

# MASTER STUDENTS' ATTITUDES TOWARDS ONLINE LEARNING DURING COVID-19 PANDEMIC: BASIS FOR AN INTERVENTION PROGRAM

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**Abstract:** The study assessed the master students' attitudes towards online learning during a COVID-19 Pandemic regarding the student attitudes, academic support, and external factors of Ramon Magsaysay Memorial Colleges, General Santos City, in the academic year 2020-2021. The objective of the study was attained using the descriptive-survey method of research. A research questionnaire was administered using the google form. The respondents were Thesis 2 students officially enrolled in the second semester of 2020-2021. The study yielded the following salient findings: First, the respondents' level of persistence in online learning during the COVID-19 Pandemic is high in terms of perceptions. Second, academic support is high. Third, external factors are increased. Overall, the level of persistence of master's students in online learning during the COVID-19 Pandemic is high. The result of the study is an avenue to identify and determine an intervention program to be crafted and sustained to enhance the master's students' attitudes towards online learning during the COVID-19 Pandemic.

**Keywords:** Master students' attitudes, online learning, COVID-19 pandemic.

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## 1. INTRODUCTION

It is a well-known fact that pandemics have had negative impacts throughout history. Today, we face a new pandemic; partial or full-time curfews have been imposed worldwide with the pandemic outbreak. Due to the chaos created by the COVID-19 Pandemic, governments took steps to protect their citizens and economies. They also took urgent steps to use digital technologies. The most visible of these measures is the digitalization of education (Angoletto & Queiroz, 2020; Basilaia, & Kvakadze, 2020; Demuyakor, 2020; Lounis, 2020; Mulenga & Marban, 2020).

Thus, the impact of the COVID-19 Pandemic on the educational landscape is both widespread and unprecedented among the students worldwide. This Pandemic leaves teachers and students to carry out education in entirely different situations. Through other learning modalities, schools shifted to teaching students in many different ways. These changes addressed the immediate and urgent need for continuous education to find creative ways to reach students at home (UNICEF, 2020; United Nations, 2020).

In addition, every learner has the right to quality and relevant education. In the 1987 Philippine Constitution, Article XIV, Section 1 states that "The state must promote and preserve all citizens' right to a high-quality education at all levels, and take reasonable actions to ensure that such education is available to everyone." In the context of the situation brought about by the COVID-19 Pandemic, it paves the way for the new normal of learning delivery, including online learning (Bond et al., 2018; DepEd, 2020; Kopp et al., 2019; Leszczyński et al., 2018; Sandkuhl & Lehmann, 2017).

Therefore, education in the Philippines is affected by the president's pronouncement that there will be no face-to-face classes unless a vaccine is discovered to control the widespread of the virus. In response to this problem, Online Learning is considered one modality that the teacher uses computer, internet connection and different online platforms for synchronous and asynchronous learning to deliver instructions.

Ramon Magsaysay Memorial Colleges Graduate School conducted the Open LMS + ClassIn Students' Orientation to train students in using the new Learning Management System for online classes. This is further to orient students to adapt new learning modality for them to continue learning amidst COVID-19 Pandemic. It also aims to foster the quality education that the institution provides for the welfare of its students. They also presented the safety protocols for the students to follow. The Open Educational Resources that the students need for their studies and researches are also made available.

Therefore, instructors should take significant measures to refine online learning quality to facilitate better learning during the COVID-19 Pandemic. Although online learning enables continuing education, there is a lack of adequate programs to improve students' persistence in a course (Abbasi et al., 2020; Allo, 2020; Anca & Cosmina, 2016; Kwary DA & Fauzie, 2018; Vitoria, Mislinawati & Nurmasyitah, 2018).

Hence, in light of the current problem in education, the researcher would like to determine the attitudes of master students' in online learning during the COVID-19 Pandemic. Therefore, this study was about the students' perceptions, academic support, and external factors so that authorities in the academe could have excellent ideas on its implementation in the field.

### Theoretical Framework

This theoretical framework is presented in this study to serve as the basis or foundation of this study. Online Collaborative Learning Theory (OCL) is anchored on constructivist teaching.

According to Harasim (2016), OCL theory defines learning as conceptual change and is key to building knowledge. Therefore, learning activity needs to be informed and guided by the norms of the discipline and a discourse process that emphasizes conceptual learning and makes knowledge.

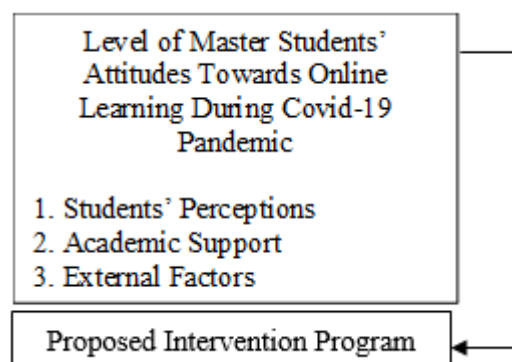
Also, the Connectivism theory in online learning is anchored on the continuous flow of information. It recognizes how information flows and changes because of the many communication networks. Therefore, online education has evolved from individual to group learning, wherein students need to identify and access information to understand (AlDahdouh, 2017; Fiore, 2017; Goldie, 2016; Lawless, 2019; McLeod, 2020).

In addition, the Community of Inquiry theory focuses on the process of the meaningful learning experience. This process is done by developing social, cognitive, and teaching presence. Social presence is the ability of the students to communicate in an environment and develop interpersonal relationships. Cognitive knowledge presence is the extent to which the learners construct their meanings. Finally, teaching presence utilizes mental and social presence to provide meaningful learning outcomes (Anderson, 2018; Befus, 2016; Cooper & Scriven, 2017; Garrison, 2018; Picciano, 2017).

Moreover, the Design thinking theory is used for innovation anchored on a human-centered approach based on understanding customers' needs and applying creative ideas (Auernhammer, Jan, Roth & Bernard, 2021; Bower, 2017; Kolko, 2018; Ralph, 2016; Stevens, 2020).

### Conceptual Framework

In managing the outcome of COVID-19 pandemic, the master students' attitudes towards online learning needs to be given importance along with other strategies to continue education. There is an urgent need for an updated, timely, and relevant intervention program that should be put forth in order to support in dealing with online learning faced by master students' during the pandemic. Figure 1 shows the conceptual framework of the study. The upper box was investigated as a potential problem which composed of students' perceptions, academic support, and external factors while the proposed intervention program based on the study's findings appears in the lower box.



### Statement of the Problem

1. What is the level of master students' attitudes towards online learning during the COVID-19 pandemic in terms of:
  - 1.1 Student Perceptions;
  - 1.2 Academic Support; and
  - 1.3 External Factors?
2. What intervention program for teachers can be established from the result?

## 2. METHOD

This study employed a descriptive-survey method of research. The researcher described the master's students' attitudes toward online learning during the COVID-19 Pandemic. The descriptive research method describes the characteristics of a population or phenomenon being studied. The parts used to describe the situation or population are usually some categorical schemes, also known as descriptive categories. Hence, descriptive research cannot explain what caused a problem. Thus, descriptive research cannot be used as the basis of a causal relationship, where one variable affects another. In other words, descriptive research can be said to have a low requirement for internal validity. (Shields, Patricia, and Rangarajan, 2017)

The survey method is human-research surveys which is the focus of this branch of applied statistics. The sampling of individuals from a population and associated survey data gathering procedures, such as questionnaire creation, are studied in the survey methodology. Also discussed are ways to increase the volume and accuracy of survey responses. Instruments or techniques that pose one or more questions that may or may not be answered are targeted by survey methodology (Groves et al., 2017).

This study was conducted at Ramon Magsaysay Memorial Colleges, located in General Santos City.

The researcher chose this school because he is currently studying in this prestigious institution.

Furthermore, the Ramon Magsaysay Memorial College is a privately owned non-sectarian college in General Santos City. Accountancy, Liberal Arts, Business, Engineering, Information Technology, Social Work, Education, Criminology, and a graduate program in education among the institutions Bachelor's degree and graduate degree programs.

Also, it is an institution with a Level 1 Accreditation valid until October 2016 from the Federation of Accrediting Agencies of the Philippines (FAAP) after meeting the required standards set forth by the Philippine Association of Colleges and Universities Commission Accreditation (PACUCOA).

In addition, Level 1 accreditation has been granted to its Business Education/Commerce, Criminology, and Liberal Arts programs, while Candidate Level accreditation has been given to its Elementary Education and Secondary Education courses. Ramon Magsaysay Memorial Colleges is keen on receiving accreditations for its other programs in the years to come. In July 2017, seven of its programs - namely Civil Engineering, Accountancy, High School, Information Technology, MA in Education, Office Administration, and Computer Science - were subjected to Consultancy Visits. Aside from these courses, RMMC likewise offers TESDA Accredited Programs, namely

Security Services NCII, Driving NCII, Bookkeeping NCII, Nail Care NCII, Health Care NCII, Housekeeping NCII, Dressmaking NCII, Contact Tracing Level II, Bartending NCII, Cookery NCII, Front Office NCII, Plumbing NCII, Masonry NCII, and Scaffolding Works (supported type scaffold) NCII.

The respondents of this study were the one hundred eighteen (118) master's students who were officially enrolled in Thesis 2 during the academic year 2020-2021 at Ramon Magsaysay Memorial Colleges, General Santos City.

This study considered the total population, as suggested by his panel during his proposal defense. It is based on the total number of Thesis 2 students in Ramon Magsaysay Memorial Colleges.

One hundred eighteen (118) students enrolled in Thesis 2 during the second semester of 2020-2021 were all involved in this study.

## 3. RESULTS AND DISCUSSION

Table 1 shows the master's students' attitudes towards online learning during the COVID-19 Pandemic regarding student perceptions, academic support, and external factors. The mean was used as a treatment for the data collected. Each indicator has ten (10) questions, the range of mean corresponding rated it to the rank, and descriptions of its interpretation are explained based on the table.

**Table 1: Master Students' Attitudes Towards Online Learning During COVID-19 Pandemic**

I. Student Perceptions	WM	Description
1. I am well informed on COVID-19 via traditional news media.	4.20	Strongly Agree
2. I am well informed on COVID-19 via social media.	4.27	Strongly Agree
3. I am well informed on preventive methods to lessen the spread of COVID-19.	4.26	Strongly Agree
4. I am likely to violate preventive steps for lessening the spread of COVID-19.	3.31	Moderately Agree
5. I am well prepared for emergencies during COVID-19 in quarantine cases.	3.72	Agree
6. I have witnessed at least one or more misinformation regarding COVID-19.	3.67	Agree
7. I have anxiety about shifting to entirely online learning off-campus.	3.60	Agree
8. I feel spending the rest of the semester online learning is similar to face-to-face learning.	3.52	Agree
9. I feel that preventive measures for COVID-19 are extreme or over-reactive.	3.47	Moderately Agree
10. I feel that the preventive measures of COVID-19 are based on sound science/medical knowledge.	4.00	Agree
Overall	3.80	Agree
II. Academic Support	WM	Description
1. Studying through online learning provides the flexibility to study at a convenient time during COVID-19.	3.94	Agree
2. Online learning service is compatible with the way the students learn during COVID-19.	3.84	Agree
3. Online instructors provide timely feedback.	3.74	Agree
4. Online learning content is meaningful and relevant to students during COVID-19.	3.90	Agree
5. Possess clearly articulated goals and confidence that online learning can contribute to attaining those goals.	3.91	Agree
6. High degree of respect among students and teachers in online learning during COVID-19.	3.92	Agree
7. Student-teacher interaction is observable during COVID-19 in an online learning environment.	3.88	Agree
8. Online learning provides instruction in an online discussion, chats, forums, or other uses.	4.03	Agree
9. Online learning services during COVID-19 can simplify the learning process.	3.91	Agree
10. Online learning gives students ample opportunities to interact with others during COVID-19.	3.86	Agree
Overall	3.90	Agree
III. External Factors	WM	Description
1. I have the convenience of being able to work as my schedule permits during COVID-19.	3.83	Agree
2. My online course has accessible and responsive instructors.	3.91	Agree
3. My family and friends support me in pursuing an online course during COVID-19.	4.04	Agree
4. I have online academic support services and technical support from the institution during COVID-19.	3.88	Agree
5. I feel belongingness as part of the online learning community.	3.97	Agree
6. I have access to appropriate study space for online purposes.	3.93	Agree
7. I can conduct and conduct research online despite COVID-19 preventive measures.	3.85	Agree
8. I have access to a computer with a reliable internet connection during COVID-19.	3.97	Agree
9. I am capable of attending online professional conferences such as webinars regarding health protocols.	3.99	Agree
10. I can converse with others using the internet, such as internet chat and instant messenger.	4.18	Agree
Overall	3.96	Agree
Overall Mean	3.87	Agree

#### Master Students' Attitudes Towards Online Learning During COVID-19 Pandemic in terms of Student Perceptions

From the data presented in the table, it could be seen that the respondents have positive attitude towards online learning, as they highly perceived it because (1) they are informed through social media with a mean score of 4.27. They are well informed on preventive methods to lessen the spread of COVID-19, with a mean score of 4.26, well informed on COVID-19 via traditional news media, with a mean score of 4.20.

In addition, they also perceived that the preventive measures of COVID-19 are based on sound science/medical knowledge with a mean score of 4.00. They are well prepared for emergencies during COVID-19 in quarantine cases, with a mean score of 3.72. They have witnessed at least one or more misinformation regarding COVID-19, with a mean score of 3.67. They have anxiety about shifting to entirely online learning off-campus, with a mean score of 3.60. They feel spending the rest of the semester online learning is similar to face-to-face learning, with a mean score of 3.52. While, they moderately agree that preventive measures for COVID-19 are extreme or over-reactive, with a mean score of 3.4.

Moreover, they moderately agree that they are likely to violate preventative steps to lessen the spread of COVID-19, with a mean score of 3.31.

Overall, the master's students' attitudes towards online learning during the COVID-19 Pandemic in terms of perceptions is high as reflected in the average mean of 3.80.

The result implies that the master's students of Ramon Magsaysay Memorial Colleges have different perceptions that influence their persistence in online learning during the COVID-19 Pandemic. Therefore, information dissemination regarding the preventive methods will increase their knowledge of the school's system on COVID-19 prevention to be able to gain confidence in engaging in an online learning activity that will improve their persistence.

The result negates the findings that Unger et al. (2020) reported that the students of Wingate University, United States of America, have different perceptions and had strong attitudes toward quickly adjusting to the online learning environment. Lack of information on preventive methods to lessen the spread of COVID-19 increases anxiety and decrease course-specific outcomes.

In recent years, students' attitudes toward online education have shifted. The pandemic discovered that the new impact of online education on pupils intensified sadness and anxiety. Because of the stress and anxiety involved with epidemics, it is recommended that college students' mental health be assessed during outbreaks. It was revealed that travel restrictions, such as the termination of academic exchange programs for students and teachers across universities, resulted in a decline in educational research actions and activities (Bao, 2020; Cao et al., 2020; Essadek and Rabevron, 2020; Islam et al., 2020; Mishra et al., 2020; Paea et al., 2021).

There is evidence of student apprehension toward online learning and media views of emergencies compared to more traditional, or in-person, in-class learning contexts. Public agencies, political bodies, and research institutes may assist and hinder learning during a disease epidemic crisis. Furthermore, crisis management is a dynamic process in which "lessons learned" or prior knowledge from previous emergency circumstances for public institutions and entities might be challenging to apply in a new emergency. While online learning tools can increase student engagement, they are not the same as on-campus or in-person learning (Cao et al., 2020; Elliott & Macpherson, 2017; Muller-Seitz & Macpherson, 2018; Robinson & Hullinger, 2018).

According to poll data, less than half of adults believe that an online class is similar to a classroom course and that the risk of plagiarism is higher with online learning. Distance learning offered entirely by videoconferencing, when compared to traditional in-person education, can result in lower course satisfaction and academic grades. Furthermore, for both students and instructors, the "learning curve" toward active learning and computer confidence creates practical hurdles that must be addressed for online learning. Students' performance (as assessed by exam results) can be similar when the same professor teaches both an in-person and an online class, according to other studies (Kenny, 2020; Macpherson, 2017; Parker, 2017; Roth et al., 2020; Stack, 2016).

Moreover, in the study of (Allcott et al., 2020), information on the spread of COVID-19 in the United States of America greatly affected media response to the critical behavior during the COVID-19 Pandemic. Social media plays a significant part in information dissemination (Kim & Haska, 2018).

### Master Students' Attitudes Towards Online Learning During COVID-19 Pandemic in terms of Academic Support

In terms of academic support, the respondents revealed that they have high attitude towards it during online learning. All of it is because they indicated that online learning provides instruction in an online discussion, chats, forums, or other uses, obtained a weighted mean of 4.03. Studying through online learning offers the flexibility to look at a convenient time during COVID-19 with a mean score of 3.94. There is a high degree of respect among students and teachers in online learning during COVID-19, with a mean score of 3.92. It possess clearly articulated goals and confidence that online learning can contribute to attaining those goals, with a mean score of 3.91. Online learning content is meaningful and relevant to students during COVID-19, with a mean score of 3.90. Online learning services during COVID-19 can simplify the learning process with a mean score of 3.91. Student-teacher interaction is observable during COVID-19 in an online learning environment with a mean score of 3.88. Online learning gives students ample opportunities to interact with others during COVID-19, with a mean score of 3.86. Online learning service is compatible with the way the students learn during COVID-19 with a mean score of 3.90, and online instructors provide timely feedback with a mean score of 3.74.

Overall, the master students' attitudes towards online learning during the COVID-19 Pandemic in terms of academic support obtained a mean of 3.90 which means they have high attitude towards online learning in terms of academic support.

The result implies that the master's students of Ramon Magsaysay Memorial Colleges gain several academic support in online learning during the COVID-19 Pandemic. Intensifying online activities and online instructors providing timely feedback to enhance academic support are strategies to improve the learning experience, leading to increased persistence.

The result did not show any mark of departure from the research findings of Fedynich et al. (2016) at South Texas University are generally optimistic about their experiences with online courses. The online instructor's role in providing timely feedback has been vitally important to persistence support.

Other issues that the students faced included a lack of digital skills in using Blackboard platforms, the need for all e-learning gadgets, tools, and systems, and communication with their teachers and classmates. The current paper's findings support previous research on the same topics during COVID-19, and the results revealed that students are dissatisfied with distance education and that many obstacles have been encountered (Batainch, Atoum, Alsmadi & Shikhali, 2020; Rajab et al., 2020).

This is also similar to the study conducted by (Khan et al., 2020) that students' preference for online learning gives them the freedom to interact with their instructors and fellow students at their most convenient time during the phase COVID-19 Pandemic.

Academic support during a pandemic crisis is the exploration and approach to online learning that allows students to work out a new normal. To assist their students, instructors are looking at online teaching tools. In many respects, online students differ from traditional students. Online students, for example, are often older and have more work and family responsibilities than students on traditional college campuses. Online courses are sometimes rushed and need much preparation and a particular set of technological skills to make matters worse. In many ways, distance learning flips the traditional teacher/student roles on their heads, with students taking charge of their education by planning, organizing, and guiding it (Nassoura, 2020; Roddy, Amiet, Chung, Holt, 2016; Shaw et al., 2016; Thistoll & Yates, 2016).

Students must manage their own electronic devices in addition to the complex mixture of the learning management system (LMS), the internet, course materials, and their own electronic devices. Although online classes do not provide much face-to-face interaction, the conventional online environment includes sections for announcements, private and group conversations, and other communication tools. Introverted learners who need more time to process their thoughts before responding may benefit from these asynchronous forms of communication. Course expectations, prerequisites, and due dates must all be communicated in a timely and straightforward manner (Beins, 2017; Green, 2020; Roddy et al., 2017; Self, Fudge & Hall, 2018).

The first issue is that online learning is only available to students who have a home broadband connection that is fast enough. While network operators have mainly succeeded in preserving services and effectively utilizing pre-existing capacity during lockdown phases, some geographical areas and demographic categories remain underserved, notably in rural and isolated locations and among low-income groups. Fewer than half of rural homes in many OECD countries, for example, are located in areas with appropriate fixed broadband speeds. Furthermore, to participate in online learning activities, children must have access to devices such as laptops and the associated software, which can be problematic for low-income families. The second issue for those linked pupils is that some have not been able to acquire adequate education hours. For example, 71

percent of state school pupils in the United Kingdom received no or only one daily online lesson, whereas only 6% of students in Germany accepted daily online chores, and more than half received them less than once a week (Escueta et al., 2017; Green, 2020; Leuven et al., 2017; OECD, 2020; Woessmann et al., 2020).

#### Master Students' Attitudes Towards Online Learning During COVID-19 Pandemic in terms of External Factors

The data presented in the table also show that the respondents have high attitude in online learning in terms of external factor because they can carry on a conversation with the others using the internet such as internet chat and instant messenger with a mean score of 4.18, their family and friends supported them in pursuing an online course during COVID-19, with a mean score of 4.04. They access to a computer with a reliable internet connection during COVID-19 with a mean score of 3.97. Also, they feel that they belong as part of the online learning community, with a mean score of 3.97. They have access to appropriate study space for online purposes with a mean score of 3.93. Their online course has accessible and responsive instructors with a mean score of 3.91. They have online academic support services and technical support from the institution during COVID-19, with a mean score of 3.88. They can conduct research online despite COVID-19 preventive measures with a mean score of 3.85, they have the convenience of being able to work as their schedule permits during COVID-19 with a mean score of 3.83.

Overall, the master students' attitude towards online learning during the COVID-19 Pandemic in terms of external factors on online persistence obtained a mean of 3.96, which means that they have high attitude in online learning despite of Pandemic in terms of external factors.

The result implies that the master's students of Ramon Magsaysay Memorial Colleges have several external factors that affect their attitudes toward online learning during the COVID-19 Pandemic. Cultivating a sense of belonging is a form of encouragement. It is a necessary component of online education. All students need encouragement to be able to do their best. It is the inspiration, sincerity, or stimulation, a compliment given to learners. It is proper to instill confidence in learners. Cultivating a sense of belonging motivates learners to continue participation in online learning where the students help each other achieve their common goal.

The result reflected the findings reported by Elumalai et al. (2020) that the students of higher learning institutions have several external factors that the persistence of online learning needs to focus on. First, improved communication is needed in a technology-based system and brings opportunities for creating their communication style.

As a result, the Graduate School has expanded its career support services to provide even better assistance to students with difficulties in the classroom. Furthermore, accessing a computer with an internet connection and conversing with people using the internet affects Filipino learners' preparation for e-learning during the COVID-19 Pandemic (internet chat, instant messenger). With these issues, students were likely turned off by the prospect of e-learning-shifting classes in higher education institutions (HEIs). This suggests that internet education is not viable in developing countries like the Philippines. On the other hand, faculty and students must adjust to the new educational reforms. During the COVID-19 Pandemic, HEIs face the issue of educating their instructors before beginning online learning programs (Alipio, 2020; Cahapay, 2020; Cuaton, 2020; Moralista, 2021; Toquero, 2020).

Furthermore, Alipio (2020) found out that the readiness level of Filipino learners for e-learning during the COVID-19 Pandemic is affected by access to a computer with an internet connection. They were also carrying on a conversation with others using the internet (internet chat, instant messenger) that they needed the external support of their fellow students to persist in an online course.

#### Master Students' Attitudes Towards Online Learning During COVID-19 Pandemic

Overall the master students' attitudes towards online learning during the COVID-19 Pandemic is 3.87 which means high.

The result implies that the master students' attitudes towards online learning during the COVID-19 Pandemic involved student perceptions, academic support, and external factors.

The result did not show any mark of departure from the research findings of Elzainy (2020) that the impact of online learning and evaluations on students and discovered significant changes in enhancing students' technology skills during the pandemic. In online education, the quality platform employed in the educational process positively impact student achievement. Online learning will continue to provide professionals with a flexible alternative based on their schedule, communication with university staff, and platforms for assistance and information in 2020 (Becker, 2017; Diaz, 2020; Elzainy et al., 2020; Ionesco et al., 2020).

#### 4. CONCLUSIONS

Based on the findings of the study, the researcher made the following conclusions:

1. The Thesis 2 master students' of Ramon Magsaysay Memorial Colleges, General Santos City, have high attitudes toward online learning during the COVID-19 Pandemic. These terms of student perceptions, academic support, and external factors. However, the preventive methods to lessen the spread of COVID-19, online instructors provide timely feedback. Also, the convenience of working as their schedule permits during COVID-19 was the area that needs improvement in the implementation of online learning.
2. Based on the result, the researcher proposed an intervention program to maximize the online learning experience of their students.

#### 5. RECOMMENDATIONS

From the results of the study, the researcher came up with the following recommendations:

1. Although master students' attitudes toward online learning during the COVID-19 Pandemic are high, there is still room for improvement. This can be done by conducting an intervention program to maximize their online learning experience.
2. Monitoring and evaluation of the master students' progress in their studies must be conducted for the recipients of the program.
3. Conduct a similar study to other Higher Education Institutions (HEIs) in General Santos City to validate the overall level of implementation of the online learning.

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