question:

Central Question: What characterizes the Lived Experiences of Medical Technology Students amidst the COVID-19 pandemic?

Specifically, the researchers sought to answer the following sub-questions:

1. What are the challenges that the Medical Technology students have encountered in their life as a student amidst the COVID-19 pandemic?
2. What are the coping mechanisms that the Medical Technology students employed during the COVID-19 pandemic?

Theoretical Framework

When the COVID-19 pandemic started, many aspects of normal life changed, many of which happened suddenly and abruptly. With usual routines suddenly coming to a halt, adjusting to the “new normal” has not been easy for anyone. From economic challenges to academic ones, new ways to cope with these new changes had to be implemented. Some have felt frustration, anxiety, and grief among other things due to the stress the change has brought (Center for Disease Control, 2022).

The most influential theory of stress and coping was developed by Lazarus and Folkman in 1984 (Weber, 2001). According to Lazarus and Folkman “Psychological stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (Lazarus & Folkman, 1984). They proposed The Transactional Model of Stress and Coping, and this stated that the ability of a person to cope with the challenges presented to them is a direct consequence or result of their interaction with the environment. To better understand this relationship, the model proposed two important phases, cognitive appraisals, and coping.

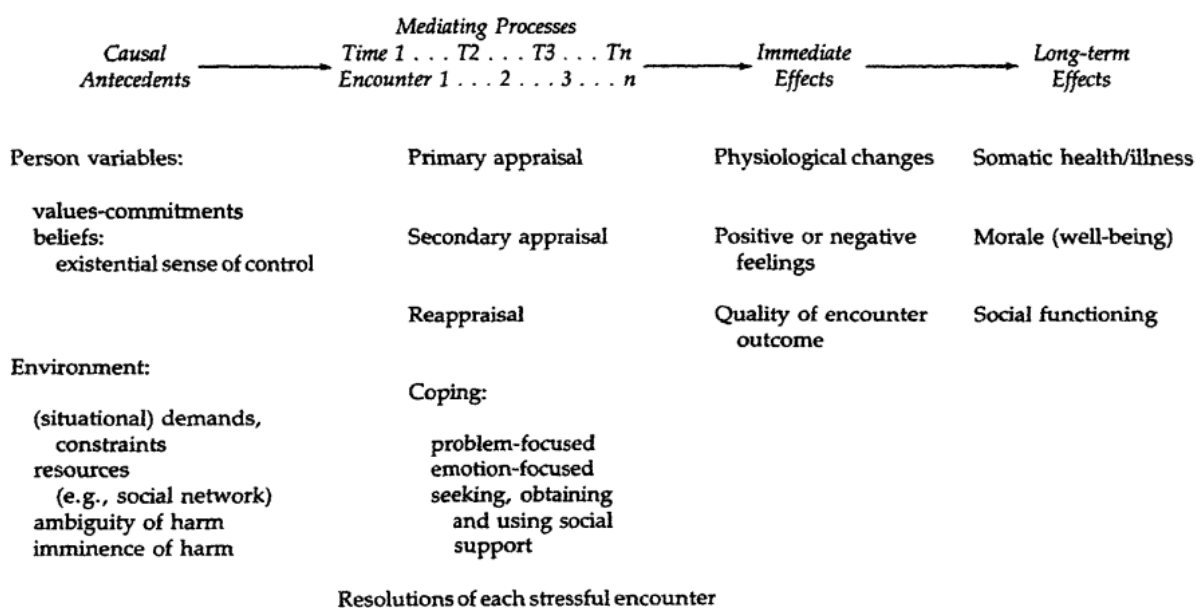


Fig 1. A theoretical schematization of stress, coping, and adaptation (Lazarus & Folkman, 1984)

Cognitive appraisals refer to the “Process of categorizing an encounter, and its various facets, with respect to its significance for well-being” (Lazarus & Folkman, 1984). A situation must first be deemed as stressful before advancing to coping with it. Cognitive appraisal consists of two mechanisms, the first one is primary appraisal. This is the individual’s assessment on whether or not the situation is threatening, challenging, or is a loss for them. Loss refers to a stressful situation that has already happened (Berjot & Gillet, 2011); threat appraisal suggests the thought of potential danger to oneself physically or psychologically while a challenge refers to the focus on the potential success or rewards and personal growth to be gained from the situation (Berjot & Gillet, 2011). Threat and challenge appraisals are not mutually exclusive and are two ends of single continuum (Lazarus & Folkman, 1984). Additionally, these two appraisals are negatively correlated, however they can occur at the same time (Skinner & Brewer). The example that Lazarus and Folkman used to explain this correlation is students waiting for an upcoming exam, which can be perceived as both threatening and challenging (1985). The second mechanism in cognitive appraisal is the secondary appraisal. This is an individual’s assessment on whether or not they have the resources to cope with the given situation. Resources to coping includes physical, social, psychological, and material factors (Berjot & Gillet, 2011).

The second phase that the model proposed is coping. Lazarus and Folkman described this as the “Cognitive and behavioral efforts to master, reduce, or tolerate the internal and/or external demands that are created by the stressful transaction” (1984). There are many categories in coping with stressful situations because there is no guarantee that one person will react the same way another would. Despite this diversity in reactions and responses, Lazarus and Folkman narrowed it down to two, emotion-focused coping and problem-focused coping. Emotion focused coping refers to the handling or management of an individual’s emotional response to the situation. On the other hand, problem-focused coping refers to the act of directly modifying the elements of the situation to better suit oneself (Berjot & Gillet, 2011). Both coping mechanisms are usually used in stressful situations but ultimately it depends on how the individual faces the situation. In the analysis that Lazarus and Folkman did, they found that although both forms of coping were utilized in most stressful situations, problem-focused coping was more used in situations that were deemed more changeable and emotion-focused coping was used when it was not.

Two broad categories of antecedents were identified by Lazarus and Folkman which directly influence the appraisal and coping reactions of an individual depending on the situation presented. The first antecedent is the characteristics linked to the individual. This can refer to commitments, personal

traits like self-esteem (Rector and Roger, 1997), and beliefs about personal control (Lazarus & Folkman, 1984). The second antecedent that was identified are the characteristics linked to the situation. This can refer to factors such as the unfamiliarity or familiarity of the situation and temporal factors (Lazarus & Folkman, 1984).

II. METHODOLOGY

Research Design

A phenomenological approach was utilized for this study. According to HARAPPA (2021), this method of study focuses on certain phenomena that cause impacts on the life of an individual wherein it highlights the specific perceptions of the subject as well as the factors that have influenced the experience of the individual during the phenomenon. In this study, observing the lived experiences of Medical Technology students was the main focus for this research. Phenomenology was chosen as the most appropriate design as it aimed to understand the occurrence of a certain event based on lived experiences of individuals. A repertory grid was used to identify significant themes from the interview transcript. Whereas the MAXQDA software was used to determine data saturation.

Subjects and Study Site

This phenomenological research attempted to interpret a socially constructed issue regarding the lived experience of Filipino Medical Technology students from a university in Manila in the battle against COVID-19. It endeavored to address the cognizance and opinions of the targeted participants on the battles, whether personal or environmental factors, faced by the students during the pandemic. It also sought to examine the coping mechanisms and the challenges embedded with the onset of the virus and to draw themes regarding the statements given by the participants. In essence, this study heavily relied on the participants' responses in phenomenological study analysis.

Type of Sampling

The procurement of the responses from the participants executed a non-random selection or purposive sampling. In this type of non-probability sampling technique, the researchers selected a sample based on their willingness to share experiences about the nature of the study and its intended sample population through convenience sampling recruitment. As such, the participants were deliberately selected from the researchers' acquaintances in the baccalaureate program of Medical Technology of any year that will provide in-depth and detailed information regarding the phenomenon being investigated.

Selection and Recruitment

Twelve (12) eligible individuals who fit the mentioned demographic were sought by the researchers' purposive and manual selection. To justify the sample size, as stated in the papers of Creswell, W. & Creswell, D. (2018), and Chachar, G. (2019), there is no specified quantity for the number of participants involved in qualitative studies, however, it is ideal to have 5-25 participants in a phenomenological study. Qualitative approaches are generally used to acquire depth of understanding, whilst quantitative methods are used to obtain a breadth of comprehension (Patton, 2014). Saturation with achieving full knowledge by continuing to sample until no new substantial information is collected is the major focus of qualitative approaches (Palinkas et. al, 2015). It necessitates a degree of precision and an emphasis on the uniformity that only smaller samples can provide. The researchers were given the liberty to add or detract the population as seen fit by the significance of the data collected. Each potential participant received a letter of invitation that stipulates pertinent details about the study. It also included the research questions that would be asked in the research.

The recruitment process upheld the stipulated inclusion and exclusion criteria under the previous demographic section of the paper. Necessary information was collected using the Robotfoto to confirm and validate if the willing participants fit the sampling criteria. This information consists of the following:

(1) Name; (2) Gender; (3) Age; (4) City of Residency; (5) School Affiliation; (6) Year Level. This form also collected contact information to be utilized as a mode of reaching the participants on different platforms. The participants' contact information was used for the following reasons: (1) Sending pertinent documents needed in the study such as (a) interview transcripts for the participants to review, clarify, and/or rectify their own responses before analysis; (b) copy of the finished research paper; (2) Contacting participants if unreachable in the platform of communication being utilized in previous interactions.

The data collected were handled with utmost and strict confidentiality and anonymity. Any sensitive information shared such as their names and contact information were not part of the research paper once published. Summary of the protocols employed will be under consent and safeguarding process. Any participants who would not comply with the said requirements were excluded from the study.

Consent and Safeguard Process

As mentioned previously, those selected each received an e-mail, and inside contained a message of invitation and consent to be interviewed. In addition, the forms included a notice that informed the participant in written permission to be part of the research upon answering the forms. It illustrated in prose the procedure, requirements, and methods that will be deployed in the study. A schedule that expressed the researchers' free time was given to the participants in order to align dates for interviews with the group. A discussion thread in email was the mode of communicating with the respondents regarding the pertinent details of the interview. Afterward, the mentioned participants were interviewed through a one-on-one interview with the interviewers randomly assigned and conducted by the researchers involved. The duration of the interview was an average of one hour.

Moreover, part of the consent form briefly clarified the integrity and anonymity of the participants in ensuring that no participants' data were released— name, contact details, and statements. With this section, the form imposed that the researchers will not share the participants' data and will not be placed in any part of the final research paper. A name coding system was also implemented to ensure the anonymity of the participants and the confidentiality of their identity. A copy of the paper was also sent to the participants as a measure to countercheck all the information for transparency. It also noted that the participants have the right to disavow and pull out from the research before, during, or after the interview. By doing so, the participants had the right to deny usage of the data collected from them in the study.

Data Measure/Instrumentation

As the researchers' aim was to understand the challenges and its respective coping mechanisms of Medical Technology students, the researchers had then decided to implement a qualitative approach with phenomenological means using a semi-structural interview to gather information. According to Ryan et al. (2009), an interview was one of the most used data collection methods in health and social research as it is a valuable method in gaining insight into the people's perceptions, understanding, and experiences of a given phenomenon, which was in this case, the COVID-19 pandemic. Yet, it was emphasized that an interview is not just a mere conversational interaction between two people as it also requires the interviewer to be knowledgeable and skillful as it was very crucial to professionally deliver appropriate questions with regards to technique, rapport, and listening for the outcome to be successful. With the COVID-19 pandemic currently ongoing, the researchers chose to implement an online interview as their means of data gathering. This method could be highly convenient for both the participants and the researchers to prevent the spread of the disease and to specifically set the schedule at their most available time and place.

Data Gathering Procedure

The data gathering procedure is as follows. Before conducting interviews, the researchers first obtained approval from the ethics review committee of the University to conduct the study. Upon the approval of the ethics review committee, the researchers were then able to proceed with the selection process for participants of the study using the previously mentioned inclusion criteria. After determining

the select participants who fit the given criteria, the prospective participants were then oriented and given an introduction regarding the study, ethical considerations, and interview objectives. Once the participants agreed to participate in the study, a consent form and Robotfoto was sent to each of the participants via email. After completing both forms, the participants then proceeded to the scheduling process for the interview. The researchers then conducted interviews using online platforms such as Zoom or Google Meet. The interview revolved around the central question and the two (2) prepared sub questions, which gave the participants the opportunity to narrate and elaborate their lived experience as a Medical Technology student during the COVID-19 pandemic. The interview lapsed around an average of sixty (60) minutes in order to capture all the necessary information that was given and expressed by the participants. The data gathered from the interviews were then transcribed by the researchers.

Data Analysis

Central questions and sub-questions were prepared by the researchers to explore their insights into the battle against COVID-19. After all the conferences were conducted using the Zoom software, the participants' answers were transcribed into text transcription in *verbatim*. Subsequently, this study has performed a phenomenological reduction by utilizing a repertory grid as an instrumental tool. Colaizzi's phenomenological method was employed to understand and delineate the participants' genuine perceptions and experiences. This approach encompassed even steps: (1) reading and re-reading the interview's content to acquaint a broad sense of the data; (2) extracting substantial statements to establish information that are directly related to the research's phenomena; (3) constructing interpretations from the significant statements of the participants while bracketing the researchers' biases; (4) categorizing the meanings into clusters of themes that have similarities; (5) incorporating the findings with a rich and exhaustive description of the phenomenon; (6) summarizing the exhaustive description as means of generating a fundamental structure; (7) validating the credibility of researchers' interpretation through returning the fundamental structure statement to all selected participants and acquiring an agreement from the participants if the essentiality of their answers were obtained. The seventh process was settled via a consent form for the participants, including the fundamental structure, participants' affixed signatures, and a commentary section for their additional remarks. This consent form was added to the appendices on the condition that the results were already verified. As the participants acknowledged and gave. Although the steps mentioned were accompanied by MAXQDA, a software program for data analysis, the researchers were reliant to Colaizzi's phenomenological method. The researchers give credence to using this procedure since it allows a deeper understanding of the respondents' experiences, identifying themes and their connections.

Furthermore, to truly capture the essence of the study, the researchers have exhibited reflexivity to adhere to the objectives of the research. As a result, the integrity of the study has remained intact for the readers to trust and utilize in future research.

III. RESULTS

Respondent Profile

The profile of the respondents was gathered and analyzed in order to have an accurate depiction of the study's respondents' demographics. In this section, the data is represented in frequency (f) and percentage (%) of the respondents in terms of Age, Gender, Year Level, and Residence. The University of Santo Tomas students from the Bachelor of Science Medical Technology course were interviewed for this phenomenological study. The whole research amassed 12 students from the mentioned institutions with stratified year levels of equal representation.

Based on the data collected from the respondents, a frequency of 5 or 41.67% of the respondents were male, while 7 or 58.33% of the respondents were female, which is the majority of our respondents.

Pertaining to the age ranges of the participants, a frequency of 4 or 33.33% were aged 18-19, 6 or 50% were aged 20-21, and 2 or 16.67% were aged 22 and up.

The year level of the participants is stratified into two groups, the first two years and the last two years. The first two years, which comprised of the 1st and 2nd year of Medical Technology course, had a frequency of 2 or 16.67% each. The last two years of the course had a frequency of 4 or 33.33% each.

All selected participants were residing in the national capital region during the duration of the study, with Manila City being the bulk of residence of the respondents with a frequency of 3 or 25.00%, followed by Quezon City with 2 or 16.67%. The rest of the city had a frequency of 1 or 8.33% distributed among the remaining cities, namely Las Piñas, Makati, Mandaluyong, Pasig, and Parañaque.

Analyzing the profile listed above, in the World Health Organization report regarding the health workforce distribution of the Philippines, it was stated that there is a preponderance of females compared to males in most health professions in the Philippines, having 24, 123 or 79% of medical technologists to be female of the 30, 504 population (2013). The data foretells that the course of the medical technologist is more sought-after and favored by female applicants, therefore explaining the ratio seen above.

One may also note that the bulk of the place of residence seen in the descriptive paragraph above depicts Manila and Quezon City, where most of the respondents reside, which is close to the selected university in Manila, the University of Santo Tomas. The data may suggest that one of the factors that students base their university selection on is the proximity of their residence to the university.

Findings of the Study

The transcribed interviews resulted in a 49,913-word document that included the respondents' narrations, lived experiences, challenges, and coping mechanisms. The study focused on the challenges that the medical technology students encountered during the COVID-19 pandemic, the common categories that arose from each challenge, and the corresponding coping mechanisms as the main themes employed in dealing with these challenges. From this, a taxonomy of the challenges and coping mechanisms during the COVID-19 pandemic was formulated in Table 1.

Table 1. The Medical Technology Students' Taxonomy of Challenges and Coping Mechanisms

Challenges	Coping Mechanism
Academic	The Gift of Learning
<i>Underdeveloped practical skills</i>	<i>Mindset</i>
<i>Sentiments of burnout</i>	<i>Study Habits</i>
<i>Lack of self-confidence</i>	<i>Routine for Learning</i>
<i>Future anxiety</i>	
<i>Difficulties in feedback</i>	
Ergonomic	The Gift of Relaxing
<i>Environmental Factors</i>	<i>Leisure activities</i>
<i>External Factors</i>	<i>Physical</i>
<i>Cognitive</i>	<i>Resting</i>
<i>Organizational</i>	
<i>Object</i>	
Economic	The Gift of Saving
<i>Leisure Constraints</i>	<i>Budgeting and Restrictions</i>
<i>Inequitable Expenses</i>	
<i>Financial Adaptation</i>	

*Unstable Employment and Harsh
Conditions
Functional Discomfort*

Socio-civic

*Physical Distance
Lack of Support System
Social Media Use
Emotional and Mental Capacity
Miscommunication*

The Gift of Interacting

*Support System
Motivation
Growth
Reaching Out*

Table 1 displays the four types of challenges encountered by medical technology students, namely academic challenges, ergonomic challenges, economic challenges, and socio-civic challenges. The academic challenges are further specified as underdeveloped practical skills, sentiments of burnout, lack of self-confidence, future anxiety, and difficulties in feedback. The coping mechanisms mentioned for this type of challenge included mindset, study habits, and routine. In addition, the ergonomic challenges include environmental factors, external factors, and cognitive organizational objects. For this type of challenge, the importance of leisure, physical activities, and resting were emphasized. The economic challenges were further itemized into leisure constraints, inequitable expenses, financial adaptation, unstable employment and harsh conditions, and functional discomfort. In dealing with these challenges, budgeting and restrictions were the identified coping mechanisms. Lastly, the socio-civic challenges include physical distance, lack of support system, social media use, emotional and mental capacity, and miscommunication. The corresponding coping mechanisms include support system, motivation, growth, and reaching out.

Academic Challenges

Academic challenges refer to the adversities experienced by medical technology students with regard to their learning experience, which can consequently affect their academic performance. From the student's point of view, these challenges can be due to internal factors such as attitudes and behaviors toward learning or external factors such as the teachers and the academic institution. The challenges mentioned are further categorized into subtopics such as undeveloped practical skills, sentiments of burnout, lack of confidence, and difficulties in the feedback system.

Underdeveloped practical skills

Practical lessons and laboratory work are of great importance as they can link both practice and theory. However, due to the abrupt shift from face-to-face classes to remote e-learning in response to the COVID-19 pandemic, students that are enrolled in practical courses such as Medical Technology, are now profoundly disadvantaged from the lack of hands-on training. The respondents of this study express a similar sentiment, as they have articulated:

"It is challenging because it is a hands-on course. And even if you learn during limited face to face, it is different from being able to develop the lab skills from the beginning." (R3)

"It's supposed to be the time where you develop these skills that you're going to be using in your professional career. But due to the pandemic, you didn't get the chance to learn the skills in person. You're just learning these skills by theory only, like you'll just memorize the procedures." (R6)

According to Rose (2020), the COVID-19 pandemic has profound impacts that may change the future of medical education. In the same study, Rose concluded that it is imperative for academic institutions to prioritize a forward-thinking and scholarly approach when it comes to ensuring the delivery

of practical learning. Similarly, when asked about what can be done in order to address this problem, a number of respondents brought up a solution that they have seen in other academic institutions.

“I feel like practical learning was lacking but given the circumstance, I understand. However, I do wish for a more hands-on approach like in the laboratory classes of other schools. In other schools, it’s like they have active experiments to be done at home and the materials are provided by the school. And I thought for us, that’s not allowed but if we can, I hope that they did that instead.” (R3)

“I’ve seen other institutions in the Philippines itself, that were able– even if some of the students were living– I’ve seen this I’m not sure where I got it online. But I’ve seen that the students, they may live in provincial areas, yet the institution was able to provide the laboratory materials so that the students were actually able to practice their skills.” (R5)

“The institution did not provide any materials from the laboratory itself that we can use. The only alternative that they gave, which for me, was inadequate of course, because I am a firm believer that no amount of alternatives can really prepare us for the real laboratory setting. But I’m still grateful that they provided other alternatives. The first was, we had practicals where we used a different instrument that we can find that was easily accessible at home, that we can mimic for the real instruments. So it’s their way of coping too. The pipette, instead of the pipette, a pencil. Those kinds of things.” (R5)

This proposed solution by the students was the focus of the study by Wallace et al. (2020). After mailing teaching packs containing clinical consumables to medical students from a university in London, results of the study showed that “hands-on practice had a positive effect on the students' feelings of belongingness and identity and helped them feel like they were not missing out or being left behind.” Themes were generated from free-text comments, two of which exclaimed, “Having all of the equipment to have a go ourselves rather than just watching videos was great” and “Being able to put on the video and ask if I was doing something right.” The intervention, no doubt a success, is being repeated for all incoming students from September 2020.

Sentiments of burnout

The term “burnout” was coined in 1974 by Freudenberger (2010), an American psychologist who used the term to describe the consequences of severe stress and high ideals in “helping” professions, specifically healthcare workers. Three key dimensions define burnout: (1) Emotional exhaustion, (2) Depersonalization, often referred to as cynicism, and (3) Increased feelings of inefficacy, often referred to as reduced feelings of personal accomplishment (Zis et al., 2014). Several respondents expressed the consequent lack of motivation that comes along with being burned out, as stated below:

“I lost the will to learn. Maybe, it’s because I’m lacking in motivation. I don’t get to feel what the past batches felt. For example, in our Ana Chem class, we’re supposed to be in the laboratory doing experiments and that’s what I look forward to the most. In our PMTP class before, we were supposed to be doing supervised venipuncture. Our practicals, it might be scary, but if I were to do it face to face, damn. Before, I was a super fan of Med Techs. Now, it’s gone because I don’t get to see the actual practice. I don’t feel it anymore. I don’t know what will happen to me when I reach my second year.” (R2)

“As a Med Tech student, it is difficult to grasp topics, it’s even more difficult to retain the information, it is also difficult to maintain the study habits that have been developed during the face to face setting. As I mentioned earlier, there is less motivation as well.” (R7)

“I think one that affected me, especially on the onset of the pandemic, as a Medtech Student was the workload and schedule. Since as I said previously, these weren’t adjusted. I don’t think it was proper in a sense for them to keep it and expect us students to give the same output every time since just staring at the laptop for around 12 hours a day. And expecting to study for 3 to 4 quizzes the following day, almost every day of the week was really tiring and could easily get us burned out, and all of that.” (R9)

These statements correspond with a more recent ecological study by Zis et al. (2021). The researchers examined the impact of digital learning on medical students’ mental health and burnout during their undergraduate studies. The statistical results showed that digital learning in medical studies caused the students’ mental health to deteriorate and their cynicism levels, one of the key dimensions of burnout, increased. Furthermore, emotional exhaustion, another key dimension of burnout, was found to increase mainly in final year students, who struggle with the lack of clinical experience just before they start working as qualified junior doctors. In a similar study by Singal et al. (2021), it was reported that 69% of medical and dental students from a university in India felt a lack of confidence and self-motivation as they shifted from traditional anatomy education to virtual anatomy education during the pandemic.

Lack of self-confidence

Aside from a lack of self-motivation, a lack of confidence in one’s skills as a medical technology student were recurring themes in the interview conducted. As expressed in the statements below:

*“Another big concern of mine is the healthcare field I’m entering. Then, I get to serve patients with a lot of risks with it. Because I will puncture them *laughs*, what if I cause hematomas or hit a nerve? I’m scared of that.” (R2)*

“But most assessments at the institution are mostly theoretical, barely practical. And so with that, my confidence as a Med Tech student to perform the laboratory procedures, I feel like I still don’t have the confidence to perform any of these because I still have this constant doubt like, “Is this correct? Ugh, I’m not sure. Wait. Alright, after this I will check if it’s correct.”

Like, I have to watch a lot of YouTube videos before I’m actually confident.” (R5)

Students experiencing low self-esteem or low perceptions of their competence are also the topic of interest in a study by Ilić et al. in 2021. The aim of the study was to assess the 2020 dental graduate students’ level of self-confidence in performing different dental procedures and compare it to that of the 2019 dental graduate students (i.e. students who graduated before the COVID-19 pandemic). The results showed that the mean level of self-confidence reported by the students in the study group was significantly lower than that reported by the students in the control group. In conclusion, the abrupt and drastic change in teaching modalities caused by the pandemic has a significant impact on students’ self-confidence, indicating that additional educational needs in the postgraduate period are imperative.

Future anxiety

Aside from the lack of self-confidence directed toward one’s skills, respondents also expressed general feelings of anxiety or hopelessness towards the future. Future anxiety is regarded as the state of uncertainty, worry, and concern about unfavorable changes or anticipated failures in a more remote personal future (Zaleski et al., 2019). The respondents expound on their sentiments of future anxiety, as verbalized in the statements below:

“It affects me in a way from the thing I mentioned earlier, that I have difficulty in seeing the finish line like when I was chatting with my friends and left me asking, “What happens to us?”. Like I cannot see 5 years in time from now, and to think 3 years have already passed after next year, and I just cannot envision the future.” (R4)

“And the fear of what's going to happen after graduation since the learning aspect is really affected. And of course, these are what we need to do for work, and for our career.” (R11)

According to the results of a cross-sectional study by Chowdhury, et al. (2022), there is an increasing prevalence of depression and stress among university students in Bangladesh during the COVID-19 pandemic regarding their future career, particularly among female students and students who do not have access to post-graduate job opportunities (i.e. internship). Further reaffirming this claim is another cross-sectional study by Dadaczynski et al. in 2021, set in a German university during the early phase of the pandemic. The findings indicate that an elevated level of future worries was associated with low/very low well-being and multiple health complaints. Furthermore, in accordance with the study by Chowdhury, et al., both health outcomes (i.e. low well-being and multiple health complaints) are more frequently observed in female students and students of lower subjective social status. Based on the results, the researchers recommend that the public health response to the pandemic and university health promotion consider student mental health as an essential target within their policy and action frameworks.

Difficulties in feedback

Academic feedback is the practice of assessing a student's performance against a known standard, ultimately done in order to meet the target learning objectives. During the online learning setup, several students have expressed their personal difficulties in reaching out to their teachers for academic feedback, as well as concerns regarding the timeliness of the said feedback, as verbalized:

“I feel like I feel alone when it terms— in terms of acads like I don't have anyone to ask help for and then it's just me to harder for me to learn if ganun.” (R1)

*“Regarding the classroom setting, it's not as easy to ask questions right now, although there is a private chat... I still feel like there are maximum questions that you can only ask *laughs*... I really get shy.” (R2)*

“There's a problem sometimes with the availability of the professors to answer your questions.” (R5)

Feedback is a fundamental factor within the learning process for students. The Quality Assurance Agency (2018) for Higher Education acknowledges feedback as a measure of teaching quality. Additionally, in George & Doto's journal entitled “A Simple Five-step Method for Teaching Clinical Skills,” step 5 is termed as ‘Correction and Reinforcement’, further reaffirming the need for formative feedback in a sound pedagogy. Moreover, feedback for students in the field of health care is considered essential in order to uphold professional standards and patient safety (Hayes, 2018).

The Gift of Learning

The Gift of Learning describes the various coping mechanisms developed by the participants as means to cope with the academic struggles they have encountered in the midst of the pandemic. The strike of COVID-19 challenged medical education because of community and institutional barriers (Baticulon, 2021), which led to a lack of hands-on skills and laboratory experience. On that account, participants have adapted to academic stress by directing their energies from within and eventually reinforcing their study habits, mindset, and routine intending student enhancement.

Mindset

Mindset refers to an individual's collection of beliefs that governs behavior, thinking, and feeling. A growth mindset of a student influenced by a challenging situation like the pandemic strengthens passion because these individuals are considered as a work in progress; students that give credence to their skill development perceive obstacles and criticism as ways to obtain valuable knowledge as part of their

learning journey. In this segment of the study, respondents gave different insights as to how they view and act upon living in a COVID-19 environment as a student.

“I feel like it's somehow like a learning point or something we can grow from, especially if the practices we do online are very different from in-person, in a way, it also helps us think that it's gonna be completely different in person and that we should really pay attention to the lessons we're learning 'cause the profs don't have the opportunity to show us yet in person, so it teaches us to be disciplined in a way instead of— even if it measured the default feeling is lazy to listen in class or something, or online class only as it teaches us discipline.” (R1)

“I guess building my character, it's really affected me. Like I'm really different compared to Senior High. I really matured and I really started to look at things more seriously or more maturely 'cause, you know, like we're already in college and not in high school, and especially during this pandemic, I can't be stuck in that high school mindset or phase.” (R1)

“Like what I said, despite us being online shows us or tells us how to be hopeful that there will be a better future or will get back to how it was in the back to normal, how it was like before. And it also teaches us to like hold on. Yeah...don't let go or like hold on even if it's online.” (R1)

“I had to sacrifice other activities in exchange for having time for myself. There's another important thing that I learned during this pandemic is the importance of having me time, and by me time, complete isolation from gadgets, from everything and just focusing on yourself.” (R5)

“And when I found out that the majority of the stress that I'm experiencing is also through my organization, my commitment to my organization, unfortunately, I had to narrow down the orgs that I choose to join or prioritize.” (R5)

*“I think the first is learning the value of saying no *chuckles*. I'm sure most of us, because it's the most sensitive period of time this pandemic we're trying to please other people you know it's like we try to please a lot of people that we tend to neglect ourselves that's the phase that “we bite more than we can chew” because, for me, how I manage the different commitments I have and all of those other factors is learning the value to say no, learning to say “this is enough, you should rest” (R5)*

*“I handled getting over breakdowns like that is what I learned in this... The movie Meet the Robinsons *laughs* where they had this line that's called “keep moving forward” and the essence of that film is to celebrate failure. And ever since I adopted that kind of thinking or that mindset, that helps me bounce back from my failures faster.” (R5)*

“The simple failures that I have, I learned to celebrate them because I know it's an opportunity for me to learn. So a shift in mindset helped me a lot from overcoming my struggles during this pandemic.” (R5)

“But now, I embodied more the value of taking care of time, the small things that we have, remain grateful for every day. That's it, and we should never take things for granted. (R11)

“Every day for me in terms of surviving my week but trying to make the most out of it, trying to be better.” (R12)

“Trying to be productive, trying to change things up, especially since I'm an irregular student of UST, so I'm trying to make every day count not just to study, but into myself as well.” (R12)

“Yes I feel that I have pressure but I take that as an advantage to myself that I need to persevere, even more, scrape further. I don't think it as a bad way to push me down but as a way to strengthen myself.” (R12)

Despite the effects of academic challenges, a shift in outlook was stood by the participants. According to a study in Henan Normal University (2021), there is a positive effect of a growth mindset on learning engagement throughout the course of the COVID-19 pandemic.

Study Habits

Study habits refer to efficient practices that an individual reinforces in order to learn and perform effectively. Different habitual implementations are developed to cope with the chief sources of academic stressors that medical students experience, such as time pressure, heavy workload, fear of failure, and exam frequency (Dafallah, 2021). Several participants have mentioned that changes in their study habits were evident in this pandemic:

*“Not only that, I got to explore my study habits a lot during this pandemic. I learned that some study habits *laughs* don't work for me.” (R2)*

“For example study habits, I am trying on looking for different things that could work for me.” (R4)

Due to the COVID-19 situation, students have been attending classes online as a way to prevent contracting the virus. With the closure of schools, they had to adapt to a new learning platform. A study by Gherheş et al. (2021) stated that e-learning (online classes) is more student-centered while learning in a face-to-face environment is more teacher-centered. Study habits have been affected by the pandemic (Arestidiou, 2021). Students explore their desired learning practices that may work for the best. Exploring various strategies for efficient learning will help students to be knowledgeable about which works best for them in both schooling environments.

Routine

A routine, in this context, is a fixed program created by students in order to organize their plans for the day. By generating a systematic structure daily, a semblance of control, stability, and security are met as means of coping with the turmoil of academic stress and the pandemic's overall chaos (Stringer, 2020). The following statements expressed by the participants are their individual routines:

“For me, since the start of the pandemic, I have developed time blocking. So what I would do is, in the morning I would review, and in the afternoon I will give myself time to rest, time for rewind and fun. And afternoon tonight, that's when I will do my homework and I make sure that I at least have 5 hours of sleep.” (R3)

“One more thing, one that I thought of, because I'm still in the process of learning it, wherein I am creating a routine that can work for me since it is more flexible considering that we are just on our houses, I'm looking for all the things that are working for me.” (R4)

*“I try as much as possible by 10:00 pm I sleep then I'll just wake up early or I set a time where I will check my emails or I think the constant notifications give so much stress *emphasizing* just hearing it and knowing that's the problem, I dedicate just a certain period of time where I would check the notifications where I would check everything that I've missed, the notifications, so I don't have to worry the entire day.” (R5)*

“Time management, planning things ahead of time, setting back up plans if this one doesn't work out like that.” (R5)

“What I did is I set up some sort of routine. A simple routine wherein it’s about the basic time when I wake up, and then fix my things. It helps me keep things in track. When I accomplish small things, I am able to accomplish bigger things. Like if I accomplish something, I get a sense of fulfillment even if it’s the small things so everything is gonna follow.” (R7)

*“I detach myself first especially by studying for 3 days straight then exam the next day. I really want to put myself first * chuckles * like don't bother me first, don't disturb me.” (R12)*

Individuals employed emotion-focused coping with internal challenges, making productivity as their anchor which relates to the transactional model of Lazarus and Folkman. These are some of the respondents’ statements that show the value of productivity:

“I've learned to be productive, like back before I was just honestly, kinda laid back 'cause I'm that type of learning like I would get good grades, but I'm not like super study person. But now that, like the pandemic kind of pushes me to do things both like to merge both home and school together—those environments. It pushes me to be more productive and more focused on school since sometimes I just wanna lay down in bed 'cause it's just right beside me.” (R1)

“Trying to be productive, trying to change things up, especially since I'm, an irregular student of UST, so I'm trying to make every day count not just to study, but into myself as well.” (R11)

Various adjustments were espied as a consequence of the COVID-19 pandemic. These changes yield mental diseases like depression which induce functional impairment, bringing many people at risk of poor mental health. Research by Hou et al. (2020) recognized that interventions such as creating daily routines aid in psychological resilience. A proposition from the World Health Organization also stated to set new routines for vulnerable adults and regular activities for the youth who are stuck at home.

Ergonomic Challenges

Ergonomic referred to the student's efficiency and comfort when it comes to the physical set-up in their learning space and working environment. Even while working in virtual learning environments, intellectual and emotional functioning is constantly nested in the actual environment. However, most physical environment research has traditionally focused on minimizing the negative effects of the environment on health or determining how people interact with the environment on a perceptual level, rather than revealing the role of the physical environment in cognitive and emotional functioning (Sjöblom et al., 2016). Findings revealed that the student's environment is a significant factor in learning. Some students don't have their own conducive learning environment, particularly, their own private space for studying. Making it hard for them to find a certain space in their home where they can concentrate

Environmental Factors

Environmental factors can influence concentration span significantly. Working in a relaxed setting with plenty of space and few distractions can help you stay focused on a task. On the other hand, an atmosphere devoid of good workspaces and numerous distractions can seriously impair one's capacity to concentrate, as concentrating at all necessitates considerably more focused attention (Liden, 2022). In considering the aforementioned factual information with regards to the effects of environmental factors on an individual’s concentration, the same is true and relatable to the participants of the study wherein they stated their firsthand experiences during this academic transition;

“before, I get irritated because I don’t have any private space of my own here in the house. Our house is small” (R2)

“Those Shopees, stuff like that, Shopee deliveries. The sounds of airplanes, those environmental factors. Those dogs that bark. We’re just like any other student, we’re also facing a, you know—

We're also easily distracted with those kind of stuff so yeah. For me, those are the challenges.” (R5)

“when we're face-to-face when we see other people working it's like in one way or another we're motivated to work, right? but that was deprived of us because of the pandemic so everything that we see, we see the bed, we see a garden out there, we see all of these, we see facebook, we see instagram, tiktok, we see all of these distractions so we become more lazy” (R5)

“I have a room where I study but it's not always that I use it. Especially now, that our house is being renovated so you really need to find an environment that would be conducive enough to study in. So I think it really plays a big role because during the face to face setup, it seems like there are lots of opportunities or lots of conducive environments like the library, classroom, and the coffee shops. There are many places you can study but now, you're just confined to a single place so you have to make the best out of it.” (R6)

*“Oh my god ok I'm so sorry. But I feel like having classes in the pandemic at home is a lot harder because usually if it was face to face I had a condo and it was really my safe space for studying but here at home you're also with your siblings, your parents. And sometimes we'd have classes at the same time so it's like *mumbles* you can't understand anything.” (R10)*

There are also respondents who emphasized the struggles online set up entails in comparison to the traditional face-to-face setting such as:

“But now that, like the pandemic kind of pushes me to do things both like to merge both home and school together—those environments” (R1)

“I don't know, it just feels different when you study face to face.” (R2)

“it's also hard that the professors are the only ones with turns on their camera. Then, I also want to turn my camera on and for the students to turn on their camera as well because it will feel like I'm inside the classroom...but that doesn't happen anymore...” (R2)

According to Kamp and Grieve (2014), face-to-face instruction has unique learning qualities not seen in online learning. Students are held accountable for their progress in face-to-face learning at the class's designated meeting date and time. Face-to-face learning ensures a better understanding and retention of lesson content while also allowing class participants to bond (“Face-to-face learning”, 2019). From this, the researchers were able to associate the lived experiences of Medical Technology students who had a more progressive experience in a face-to-face setting where they are able to give their full attention to their academics unlike in an online setting when there are numerous causes of distraction.

On the other hand, other respondents, as reflected in the following responses, highlighted the difficulties of playing the roles of daughter and student at the same time.

“There were a lot of experiences like the Lazada incident, or like “Participant's name” wash the dishes but I was doing homework at that time. You know when you're sometimes so in the zone, like OK I have to finish this because it is true later and they would say “you haven't washed the dishes, you wash the dishes”, so that's what I feel like is hard about being a daughter and a student. Because with my family if you don't get to do the things that are asked immediately, they get mad. So I have to reason out with my parents “I'm sorry, I'm still a student” and they're pretty understanding but of course they will get mad first but we'll be OK after” (R10)

The prior statement from one of the Medical Technology student if not the most common denominator of all students is one of the significant answers that the researchers received. In the process

of in-depth research and analysis of both facts and lived experiences, the researchers were able to find the truth and reason behind these experiences backed with supporting data. Through these experiences one can identify the factors that contribute to such situations and the effects it entails.

External Factors

External environment factors are elements that exist outside of a person's internal environment and can have an impact on how they function. These outside forces can either help or hinder its current processes. This is usually described as negative since humans have no control in this aspect, as described in the following statements:

“The next factor is the weather. Because it is online, when there’s a typhoon it’s hard to connect on zoom. Although there’s a recording, your concerns aren’t immediately answered. You will need to wait for consultation hours and sometimes there are people along with you” (R3)

“During the last typhoon, I had a blockmate who texted saying the rain was hard and they couldn’t connect to the class. When we told the prof, he said ok and we thought it would only be like that for a day. Unfortunately, the situation lasted an entire week, and the only form of communication was through text. They said that it was really hard to do homework. During that time we had a lot of things to pass and we couldn’t contact the prof so we were the ones who told the president to ask the prof if they could extend the deadline for our friend. I sympathized because I would lose wifi suddenly sometimes and wouldn’t be able to connect anymore” (R3)

“There was this time aside from Odette, this was in 2020, I remember, I just forgot the name of the typhoon but the affected areas were Cavite, Taytay, and all. And there was a heavy flood and it stressed me out since the water level was very high and it was the first thing that I encountered in the news that it even reached the roofs of houses. And from that time, there was a processing of a request for an academic break because a lot of people are having difficulties to cope up and even though it didn’t directly affect me, it was sad to take it in on that time since I get so occupied on the welfare of the students that are directly affected since there are students’ lives on the affected areas.” (R4)

“I think in our province, brown-outs are frequent and since we always have a lot of quizzes, it would add to our stress when we think on “what if a brown-out were to occur?”. There.” (R7)

When instructional time is lost, the quality of learning suffers. Some students may struggle to catch up and may eventually drop out of school. Simultaneously, the loss of instructional resources may have an impact on the quality of student learning (Cas, 2016). Since every student has a different setup at home, they must adjust depending on the environment they have. Some students may be coping well given that they have an environment conducive to learning, but no one can say that the same is true for all students. Given that every home and situation is different in the online setup, the quality of education and student performance are put at stake compared to the face-to-face setting. Instructional time is fixed, allowing students to focus on their studies alone.

Cognitive

Cognitive ergonomics is concerned with the mental (intellectual and psychological) aspects of the operator-activity relationship, such as perception, reasoning, memory, stimuli, and psycho-motor responses, among other things. The benefits of cognitive ergonomics are related to performance issues, decision-making, management mistakes, or stress (“Ergonomics”, 2020). This is another significant aspect of ergonomics that has a real impact on the respondents' performance. The respondents discussed how their mental and emotional well-being affected their performance as Medical Technology students.

"In my perspective, there are concerns on the emotional, mental well-being of the students. Wherein, I think it comes along from what I mentioned earlier which is the lack of physical support system when things get stressful, so I think it affects the emotional and mental well-being. The stress obtained from the pandemic, on how the government responded and all the disasters that occurred along only in the pandemic. It gets so stressful on the mental well-being of an individual. That's all." (R4)

"I'm incurring some sort of stress probably with my acads and because of isolation as well, I couldn't keep you know contact with my friends and I feel that really affected my studies as well and actually my mental health also when there's too much stress since my normal stress reliever would be you know I ask how my friends are but the problem is because of this pandemic like all of us are busy" (R5)

"Personally, I think there was a loss of drive to study because I was so distracted by the fact that a family member had COVID. And especially during that time, there weren't any vaccines available or developed yet because it was September of 2020, I think. And I seem to be focusing on the thought, "Oh, I have an infected family member.". That's what makes it even harder for me to focus because you're only in one space. She was just staying in the other room. There is a high possibility that we can also be infected so I seem to be thinking a lot during that time" (R6)

"Of course, everything is affected. And the first thing I was scared of was the disease itself. Since it grew to be a pandemic, they said there are a lot of reports where the mortality rate is high, plus the fact that my siblings are healthcare providers. I can't avoid it but think of them right. In regards with school, since everything has stopped, during that time, I was only in my third year. So I was scared of course. Since third year is where we would get our knowledge for work." (R11)

According to the Centers for Disease Control and Prevention (2019), Employees' job performance and productivity, engagement with their work, communication with coworkers, and physical capability and daily functioning can all suffer from poor mental health and stress. In relation to this, going back to our participants' responses, it is evident that the study mentioned above is consistent with the answers of the Medical Technology students. The respondents implicitly stated how their performance is directly correlated to their mental state and stress. This showed the crucial role of a healthy state of mind in a person's performance, focus, and drive.

Organizational

The Philippine response to COVID-19 has been described as one of the world's longest and strictest lockdowns. COVID-19 securitization relied on framing the pandemic as a war – a fight for the nation's survival. This was used to justify the government's draconian response to stop the virus's spread. This was primarily accomplished by utilizing and expanding the state's law enforcement apparatus (Hapal, 2021). Which received much criticism from the public, including one the respondents, who are studying intending to become health workers. The method used as a response to the rapid spread of disease was questionable for them, especially since the problem calls for medical solutions that should be the top priority which is evident in their responses;

"I get so irritated on the response of the government from that time since they are just letting the Local Government Units to handle the situation. No urgency and just like from the start of the pandemic, they are prioritizing the military response, to add the shutdown of the franchising of ABS-CBN, it gets so stressful. From that time, I overheard from my friends in other Southeast Asian countries like Thailand that they were already able to start limited face-to-face classes. In Korea too, the government handled the pandemic response very well." (R4)

Engaging young people in open government initiatives can increase young people's understanding and interest in civic and political affairs, as well as foster active citizenship: young people believe they are

actively involved in decision-making and that their concerns are taken seriously by government officials. This can contribute to social wellbeing on an individual level by increasing self-esteem and a sense of empowerment, and it can have significant societal benefits such as increased awareness of common challenges and a shared commitment to finding long-term solutions. With this, Medical Technologist students were affected by how the government chose to take action when the Filipino people were seeking for cure and lasting solutions but were given military responses instead. This gave rise to more scrutiny especially with the news circulating from foreign countries that are already slowly recovering from the pandemic. Since COVID-19 has caught the entire country off-guard, band aid solutions were made that sparked the interest of the public especially students in the current situation of the Philippines. This paved the way to the creation of active and critical-minded students that had a major contribution in their character building.

Object

Resources are defined as “anything perceived by the individual to help attain his or her goals” (Halbesleben et al., 2014). This is a type of supply that can be used by a person or organization to function and carry out plans and projects. Medical technologist are professionals who work in hospital laboratories and perform a variety of tests. It is the medical technologist's responsibility to provide accurate and precise data (“What is a medical technologist?”, 2019). Given that Medical technologist require practical application in order to master certain skills that come along with the profession, transitioning into virtual learning with limited materials to practice brings about more struggles. Students are required to use alternative tools instead which may lead to a challenging time grasping lessons that they should have encountered firsthand. In relation to this, some respondents stated their issues in using even the most basic tool for studying at home that hinders uninterrupted learning, their gadgets;

“My device is super laggy, super slow, it would lag for five minutes, but it's actually freezing” (R11)

The Gift of Relaxing

The Gift of Relaxing refers to the different coping mechanisms that an individual employs to calm themselves amid a stressful situation. When the body is under stress, an individual may experience physical, psychological, and behavioral effects (Mayo Clinic, 2021). Some of these effects include headaches, anxiety, overwhelming feelings, overeating, undereating, misuse of substances, irritability, etc. When left unchecked, stress may lead to various health issues like high blood pressure and cardiovascular problems. According to Dr. Herbert Benson of Massachusetts General Hospital, the use of a combination of approaches that induce a relaxing response can counter the effects of stress (2020). To avoid these health problems, learning how to effectively manage stress is essential.

Leisure Activities

One of the biggest consequences of the COVID-19 pandemic has been the abrupt stop of normal life. In the absence of a regular routine, people have found themselves anxious, frustrated, and stressed by the disruption of their everyday lives. According to Xiangyou Shen, “Leisure is so crucial to our mental health. Despite all the disruptions of daily life, physical distancing, movement restrictions and closure of indoor leisure facilities, we found that people continue to use leisure to help them cope with stress and as a way to navigate a life during COVID-19 (2022). Leisure activities have had a positive correlation in the wellbeing of an individual in terms of fulfilling psychological needs and providing time structure (Shen, et al., 2022). This is further evidenced in the answers of the interviewees when asked about the coping mechanisms they have developed during the pandemic. These can be categorized as online or offline hobbies. The offline hobbies are as follows:

“I’ve started new hobbies like baking, bouldering so I feel like that’s the benefits of what I got from the pandemic.” (R10)

"I also picked up the hobby of crocheting. When I'm stressed during synchronous classes, and I can't understand anything. I would just crochet for a bit, and I'll go back to my synchronous class, and I would get what's being taught." (R3)

"The coping mechanisms that I developed this pandemic are taking care of plants and baking. I feel like it's a stress reliever because people benefit when I bake, and I give to my sibling what I bake so that's what my coping mechanism is." (R3)

"...Read books especially the books I read when I was in high school in our Chinese class because for me, that's the way to escape" (R12)

The online hobbies mentioned are the following:

"Play games, so I try to take my relaxation off or like I try to take stress off with playing games, so it takes my mind off school or acad stuff" (R1)

"Next, I got to taste the world of Valorant, it was my way of destressing" (R2)

"I got to know games, mobile games, PC games, it became my outlet to release my...to distress." (R2)

"Watching Netflix shows, listening to podcasts I'm really into that, anything about... that actually helps me cope with my mental health. What helped improve my mental health is listening to podcasts about self-help so hearing different advice from professionals on how to tackle certain mental health issues" (R5)

"Personally, I used like Netflix, and binge watching. YouTube, then scrolling on social media as form of detox and de-stressing. Just like everyone else. And sleeping, a lot." (R9)

"Personally, I never was the type to go social detox in the sense I'm not wanting to post, I just casually scroll. When I feel overwhelmed, I just move on to another app or look for another source of de-stressing." (R9)

"Some people workout, some people bake, some people eat, some people watch movies, so I feel like whatever it is that makes you happy just do it, it's ok to take breaks, that's it!" (R10)

"I watched anime just to be detached from my problems a little bit and then further I learned more about the building especially the fad of keyboards. I understood better because you need to think and control so that you can feel that you are using your mind. It's like a stress reliever" (R12)

"I watch anime, browse reddit...because for me, that's the way to escape" (R12)

"In my perspective, yes. The same way in lack of social interaction, wherein every day is just a routine. Same things, nothing is new especially before wherein I cannot see the finish line on this pandemic. I just get my emotions on watching." (R4)

Major health organizations like the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) encourage and advise the allotment of time for leisure as a type of self-care during the pandemic. Leisure activities will typically provide the individual a break or relief from worries and stressors that they are thinking about by providing a sense of "being away" (Pressman, et al., 2009).

The coping mechanisms aforementioned are emotion-focused coping. According to Lazarus and Folkman “A wide range of emotion-focused forms of coping is found in the literature. One large group consists of cognitive processes directed at lessening emotional distress and includes strategies such as avoidance, minimization, distancing, selective attention, positive comparisons, and wresting positive value from negative events.” (1984). The actions employed by the interviewees do not actively solve or eliminate the stressors of the situation, rather these are efforts to reduce the negative emotions associated with the stress.

On the other hand, problem-focused coping was also employed by some of the interviewees, as stated in the following statements:

“What I did is I set up some sort of routine. A simple routine wherein it’s about the basic time when I wake up, and then fix my things. It helps me keep things on track. When I accomplish small things, I am able to accomplish bigger things. Like if I accomplish something, I get a sense of fulfillment, even if it’s the small things, so everything is going to follow.” (R7)

“One more thing, one that I thought of, because I’m still in the process of learning it, wherein I am creating a routine that It can work for me since it is more flexible considering that we are just in our houses, I’m looking for all the things that are working for me. For example, the study habits, I am trying to look for different things that could work for me...” (R4)

“Favorable moment, I think it was when I had the chance to fix my environment. To think back, my room only contains a bed. No table, so every time I stayed in our house, my schoolworks, they often are in the bed. So, from there, I was forced to fix it and I think it’s favorable.” (R4)

According to Lazarus and Folkman, problem-focused coping is “often directed at defining the problem, generating alternative solutions, weighting the alternatives in terms of their costs and benefits, choosing among them, and acting.” (1984). The aforementioned statements indicate solutions that actively minimize the stressors of the situation they are in.

Physical

At the onset of the COVID-19 pandemic, lockdowns had to be implemented to keep the virus from spreading. With this restriction, remaining active is more important than ever. Physical activity benefits not only the body but also the mind. Regular physical activity aids in reducing health issues like strokes, cancers, and health disease.

Physical activities are defined by the WHO as “bodily movement produced by skeletal muscles that requires energy expenditure. Physical activity refers to all movement, including during leisure time, for transport to get to and from places, or as part of a person’s work.” (World Health Organization, 2020). Physical activities have long been correlated to stress reduction through the release of the hormone endorphin. This hormone works as a natural anti-depressive-noradrenaline by relieving pain and creating a general feeling of well-being (Harvard Medical School, 2021). According to Lazarus and Folkman (1984), these fall under the scope of emotion-focused coping because there is no active problem solving to the stressor. This method was employed by some of the interviewees, as mentioned in the following statements:

“I like to just meditate and to just listen to music things like that so that’s my me time or like playing with my dogs.” (R5)

“I think one of my coping mechanisms really is to rest. Like I’m not saying go to sleep, but try to do different things like for example, you can work out...” (R6)

"...I just buy stuff that I feel I deserve and do some exercise and all." (R8)

"I've started new hobbies like baking, bouldering so I feel like that's the benefits of what I got from the pandemic." (R10)

"Some people workout, some people bake, some people eat, some people watch movies, so I feel like whatever it is that makes you happy, just do it. It's ok to take breaks, that's it!" (R10)

Resting

Getting enough rest is essential in the process of learning and concentrating, two factors especially important to students. However, without proper rest, an individual's capacity to focus gets impaired. Sleep, in particular, is essential for various psychological and physiological functions (Alayode & Kofoworola, 2021). According to *Health: By Choice; Not by Chance*, a public lecture by Aderinola (2011), rest is essential to the following: (1) Body Renewal (2) Injury Healing (3) Strengthening of Immune System (4) Increasing Longevity.

With an already demanding academic schedule adding to the stressors brought about by the pandemic, one of the coping mechanisms employed by the interviewees, is getting enough rest. This can be seen in the following statements:

"My coping mechanism, like even before, it still works since during the pandemic, it includes sleeping. My number one coping mechanism is sleeping that when I get stress so much, I sleep." (R4)

"Teach myself that I need breaks like I deserve breaks. Well, since our classes are like until 7. I feel like I do deserve a break after all those hours of school and class." (R1)

"I'm feeling really good. I had a whole night's sleep, so—" (R5)

"Life-giving moments would most probably be the moments after quizzes. So I can finally sleep." (R7)

"I can get a lot of rest when I need it the most. For example, I just sleep the whole day. I just slept the whole day. Then, I'll find out that I'm well-rested after." (R8)

Referring to Lazarus and Folkman's two methods of coping, the aforementioned statements can be classified under emotion-focused coping. Much like the physical activities formerly mentioned, resting or sleeping does not actively solve the problem of the situation. Although rest can aid in lessening feelings of anxiety and/or general distress, this coping mechanism does not eliminate the stressor, but rather just aids the individual both mentally and physically.

The pattern seen in "The Gift of Relaxing" is that the majority of the coping mechanisms employed by the interviewees are emotion-focused coping. This type of coping is mostly used in situations that are deemed unchangeable to the individual. Many of them cope through the utilization of leisure activities or through resting. Although, these actions do not solve the problem, they do bring a momentary relief or escape from the stressful situation. On the other hand, problem-focused coping is only used by a couple of interviewees as a way to relax. These interviewees make use of routines and organization as a means to eliminate or minimize the stressors they have.

Economic Challenges

Economic challenges are described as a form of difficulty relating to financial incapacities and instability faced by an individual, and in this study, amidst the pandemic. The dramatic permutation of the

COVID-19 virus has majorly disrupted the global economy directing it towards unprecedented economic fallouts based on the spread of the virus and its variants (Rasul et al., 2021). Because of this, a lot of livelihoods, wages, and quality of life were affected. As such, the budgeting restraints, and the lack of financial freedom, are perceived to influence the spending habits and activities that are allowed by an individual.

Leisure Constraints

Leisure Constraints describe obstacles that individuals perceive that impede one from engaging in and enjoying the merriment of leisure and entertainment activities (Li et al., 2021; Jackson et al., 1993). With the shift of reality due to the onset of the pandemic, economic challenges are present in different forms, plaguing the quality of life of every individual on their physical, emotional, and mental health. According to Liberman, losing financial freedom and material resources evokes individuals to cope differently than the economically secure and healthy (1975). Listed down below were some significant statements that encapsulated this idea:

*“R1: [I’m] financially actually affected uhm me at least because of course we’re all at home and uh work— work has also been affected for everyone, so we or I learn to like really manage my budget and expenses and I just can’t buy what I have in mind or something in shopee *laughs* all the time so.” (R1)*

“The financial situation of all is not as great as before. Like even my family, we’re already struggling enough” (R2)

*“I don’t have any allowance *laughs*” (R2)*

Relating it to the study, the researchers infer that financially struggling individuals certainly have a stronger disposition regarding their situation. It is of note to also point out that these individuals are more inclined with solution-focused (positive) forms of coping with a more resilient resolve against the woes and assaults of life with situation awareness of their realities (Rasul et al., 2021). This suggests that there is an unprecedented behavioral change bound to happen when faced with financial difficulties brought about by the effects of the COVID-19 pandemic.

Inequitable Expenses

Expenses refers on the money being spent by the families of these Medical Technology students in order to suffice their basic necessities which include food, housing, clothing, education, etc. With the current pandemic situation lived by the Medical Technology students wherein there is an enormous impact on the economy of each country, these were the following sentiments that was tackled about their realizations and experiences:

*“The number one I’m most concerned about is aside from the academic aspect, the financial. Because to be honest for me, it’s unfair *covers mouth, laughs, and scratches head* they allot so unfairly. Although, there has already been a big reduction on our tuition. Still, it’s so unfair that we have to pay so much” (R2)*

“Maybe financially, it’s really different when we talk about finances. Because, this third year, fourth year, with the addition of the pandemic, I opened my eyes more with the reality of the situation.” (R11)

Empirical on the government responses in order to contain the COVID-19 pandemic based on the health protocols, lockdowns and area restrictions have been implemented which then turned to home confinement to all of the citizens that even affected the occupation of many and for Medical Technology students, a lot of the offered services provided in their universities are not currently being given with the

current setup which is the enrich virtual learning environment in comparison with their face-to-face classes wherein they practically use a lot of their school hours in laboratories and the amenities of the school, itself. With that being said, this builds a burden on the students since they are not getting the maximum amount of what they paying for as according to the Jonathan Robers, director of the Ancient Language Institute, that the students who are currently taking in online classes at the same time, paying the same amount of tuition is one of the main sources for such colleges in order to pay for their bills (DePietro, 2021). In addition to that, the effect of the strict lockdowns also changed the way of living of such families that rooted on significant financial, social, and emotional costs on their well-beings which could be shown on how big an impact the massive unemployment during the pandemic which resulted to temporary or even worse, permanent reduction on their income in variation with the length from the lockdown was imposed onto their respective areas (Rodrigues et.al, 2021).

Financial Adaptation

One of the sources of stress observed among students relates to higher education systems in various parts of the world to financial constraints (Aherne, 2001; Joo et al., 2008; Roberts et al., 1999). Unsurprisingly, financial stress and uncertainty have a negative impact on student well-being (Mahmoud et al., 2012; Smyth et al., 2008). The same holds true for this study's respondents when asked about the impact of finances on their academic performance, especially during the pandemic when sources of income became restricted. Some of the student participants experience these struggles firsthand within themselves and among their classmates.

"It's so hard...I even have a classmate...I gossip so much but I have a classmate who lost her source of tuition. Then now, she's working while studying. Damn, i'm amazed with how she's working while attending our synchronous classes." (R2)

"Other thing is financially, some can't finish their classes and some can't finish anything because we are financially hindered by the pandemic so we focus on ourselves first" (R12)

Financial stress is not uncommon among Filipino students, and government statistics indicate that a sizable proportion of the school-age population faces financial difficulties. Beginning with primary school, nearly 20% of Filipino children who dropped out cited a lack of financial resources as the primary reason for leaving school (Philippine Statistics Authority, 2015). In this case, the educational sector must revisit their system to provide alternative choices for the Filipino youth. There must be adequate support provided to aspiring professionals in which they can maximize their potential free from the burden of financial problems.

Unstable Employment and Harsh Conditions

According to the Philippine Statistics Authority (PSA) 2015, the unemployment rate in the Philippines reached its all-time high of 17.6% in June of 2020, specifically during the first implementation of the Enhanced Community Quarantine (ECQ). Among the 7.25 million jobless Filipinos during this time, one student recalled how the trend in unemployment and difficulties in the labor market affected their family, as they stated below:

"Knowing how slow the government was when it came to addressing the problems with COVID-19 and having a lot of relatives na front line workers, I really felt how stressed they were and how hard it was for them, especially during the time that COVID was high. I think this was around last year or even in the start of COVID. I really got to see my parents struggle and their friends struggle and so many people lost their jobs because of COVID because the jobs closed down. Seeing that it just made everything feel sad cause it's like everything is going so well then boom COVID. People lost opportunities so fast because of COVID and knowing that it made me really sad and it was hard for me sometimes to focus because of those types of problems that I saw around the news. I think that's why I deleted twitter cause it was just bad vibes, it was sad." (R10)

The effect of financial difficulties during the time of the COVID-19 pandemic to students' mental health was closely studied by Feng & Zhang (2021), with results showing that the overall level of mental health of students with financial difficulties is relatively low, although their psychological resilience tends not to be at a low level. On the other hand, compared to students with no financial difficulties, their resilience and optimism are equivalent while in terms of recovering from pressure, students with financial difficulties recover more easily. Moreover, in a cross-sectional study by Galanza et al. (2021), in studying the mental health of Filipino university students using the bidimensional model of mental health, the researchers argued that perceived financial difficulties due to the pandemic are associated both with negative (more symptoms) and positive (lower well-being) mental health of students.

Functional Discomfort

According to Hira and Mugenda (1998), financial satisfaction has been defined in the literature as one's satisfaction with one's income, ability to handle financial emergencies, ability to fulfill basic needs, debt level, amount of savings, and money set aside for future financial needs and life objectives. Moreover, students undergoing financial difficulties may be prone to functional discomfort, which may be an obstacle for them. Apuke & Iyendo (2018) claims that the majority of previous research into the use of internet technology for learning in modern educational settings in developing countries focused on its impact on academic achievement, communication, and general educational purposes. During the interview process, the respondents expressed:

"R6: It's not something that made me happy, but when my laptop broke. I was supposed to have an interview yesterday, right?" (R6)

"Since online, we're really affected financially, and the students device incapability as well, like what are his/her's resources." (R11)

In line with this, the students could not function properly with the restrictions of services and economic statuses of each individual. They pointed out how difficult it is to execute online learning due to these limitations. Apart from this, distractions are a reality of distance learning, which is disruptive in a learning environment. The noise from inside and outside their houses due to shared rooms and spaces, dogs barking, and the noise from the vehicles on the road affect their quality of life and may be fixed with financial capacity.

The Gift Of Saving

In this study, the Gift of Saving refers to the type of coping mechanism employed by an individual with a distinct purpose of easing financial predicaments that they face. Saving is by practicing being financially prudent in all expenditures done by a household. With the onset of the pandemic, the economy is in an uncertain condition, which may instill fear and panic amongst the masses. (Holz 2020) Moreover, the bulk of the population attempts to gain control by saving monetary funds, giving a sense of choice and security shortly for the future (Holz, 2020; Morcerf, 2020). Therefore, individuals take specific measures to withhold fortune to avoid precarious situations in this instability and economic decline.

Budgeting and Restrictions

Budgeting and monetary restraints, in this context, elaborate the forecasting of revenue and costs for a specific future period (Ganti, 2021), restricting the outflow of money in order to save. This is often accompanied by regular compilation and re-evaluation of expenditures. According to Xiaotong Jin et al., with the onset of a public health emergency, the masses are more obliged to withhold funds than spend them due to the risk perception of the community towards the severity of the national situation and emergency (2021). Because of this, it is deemed that risk perception mediates and influences an individual's willingness to consume. This statement means that individuals would be spending based on the country's economic status. High-risk perception correlates to the willingness to save, and the inverse

holds for low-risk perception concerning the willingness to spend (Jin et al., 2020; Trkulja & Tadic, 2021; Morcerf, 2020). A response supported these claims uttered during an interview regarding their household's financial status and monetary retention. The statement is as follows:

*“financially actually affected uhm me at least because of course we’re all at home and uh work—work has also been affected for everyone, so we or I learn to like really manage my budget and expenses and I just can't buy what caught my eye or something in shopee *laughs* all the time so.” (R1)*

Support from the previous statements mentioned above may be seen as it narrates the lived reality of the respondent and budgeting through restrictions during the pandemic. The respondents also conveyed the general population’s economic situation, which possibly insinuates that it influences her financial capacity to withhold expenses if deemed necessary.

In another statement from a contrastive perspective, the respondent conveyed the gift of saving in a different with aims to purchase comfort and a “desired” item with the respondent’s preference. Be

*“That's what I learned because if you love yourself *laughs* good things will happen in the future. Like I'm not here to brag it oh, but I just bought this *shows headphones* because I feel I deserve it. That's what I thought to spend with my hard, hard earned money. Well I was just being given money ... so I just got this *points headphones*. Then I just buy stuff that I feel I deserve and do some exercise and all.” (R8)*

Although in contrast with the supported claims, the researchers still believe that it furthers the evidence of the capacity and willingness to practice consumerism based on the perceived allowance due to circumstances by representing the outlier from the population. The respondent executed savings and budgeting to be able to supply his wants, therefore connecting that another factor to consider in the inclination of an individual to buy despite the economic crisis.

Socio-civic Challenges

Socio-civic challenges were the difficulties that the Filipino Medical Technologist students face with regard to how they coped with the COVID-19 pandemic as of describing by this institution; it was the competency that included personal, interpersonal, and intercultural coverage of all forms of behavior by an individual on how they participated in a constructive and working society in order to resolve conflicts when it is necessary (IN4SOC, n.d.). With this, it can be represented by different factors, including physical distance, lack of support system, social media use, emotional and mental capacity, and miscommunication. As they deal with their lives surviving amidst the pandemic, various obstacles could arise in the above aspects.

Physical Distance

Physical distance affected how Medical Technology students dealt with their everyday processes in regard to how they usually started their day and interacted with other people, as expressed in the following statements:

“Kinda hard. Ah. I guess. Since we're at home all the time, we don't really get to see proof of life or like we don't really talk to much people. I don't, I usually don't talk to anyone lately. I notice, especially if like I haven't really made much friends in class. Which is normal 'cause we haven't seen each other, so um with it sound like we're uncomfortable. We just choose not to talk to each other because that isn't about school.” (R1)

“The unfavorable situation was getting distanced from my friends who have been my coping mechanism ever since. Because the setting is online, we rarely see each other, and I feel more alone. Additionally, because I’m still shifting to online learning, I feel it has been harder for me because of the pandemic.” (R3)

“From now, since there was an ease in the restrictions, I am already meeting up with my friends but from the start, of course it would be difficult for all of us to see each other since others are from different provinces, as well as my friends here in the near cities, to think that it is still risky. So to think that when you are stressed, it is really difficult since you only have yourself to depend on and to cope up unlike before that when you are stress, you can just eat out or hang out with your friends.” (R4)

“I think due to the pandemic, I get so much used to in our house, at the comfort of your own homes, and to add the lack of social interaction, I get so comfortable being alone. Wherein I get so anxious, to think how heavy the word “anxious”, I think that is how I feel every time I meet with them.” (R4)

“Back then, you’re surrounded with your friends, your classmates, your orgmates. But now, it’s like a very limited circle, your social space.” (R6)

“Since we aren’t allowed to go out, maybe we don’t have- or since we lack physical interaction with other people, it’s like our mental health declines since we feel lonely and because we don’t have physical interaction with other people.” (R7)

“In regards with the interaction with other people, yes I am having a hard time since you won’t be able to physically talk to blockmates, especially for groupworks since it’s more difficult to communicate via chat.” (R7)

Factual on the current situation amidst the pandemic, it can be observed that there were strict implementation of lockdowns and area restrictions that force home confinement on several individuals, and one of the populations affected is the Medical Technology students. According to the study on the effects of home confinement on mental health and lifestyle behaviors during the COVID-19 outbreak, it was stated that being confined in a place had a negative effect on the well-being and emotional status of individuals that resulted from perceiving low mental well-being, feeling of dissatisfaction, development of depression in comparison onto their “before” confinement period (A. Ammar et.al 2021).

Lack of Support System

Based on the University of Buffalo (n.d), a support system describes a network of people who may be coming from friends, family, and peers. That person can turn in to acquire emotional and practical support, which is very important for Medical Technology students in line to cope with the pandemic's problems. With that, the respondents shared such experiences with regards to how important a support system is amidst the pandemic. As vocalized by the respondents:

“I feel like I feel alone when it terms— in terms of acads like I don't have anyone to ask help for and then it's just me to harder for me to learn if ganun. So yeah.” (R1)

“I'm not really familiar or I haven't really met my block mates yet. Whenever I have difficulty in my lessons or experiments, I don't really have anyone to ask except this one block mate. That's it. But of course I don't wanna nag him, asking him all the time on what to do or that I don't get it.” (R1)

"I get sad sometimes if I don't have anyone to talk to 'cause sometimes I'm so stressed, but I can't really let it out or vent out to anyone and uh there is no one. Yeah, I... basically I just feel lonely sometimes." (R1)

"Referring on the question earlier, wherein how does it affect the lack of social interaction. So, it affects me in a way that at first, I find it difficult in getting ways to de-stress, there is no physical support system. That's all." (R4)

"Also, I guess it would be the lack of social interaction since my stay in UST, it was quite enjoyable because of my friends and when there was during classes, or after classes, you could easily, talk to your blockmates or to your friends, and hangout to your friends as a way to relieve stress. But for the lack of that, it was easily, it was made so much easy for one to become stress and overwhelmed. That's all." (R9)

As the COVID-19 cases worsened and different health protocol measures were implemented, such as lockdowns and limited area restrictions, the drastic effects on the students also aggravated as they tend to take their personal and academic problems alone. According to the study of the effects of sources of social support and resilience on the mental health of different age groups during the COVID-19 pandemic, it was stated that sources of support and psychological resilience are two that can protect an individual's mental health, especially in stressful situations, that it is the key to resilience when it is considered to be a process or an outcome (Li, F et.al, 2021).

Social Media Use

Social media is a platform for communication that is based on the internet. It allows people to have conversations, share information, and create web content, including blogs, micro-blogs, wikis, social networking sites, photo-sharing sites, instant messaging sites, video-sharing sites, podcasts, and widgets. (University of South Florida, n.d.) As such, the following are the sentiments stated by the respondents:

"It's also hard nowadays for people to know you personal, to share your life in only an online setting. it's hard to trust people until now and ever since the start of the pandemic because you don't get to know them very much and it's way different in person." (R2)

*"In chat, you don't get to interpret their reactions exactly. Me, I tend to argue because I'm not sure if what they say is sarcastic *worries* or sometimes I get talked about because I blurt out the things I said immediately, which I only intend as a joke." (R2)*

"From now on, it's either you have to be alone or settle on online, Zoom events, like online drinking, game nights, movie nights, yet they feel lacking since there are no physical interactions. Only virtual, you are just seeing each other on each screen, like that. And from other times when we are trying to catch up, we try to chat with each other to share rants still, it is difficult to find connection even through chat. That's all." (R4)

"Generally po, as a student amidst the pandemic, I feel like it get so hard to socialize with my blockmates. Since our first year, pandemic and online classes, I get so shy reaching out with strangers but now, it became a harder challenge for me thinking that we are about to have a block meetup in February. When we first met, I was invited but I was very hesitant even if I like to come because just the thought of meeting up with them, socializing, my stomach aches and I just can't imagine it from that time." (R4)

"I have difficulty in interacting even through chat. To think, I'm only messaging a few from school since I just ask about school works, or group works. I'm always in the same circle. I stay in my

comfort zone. If there is a new groupings, I will chat with my new classmates, but it is not that easy to do.” (R4)

“it’s really hard to talk to my classmates right now given that messenger is the only form. I feel like most of the time from what I hear with my friends as well they only contact our blockmates if it’s related to academics but anything further from that they no longer have a conversation because of messenger or online setup, there is a tendency to be shy compared to face-to-face” (R5)

*“but with friends that are far from my house it’s definitely hard to reach out to them. Especially at times when your messages gets buried in messenger *laughs* when you tried to reach out to them and you don’t want to call them because you feel like you might interrupt something important that they are actually doing” (R5)*

As COVID-19 progresses, social media platforms were highly utilized to interact with one another, primarily since physical distancing and lockdowns are strictly implemented in each country with regard to the severity of the disease in each area. According to the study of social connection and well-being during COVID-19, it was stated that there is greater satisfaction with life linked to active usage of Instagram, but it also has a negative impact. The study explained that interactions that involve voice used in phone calls, video chat, or voice chat lead to stronger social connections than those without voice, according to K. O. Miyamoto et al., (2021) It could relate to a human being finding something to fill in the gap in their social connection, which is usually done through physical socialization or in-person. Moreover, according to Twenge et al., it was further supported that it can be considered a well-established protective factor against loneliness, (2019). Electronic communication provides a leaner, less fulfilling form of interaction from the study by Pittman and Reich (2016).

Emotional and Mental Capacity

Emotional and mental capacity show an individual's ability to cope with positive and negative emotions. (WebMd, 2021) With this, it could revolve around how they take each thing that is happening in their current situation and progressively adapt to it, as shared by the respondents:

*“getting into UST, I was kind of culture shocked 'cause of course there’s a ton of quizzes and a ton of teachers actually teaching. So, uhm it was a bit of uh a hard switch or like I got culture shock because a lot of my class— or blockmates were hardworking 'cause they're from senior high, UST SHS. *laughs* So it was a bit of a hard adjustments for me” (R1)*

“It's so hard to be a student, especially in times like these.” (R2)

“I’m not sure if this is too personal but my dad’s cousin just died recently and during the first 2 days of class after we found out, I found it hard to focus in class that’s why I needed to catch up with my friends because I felt that if I was alone, I’d dwell too much on the death and not focus on what I was doing. I don’t think it was a valid excuse since it is the extended family.” (R3)

“I guess would be a lot of my loved ones you know I’m sure all of us have gotten sick because of the COVID and unfortunately have passed away because of the COVID. You hearing like news online, and hearing unfortunate events online and also from my loved ones, I think that also brought easily caused me to like have a poor mental health during this pandemic” (R5)

“I wanted to fix it but the problem is—me myself, I badmouth like unconsciously but yeah. It was really depleting like a lot and I was just crying about it, like a night—The whole night.” (R8)

The findings were similar to the study conducted on the effects of the COVID-19 outbreak and lockdown on mental health among post-secondary students in France's Grand Est. region. The study stated that the participants had shown a lower quality of life, resulting from decreased learning time due to the problems carried out from distance learning and decreased motivation as their level of engagement was reduced. Moreover, another element that also has a significant impact is the way the government's response was implemented. It stated that most likely, a strict lockdown had a deleterious effect on the mental health, especially for students who experienced confinement in student housing as well as those who chose to return to live with their families during that period (C. Baumann et al., 2021) as stated by the respondent:

“In my perspective, there are concerns on the emotional, mental well-being of the students. Wherein, I think it comes along from what I mentioned earlier which is the lack of physical support system when things get stressful, so I think it affects the emotional and mental well-being. The stress obtained from the pandemic, on how the government responded and all the disasters that occurred along only in the pandemic. It gets so stressful on the mental well-being of an individual. That’s all.” (R4)

Miscommunication

Miscommunication is the social inability to communicate with other people properly or adequately. Thus, it showed to be one of the social barriers that a typical Filipino Medical Technology student experienced in line with their daily lives. Placed below are the following statements of the respondents regarding this matter:

*“It’s hard to release the accumulated *quote and quote gesture* extrovert energy that I have. Because before, in our household, I used to be so quiet. But, every time I enter school *makes loud noises*. My friends tell me that I have this distinct aura of being very bright, but I don’t hear that anymore.” (R2)*

“Mama and Papa weren't sure how heavy our workload was. So what happened would be, they would order us around while I had my own problems to deal with because I am a group leader and there were meetings. During that time, I couldn't separate my life from my personal life. Things kind of got messy in the house because we would always be fighting.” (R3)

According to a study about the barriers to online learning during COVID-19 in the Philippines, it was mentioned that there is a difficulty in performing responsibilities at home, a lack of physical space conducive to studying, and the mental health difficulties that are most commonly affecting their performance. These are among the barriers medical students encounter (R. Baticulon, 2021).

The Gift of Interacting

The gift of interacting refers to the different coping mechanisms that involve the interaction of an individual with their family and friends. According to a study conducted by Cohen, Sherrod, and Clark (1986), a study of incoming college first-year students discovered that social support was useful in lowering depression in both healthy and low self-esteem individuals. Moreover, a way to mitigate stress during university life includes belonging to a social network.

Support System

Interaction is to establish a support system. According to Hood (2020), having a support system is vital. Having one is a critical aspect when it comes to maintaining both mental health and physical health. Surrounding oneself with the right people is important for developing and improving new skills. Research also shows that isolation could be a possible factor that worsens mental illness. Hood (2020) also claims that it is also critical to avoid distractions that may dull the senses or hinder one's performance. The

distractions may be avoided by leaning on one's support system such as going for a hike or learning to meditate in a yoga class. South University (2018), claims that there are numerous psychological and as well as physical benefits in terms of having a support system.

“I did seem like I had like one or three friends that I mainly talked to every day. I would vent to them or like to tell them how I'm feeling, if ever I'm feeling stressed. So uh, you know the weight comes off my chest.” (R1)

“You don't need a ton of people to or like a ton of friends to keep you float. Like sometimes you just need those singular one to three people, that you depend on 'cause sometimes it can get your vision or your goal can be very clouded if you have way too many people that may not even support you in the real uh in the real in the— In the back of their heads.” (R1)

“For me, I love talking to my friends, they are my coping mechanism for stress. There are also times when we'd call at night. Just the other day, me and my friends from the block were on call and we'd all do homework at the same time. I'd feel happy when we do that because I don't feel alone. Sometimes it's hard when we're doing the homework and it feels like I'm not the only one having a hard time.” (R3)

“It was really tough to balance but I'm really grateful to have my executive board and my vice president to help me. We're super a team and I'm really thankful because if ever I wasn't able to do something sasaluhin nila ako and sila gagawa and vice versa.” (R10)

The participants in the research have exhibited how their friends and family have been able to stand as a support system for them amidst the pandemic. Multiple sentiments from the respondents have expressed how having a support system has been an exemplary coping mechanism amidst the pandemic.

Motivation

According to Bell (2021), friends may be able to provide one with encouragement and motivation. South University (2018), claims that In stressful times, friends and family may be able to help friends and relatives who are aware of your academic and professional goals may be able to assist you in achieving them. The respondents in the study have also expressed how the people they consider their support system also serves as one of their motivations to achieve. This is seen in how college students make time to study with their peers and become more motivated in accomplishing tasks.

“My main coping mechanism since the start is spending time with friends and family because I feel like I can do everything when I'm with them.” (R3)

*“Having online study sessions, like it's a good, that's a good * laughs * for me that's a really good activity” (R5)*

*“Having an online study session where we see each other working, “Oh they're doing something okay okay I'll start, I'll really start 10:00 am I'll start, promise” cause it's already working *smiles *. It's like we're motivating each other I guess to achieve what we need to achieve for that” (R5)*

“I think uhm one thing that I learned is that it is essential to maintain interaction with other people. Since it is gone now, I just realized the effect of interacting with other people. And also another thing that I learned is it's really your choice if you want to finish things and if you want to motivate yourself, you have a choice to get out of bed or to sleep again. Like you shouldn't allow yourself to run out of motivation, you have to keep motivating yourself.” (R7)

Growth

According to Ybarra (2018), relationships may be able to sustain the personal growth in an individual, without being necessarily conflicting. Multiple studies suggest that having a supportive family and friend may be able to boost the confidence of an individual and as well as aid in motivation towards greater personal goals. Aside from a support system and motivation, interaction is vital for the development of an individual's mental health. Statements from the respondents of the study show how interaction has greatly helped them in regards to their overall social growth. Moreover, bonds in the relationship has also been strengthened, granting a stronger foundation and deeper relationships.

"Another one is family. Our situation became better, we got to know each other more and they get to understand me. I don't feel that much pressure anymore, and it's probably one huge factor with how I got to cope that time." (R2)

"If there's a plus side to the pandemic is that I was able to become closer to my family." (R5)

"You gain a lot of emotional immaturity during the pandemic because you have to empathize with other people's situation.." (R6)

"You gain a lot of emotional immaturity during the pandemic because you have to empathize with other people's situation." (R6)

"Like I said awhile ago, the relationship that I have with my family, I think also got better and some friends I haven't talked to in awhile, now we're all so close because of discord and game nights." (R10)

Reaching Out

DiGiulio (2019), claims that maintaining a friendship may be costly due to distance, in regards to both time and money. However, maintaining that bond proves the lengths a friend or family would go through when matters show up, whether it be in person or virtually.

"So from what I learned, it is to always check up on your friends. Just do it out of concern just to check up how they have been because not all that are experiencing inconvenience in their lives can just openly share what happened in their lives. So from there, others just need to reach out for them and just see how they are. Makeup to check up on your friends and to be steady and resilient. Not the "resilient" that is overly-romanticized but to be strong. That's all." (R4)

"asking people how their day is because I told you that my stress reliever is talking to another person so I try as much as possible to get in close contact with my loved ones you know by simply asking them "Are you free?" for me, during this pandemic, I learned to be sensitive of other people's time, of other people's priorities" (R5)

"For the favorable moments, it's easier to connect with friends. Since we are in an online setting, I can contact them via discord, calls, and the like." (R7)

"I think connecting with my friends using messenger or discord and I am able to talk to them more in an online setting." (R7)

"as an individual, we have various roles. We have a role as a student, a role as a friend, a role as a son, a brother. So, we don't have to take that negatively, we just need to balance it all out. However, it really does affect my time as a student, but we still do our best right?" (R11)

“we are on discord calls every night so there's nothing changed when we went online. We just talked for longer so it's like every night we still talk, enjoy, get together even though everyone is busy in the morning as well as at night there are times we talk, enjoy, play.” (R12)

It is vital to check up on your peers and family to reach out and improve the quality of interactions. In this day and age, many modes of online communication are provided as means to reach out to anyone at any point in the world. The respondents in the study would utilize these said means to establish communication with peers and family.

Discussion

In order to associate the variety of coping mechanisms experienced by medical technology students under the COVID-19 pandemic, the figure entitled “*Filipino Medical Technology Students Circle of Coping with COVID-19*” was designed as means to characterize the findings procured into several themes.

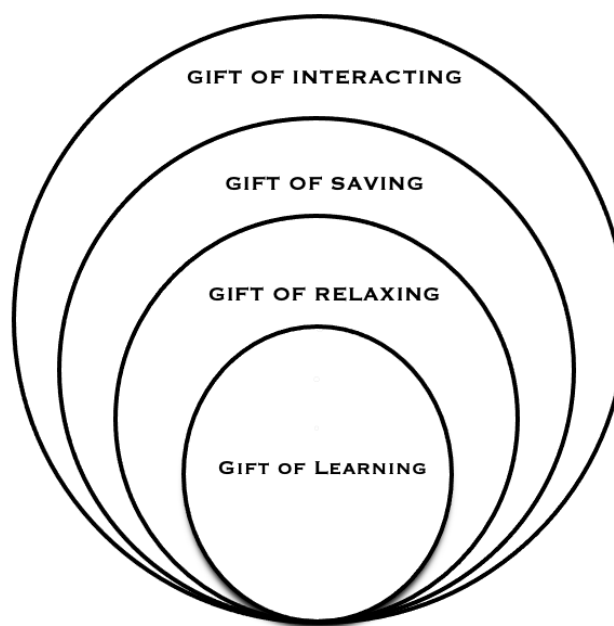


Figure 2. Filipino Medical Technology Students Circle of Coping with COVID-19

The framework displays circles that represent the wholeness of the distinct coping mechanisms encountered by medical technology students to withstand the challenges of COVID-19. The various circles are labeled as Gift of Learning, Gift of Relaxing, Gift of Saving, and Gift of Interacting. The researchers termed these themes as a “gift” because of the notable capacities students endure in a very challenging time.

A tangent circle is the type of circle utilized in this framework. This type of circle represents the totality of the result of the study because all of these intersect to a common point, which is the coping mechanism of the respondents.

Found at the innermost is the Gift of Learning since the researchers believe that the foundation of all the themes presented begins with the self. This theme is considered the core of the framework since every other coping mechanism permeates from this gift. Therefore, before one can engage in the themes of the outer circle, one must first gratify the needs of that within. In addition, the coping mechanisms

derived from this theme include mindset, study habits, and routine, which focus primarily on intrinsic motivation and self-improvement.

Following the Gift of Learning is the Gift of Relaxing. The circle for this theme encompasses the previous theme due to the fact that the coping mechanisms derived (i.e., leisure activities, physical, and resting) have a positive correlation to fulfilling a person's psychological needs. In other words, when solutions to academic challenges no longer satiate the individual to cope, the individuals experience challenges within their minds. With this, individuals resort to various methods to appease themselves through individual actions to release stress and mental anguish. Furthermore, intrinsic activities that focus on self-rejuvenation are employed by individuals as a solution. Acts such as leisure, physical, and resting activities.

The Gift of Saving lies between the Gift of Relaxing and the Gift of Interacting since this theme is considered as the boundary between oneself and society. In retrospect, an individual has to be financially capable in order to address one's academic and ergonomic challenges. To cover the basic necessities of a person, which subsequently affect their emotional, mental, and physical condition, a sufficient source of income and stable livelihood are important. Personal tension might be reduced and alleviated by rewarding oneself, which could be financed with sufficient money. Furthermore, an individual's economic situation has an impact on how they interact with society and other individuals.

Lastly, the Gift of Interacting is placed as the outermost circle as it encompasses all the aforementioned coping mechanisms before this is executed, as it is the most extrinsic factor to cope with challenges. This theme requires the person to go beyond oneself and connect with other individuals in addressing the challenges posed by socio-civic challenges.

IV. CONCLUSION

Summary

The research has primarily executed the analysis to assess the difficulties experienced by medical technology students amidst the pandemic. Other study topics included determining the demographic profile of the respondents and how medical technology students deal with previously mentioned issues to reveal coping mechanisms enacted by the demographic.

The phenomenological research approach executed the means of the researchers' aim to gather and collect data. This design paved the way in isolating the various challenges the respondents faced at different year levels with the support of the testaments of their lives as students and individuals during the pandemic. It is deemed to enlist the challenges, new and old, brought forth by the pandemic, illustrating these individuals' lived realities and problems. Ergo, revealing the coping mechanisms utilized with such challenges. Aligned with these objectives, the researchers conducted semi-structured open-ended interviews to be exploratory of the challenges faced by the respondents while having a general outline, thus allowing pertinent and unfounded difficulties these respondents might have faced to attempt to encapsulate relevant themes. Commonalities among the responses were distinguished, and narratives were evaluated collectively through the aforementioned method, enabling proper segmentation and sorting of the information gathered.

In order to proceed with the thematic analysis and data saturation from the gathered interview transcripts and recordings, the employment of Colaizzi's phenomenological descriptive method was utilized for this research. With this method, the establishment of condensed statements from the challenges and coping mechanisms was accomplished, which then concentrated upon the theme's formation, synthesis of interpretation, and central structure origination. The themes concerning the challenges identified through the gathered data include academic, ergonomic, and socio-civic challenges. Contrary to the themes

formed from the significant statements of the respondents on their challenges, this set of themes was utilized in order to classify each of the coping mechanisms that were formed by the Filipino Medical Technologists students against the hardships they regularly face amidst the COVID-19 pandemic.

Within the study, the findings have shown that the Filipino Medical Technology students who have experienced such obstacles during the period of the COVID-19 pandemic; are as follow:, (1) *academic challenges* such as underdeveloped practical skills, sentiments of burnout, lack of confidence, future anxiety, underdeveloped practical skills, and difficulties in feedback;(2) *ergonomic challenges* that consist of environmental factors, external factors cognitive, organizational, and object ;(3) *economic challenges* that are surrounded by leisure constraints, unstable employment, and harsh conditions, inequitable expenses, financial adaptation, and functional discomfort; and (4) *socio-civic challenges* that revolve on physical distance, lack of support system, social media use, emotional and mental capacity, and miscommunication. Moreover, the study investigators could also obtain information on the coping mechanisms that were applied by the respondents to overcome the aforementioned challenges. The following strategies include (1) *gift of learning* in study methods, easements, and thoughts such s; (2) *gift of relaxing* that shows importance in self-rejuvenation, which includes leisure activities, physical activities, and resting; (3) *gift of saving* in financial learning which comprises of budgeting and restrictions; and (4) *gift of interacting* that values support system, motivation, growth, and reaching out, at last.

Moderatum Generalization

The research identified the different challenges that medical technologists experienced amidst the COVID-19 pandemic. In order to achieve these goals, the researchers performed semi-structured interviews in order to explore the challenges faced by the respondents while maintaining a basic outline, allowing them to capture both relevant and unsubstantiated difficulties they may have faced. Colaizzi's phenomenological descriptive method was used in this study to move forward with the topic analysis and data saturation from the acquired interview transcripts and recordings. The challenges were categorized into five, namely academic challenges, ergonomic challenges, economic challenges, and socio-civic challenges. In relation to these challenges, the interviewees were also asked about the coping mechanisms they had to help them manage the challenges they faced. Moreover, these coping mechanisms were then dissected into the gift of learning, relaxing, saving, and interacting. Categorizing the challenges and as well as the coping mechanisms aided in creating a deeper and more specified understanding of the situation of each respondent. To identify both the challenges and coping mechanisms that the interviewees employed, the researchers used significant statements found in the transcribed interviews. The significant statements that were chosen, directly and/or indirectly mentioned their stressors and the coping mechanisms in response to that. Furthermore, the Theory of Stress and Coping by Lazarus and Folkman (1984) was utilized to analyze the findings gathered from the interviews. In addition to the theoretical framework, other credible sources were used to support the findings of the study. Points made in the study were backed up by other sources, journals, etc.

Recommendations

For future researchers who wish to partake in a study similar to or related to the topic discussed, an increased sample size is recommended in order to further enhance the research. The researchers only had interviewed 12 selected medical technology students from a single University in Metro Manila. Additionally, broadening this field of observation by involving other institutions in the Philippines, not only from the universities inside Metro manila, can widen and bolster the accuracy of the characterized coping mechanisms observed in various Filipino students tackling this course amid COVID-19. Moreover, the initial findings of the study only focused on the positive coping mechanisms and identified them as "The Gift". Future research may also pivot on including the other ways of coping which were mentioned also by the respondents of the interview such as substance use, impulsive buying, oversleeping, and stress eating. As these students are considered future frontliners, the study may also be utilized as a tool for

developing the management on medical education of universities in the Philippines in terms of an online setup.

In addition, the group highly recommends inquiring about a participant's household income during the selection process. Doing so will allow the researchers to better thematize economic challenges (along with its respective coping mechanisms) that are more representative of the different socio-economic classes. Furthermore, future studies related to the topic discussed may choose to include teaching personnel as participants of the study. Inclusion of teaching personnel as respondents can help enlighten researchers about the academic challenges faced in higher education during the COVID-19, from the perspective of an educator. Moreover, this can also be done to eliminate the presence of a possible acquiescence bias, if the researchers are also students.

ACKNOWLEDGEMENT

The researchers would like to express their gratitude to the following individuals for their contributions to the success of the research:

Asst. Prof Joemarie T. Malana, as the group's research adviser, for guiding the researchers through the proper data collection and thesis manuscript formulation.

The Faculty of Pharmacy Research Ethics Committee (FOPREC), for carefully reviewing the manuscript and ensuring that the data collection adheres to the ethical research principles involving human participants.

Prof Ma. Freida Z. Hapan, PHD, for assisting the group in developing the simulacrum based on the findings obtained, as well as in developing the thesis title.

Respondents, who took the time to participate in the study despite their hectic schedules within the workplace.

Parents, for moral encouragement, financial assistance, and spiritual support in building the research.

God, our Almighty Father, for His never-ending grace, His guidance in the researchers' knowledge and determination, surpassing all the challenges to complete the study that is made for His glory.

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