# Phenomenologizing Filipino Medical Technology Students Experiences in the Enriched Virtual Mode of Learning

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Abstract: Filipino Medical Technology students encountered challenges with the Enriched Virtual Mode during the COVID-19 pandemic. This phenomenological study followed purposive sampling in selecting twelve (12) Filipino Medical Technology students from a higher-education institution engaged in Enriched Virtual Mode. They answered online forms and participated in a semi-structured one-on-one interview. Recorded interviews were transcribed, read and re-read by the researchers. Colaizzi's method was applied to obtain the essence of the phenomenon under investigation and through this, researchers were able to analyze 83,543 words from data collection. Significant statements and their condensed meanings were arranged into codes and themes. A repertory grid was also utilized to facilitate cool and warm analyses. This resulted into the emergence of five (5) interesting typologies of challenges experienced by respondents: *Balancing feelings of isolation and need for participation, Balancing quantity and quality of submissions, Balancing time and demands, Balancing connection and disconnection and Balancing wellness and workload.* These challenges are overcome through coping mechanisms which include: *Interaction and Engagement, Determination and Commitment, Prioritization and Time Management, Communication and Discernment* and *Relaxation and Enjoyment.* Findings provide a valuable lens wherein Filipino medical technology students' experiences in the Enriched Virtual Mode of learning could be viewed and understood.

Key Words— Challenges, Coping Mechanisms, Enriched virtual mode, Filipino medical technology students, Phenomenology.

#### I. INTRODUCTION

The concept of online education had already existed way before technology had even started. Distance education is known as a way of instilling learning in students despite the difference in geographical location between the learner and the educator. The earliest system of distance education is correspondence education in which educators and learners are physically separated and learning materials are sent using a mailing system [1]. Caleb Phillips was the first to record the use of correspondence education by offering lessons in arts, in which modules were sent weekly to the learners [2].

Manuscript revised July 28, 2021; accepted July 29, 2021. Date of publication July 30, 2021. This paper available online at <u>www.ijprse.com</u> ISSN (Online): 2582-7898 However, as recorded, Isaac Pitman was the founder of distance education in which he sent postcards with instructions of transcribing the passages from the Bible and must be returned for analysis and modifications. From this point forward, numerous colleges and institutions grew using the concept of correspondence education. The birth and advancements in technology paved the way for the development of distance learning.

Currently, the most used forms of distance learning include correspondence education, the E-learning system, and the online learning system. Correspondence education is practiced by educators sending learning materials such as modules, assignments, and textbooks to the students via post or couriers. The students work on the learning materials at their own pace and send back the assignments to their educators through the post as well. In case of clarifications and questions, students may reach their educators through different forms such as mail,

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING

phone calls, and text messages. Another form of distance learning is the E-learning system in which learning materials are accessible by a computer. The materials used in the Elearning system are stored in external storage devices such as CDs, DVDs, computer-based applications, USB flash drives, or external hard drives which are viewed through the computer. Lastly is the online learning system which may be categorized under the e-learning system. This is because an online learning environment requires a technology-based device such as computers, smartphones, or tablet computers to have access to an internet connection and explore the world wide web [3]. In this learning system, learning materials, modules or even Ebooks are accessible within the worldwide web. Also, the development of the Course Management System (CMS) software serves as the channel or virtual classroom used by the instructors and students. Learning materials, modules, assessments, instructions, or even live and recorded classes are made available in the CMS software making online learning a highly interactive mode of learning. The online learning system may be conducted Synchronously and Asynchronously. Synchronous Online Learning delivers online courses in realtime with simultaneous interaction between the instructor and learner. On the other hand, Asynchronous online learning delivers online courses in which interactions between the students and instructors are done through discussion boards and assessments which are to be accomplished within the given deadline.

Further development on online learning is its integration with the Brick-and-mortar learning system that comprises traditional and technology-rich instruction where students report to the education institution physically resulting in a Blended Learning System. It is defined as a formal education program that is a combination of online delivery of content and learning as well as for instructions with the use of CMS and a brick-and-mortar learning environment that requires students to report to the institution physically to conduct face-to-face classes [4]. Blended learning gives the student the control of time, place, and pace when it comes to learning. This learning system is further categorized into Rotation Model, Flex Model, Self-Blend Model, and the Enriched Virtual Model.

The Enriched Virtual Model (EVM) as a form of blended learning exhibits both brick-and-mortar systems in the educational institution and online classes at a specified time. It allows students to learn at their own pace and in their own available time. Its unique characteristic is that the time allotted to the brick-and-mortar model is seldomly provided and only depends upon the call and requirement of the institution and is equally applied across all courses within the program. In this mode of learning, the primary foundation of education is online learning, and students are only called for face-to-face classes on selected dates [5]. Online classes may be conducted either synchronously or asynchronously. Synchronous sessions are real-time sessions with the course facilitator and include live discussions, lesson clarifications, meetings, consultations, and real-time graded assessments. On the other hand, Asynchronous sessions are sessions promoting independent learning or learning at one's own pace where students are provided with recorded lectures or discussions prepared by the course facilitators and accomplishing Other Learning Activities (OLA).

At the start of 2020, COVID-19, a new strain of Coronavirus has become a global health crisis therefore, the World Health Organization (WHO), government officials and the health sector promulgated ordinances for people to practice health safety protocols like community quarantines, social distancing, limited workforce, and a temporary halt in some sectors [6]. In accordance, the Philippine educational system adopted pertinent steps that aim to avoid and limit the risks of infection among students and other stakeholders during the health crisis. The Commission on Higher Education (CHED), in response, promulgated the CHED Memorandum Order No. 4 Series of 2020, "Guidelines on Flexible Learning," which is implemented by both public and private Higher Education Institutions (HEIs) in ensuring that there is still a continuity of education when the use of traditional modes of teaching is not feasible during COVID-19 pandemic [7]. Thus, the memorandum aims to explore other learning modalities that would facilitate migration from traditional to flexible teaching and learning modalities in the time of COVID-19. Under this approach, the delivery of learning is mainly focused on the use of technology and distance education wherein students and teachers are co-creators of knowledge and have control of the learning experiences, grounded on the realities of the learning and teaching environment. One mode of online and distance learning which is practiced by some HEIs during this time is the Enriched Virtual Mode [8].

As the pandemic continues to be a huge challenge and barrier to the education system, the Faculty of Pharmacy of the University of Santo Tomas highly urged everyone to respond, cope, survive, and persist amidst the global health crisis. Giving

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING

importance to yield a high quality of education despite the quarantine measures, the university resorted to Enriched Virtual Mode, a way of learning grounded with both the principles of communion and encounter. The utilization of both online and offline strategies will provide accessibility and flexibility in learning especially to students with no capacity or connectivity.

Adopting the Enriched Virtual Model, a form of blended learning allows students to experience both online learning and face-to-face learning. The online learning for the Enriched Virtual Mode consists of Asynchronous and Synchronous sessions that promote the full learning experience for Filipino Medical Technology students. As for face-to-face learning, according to an article released by The Varsitarian, "Oncampus classes would be held only when allowed by government regulations and with strict implementation of public health standards to prevent the spread of COVID-19." Upon the implementation of this type of learning, both students and course facilitators have different perspectives and opinions regarding the Enriched Virtual Mode of learning based on their experiences, knowledge, environment, and resources. The divided population comprises individuals who view it as beneficial and individuals who perceive it negatively given their situation as the Enriched Virtual Mode was applied. Considering that the Enriched Virtual Mode is newly introduced to Filipino Medical Technology students and in Medical Technology education, arising challenges are inevitable due to the adjustments necessary to cope with this type of learning. The issues mainly observed by Filipino Medical Technology students in the Enriched Virtual Mode are leaning onto the different challenges encountered in this new method introduced for two academic terms, specifically 2nd Term of A.Y. 2019-2020 and 1st Term of A.Y. 2020-2021.

Challenges as defined in a study by Mkrttchian (2018) is something that serves as a stimulus for one engaged in the challenge to make a special effort, a demand for explanation and justification [9]. Moreover, Misra (2019) explained that challenges may also be difficulties encountered along the way of achieving one's goal [10]. In a similar study by Adedokun-Shittu and Shittu (2015) challenges may also be seen as barriers for the integration of technology in the field of learning [11]. Digging deeper into it, Maboe (2019) stated that challenges may also be problems that come in the way of students in online learning which may be cognitive, affective, psychomotor, technological issues resulting in difficulties [12]. Some of the issues that Filipino Medical Technology students face as they adjust to the Enriched Virtual Mode are: adaptability struggles, computer literacy, technical issues, time management, and self-motivation [13]. Adaptability struggle is one of the problems faced by students as they transition from the traditional face to face classroom environment to the Enriched Virtual Mode which can only either be Synchronous or Asynchronous. Not every student can adjust into new learning environments immediately. According to Xu and Jaggars (2013), difficulties in adaptation are experienced by a typical student in online learning [14].

Another problem encountered by students involves computer literacy as Enriched Virtual Mode requires technological proficiency. Certain limitations in technological skill and knowledge still exist most especially if a student encounters technical issues, which hinders the students ability to access technical resources. According to the study of Kumar (2015), not every student has access to a strong internet connection that is essential for this new method in learning [15]. This affects Filipino Medical Technology students in which poor internet connection and lack of technological resources brought problems such as inability to participate in synchronous discussions and the inability to take real-time assessments that are only available on specific schedules set by the course facilitator.

Time management is also one of the challenges encountered by Filipino Medical Technology students in the Enriched Virtual Mode as Other Learning Activities (OLA), assessments and examinations are given in each course. Struggles in adaptation are encountered differently by students as other factors such as tasks and responsibilities outside the Enriched Virtual Mode are encountered. According to Etherington (2017), self-motivation, an essential factor in online learning, greatly affects the student's performance and the ability to complete the course [16]. With all the challenges raised in the Enriched Virtual Mode, difficulties are encountered by Filipino Medical Technology students as they cope and adjust to learning.

Although there are numerous existing studies and research regarding online learning, not much is known about the Enriched Virtual Mode and the challenges encountered by Filipino Medical Technology students in this learning. Given the issues and challenges arising with the abrupt implementation of the Enriched Virtual Mode due to the COVID-19 Pandemic, this phenomenological study focuses on

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING

addressing the central question: "What characterizes the challenges encountered by the Filipino Medical Technology students on the Enriched Virtual Mode of Learning?"

#### II. METHOD

#### A. Research Design

This study is qualitative phenomenological research that addresses the difficulties experienced by Medical Technology students in such a setting. A phenomenological approach aids in providing a deep understanding of the various experiences of individuals involved or exposed to a single phenomenon [17].

#### B. Selection

The selection of participants followed non-probability sampling, purposive sampling. Non-probability sampling is best for qualitative studies and that purposive sampling allows researchers' judgment in sample selection on what can be most useful in the study [18]. In terms of sample size, "there are no rules for sample size in the qualitative study" [19]. The sample size does not depend on the quantity; rather, on what the study wants to know, the purpose of inquiry, what is at stake, what will be useful, what will have credibility, and what can be done with the available resources [20].

As for the inclusion criteria, this study only focused on twelve (12) Filipino Medical Technology Students from the University of Santo Tomas in the age bracket of 18 to 22. The group consisted of six (6) female and six (6) male Medical Technology students and was further divided into groups depending on their current year level. Three (3) students were selected per year level: first-year students (2 females, 1 male); second-year students (1 female, 2 males); third-year students (1 female, two male); and fourth-year students (2 females, 1 male). The employment of this technique guaranteed that each group was represented in the population regarding their experiences on the difficulties in the Enriched Virtual Mode. Beyond the above mentioned criteria are excluded from this study.

#### C. Data Collection and Data Measure Procedures

The data collection consisted of online forms and semistructured interviews. Through Google Forms, online forms were deployed to the twelve (12) interviewees before the interview containing the demographic profile, background information, and consent form of the interviewee. Presented in the informed consent form were: the purpose of the study, manner of the interview, risk and discomfort, benefits, compensation, voluntariness, and withdrawal from the study. This was signed by the researchers and the participants of the study with validity until May 2021.

The involvement of the participants was done through a semistructured interview and in a one-on-one manner. This was aided by an interview guide with a set of questions provided. The interview lasted from one to two hours per respondent. The interview questions stated in the interview guide were formulated based on the central question of this study: "What characterizes the challenges encountered by Filipino Medical Technology students on the Enriched Virtual Mode of Learning?" The sharing and musings of the respondents revolved around the following sample key questions: a) How are you coping during this pandemic?; b) What was the first thing that came to your mind when you knew about the transition to the Enriched Virtual Mode?; c) How do you currently view the Enriched Virtual Mode?; d) How did the Enriched Virtual Mode of Learning affect your studies?; e) How will you describe your experiences in terms of learning via the Enriched Virtual Mode?; f) What are there any difficulties you've encountered while engaging in the Enriched Virtual Mode? Can you elaborate on the instances wherein difficulties were experienced?; g) How do you manage your time during the Enriched Virtual Mode? and h) How does the Enriched Virtual Mode affect your academic performance

The researchers utilized widely used platforms for video conferencing, such as Zoom, that allowed the session to be recorded. Before the interview, the respondents were informed, and their permission was asked to record the session. This is bounded and protected by the Republic Act 10173: Data Privacy Act of 2012. Responses and the data gathered from the respondents were treated with utmost confidentiality, anonymity and only used for the sole purpose of this study. Thus, the respondents were represented by their respective codes in the data interpretation.

All gathered information from the online forms (Google forms), semi-structured interviews, and informed consent were stored in a Google Drive with the UST G-Suite account of the researchers. Both the researchers and the participants had access to the information. However, the research participants are only limited to access their own information and interview recordings. The data gathered were valid for use for the whole duration of the study until May 2021.

#### D. Data Explication

The audio-recorded interviews were transcribed, read and reread. Statements given in the Filipino language were translated and interpreted to maintain the original meaning of the articulations. Colaizzi's method (1978) was utilized to get the essence of the phenomenon under investigation. Condensed meanings of the significant statements were formulated and categorized into codes and themes. A repertory grid facilitated the use of cool and warm analyses. According to Tatum (2020), a repertory grid is a research tool constructed to promote highly structured interviews, and it is composed of topics, elements, constructs, and ratings [21].

From the 83,543 words obtained from data collection, the emerging essence of the phenomenon was facilitated by Colaizzi's procedure. This consisted of (1) Familiarization wherein researchers read and re-read the field texts with innocence to obtain a general understanding of the phenomenon; (2) Analysis of identified significant statements wherein essential and relevant information to phenomenon were extracted; (3) Formulation of meanings from the significant statements relevant to the phenomenon; (4) Clustering of themes and sub-themes through the establishment of similarities, differences and possible existing relationships among selected statements; (5) Development of exhaustive description through writing the complete and inclusive phenomenon description; (6) Formation of the fundamental structure was produced and significant statements were condensed into shorter versions; and (7) Validation of findings was made through three techniques: critical-friend technique, correspondence-technique, and member-checking. Reflexivity, unbiased processing, and interpretation of data were observed among researchers. The researchers also assured the respondents of the truthfulness, trustworthiness, accuracy, and validity of the findings reported in this study.

#### E. Ethical Considerations

This study is conducted as approved by the Faculty of Pharmacy Research Ethics Committee for approval with a study protocol code of FOP-ERC-2021-01-146

Informed consent is provided to the brief about the nature and purpose of the study before the interview. It also stipulates an agreement about the extent of the interview and data gathering. The consent was obtained through a restricted Google Form where the respondent can access and submit his/her signed consent form. The study involved audio, and video recording of the interview, and the respondent's name or any identifying information were kept confidential. The respondents' answers were anonymously stated in the final study document, and results were reported in the aggregate.

In lieu of the instances of using Google Drive and Google Forms, a 'restriction' option was done in collecting necessary information and data from the respondent. Other data collection or storage, offline back-up in a hard drive, the documents were locked, and only a password made by the researchers enabled access to the document. The transcripts and data that were obtained from the respondent were only for the sole purpose of the study. Once the transcriptions were checked for accuracy, recordings and data were all deleted.

The participation was voluntary, and the respondent was allowed to refuse participation, answer questions, or withdraw from the study at any time to trigger situations that may be consequential for health and well-being. The respondents had no direct benefits from the interview, but the data gathered in the study were deemed helpful in Medical Technology education, theory, research, and practice. A certificate of participation and a letter of gratitude was given for the recognition and expression of appreciation.

#### **III. RESULTS AND DISCUSSION**

The proposed system produces ranking decisions that were relatively highly consistent with those of the human experts. This system will enable a more effective way to short list submitted candidate CVs from a large number of applicants providing a consistent and fair CV ranking policy. The presented system automates the processes of requirements specification and applicant's ranking. This system can be used in many business sectors that may require expert candidates and also reduce workload of the human resource department.

Findings in this study described the essence of the lived experiences of twelve (12) Filipino Medical Technology students who engaged in the Enriched Virtual Mode of learning during the pandemic. The depth and the breadth of the field texts gathered resulted in the emergence of five (5) interesting typologies of challenges experienced by the respondents (Table 1). These challenges include: a) Balancing feelings of isolation and need for participation, b) Balancing quantity and quality of submissions, c) Balancing time and demands, d) Balancing connection and disconnection, and e) Balancing wellness and workload. These challenging experiences were guided and

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING

illumined by coping mechanisms, which include: a) Interaction and Engagement, b) Determination and Commitment, c) Prioritization and Time Management, d) Communication and Discernment, and e) Relaxation and Enjoyment as portrayed in Figure 1. The equilibrium of challenges and coping mechanisms depicts the magnitude of forces experienced by the respondents and provides a vivid picture of how they move along the lever to maintain stability and balance while they strive to overcome the challenges through coping mechanisms, which they use as a fulcrum to enable them to successfully thrive in the Enriched Virtual Mode of learning.

Table.1. Typologies of the challenges experienced by the respondents
and their coping mechanisms

CHALLENGES	COPING MECHANISMS
Balancing feelings of isolation and need for participation	Interaction and Engagement
Balancing quantity and quality of submissions	Determination and Commitment
Balancing time and demands	Prioritization and Time Management
Balancing connection and disconnection	Communication and Discernment
Balancing wellness and workload	Relaxation and Enjoyment



Fig.1. the equilibrium of challenges and coping mechanisms of Filipino Medical Technology Students

# A. Balancing Feelings of Isolation and Need for Participation: Interaction and Engagement

The lack of in-person interaction in this mode of learning creates a feeling of "being alone" among students in spite of the

fact that they are attending synchronous classes with their classmates. Balancing feelings of isolation and need for participation brings the respondents in a situation where they miss being with their classmates and having someone to study with, exchange ideas with, and interact with, as shared by some respondents:

"It is very sad, it is very sad... uhm... I am focused but whenever I study, I want someone to be with me not like... even if someone is just with me in the session, like beside me so I would not feel so lazy in studying because it is hard to have classes every day for so many months and the only thing I see is the four corners of my room... it is draining and the isolation brings forth too much sadness to the point that it is depressing. From the start of the day until the end of it, you do not have anyone with you and the only way to communicate with your friends is through Facebook which is not enough." (R1)

"Next (finger points) is the (looks faraway, pause). Well, it is hard (looks up)... it is hard to study and learn without having someone you can ask in person. Like if there is someone beside you while you are studying, you could exchange your ideas. Here is how she understood the topic and here is how you understood the topic. If you are alone, it is difficult (looks up), it is just your own understanding and what happens is that (looks up), you keep using Google (laughs)." (R7)

Erichsen and Bolliger (2010) stated that students participating in online education tend to have a stronger possibility of isolation because the persons involved will not have the chance to meet in person during the course [22]. Filipino Medical Technology students immersed in the Enriched Virtual Mode had to face conditions of isolation in their current learning space that caused feelings of loneliness and depression to surface. In relation to such, Tiwari and Ruhela (2012) revealed that there is a positive correlation between social isolation and depression [23].

Aware that there is still the need to actively participate in virtual classes despite having feelings of isolation, the respondents still see to it that they attend synchronous and asynchronous classes. They give importance to the fact that class participation is still a very important aspect of learning. This is expressed in the following articulations:

"I have a lot of input [during recitation] (laughs). I have much more input. I am more confident even if I make mistakes

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING because I will not get to see their reactions, that is why it is okay. I will not see their eyes waiting for my answer." (R7)

"I prefer synchronous classes because I can control myself with listening. Like I really listen to the professor, "listen" (smirks and laughs). I try to recite also. That is the difference, when it comes to online, I tend to recite more. I can do it because other people cannot see me." (R12)

In spite of isolation and feelings of loneliness, Filipino Medical Technology students continuously remain aware of the importance of class participation in both synchronous and asynchronous sessions in the Enriched Virtual Mode. Some students participate actively in synchronous classes and turn isolation as an opportunity to fulfill their need to participate during class recitations as this setting helps avoid a physical watching audience. Synchronous discussions make students feel as if they are working together which encourages student participation in the online discussion [24].

Through interaction and engagement, Filipino medical technology students are able to create a platform that is geared towards belongingness and an opportunity to cope up with the need to participate in class activities despite feeling isolated, as verbalized by some respondents:

"We always chat with each other through Messenger or phone calls. We always leave that on so that when we have questions, we can just like do something similar while in the library when one has a random thought you can immediately ask about it. So we created a (looks up) virtual setting for that." (R8)

The difficulty of having no direct interaction with other individuals in the online setting is conquered through the creation of online communities among students [25].

The difficulty of making friends online decreased and interactions with classmates in the virtual setting increased as time passed by. Hudson, Hudson and Steel (2006) shared that the reservations of students when it comes to interaction and raising concerns evaporated as time went on wherein students became familiar with each other and were oriented with the effective use of media [26].

Interactions and engagements online with peers became a coping mechanism in the Enriched Virtual Mode setting to battle feelings of isolation and loneliness.

## B. Balancing Quantity and Quality of Submissions: Determination and Commitment

Confronted with a multitude of tasks, requirements, and responsibilities, Filipino medical technology students are also expected to maintain quality in all of their submissions. The huge quantity of requirements and assessments that need to be done, situates the respondents in a milieu where the internet becomes an important immediate source of information, cramming turns out to be a common day practice, and understanding is being sacrificed for the sake of compliance. As verbalized:

"Uhm... I am doing so much more right now. Honestly speaking, whenever I do assessments, I do not... I do not understand it like I just answer and just answer. I just search from the internet, I just replace it but when I pass it at the end of the day, I don't know anything like that." (R1)

"They can give us a hundred worksheets, a hundred activities, a hundred lab works but it will never be the same as if when you are doing it in actuality with your own body because this one, it is so mentally tiring... uhh... because everything, you just have to think about it. You're always thinking, thinking, thinking, unlike when you are in actual, you are thinking and doing. So, right now, you are not doing, you are just thinking. It is... yeah... it does not help to give a lot of activities... uhm... it has its limitations... uhh... it strengthens what you know, mentally, about the topic, the lesson, about the course but that is just that, it has its limitations. It can never suffice for when you actually experience something and then you remember it that way." (R10)

In the study conducted by Perante and co-authors (2021), it is stipulated that learning in an online environment amidst COVID-19, workloads have been heavier than usual [27]. With this matter, the students just want to finish and submit it for the sake of compliance and relief of lessening the bulk of workloads they still need to do [28]. Also, some students see that giving a lot of assessments or tasks in the Enriched Virtual Mode of Learning has its limitations. The theoretical satisfaction of giving a lot of assessments or tasks still does not suffice the quality of hands-on experiencing the lesson before doing an assessment to oneself [29].

However, Filipino medical technology students' value for quality enables them to view the Enriched Virtual Mode of Learning, not merely as a mode of earning grades through compliance but also as an opportunity to learn and to put premium to quality in terms of learning outputs and submissions. As expressed by some respondents:

"Most of the time I cannot do the division of work [of laboratory sheets] because there are days that we have a lot of quizzes, exams, and practicals. Thus, you need more time on studying than doing exercises (hold his forehead). But on the submission date, there are still a lot that I have to do but it is okay, I guess, since by the time I need to answer and do them I have already studied the topics beforehand. So, it is much easier for me to answer them rather than I will answer them without knowing anything." (R9)

In the study of Rahiem (2021), the determination, and the mental fortitude towards learning is what sets students, in online learning, to move forward [30]. To stay determined with the task and assessment, students build smart approaches in accomplishing bulks of work on time and of quality. Other students would ask for help and ideas from their classmates [31].

Filipino medical technology students transcend their thinking and practices by getting things done, doing things right and doing things with fortitude and commitment. In this way, they are able to comply with the quantity of requirements and at the same time satisfy the need for quality. As articulated by some respondents:

"So, I have to do my part. I have to do it or else I am going to hold other people back. I think that is the most important factor. You know, when you are not the only one doing that project, like other people are counting on you, then you just have to do it right, whether you like it or not—because you are committed to it." (R6)

"Sometimes, I cannot do things in advance, but then, that does not stop me from getting things done. So even if I am not able to do things in advance, I do things day-by-day, and that has helped me cope up" (R11)

Staying committed to what they have, like the members they have in group projects or assessments is also what keeps them from going because they see that holding back oneself will also hold back others as well in moving forward with their learning. This is because working in peer groups affects a shift in a student's intrinsic value of learning, and peer's attitudes about school become similar especially in tasks and assessments where they require collaboration [32]. Thus, Filipino Medical Technology students consider the effects of not putting effort and quality work to other people as well, leading them to observe determination and commitment.

# C. Balancing Time and Demands: Prioritization and Time Management

In the realm of the Enriched Virtual Mode of learning, Filipino medical technology students recognize that time should be balanced with demands. The challenge of coping with so little time to be able to comply with a lot of demands both from school and at home, not to mention, the hours to be spent in synchronous and asynchronous classes position the respondents in a situation where they just do their tasks day in and day out without really being conscious of the time, as articulated:

"You watch the lectures synchronous, then watch it asynchronous... so three hours, three hours equals six hours. So there will be meeting, project, group meeting for your organization, business... Your family asks you where you are, we will eat already (exhausted sigh)— it is stressful. Even like, even if there is like there is a Saturday or Sunday—it does not feel like it. You cannot really tell when the sun is about to rise and when it is about the set, and you cannot tell what time, you cannot really tell what day it is. Like, it does not matter everyday." (R6)

Lapitan, Tiangco, Sumalinog, Sabarillo and Diaz (2021), explain students engaged in online learning are held accountable to independently watch recorded videos however, if this task is not completed, students do not acquire significant learning and the completion of synchronous sessions would be deemed difficult [33]. With this approach, students are under pressure to watch and attend both the recordings and sessions despite the existence of other demands.

As respondents take on the role of online students, studying at home situates them in a sphere wherein household demands compete along with school demands. Respondents cease to be solely learners or students as various roles at home are fulfilled as verbalized:

"When you practice the different roles that you have to do: as a student, as a child, as a grandson, as a daughter, as a son or as a sibling, there will be so called role strain because of many roles to do. When in fact, we should be in Manila focusing on our role as students only." (R8)

"Uhm... usually when we are in school, we are just students but now that you are at home, you are not only a student but you are also a sibling, you are also someone's child and you are also someone's responsibility and you also have your own responsibilities in your own home." (R10)

Filipino Medical Technology students notice themselves situated where there is a need to adhere with the household demands, life commitments, as well as to perform the responsibilities of a student, hence, role strain is evident whenever they face a crisis on what role to portray. Farrell and Brunton (2016) mentioned that the most challenging aspect faced by a student in an online set-up is balancing one's studies along with the other highly-valued and time-consuming commitments, in particular, time for work, family and caring responsibilities [34]. The responsibility of being a son, daughter, sister or brother leaves little amount of time to concentrate in school works only.

Filipino Medical Technology students are observed to prioritize tasks based on importance and deadlines. This implies a strategic and purposeful coping mechanisms where the respondents learn to do tasks based on what should be done first, what is essential to do, and deciding which tasks are of higher priority. This is evident in the following verbalizations:

"In terms of academics, I am just thinking what should I prioritize first and then I arrange the deadline of my school work so that I can know which one to do first and which one I can set aside for now and in my personal life." (R3)

"What I do is I prioritize everything. I have a to-do list and I write everything down the things I have to accomplish per day. I have calendar, and I like to look at things on a weekly basis, so that I know how to plan my days" (R11)

When Filipino Medical Technology students expose themselves with tons of work and responsibilities to be accomplished, arranging of tasks based on level of priority is a way to endure the situation. This is congruent with the study of Rotas and Cahapay (2020) where they mentioned that by creating a schedule and a checklist which includes which tasks to be accomplished is a way of improving one's timemanagement skills [35]. Despite experiencing role strain and role overload, Filipino Medical Technology students solved this through planning ahead of time to view things on a weekly basis. As stated by Sharp and Sharp (2018), self-regulated learners seek planning tools such as organizers and calendars to manage the organization of activities in the online course, other activities for other courses and to attend personal responsibilities [36]. The systematic approach such as proactively planning and scheduling tasks is effective in enabling an individual to cope up with the coursework [37].

### D. Balancing Connection and Disconnection: Communication and Discernment

In the Enriched Virtual Mode, Filipino Medical Technology students have experienced challenges in terms of internet connectivity and yet, they know that it is important for them to stay connected, as shared:

"Also, not everyone is fortunate enough to have good internet connection so some of my classmates, sometimes, me... we only rely on data connectivity so it would be hard to understand and to keep up with the synchronous classes that we have." (R2)

Balancing connection and disconnection is a challenge for Filipino Medical Technology students with unstable internet connections at home. According to Kumar (2015) the accessibility of strong internet connections and high bandwidth at home is unavailable among all students which contributes to the difficulty in coping with online learning activities [38]. Synchronous classes are affected by internet connectivity issues. Internet connectivity issues are the second most frequent feedback on the theme 'worst experience' which affects the students in synchronous classes and submission of requirements [39].

Respondents also experience power interruptions which make virtual learning even more challenging and difficult, as verbalized:

"Uhm... many of my block mates always have internet or electricity problems but mostly, electricity problems. I am not sure why but they always tell us that they will not be able to attend classes almost all of the time because of electricity problems rather than internet problems." (R2)

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING

"And sometimes... uhm... we have scheduled brownouts like they cannot pass a work on a certain deadline or they have to... uhm... they have to say it to the class officers so that they... the class officers could relay it to the professors" (R3)

In support to this, Al-min, Zubayer, Deb, and Hasan (2021) documented that the inconsistency of electricity is also a difficulty encountered upon engagement in online learning [40]. Electricity problems are even more commonly experienced in rural areas [41].

Moreover, Filipino medical technology students also encounter challenges with regard to the electronic gadgets that they use during virtual classes, as expressed:

"Another problem would be... me... for me, my computer because my computer is old already and I was not initially prepared to be having to use this a lot before, I would borrow from my friend, their laptop. So, it could be easy for me to just borrow and use a laptop that is working properly but now, with everyone having to use what resources they have, I am forced to use mine, which is an old computer, which does not function as well as other computers do." (R10)

Such findings coincide with the study conducted by Lapitan, Tiangco, Sumalinog, Sabarillo and Diaz (2021) stating old or slow computers are considered as constraints that prevent a student from engaging in online learning [42]. Moreover, the use of smart phones, laptops, tablets, desktops or hybrid digital devices are essential for students to be able to immediately cope with the abrupt switch to online learning [43].

Additionally, they also have concerns regarding the need to focus on the lessons whether delivered asynchronously or synchronously amidst all the distractions, as verbalized:

"My biggest struggle is that my mind kind of associates this place as my home—my resting place and the place where I can relax. But when I am studying here and doing requirements, I cannot keep up. I mean I feel really burnt out... I feel like I should, my brain, contradicts with the environment." (R8)

"(laughs) Since we are in an online learning set-up, and there's a recording of the professor, when I am bored I play, I just watch Youtube, I listen to music or something (laughs). Sometimes I sleep when I am sleepy (laughs)" (R9) In support of this, Shawaqfeh (2020) revealed that boredom also becomes a challenge in online learning [44]. Students engaging in online learning may be distracted by surfing the web, social networking sites and viral videos [45]. The demarcation between school and home becomes a struggle as the barrier and separation between home and school becomes both vague and difficult to distinguish [46].

Respondents also share their challenge with course facilitators who are difficult to find and contact as they do not reply, as articulated:

"There is this subject in particular that seems to... this professor in particular... uhh... she is always... uhh... missing in action if I may say, she does not always communicate with us well and... uhh... we always have a hard time if we are... because we are left behind (shrugs) we do not know if she is going to teach or if she is not going to teach and she does not seem to reply to our president. So, we are having a hard time with that particular professor (nods) that does not... that is always... uhh... she always says she has a meeting during our synchronous classes and in our lecture courses, we only usually meet once a week so, that synchronous class if she would not attend it, it would be very much hard for us if it would be asynchronous since we only meet once a week." (R2)

Accordingly, Alawamleh, Al-Twait and Al-Saht (2020) shares that the transition to online learning during the COVID-19 pandemic had a negative impact on the communication between students and teachers [47]. Filipino Medical Technology students also revealed how communication with course facilitators became an important aspect of coping with the challenge as shared by some respondents:

"It gets answered. Because most of the time what we do is we put our questions in a Google Docs and then the next following session if there are other questions then that will be the time for us to ask and then our professors respond about them. So, I guess it is adequate." (R9)

"So, it is different to be able to have your own connection, to have your own, you know, uhmm... conversation with the professor and understand everything that they are saying the way you need to understand it." (R10)

Respondents also see the need to use discernment where sensitivity on their part also has to be observed and practiced,

especially when communicating with course facilitators and peers, as articulated:

"Uhm... I personally talk to some and some really felt discouraged that they cannot do this anymore. They feel tired mentally and physically and they breakdown a lot when... uhm... it is the big day... of the ... deadline of everything." (R3)

"Maybe about the teachers, it should not be that it is only them who is gentle towards us. I think, we should also be gentle to them because there are times that I also pity our teacher during the times that no one responds [during synchronous classes]. Like me (points to herself) of course I also get ashamed when I respond a lot so I would just keep quiet. However, sometimes, there is really no one responding." (R7)

As part of coping on the need to balance connection and disconnection, communication with sensitivity and discernment with course facilitators and peers is important. Vestermark (2020) stated that the maintenance of rapport among students and professors is a natural courtesy that should be observed [48]. With regards to peers, this study had also revealed the importance of maintaining communication with peers and checking up on peers especially during discouraging times.

# E. Balancing Wellness and Workload: Relaxation and Enjoyment

The engagement of Filipino Medical Technology students in the Enriched Virtual Mode affects their health and wellness as they are forced to adapt in to the "new normal". Overwhelming amounts of workload cause respondents to neglect their physical health, as expressed:

"Sometimes, I would forget to eat because...uhm... there are requirements that I need to do like I need to finish it because if I do not finish it now, I would not be able to focus on my food. I would not be able to be happy with my food because I have requirements to do." (R1)

Balancing wellness and workload in the Enriched Virtual Mode becomes a challenge as Filipino Medical Technology students skip their meals just to accomplish tasks. Sogari, Velez-Argumendo, Gomez and Mora (2018) states the skipping meals is caused by a variety of factors such as time constraints, studying, the obligation to attend classes, and fatigue from staying awake and it has also been found out that students are consuming unhealthy sweets such as junk foods to balance their mood [49]. Additionally, in tertiary education, college students are busy with their academics which leads to time constraints and difficulty in maintaining an active body or doing exercise.

The immense amount of workload also results in anxiety affecting the mental well-being of the respondents. The respondents are feeling the social and mental strains brought about by the radical change in their lifestyle and in their social life, and even in their personal life. This causes sadness and anxiety as shared by the respondents:

"The Enriched Virtual Mode really affected us emotionally at the same time. It really affected us emotionally because I hear a lot of stories about it. At the same time, my friends, a lot of them have anxiety. And most of them are struggling with their depression because we are humans and we are social beings and there is this innate craving in our brains for socialization. EVM really had a huge effect on us, as well as, online class and other factors that is happening in our environment. I feel it. I feel it and in a way, I understand it more. I understand how it is to be anxious and how it is to be sad, worrying every day."(R8)

Feelings of anxiety and craving for socialization were found to be one of the difficulties encountered by Filipino Medical Technology students in the Enriched Virtual Mode of learning. According to Faisal, Jobe, Ahmed & Sharker (2020), college students have higher levels of stress, anxiety, and depression during the COVID-19 pandemic [50]. It has been revealed that university students have higher incidence of anxiety, depressive problems and low mental health ratings, equivalent to working people and unemployed adults.

Despite all these challenges in the Enriched Virtual Mode, Filipino Medical Technology students remain mindful about their health and they try their best to engage in activities that would help them maintain a level of physical fitness, as articulated by the respondents:

"So physically, it is also one of my coping strategies when EVM affects me emotionally. I do exercise which does not have to be one hour or 40 minutes or a lot of time. It can be 20 minutes, it can be 10 minutes only. What is important is that I am able to move my body strenuously since most of the time, I am just sitting and studying for 8 hours or even for 10 hours. This really requires us to exercise so that we will not gain weight from stress eating." (R8)

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING

Additionally, the respondents also distinguish the fact that any opportunity to socialize will help them experience relaxation and enjoyment enabling the balance of wellness and workload. Finding time to socialize and enjoy with family and peers allow them to relax and enjoy their life as students as shared in the following statements:

"I get to spend time well with my family, especially during dinner when they come home since my mom and dad are not here when it is morning and afternoon, they have work. So, when they come home, I am able to bond well with them so, yeah I think it is understandable that I allot most of my time for school." (R2)

"I also play video games with some of my classmates so... that would really help me unwind especially when I am full of academic requirements that would be... uh... my bonding time with them and also, that would serve as my time of rest in a way." (R2)

Filipino Medical Technology Students are still looking for ways to cope with the abrupt transition from traditional education to the Enriched Virtual Mode. As another form of self-care, students unwind from their academic load by doing activities like working out and playing video games. Kim and McKenzie (2014) revealed that students with elevated levels of stress while participating in physical activity seemed to have lower levels of perceived stress after doing the exercise due to positive emotion [51]. In addition, playing video games as a form of relaxation contributes to the improvement of an adult learners' communication capacity, adaptability, and resourcefulness, implying that video games have a significant role in higher education [52].

#### **IV. CONCLUSION**

As the COVID-19 pandemic persists, the Enriched Virtual Mode became the online learning mode of Filipino Medical Technology students for the continuation of Medical Technology education. The immersive experience of Filipino Medical Technology in the Enriched Virtual Mode brought forth significant difficulties and challenges encountered. Through the lens of phenomenology, this research study was able to identify interesting typologies of challenges which are accompanied by coping mechanisms of the respondents engaged in the Enriched Virtual Mode. In surfacing the essence of Filipino Medical Technology students' challenges and coping mechanisms as they experience the Enriched Virtual Mode of learning, this paper recommends researches to explore and consider other institutions which are under the same mode of learning as this study is only focused on the Filipino Medical Technology students at University of Santo Tomas. It is also recommended to widen the scope of participants of the study and include other faculty or colleges not only limited to medical courses.

#### REFERENCES

- [1]. Simonson, M. and Berg. Gary A. (2016, November 7). Distance learning. Encyclopedia Britannica.
- [2]. Kentor, H. E. (2015). Distance education and the evolution of online learning in the United States. University of Denver Research.
- [3]. Odendaal, A. (2014, November 4). Types of distance learning. Oxbridge Academy.
- [4]. Staker, H., & Horn, M. B. (2012, May). Classifying K–12 blended learning. Innosite Institute.
- [5]. White, J. (2019, June 27). Is the enriched virtual blendedlearning model the future of high school?
- [6]. World Health Organization (2020). Key messages and actions for COVID-19 prevention and control in schools.
- [7]. CHED (2020). CHED memorandum no.4 series of 2020. Quezon City, pp.1-10.
- [8]. CHED (2020). CHED COVID advisory no. 6: Guidelines for the prevention, control, and mitigation of the spread of coronavirus disease 2019 (COVID-19) in higher education institutions (HEIs). Quezon City, pp.1-4.
- [9]. Mkrttchian, V., Gevorgian, S., Shoukourian, S., Gasparyan, F., Vardanyan, R., Poghossian, A., & Avetisov, V. (2018). Student competence. Advances in Educational Technologies and Instructional Design, 1-16.
- [10].Misra, P. K. (2019). Equipping teacher educators for digital teaching and learning. Handbook of Research on Faculty Development for Digital Teaching and Learning, 119-139.
- [11]. Adedokun-Shittu, N. A., & Shittu, A. J. (2015). ICT impact assessment in education. Encyclopedia of Information Science and Technology, Third Edition, 2506-2515.
- [12].Maboe, K. A. (2019). Students' support in an ODeL context. Modern Technologies for Teaching and Learning in Socio-Humanitarian Disciplines, 114-137.
- [13].Kumar, S. (2015, July 10). 5 Common problems faced by students in elearning and how to overcome them.
- [14].Xu, D., & Jaggars, S. (2013). Adaptability to online learning: Differences across types of students and academic subject areas. The Journal of Higher Education.
- [15].Kumar, S. (2015, July 10). 5 Common problems faced by students in e-learning and how to overcome them.
- [16]. Etherington, C. (2017, February 13). Self-motivation is essential to e-learning.

INAH KATHLANE CORDERO., et.al: PHENOMENOLOGIZING FILIPINO MEDICAL TECHNOLOGY STUDENTS EXPERIENCES IN THE ENRICHED VIRTUAL MODE OF LEARNING

- [17].Regoli, N. (2017). 8 advantages and disadvantages of phenomenological research.
- [18].MacCombes, S. (2019, September 19). Sampling methods: Types and techniques explained. Scribbr.
- [19].Anderson, T. (2008). The theory and practice of online learning. Pp.91-93.
- [20].MacCombes, S. (2019, September 19). Sampling methods: Types and techniques explained. Scribbr.
- [21].Kumar, S. (2015, July 10). 5 Common problems faced by students in elearning and how to overcome them.
- [22].Lapitan, L. D., Jr., Tiangco, C. E., Sumalinog, D. A., Sabarillo, N. S., & Diaz, J. M. (2021). An effective Blended online teaching and learning strategy during the COVID-19 pandemic. Education for Chemical Engineers, 35, 116-131.
- [23].Regoli, N. (2017). 8 advantages and disadvantages of phenomenological research.
- [24].MacCombes, S. (2019, September 19). Sampling methods: Types and techniques explained. Scribbr.
- [25].Patton, M. (1990). Qualitative evaluation and research methods (pp. 169-186). Beverly Hills, CA: Sage.
- [26]. Patton, M. (1990). Qualitative evaluation and research methods (pp. 169-186). Beverly Hills, CA: Sage.
- [27]. Tatum, M. (2020). What is a repertory grid?
- [28].Erichsen, E. A., & Bolliger, D. U. (2010). Towards understanding international graduate student isolation in traditional and online environments. Educational Technology Research and Development, 59(3), 309-326.
- [29]. Tiwari, P., & Ruhela, S. (2012). Social Isolation & Depression among Adolescent: A Comparative Perspective. IPEDR, 31.
- [30].Hrastinski, S. (2008). The potential of synchronous communication to enhance participation in online discussions: A case study of two e-learning courses. Information & Management, 45(7), 499-506.
- [31].Croft, N., Dalton, A., & Grant, M. (2010). Overcoming isolation in distance learning: Building a learning community through time and space. Journal for Education in the Built Environment, 5(1), 27-64.
- [32].Hudson, B., Hudson, A., & Steel, J. (2006). Orchestrating interdependence in an international online learning community. British Journal of Educational Technology, 37(5), 733-748.
- [33].Perante, L., Solmiano, E., Lunesto, J., Tus, J., Malicdem, J., & Malaca, J. (2021). Mag-aral ay di 'biro: A Phenomenological study on the lived Experiences of the students on blended learning amidst COVID-19. International Journal of Advance Research and Innovative Ideas in Education, 7(1), 1-16.
- [34].Gedik, N., Kiraz, E., & Özden, Y. (2012). The optimum blend: Affordances and challenges of blended learning for students. Turkish Online Journal of Qualitative Inquiry, 3(4), 1-18.
- [35].Kenney, J., & Newcombe, E. (2011). Adopting a blended learning approach: Challenges encountered and lessons learned

in an action research study. Journal of Asynchronous Learning Networks, 15(1), 45-57.

- [36].Rahiem, M. (2021). Remaining motivated despite the limitations: University students' learning propensity during the COVID-19 pandemic. Children and Youth Services Review, 120, 105802.
- [37].Perante, L., Solmiano, E., Lunesto, J., Tus, J., Malicdem, J., & Malaca, J. (2021). Mag-aral ay di 'biro: A Phenomenological study on the lived Experiences of the students on blended learning amidst COVID-19. International Journal of Advance Research and Innovative Ideas in Education, 7(1), 1-16.
- [38].Rahiem, M. (2021). Remaining motivated despite the limitations: University students' learning propensity during the COVID-19 pandemic. Children and Youth Services Review, 120, 105802.
- [39].Lapitan, L. D., Jr., Tiangco, C. E., Sumalinog, D. A., Sabarillo, N. S., & Diaz, J. M. (2021). An effective Blended online teaching and learning strategy during the COVID-19 pandemic. Education for Chemical Engineers, 35, 116-131.
- [40].Farrell, O., & Brunton, J. (2020). A balancing act: A window into online student engagement experiences. International Journal of Educational Technology in Higher Education, 17(25), 1-19.
- [41].Rotas, E., & Cahapay, M. (2020). From stress to success: Exploring how Filipino students cope with remote learning amid COVID-19 pandemic. Journal of Pedagogical Sociology and Psychology, 3(2), 27-35.
- [42].Sharp, L. A., & Sharp, J. H. (2016). Enhancing Student Success in Online Learning Experiences Through the Use of Self-Regulation Strategies. Journal on Excellence in College Teaching, 27(2), 57-75.
- [43].Farrell, O., & Brunton, J. (2020). A balancing act: A window into online student engagement experiences. International Journal of Educational Technology in Higher Education, 17(25), 1-19.
- [44].Kumar, S. (2015, July 10). 5 Common problems faced by students in elearning and how to overcome them.
- [45].Lapitan, L. D., Jr., Tiangco, C. E., Sumalinog, D. A., Sabarillo, N. S., & Diaz, J. M. (2021). An effective Blended online teaching and learning strategy during the COVID-19 pandemic. Education for Chemical Engineers, 35, 116-131.
- [46].Al-Amin, M., Zubayer, A. A., Deb, B., & Hasan, M. (2021). Status of tertiary level online class in Bangladesh: Students' response on preparedness, participation and classroom activities. Heliyon, 7(1), e05943.
- [47].Dube, B. (2020). Rural online learning in the context of COVID-19 in South Africa: evoking an inclusive education approach. REMIE – Multidisciplinary Journal of Educational Research, 10(2), 135-137.
- [48].Lapitan, L. D., Jr., Tiangco, C. E., Sumalinog, D. A., Sabarillo, N. S., & Diaz, J. M. (2021). An effective Blended online

teaching and learning strategy during the COVID-19 pandemic. Education for Chemical Engineers, 35, 116-131.

- [49].Brooks, D. C., & Grajek, S. (2020, March 12). Students' readiness to adopt fully remote learning. EDUCAUSE Review | EDUCAUSE.
- [50].Shawaqfeh, M. S., Al Bekairy, A. M., Al-Azayzih, A., Alkatheri, A. A., Qandil, A. M., Obaidat, A. A., Al Harbi, S., & Muflih, S. M. (2020). Pharmacy student's perceptions of their distance online learning experience during the COVID-19 pandemic: A cross-sectional survey study. Journal of Medical Education and Curricular Development, 7, 238212052096303.
- [51].Sellers, E. (2016, September 29). Poor time management in online learning.
- [52].Kent, N., & Facer, K. (2004). Different worlds? A comparison of young people's home and school ICT use. Journal of Computer Assisted Learning, 20(6), 440-455.
- [53]. Alawamleh, M., Al-Twait, L. M., & Al-Saht, G. R. (2020). The effect of online learning on communication between instructors and students during COVID-19 pandemic. Asian Education and Development Studies, ahead-of-print (ahead-ofprint).
- [54]. Vestermark, K. (2020, November 27). Developing rapport with students in the online setting. E-Learning Industry.
- [55].Sogari, G., Velez-Argumedo, C., Gómez, M., & Mora, C. (2018). College Students and Eating Habits: A Study Using an Ecological Model for Healthy Behavior. Nutrients, 10(12), 1823. MDPI AG.
- [56].Faisal, R., Jobe, M., Ahmed, O., & Sharker, T. (2021). Mental health status, anxiety, and depression levels of bangladeshi university students during the COVID-19 pandemic.
- [57].Kim, J., & McKenzie, L. A. (2014). The impacts of physical exercise on stress coping and well-being in university students in the context of leisure.
- [58].Barr, M. (2017). Video games can develop graduate skills in higher education students: A randomized trial.