RESEARCH ARTICLE

Factors affecting the coping experience of health science students in remote learning during the COVID-19 pandemic

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ABSTRACT

Background: The uncertainties of the COVID19 pandemic, resulted to the use of remote learning. It is now considered as the 'new normal' in the educational system, especially among countries that have underutilized this platform. The need for a balanced solution is even more magnified in the context of resource-limited countries and their state-funded institutions. The general objective of the research is to determine the factors in the coping experience among health science students during the COVID-19 pandemic.

Methodology: A descriptive, quantitative, cross-sectional study design was employed for this study. There were 167 undergraduate students, at least 18 years old, enrolled in a health science college who completed the self - administered online survey.

Results: The availability and access to a stable internet and resources were essential in the learning of students. Teaching methods and course handling of teachers, were elemental in influencing the coping experience. Most students agreed that remote learning affected their study habits and attitudes such as following a work schedule and accomplishing assigned tasks that resulted to be overburdened and stressed with schoolwork. Additionally, majority of students disagreed to continue the implementation of remote learning after the pandemic. The identified psychosocial factors that contributed to the stress and anxiety of the students include a combination of concerns on health, workload, deadlines, school delay, and being isolated.

Conclusion: Overall, the respondents want the pandemic to end soon and were prepared to go back to the traditional face – to – face classes. The realization gained from these findings, leads to the importance of preparing a resilient educational system that also considers the learning capacity and mental health of students to cope with a new instructional strategy.

Keywords: *Remote Learning, COVID-19 pandemic, undergraduate students, health science, learning experience*

Introduction

The COVID19 pandemic has caused widespread disease and death in all communities with a great impact on health systems, government policies, economics, and social interaction on all levels. With the primary goal of ensuring the health and safety of individuals, the WHO emphasized that countries must approach this crisis with a reasonable balance among protecting health, minimizing economic and social disruption, and respecting human rights [1].

In response to the rapid increase in the number of cases and mortality due to COVID-19 infection, many countries have ordered measures to minimize human social interaction

by implementing some form of community quarantine - which includes the closure of schools and offices and restrictions on the delivery of non-essential services. In addition, the uncertainty regarding the length of time of the community quarantine implementation remains. Based on the available data in April 2020, there are 1.57 billion learners in more than 190 countries affected by these policies globally [2]. The Philippines in particular has declared a cancellation of the academic year, affecting more than 28 million learners.

Student learning, amid school closures, must still be addressed with utmost consideration to the safety of students, teachers, and staff alike [3]. In order to continue teaching, schools, colleges, and universities have resorted to alternative modes of learning without the use of face-to-face activities typically used in classes, laboratories, and training facilities. One of the most feasible ways of reaching students is through the use of technology particularly through social media and other online platforms available for communication. However, online learning involves thorough preparation and planning that requires ample time and resources. As a response to the COVID19 pandemic, countries have resorted to using purely remote learning through online resources in order to continue the conduct of education. Brought about the uncertainty of the duration of this crisis, these alternative methods of learning are considered to become the 'new normal' in the educational system especially among countries who have underutilized this learning platform prior to the pandemic.

The mode of teaching adapted by many educational institutions is based primarily on internet-based platforms with the use of mobile devices, laptops and other gadgets for communication. The availability of the various equipment and software gave educators more options to carry out online learning. However, amid its local availability, challenges ranging from the lack of internet infrastructure and access, varying degrees of digital inequality, up to the difference in pedagogical orientation and faculty preparedness still persist [4-6]. Compounding these are the unique circumstances surrounding the sudden cancellation of classes such as its occurrence in the middle of the semester, and many institutions' current reliance on face-to-face interaction with students for educational activities and evaluation.

The transition for health sciences students is particularly difficult due to the skill-based nature of their work which demands supervision [7]. A literature review by Sinclair, Kable, and Levett-Jones stated that online distance learning can help students retain skills and translate these into actual behavioral change [8]. The known disadvantages such as the adoption of more complex teaching methods and the high degree of learner motivation needed still remain and may be magnified in online learning [7].

In spite of the shift to a student-centered learning experience, traditional methods and face-to-face activities are still the norm. With the sudden change in teaching methodologies, institutions are in need of evidence-based solutions to bridge the gaps among remote learning, stakeholder's concerns, and the resources at hand. The need for a balanced solution is even more magnified in the context of resource-limited countries and their state-funded institutions.

Globally, the COVID-19 crisis acted as the catalyst to transform the traditional, face to face, classroom-based approach of teaching into the more flexible strategy of online learning. In the Philippines, most higher educational institutions (HEI) had to engage in remote learning upon the implementation of varying degrees of community quarantine. The teaching and learning strategies were temporarily developed that will be most acceptable and accessible to the students during this period. However, due to the uncertainty in the duration of the COVID-19 pandemic, the Commission on Higher Education indicated the adoption of a flexible learning strategy for the next academic year [9]. Colleges and universities need to transition from the traditional face to face teaching to a remote learning environment as a means of flexible learning that will anticipate the prolonged need to minimize physical interaction due to the current health crisis. In the University of the Philippines Manila, in spite of most courses being skill-based health programs, the conduct of classes for the next academic year must be implemented as remotely as possible, with limited opportunity for face to face interaction. Nevertheless, there is a need to sustain the continuity of instruction and learning that will engage the academe to innovate strategies that promote excellence and consider the equity needs of both faculty and students [10]. There can be several reasons contributing to the success of a flexible learning approach which involves technological, human and psychosocial factors. Hence, the study aims to determine the human, technological, and psychosocial factors influencing students in coping with remote learning in the health science college during the COVID-19 pandemic.

Through this study, a better understanding of these technological, human, and psychosocial factors will be identified and alternative activities and curricular changes will be more nuanced to the current context and rendered more effective. The results of this study will assist in

modifying the current implementation of remote learning in the university. It will provide the faculty with insight on a student's coping experience of the 'new normal' based on the factors mentioned above. Ultimately, the results may support in developing a well-planned and coordinated alternative or flexible learning program that can avoid potential issues and gaps that can be encountered among students in the future. Finally, students as the final recipient of the better policies drawn based from the results may receive more equitable and accessible means of continuing education during the pandemic.

Methodology

Study Design

This study utilized a descriptive, quantitative, cross-sectional study design to measure the current perspectives of the learner on the three factors.

Study Site and Population

The participants in the study were undergraduate students enrolled in health science college for the first semester of the academic year 2020-2021.

Sample Size and Sampling Method

The sample size was estimated using Cochran's formula with the adjusted sample size divided based on sizes of every stratum. Each year level of the selected undergraduate students served as a stratum where stratified random sampling was applied. After which, simple random sampling was done until the minimum number was achieved.

Data Collection

An online, self-administered, structured questionnaire was used to determine the factors influencing coping of health sciences students with remote learning during the COVID-19 pandemic. Pre-testing of the tool was done. Data collection was done towards the end of the semester from November to December 2020 to ensure that the students have fully experienced and acclimatized to the changes brought by remote learning.

Data Processing and Analysis

Data was encoded using Microsoft Excel and analyzed using STATA version 12 (STATA 12®, StataCorp, Texas, USA).

Descriptive statistics was employed. Proportions with confidence intervals were calculated for sex, year level, place of residence, and other details regarding living conditions. As age was treated as a ratio variable, a mean age and standard deviation were computed. A frequency distribution was done for all questions regarding technological, human, and psychosocial factors. As these questions pertained to categorical values, proportions and their corresponding confidence intervals were calculated. Questions utilizing the Likert scale were interpreted using a scoring system, treated as an interval variable, and coded according to a coding manual.

Ethical Considerations

The study was reviewed by the University of the Philippines Manila Research Ethics Board (UPMREB CODE 2020-508-01) and conforms with the Data Privacy Act of 2012. Consent was obtained prior to participation. Codes were assigned in place of any identifiable information to ensure anonymity. The data was stored in a password-protected local file and access to data was limited to the author.

Results

A total of 167 participants were included in the study. The mean age of participants is 19.6 (SD±1.05). More than half (65.3%) of the respondents were female. Among the different year levels from the undergraduate program, almost a third of the respondents were freshmen students, while senior students had the least proportion. At the time of the study, majority of the students were outside the National Capital Region (NCR) (61.7%), while almost all were staying with their parents and siblings. Most (80.3%) participants had an annual family income of at least a hundred thousand, with most (79.0%) having a steady income during the pandemic. Over a fifth (21.0%) of the participants reported that they had a family member or acquaintance who had been infected with COVID-19 (Table 1).

Technological Factors

Prior to the pandemic, the respondents have been acquainted with the use of the internet for academic purposes through online lectures (49.7%), training or workshops (37.7%), video conferences (37.1%), supplemental readings (88.6%), and research (35.3%). Majority of the respondents had personal laptops (88%) or mobile phones (91.6%) for academic use. Over half (58.7%) of the participants had access to Fiber internet but less than a tenth (7.8%) had access to an unlimited data plan. A reliable

Table 1. *Socio-demographic Characteristics of Respondents, November-December 2020 (n=167)*

Socio-demographic Characteristic	n (%)
Gender	
Female	109(65.3)
Male	58(34.7)
Age	
18 years old	30(18.0)
19 years old	46(27.5)
20 years old	53(31.7)
21 years old	36(21.6)
22 years old	2(1.2)
Undergraduate Year Level	
I	51(30.5)
II	48(28.7)
III	48(28.7)
IV	20(12.0)
Place of residence during COVID-19	
National Capital Region	64(38.3)
Other Provinces	103(61.7)
Living conditions during COVID-19	
Parents and sibling	152(91.0)
Relatives	13(7.8)
Other	2(1.2)
Monthly Family Income	
Under 40,000	8(4.8)
40,000-59,999	10(6.0)
60,000-99,999	15(9.0)
100,000-249,999	29(17.4)
250,000-499,999	28(16.8)
500,000 and over	77(46.1)
Steady Family Income during COVID-19	
Yes	132(79.0)
No	35(21.0)
Any family member or acquaintance who had COVID-19	
Yes	35(21.0)
No	132(79.0)
TOTAL	167(100.0)

internet connection was experienced for at least 4 hours (52.1%) or 2 – 4 hours (25.7%) by the respondents which allowed them to access their lessons posted in the learning management system. However, 11.4% had an internet connection which were often interrupted.

Among the different online platform and LMS available, Zoom (99.4%), Canvas (82.6%), and Google Classroom (62.3%) were commonly used by the teachers for remote learning. However, to make announcements regarding the coursework and requirements, the participants reported that their teachers also utilized social media platforms (e.g. Facebook) (82.0%) and email (73.1%), apart from Canvas (97.6%) and Google Classroom (68.3%). Most respondents perceived these online platforms to be effective in communicating with their instructors (80.3%) and classmates (82.6%).

Human Factors

In terms of the content of the course packs given to students, some participants reported that they were able to receive the course guide with detailed syllabi (79.6%), learning resources (72.5%), study/activity guides (73.7%), and assignment guides (59.9%) to facilitate learning. However, almost a fifth (16.2%) reported that they did not receive any course pack for the semester.

Participants reported that there were a variety of teaching strategies used by teachers for remote learning such as live lectures (98.8%), recorded lectures (98.2%), provision of lecture material (97.6%), online quizzes/examinations (99.4%), and asynchronous coursework (99.4%). Among these different teaching strategies used by teachers, participants perceived lectures (91.6%) and coursework (44.9%) to be most effective in meeting course objectives.

The delivery of remote learning to the students relied on synchronous and asynchronous methods. Most students found asynchronous as most effective when combined with less synchronous online learning (43.1%), or as a purely asynchronous online and offline coursework (20.4%). While, the use of the synchronous approach was not favored by the respondents for effective learning.

More than half of the respondents perceived the course packs as useful (58.7%) and learning resources as appropriate and appealing (64.1%). However, less than half (40.1%) of the respondents agreed that the instructions on coursework are easily understood and consistent, while almost 30.5% were neutral. Less than half of the respondents perceived the

teaching methods to be effective in promoting relations, providing post-feedback, and catering to individual learning needs. Overall, less than a fifth (16.8%) of the respondents agreed that remote learning is beneficial to their continued education during the pandemic (Figure 1).

The human factors were also determined based on the student's perception of the instructors. There was generally positive feedback on the performance of their instructors in the online setting (Figure 2).

In terms of student habits and attitudes, more than half of the participants reportedly practice checking of requirements regularly (87.4%), devoting more time for studying (80.8%), managing time wisely (79.6%), and following a work routine (55.1%). On the other hand, less
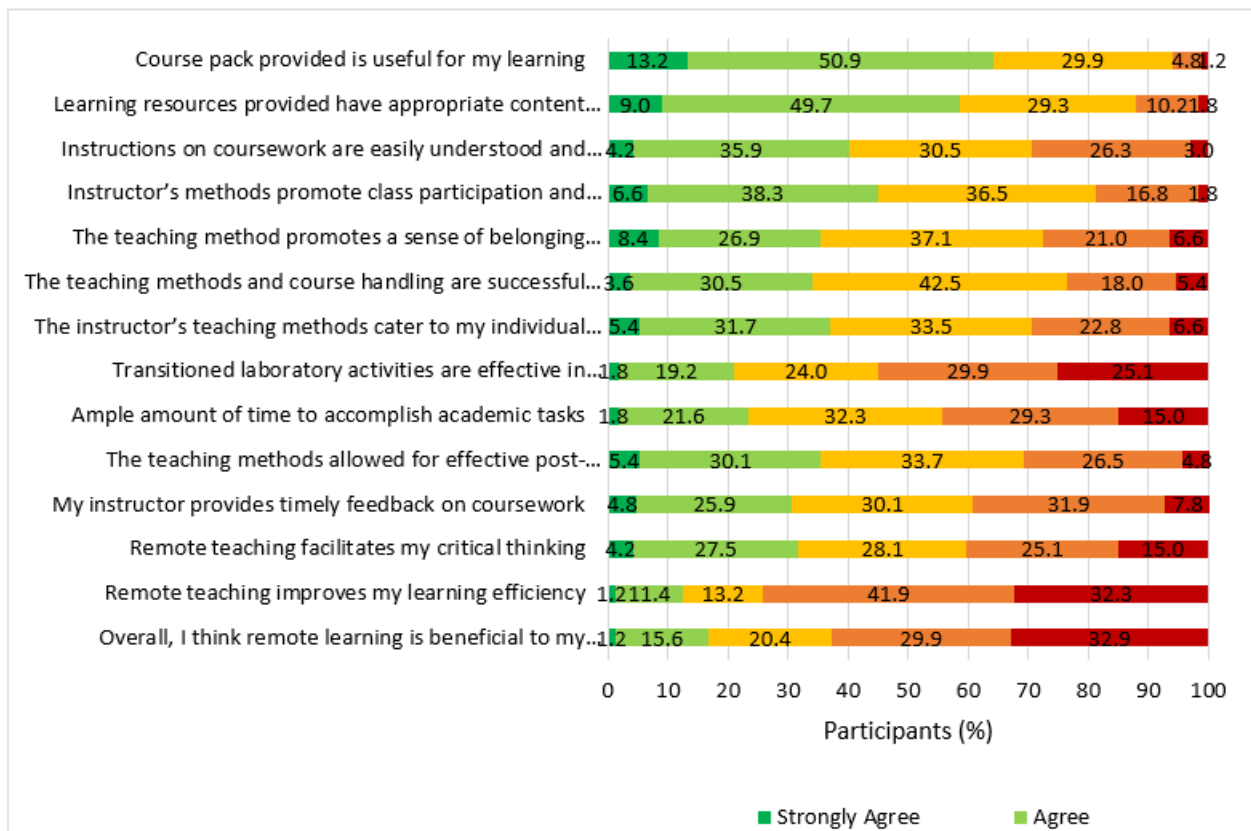

Figure 1. *Distribution of participants by their perceptions on teaching methods and course handling, November-December 2020 (n=167)*
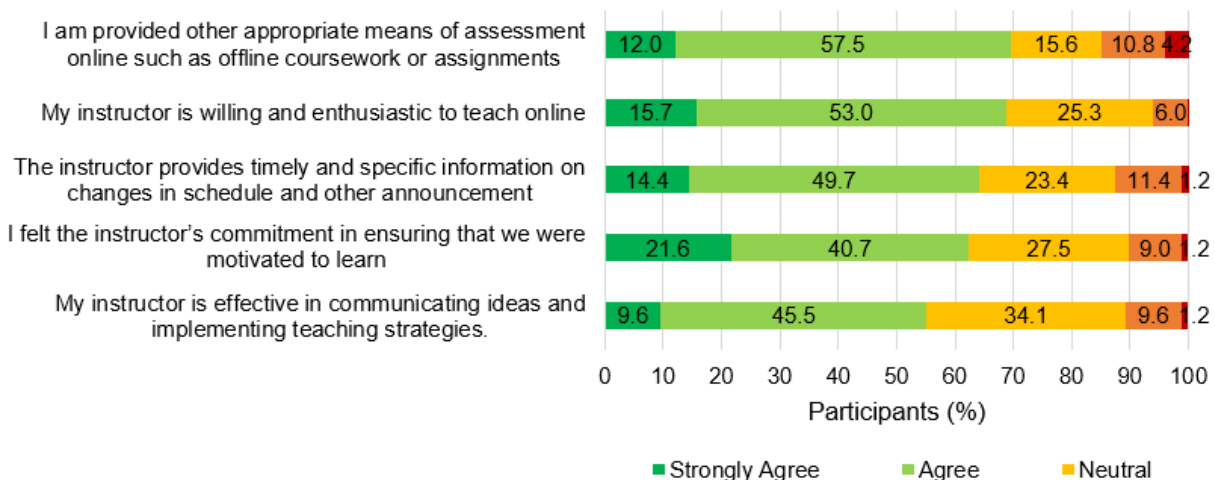

Figure 2. *Distribution of participants by perceptions on their instructors, November-December 2020 (n=167)*

than half (46.7%) found online learning to have enhanced their effectiveness working with their classmates. Only 15% of the participants agreed to continue with online learning post-pandemic (Figure 3).

The use of remote learning as an alternative mode of teaching during the COVID19 pandemic had various advantages. The most common benefits acknowledged by the respondents include cost savings (64.7%), flexibility (52.1%), self-paced learning (49.7%), structured schedule (47.3%) and convenience (3%).

On the other hand, the numerous drawbacks identified in using remote learning during the pandemic include, difficulty to pay attention / stay on task (94.6), less hands-on experience (94.6%), difficulty to be motivated (91.6), less social interaction with classmates (91%), increased distractions (87.95), required internet access (80.2), harder to retain information (78.4) and difficulty to communicate with instructor (i.e., ask / get answers to questions) (74.25%) among the leading responses.

Psycho-Social Factors

The COVID19 pandemic has brought many challenges that affected both the physical and mental wellness of students. There are various psychosocial factors that were identified that influenced the coping experience in remote learning (Figure 4). Among the different psychosocial factors, there was a strong agreement that personal and family health (50.3% and 64.7%), need to do other things aside from schoolwork (61.7%), not meeting deadlines (63.5%) and getting delayed in academics (54.5%) contribute to the

anxiety of students. Moreover, the feeling of being isolated and the frustration on the lack of stable and fast internet access were also identified as additional causes of anxiety. Contrary, the students felt that their financial situation and their lack of resources to access and effectively perform the required tasks did not affect their learning during this period. There was also no observed agreement whether family and their living conditions affected the respondents.

With reference to the factors related to the opinions of the respondents on the potential stressors in the implementation of remote learning (Table 4.3.2), almost half (49%) were in agreement in coping with the expected learning outcomes of the course. While, half disagreed (50%) that the remote learning experience has improved their study habits. A remarkable finding was most strongly agreed (78%) that they hope the pandemic will end soon so that they can return to the traditional face-to-face school classroom learning in the university. But, many (52%) were scared to return to school after the COVID19 pandemic. The respondents consistently disagreed, with 42% strongly disagreed, that they would prefer remote learning over the traditional face-to-face learning even after the COVID19 pandemic.

Discussion

The COVID19 pandemic greatly impacted humanity. It has caused a drastic change in daily living as it necessitated new global policies and guidelines to mitigate the spread of the virus. Due to this, higher education institutions shifted to implement remote learning to ensure the health and safety among its students, teachers, and staff in line with the recommendations of the Philippine government.
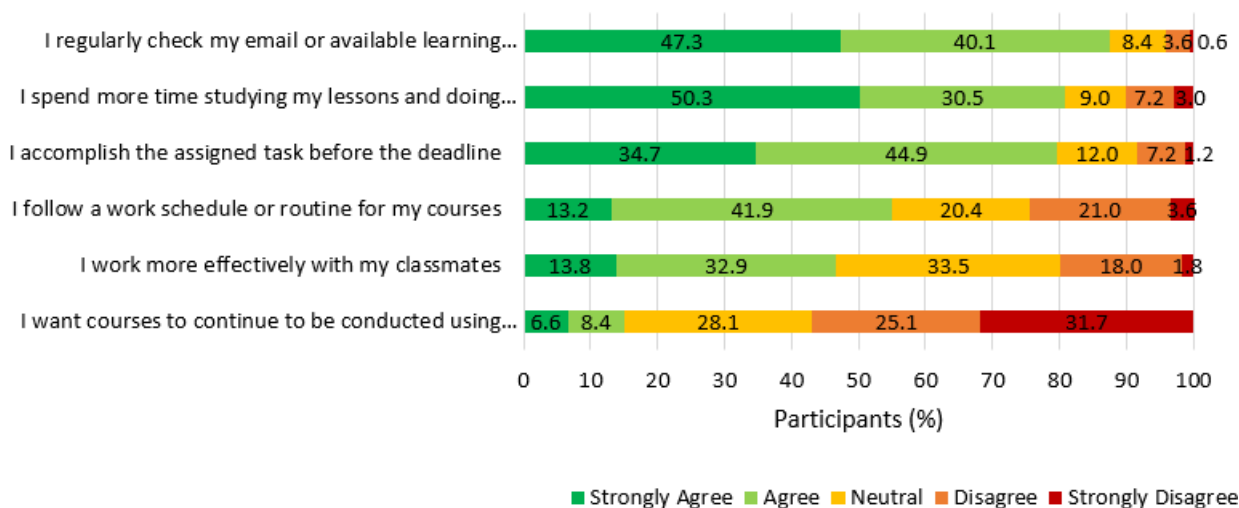

Figure 3. *Distribution of participants by their study habits and attitudes, November-December 2020 (n=167)*
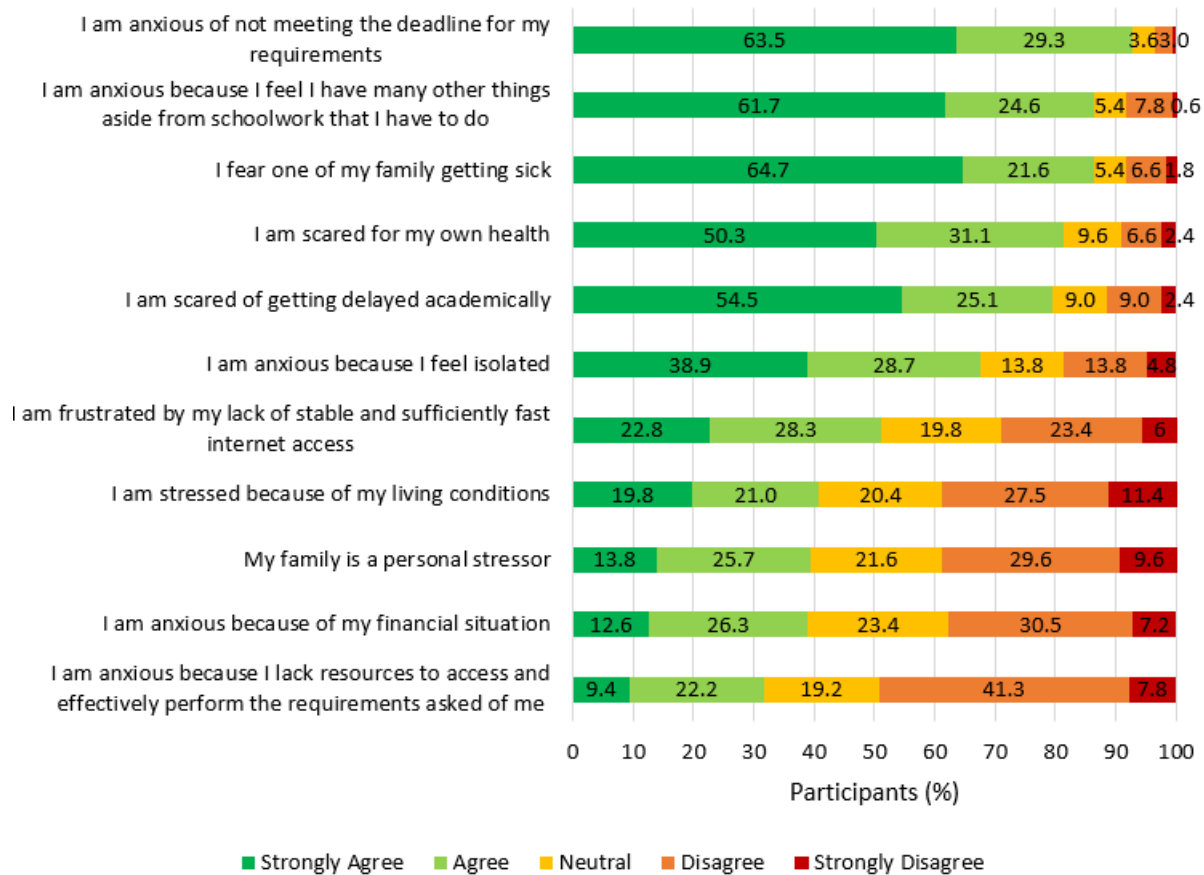
Figure 4. *Distribution of participants by their perceived psychosocial effects of remote learning, November-December 2020 (n=167)*
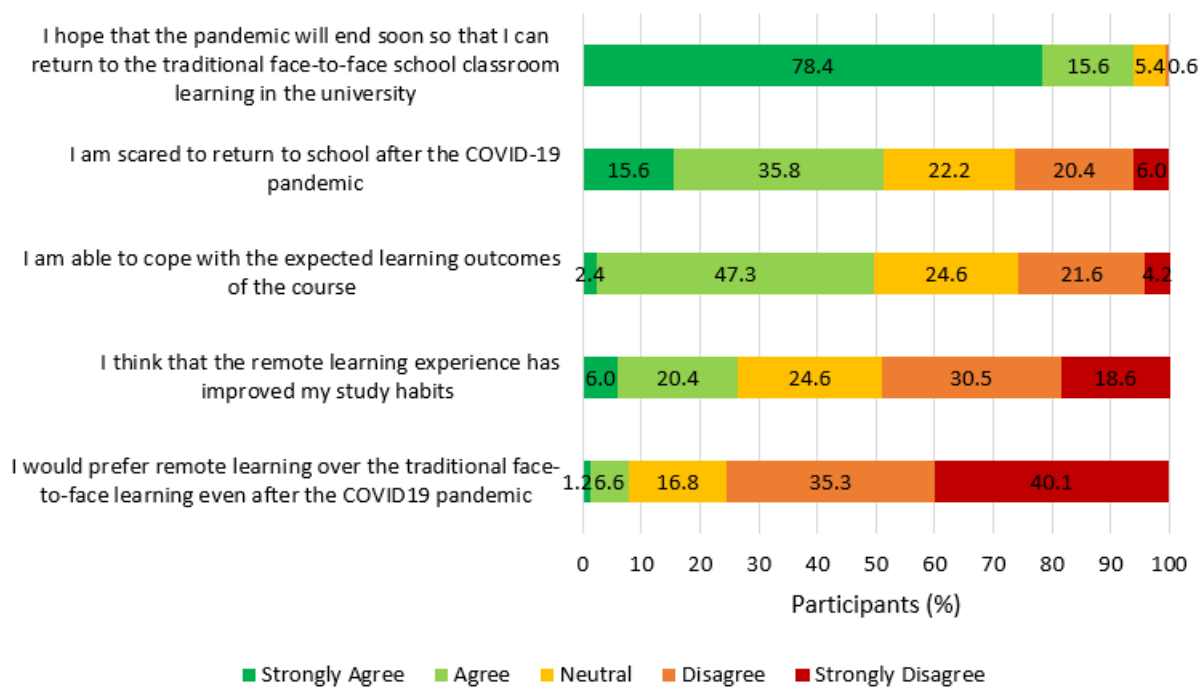

Figure 4. *Distribution of participants by their perception on remote learning, November-December 2020 (n=167)*

The availability of the internet, computers or similar gadgets, and learning management platforms affect the experience of student learning. In the present study, the students were able to use their personal gadgets during their remote learning. However, not all of the respondents were able to experience stable internet connection, which may be attributed to inadequate speed and strength of the internet source. In some areas, the problem of poor connectivity may be due to the internet provider, the number of users, or the availability of internet connection at a particular time. These circumstances may become an obstacle for students with regard to accessibility to lessons, taking examinations, and attending synchronous sessions. These technological challenges may lead to absence or hinder active participation in required synchronous activities which may be part of their student assessment [11, 12].

The economic impact of the COVID19 pandemic has affected many families, emphasizing the need to prioritize the use of the household income for the basic needs. However, the reopening of schools necessitated the students to invest in a gadget, as well as good internet provider, to allow them to continue their education. The lack of funds to support the resources for remote learning will prevent a considerable number of students from participating in online education [13]. In an attempt to assist both teachers and students in coping during the implementation of remote learning, universities have extended financial assistance to procure appropriate devices and provided allowance for internet connectivity. In the present study, respondents were able to avail some form of assistance from the university including computer subsidy or loan; free or subsidized internet load; and home delivery of the instructional materials (e.g., printed or in flash drives). By providing financial aid, the students may have more opportunities to continue their education, in spite of the financial diffculties experienced by their families during this crisis. More importantly, this may potentially minimize the digital divide amongst students that is observed in remote learning.

The students valued the use of various LMS (e.g., Canvas, Google Classroom, Zoom, Moodle) by the teachers, which they found to be user-friendly and acceptable. The LMS offered multiple functions where teachers and students may upload their lectures and coursework while facilitating some form of social interaction. However, the use of these features required a stable and reliable internet connection for the students to better adapt and appreciate the benefits. The availability of various educational applications, platforms, and resources may help parents, teachers, schools, and school administrators ensure student learning and provide social care and interaction during periods of school closure [2].

The versatility of remote learning alongside the wide array of resources allow teachers to apply several methods to make learning more meaningful and effective. Teaching methods such as live or recorded lectures, oral reporting, small group discussions, quizzes, and other activities are commonly used for online instruction. In the study, the students acknowledged the efforts and commitment of the teachers to continue the delivery of education with substantial compassion and flexibility. However, the student's need for constant direction and guidance in the accomplishment of lectures and coursework reflects their dependence on teachers. Despite of the variety of teaching methods, results showed that remote learning was teacher-centered, wherein respondents still heavily relied on the provision of clear instructions and the essential tools that would foster effective student learning. Moreover, students continue to rely on the teachers for supervision in terms of knowledge and skills acquisition, specifically through the lectures. Thus, despite the independence and individualized learning that remote education may offer, students may not be prepared to completely forego their reliance on teachers.

The success of remote learning during the COVID-19 pandemic is largely influenced by the teaching method and course handling of the instructor. The conversion of the traditional in-person education is more than just applying the classroom activities in a virtual environment. The use of the various online platforms as teaching-learning environments, should cultivate effective communication and social interaction.

The present study showed the appropriate use of online platforms, including social media, which provided effective communication between teachers and students through the pandemic. The students remained connected with each other and their teachers through online platforms which served as a gateway to maintain interaction during the pandemic. However, many students were undecided on the efficiency of remote learning in promoting a sense of belongingness, which further intensified their feeling of isolation. In this pandemic, the lack of being around people magnified feelngs of loneliness and separation from the social relations that students were accustomed to. They were not able to experience the social interaction that online learning could offer, hindering their appreciation of remote learning.

Among the different teaching methods, the use of both synchronous and asynchronous methods made the delivery

of lectures more acceptable to students. The synchronous sessions provided a venue for interaction with teachers and classmates. However, this entailed a specific time to be spent for the session. On the other hand, many students preferred asynchronous sessions and offline activities that encouraged self – learning by allowing students to plan a schedule suited to their learning habits.

The pandemic also resulted in a total lack of hands-on experience in the laboratory that may not be compensated for by online means. Thus, a feeling of incompetence among the students may be present when it comes to basic laboratory skills, which may be necessary in their future careers. Moreover, the students' opinion on the value of remote education as an innovative way of learning may be affected as they yearn for the actual laboratory practice.

Remote learning is a reality that students must cope with during the pandemic. However, even with careful planning and development, the curriculum means nothing unless teachers are aware of the product and have the skills to implement this in their classrooms [14]. In designing the curriculum, the use of innovative and sensible methods of evaluation are desirable to determine what students have acquired from the course. Learning that is not solely based on written examinations, it should encourage the proper application of principles and concepts presented in the course. Furthermore, the countless amount of offline course work given by teachers for evaluation (e.g., written reports, worksheets, projects) may overburden the students. This scenario demands students to exert more time and effort to accomplish the assigned task, to enable them to submit these requirements on time. Moreover, the potential risk of failure in the technological resources and connectivity, or the lack thereof, compounds the student learning environment. Consequently, this cycle leads to exhaustion and mental health breakdown among the students.

The delivery and execution of the approaches to remote learning will differ for every teacher. An important consideration to achieve effectivity is to understand that different approaches suit different tasks and types of content as well as student characteristics [15]. As emphasized in several studies, adequate orientations should be provided by instructors to the students to enrich the use of online learning [16, 17]. Additionally, the diversity of the students in terms of accepting remote learning and adapting to this change may attribute to the varying responses. A remarkable observation in the current study is that students do not see remote learning as a helpful strategy to continue education

after the COVID19 pandemic. This may be explained by the perceived concerns of the respondents with regard to amount of workload, deadlines, and the lack of hands – on experience. Moreover, the impact on their mental health brought by this set up has influenced students to have a negative attitude towards remote learning.

To cope with the demands of remote learning during the pandemic, the students improved their study habits by establishing a work schedule to accomplish the requirements of the course. While at home, the students constantly attempt to catch up with schoolwork alongside their family responsibilities that may result in frustration and despair. The prolonged school closure may result in the students repeatedly experiencing burnout, making it more challenging to get back on track considering that stress relief mechanisms may include a change of environment or to be among friends. This study made clear that students had a more negative perception on remote learning. The time and effort spent each day with no boundaries to hours spent for school and family due to the workload, created a notion of pessimism towards remote learning as an innovative strategy for education.

The number of students suffering from mental health problems continue to rise. There are several stressors related to the pandemic that have affected their well- being. The need to complete the numerous assigned tasks, given at the same time, by different teachers, may lead to an overwhelming amount of workload. Furthermore, students are compelled to complete their work because of the fear of failing and getting delayed. They may push themselves to spend more time in order to accomplish the course requirements but, this pressure may lead to mental anguish and cause them additional anxiety. Similarly, numerous studies have recognized these various sources of anxiety and stress and its association with remote learning during the COVID19 pandemic [13, 18-20].

The idea of how to survive this setup everyday troubles the students as they have no choice but to continue remote learning throughout the pandemic. It is not a surprise to observe the overwhelming response among students to shift back to the traditional physical face-to-face classes once the situation permits. While the students are fully engaged in remote learning, they cannot detach themselves from the terror of possibly becoming infected. The fear of COVID19 was associated with depression, anxiety, and stress among adults [21]. This psychological impact may affect their focus and subsequently, the quality of their outputs, further deteriorating the mental health concerns of the students.

The increasing number of students experiencing stress during the pandemic may eventually lead to unfavorable effects on their learning and their psychological health. As each day in the pandemic passes, it becomes imperative for students to deal with the challenges of both their personal lives and the academic workload of remote learning. The pressure to meet the requirements of each course within a specific period and balancing this with the expectations from family members on their responsibilities that need to be fulfilled, lead to the eventual collapse of the mental well-being of students; they become fatigued and burned out, which may affect their perception of remote learning as an alternative mode of education. Protecting students against the COVID19 infection is the top priority of many universities in implementing school closures. However, it is equally important to carefully consider addressing the escalating problem of mental health wellness during the implementation of remote learning in this pandemic.

In spite of the benefits of remote learning, especially during a time of crisis, students would not like to utilize this alternative after the COVID19 pandemic. The collective experiences of students created a negative attitude towards the use of remote learning in the future. The lack of hands on laboratory activities; online assessment tools; sustained interest and motivation; increased workload; and the rise of mental health concerns that occurred during the implementation of remote learning may have affected their acceptability of this strategy. It was evident in this study that the students would want the COVID19 pandemic to end so that they may return to traditional face-to-face classroom learning. The same sentiment was observed in other studies [20,21]. This feeling was further intensified by their longing of physical interaction and socialization.

Being home for many months, with time spent mostly for schoolwork compounded by the limited personal physical interaction, generated the build-up of anxiety among students. They yearn for support from teachers, friends, and family to surpass the challenges inflicted by remote learning during the pandemic. The coping experience has become one with the disaster brought by the COVID19 upon the students. Although, the uncertainties of the COVID19 pandemic remains, going back on how the academic community operated before this crisis may be unrealistic. Looking forward, we must be prepared to face a new normal, adapting to the challenges we encountered, as we rise above the COVID19 pandemic.

The realization gained from these findings, leads to the value of pursuing alternative learning platforms to enhance the resilience of education institutions. Effective policy intervention is needed which would support and facilitate the implementation of innovative learning strategies. Adequate preparation must be made among all stakeholders which would include not only school organization, teachers, and staff, but most importantly the students. Hence, student consultation must be considered in the planning and development of alternatives measures in continuing education during disasters. Support systems and counselling are integral in the learning environment that can assist students to cope with the challenges of family, social, and academic life.

Consolidating the technological, human, and psychosocial factors identified in this study will aid in the development of a well-planned and coordinated alternative or flexible learning program. With the current implementation of remote learning, revisiting the guidelines to practice flexibility and compassion must be done. Students and teachers must have the opportunity to rest, refresh, and recharge which is beneficial to maintain physical, emotional and mental wellness during this pandemic.

In consideration of the study limitations, future researchers may use both quantitative and qualitative methods to obtain a more comprehensive data. Expanding the participants to include undergraduate and graduate students of different academic programs may be considered to address the generalizability of results. Further research on alternative and flexible learning is needed not only during times of disasters but as society returns to the better normal.

Conclusion

The disruptions in the educational system brought about by the COVID-19 pandemic, gave an opportunity for the academic community to explore alternative modes of teaching – particularly remote learning. The success of remote learning among students relies on technological, human, and psychosocial factors. In the implementation of remote learning during the COVID-19 pandemic, it is important to consider quality of teaching, ensuring accessibility to technology, fostering peer interactions and applying different strategies that may cater to different types of content and a diverse group of students. The conduct of remote learning during the pandemic reflected the efforts and commitment of teachers in developing courses that aim to cater to the needs of the students without compromising its quality. The teaching method and delivery of remote learning by instructors are crucial. However, the different design and approaches used by the teachers may affect the full appreciation of remote

learning among the students. It is evident that the teachers continues to play a central role in remote learning. The selection of teaching approaches must be best suited to the curriculum content and the characteristics of the students.

Aside from worrying about safety and health, the need to cope with the academic workload, inadequate learning and the feeling of isolation have caused students to develop a negative perception and acceptability of remote learning. The interrelationship of the concerns on accessibility of technology, academic workload, personal and family issues and the need for social interaction contributed to the stress and anxiety of students. These factors have resulted to their inability to progressively cope with the realities of remote learning during the COVID19 pandemic. The current circumstances has forced the situation to be treated as the new normal, instead it has become a new struggle among the student in the midst of the pandemic. The compounding coping experience of student have generated doubts on the merits of remote learning during crisis. Hence, the general sentiment of reverting back to the traditional face-to-face classes and discontinuing the use of remote learning in the future was evident.

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