Online Distance Learning Barriers and Their Implication in the Delivery of Instruction in the New Normal

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Abstract

The Covid-19 pandemic compels countries to adopt remote learning without sufficient research. This resulted to unforeseen online learning barriers experienced by the students. This study investigated the relationship between online distance learning barriers and students’ perception of the delivery of instructions in the new normal. Specifically, it identified the extent of online distance learning barriers in terms of individual, technological, domestic, institutional, and community, and the level of delivery of instruction in the new normal. Through descriptive-correlational research design using a survey questionnaire, this study assessed the perception of the 172 high school students. After subjecting to chi-square and Pearson r, data revealed that, of all the variables involved, only family monthly income was found to have a significant relationship to online learning barriers in terms of individual and technological factors. In addition, family monthly income was found to have a significant relationship with the level of delivery of instructions while a negative relationship between technological and institutional barriers with the level of delivery of instructions in the new normal was also found. In light of the results, the study recommends that teachers might improve the delivery of instructions using learning materials, which are based on the capacity of students. Leniency in terms of submission of requirements can be practiced and if not, alternative forms of learning must be available.

Keywords: Delivery of Instruction, Descriptive Correlational Study, Online Learning Barriers

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1. Introduction

The global education system has been affected by the COVID-19 pandemic. In March 2020, cities and municipalities in Luzon in the Philippines are placed under community quarantine, with all classes suspended at all levels. The majority of the country's educational institutions have abruptly transitioned from face-to-face instruction to various forms of flexible learning and remote or online learning (Baticulon, 2020). It is uncertain whether the original learning objectives might be met, or whether they would be reasonable to expect in a pandemic situation. There are no studies that addressed the use of online learning in the Philippine schools or the present capacity for it. This is exacerbated even more by the government's absence of a comprehensive plan to combat COVID-19.

The educational system in the Philippines is based on a K12 curriculum. The K to 12 Program includes Kindergarten and 12 years of basic education (six years of primary education, four years of junior high school, and two years of senior high school to allow for mastery of concepts and skills, the development of lifelong learners, and the preparation of graduates for post-secondary education. As the number of infections and deaths continues to rise daily during the pandemic, the Department of Education (DepEd) issued Policy Guidelines on the Implementation of Learning Delivery Modalities for Formal Education (DM-CI-2020-00162), which aims to provide teachers with strategies for implementing distance learning delivery modalities (DLDM). This turn of events led the educational system to adopt a flexible kind of learning, even though there are still many preparations to be completed, such as staff training and student preparation for the following academic year. Add to that the lack of technology to support this form of learning as well as labor to distribute the modules.

Despite student calls for an academic freeze and a clear lack of preparedness, the government continues to promote online learning as a mode of instruction. This research takes a step ahead in identifying the many hurdles to online distance learning and offering potential solutions.

2. Literature Review

2.1 Demographics of Learners in the New Normal

2.1.1. Age

The study of Decker and Beltran (2016) showed that students, regardless of age, felt a sense of belonging and felt comfortable communicating in the online environment. The data further
revealed that older students feel more comfortable interacting with their classmates and disagreeing with their classmates while still maintaining trust than their younger counterparts. In terms of teaching and learning, Simons and Brock (2014) found that older students preferred videos of the professor lecturing while younger students prefer more interactive learning activities. On contrary, Fishel and Ferrel (2010) found no overall significant difference in the perceptions between the age groups licensed pesticide applicators in terms of online tutorials they took regarding the effective method of presenting the information. The same finding was evident in a separate study conducted by Fleming et al. (2012) that age is not a significant factor affecting either future use intentions or satisfaction with e-learning.

In a study by Clark et. Al (2015), data revealed that age is often associated with a decline in cognitive abilities that are important for maintaining functional independence, such as learning new skills. Many forms of motor learning appear to be relatively well preserved with age while learning tasks that involve associative binding tend to be negatively affected. Older adults demonstrated lower performance (slower reaction time and lower accuracy). However, contrary to what was predicted older adults showed similar rates of learning as indexed by a configured learning score compared to young adults.

2.1.2 Sex

Based on the study of Latchem (2014), in many countries over the past 10 years, mature (over 40 years old), single-parent, minority, and low-income women had become the largest group among adult learners. Increasing numbers of these women were studying online, and in some countries, females constitute the majority of online learners. Similarly, Morante (2017) found that female students exert more effort in online learning and tend to engage more socially with peers which resulted in higher academic performance. They also have more positive perceptions than males of teacher support, student interaction, collaboration, personal relevance, authentic learning, and student autonomy (Ashong & Commander, 2012). Thus, Carroll (2017) found that females are more likely to be successful in online learning because of their time management and self-regulation skills.

According to Buchmann (2020), biological differences might play a relatively small role in educational outcomes while other factors like socialization and differences in expectations of boys and girls may play a larger role. Research on primary and secondary school students examined how peer, teacher, and family interactions were related to gender differences while
research on higher education examined sex segregation by major and gender differences in choices to attend or complete college. Recently, research had shifted to examine the causes and consequences of the reversal of the gender gap in educational attainment. Women now outpaced men in both college enrollment and completion in the majority of countries throughout the world.

2.1.3. Family Monthly Income

According to Tartaglia (2020), online learning was not for everybody because it had a negative impact on economically disadvantaged students. The study of Reich (2015) showed that students with higher family incomes were most likely to finish an online learning course. Meanwhile, Suarez et al. (2015) cited that multiple inequalities such as poverty, parental education, and literacy, location of residence, gender, sexual orientation, ethnicity, and language had a negative impact on the ability of children to learn.

Honey (2014) stressed that the higher the poverty rate, the lower the test scores. This is supported by Egalite (2016) that family income had a direct impact on a child’s academic outcomes, or variations in achievement could simply be a function of the school the child attends: parents with greater financial resources can identify communities with higher-quality schools and choose more-expensive neighborhoods—the very places where good schools were likely to be. More affluent parents could also use their resources to ensure that their children had access to a full range of extracurricular activities at school and in the community. In the contrary, Rivera (2016) acknowledges the internet as a powerful tool in online learning whether they were rich or just an average student when regards to family income, it does not matter as long as they had access to the internet.

2.2. Online Learning Barriers

According to Pappas (2016), there were many obstacles in e-learning that even e-learning professionals found it challenging to provide an amazing learning experience. He provided eight e-learning barriers that inhibit online learning engagement such as limited tech experience, past experiences, lack of motivation, personal cognitions, too challenging e-learning materials, inadequate support, lack of community involvement, and online learner boredom. Limited tech experience caused online learners to be hesitant because they didn't have much tech experience thus, they've avoided it up until now. Past experiences greatly influence online learning engagements. Not everyone had great past experiences when regarding online learning especially
those who needed to endure boring compliance online learning programs. Lack of motivation was one of the most common challenges that e-learning professionals faced but there was a way that teachers could make online learners get involved and actively engaged in the process, it was through gamification or the use of game design and elements to encourage online learning engagement. Personal cognition of learners such as self-defeating beliefs and opinions could be a hurdle in online learning. This would prevent them from receiving the benefits of the online learning you offer. Too challenging e-learning materials should also be avoided. Creating an effective e-learning experience was all about finding the perfect balance. If it is too easy, online learners may become bored and disengaged. If it was too difficult, they might become frustrated and simply give up. Lastly, the list would not be complete without boredom.

In a factor analysis conducted by Talbert (2020), perceived lack of social interaction is the most significant barrier to online education. It was followed by administrative/instructor issues, time and support for studies, and learner motivation. Less important barriers yet significant also were lack of technical skill and lack of academic skill. Other findings were the degree to which barriers to learning were perceived was inversely related to comfort and confidence levels with using online learning technologies. The ones with the highest levels of comfort/confidence in using these technologies had the lowest perceived barriers in terms of number and degree; and as the comfort/confidence level dropped, the barriers were higher and more numerous. The respondents who indicated they could not learn well online or who predicted a lack of success in learning online had the highest barrier ratings. Those who said there's no difference in their learning had moderate ratings on barriers. Those who felt they learn better online had the lowest ratings on barriers.

Barriers were classified into five categories: technological, individual, domestic, institutional, and community barriers (Baticulon et al., 2020). Most frequently encountered were difficulty adjusting learning styles, having to perform responsibilities at home, and poor communication between educators and learners. Individual barriers referred to challenges that involved the learners encountered in the implementation of the new normal educational setup. For instance, difficulty in adjusting learning styles. Domestic barriers referred to challenges that involved the household that might be encountered in the implementation of the new normal educational setup like lack of basic needs and family conflict. Technological barriers referred to challenges that involved access to technology that might be encountered in the implementation of online distance learning set up like lack of gadgets and poor internet connection. Institutional barriers referred to challenges that involved the learners encountered in the implementation of the
new normal educational setup. For example, lack of communication between learners and educators. Community Barriers referred to challenges that involved the locality that might be encountered in the implementation of the new normal educational setup for example community lockdown. For instance, community lockdown.

The factor analytic study by Muilenberg and Berge (2015) identified 6 barriers to online learning. Time/ interruptions pertained to perceived barriers to students spending time learning online that might disrupt them. Infrastructure/ support services had something to do with the way instructors or the organizations handle issues. Third was motivation, student’s psychological processes or beliefs influence the way they would persist in achieving their goal. The fourth was prerequisite skill or the perception of the student which focused on the mastery of a certain degree before entering the online classroom. Fifth was technical, which is defined as students being comfortable with the use of software and hardware being used in online classes. Lastly social, a friendly environment, where human relationship and cohesion was being promoted.

Moreover, Larbi et. al (2020) cited four barriers to online education. First was the rigidly structured system that does not support innovative educational practices. The second was fear of change. Going online was seen by academic faculty as an additional responsibility and a threat to the status quo. Some even expressed the fear of losing the ‘human touch’ since they might not be physically present with their students. Thirdly were infrastructural deficits. The majority of the infrastructure is not designed to support emerging educational technologies. Just to mention a few, poor network security, inadequate wireless technologies, and low-speed internet connection.

Based on the data of DICT (2021), the Philippines is ranked 86th spot in the global mobile internet speed rankings according to data from an Ookla report. The student’s willingness and motivation for this new learning modality are the keys. Students coming from financially challenged families might lose interest since they may find it difficult to access data and the internet.

2.3. Delivery of Instruction in the New Normal

As the country continued to confront different issues brought about by the COVID-19 pandemic, the DepEd is addressing the challenges in basic education for the school year 2020-2021 through its Basic Education Learning Continuity Plan (BE-LCP) under DepEd Order No. 012, s. 2020. Tibon, (2020) highlighted that the learning delivery modality that schools could adopt might be one or a combination of the following, depending on the local health conditions, the
availability of resources, and the context of the learners in the school or locality: face to face, distance learning, blended learning, and homeschooling. Of these four-learning modalities, distance learning was much preferred and widely used.

Distance learning referred to the learning modality where learning takes place between the teacher and the learner who are remote from each other during the actual period of instruction. According to Abu (2020), this type of learning has three types namely modular distance learning, online distance learning, and television/radio-based instruction. Modular distance learning allowed learners to utilize self-learning modules (SLMs) in print or digital format. Online distance learning, on the other hand, features the teacher facilitating learning that would encourage learners’ active participation using various learning platforms and technologies accessed on the internet such as Google Meet, Zoom, and Microsoft Teams among others. Meanwhile, TV/radio-based instruction made use of self-learning modules converted to video lessons for television-based either instruction or radio scripts for radio-based instructions.

According to Deped (2020), the department will provide SLMs with the alternative learning delivery modalities to be offered for various types of learners across the Philippines. The integration of SLMs with the alternative learning delivery modalities (modular, television-based, radio-based instruction, blended, and online) will help DepEd ensure that all learners have access to quality basic education for SY 2020-2021 with face-to-face classes still prohibited due to the public health situation. “The SLMs and the other alternative learning delivery modalities are in place to address the needs, situations, and resources of every learner and will cover all the bases in ensuring that basic education will be accessible amid the present crisis posed by COVID-19” (DepEd, 2020).

The study of Bagood (2020) showed that institutions were doing its best to distinguish the effective modality to be implemented in every school. The survey results showed that Modular Distance Learning (MDL) was the modality that most of the parents and guardians preferred. Undoubtedly, the shift of the teaching-learning delivery in schools to modular distance learning made more challenging, on the part of the school personnel, the delivery of basic quality education. For this, DepEd leaders were always finding avenues to solve the problems and capacitating its teachers and school heads to become more effective in their field for modular distance learning.

To be successful in the delivery of instructions in the new normal, Latheef (2020) identified ways how to improve the teaching and learning process. First, plan and organize thoughtfully.
Next was clarified purpose, norms, and expectations, building community through faculty-student interaction and student-student interaction. Finally, used technology but be careful of going overboard as it could overwhelm students.

The studies and literature cited enrich the content of this study. It was similar to the current study as they all correlated profiles file of the respondents specifically age, sex and family monthly income, and online distance learning barriers with the level of delivery of instructions in the new normal. On the contrary, somehow studies and literature mentioned above were different in the sense that they were all done when there was no pandemic and having an online class was a choice.

2.4 Theoretical Framework

The study is anchored on the Study Technology Theory of Hubbard (1972) which provides the first fully workable approach to teaching students how to learn after his comprehensive work in identifying different barriers to learning. It offers methods for recognizing and resolving all difficulties in absorbing material, including a previously unacknowledged barrier that ultimately lies at the root of all failures to pursue a given course of study. The first barrier is an “absence of mass” or the lack of the physical object a student is studying, which leads to confusion. Hubbard encourages learners to use clay to create representations of objects. Secondly, too steep a study “gradient.” means that students will become confused if they attempt to master a skill without grasping a necessary previous step. Finally, the “misunderstood word.” Readers should not skip over words they do not comprehend. Instead, they should consult a dictionary to go through a process called “word clearing.”

3. Methodology

The study utilized descriptive and correlational methods of research. It investigated the relationship between the profile of the respondents and the extent of online distance barriers, the relationship between the profile of the respondents and the levels of delivery instruction in the new normal, and lastly the possible relationship between the extent of online distance learning barriers and the level of delivery of instruction in the new normal.

The participants of the study were 172 students of a national high school in San Pedro, Laguna in the Philippines who preferred online classes but after several days shifted to the modular model of instruction. They were selected using purposive sampling. The majority of the respondents belong to the 14-17 age group, females with below 10,000 family income.
The instrument used was composed of three parts. The first part determined the demographic profile of the respondents as to age, sex, and family monthly income. The second part was a modified questionnaire from the study of Baticulon (2020) in a 4-point Likert Scale format. It assessed the barriers being experienced by the respondents in the implementation of online distance learning. It was pilot tested on 50 senior high school students with a Cronbach’s alpha of 0.84. The third part was a researcher-made questionnaire in a 4-point Likert scale format which assessed the level of delivery of instruction. It was also pilot tested on 50 senior high school students with a Cronbach’s alpha of 0.82.

An assent form was first secured from the parents of the students before distributing the questionnaire through Google form to the students. The study ensured that all data gathered were treated with utmost privacy and confidentiality.

Simple descriptive statistics such as weighted mean, frequency, percentage, and rank distribution were utilized to describe the profile of the respondents, the extent of online distance learning barriers, and the level of delivery of instructions. Shapiro-Wilk test of normality was also employed. Chi-square and Pearson r were utilized to identify the relationship between variables at a 0.05 level of significance.

4. Findings and Discussions

Table 1 shows the online distance learning barriers as to individual, technological, domestic, institutional and community.

For individual barriers, respondents had difficulty adjusting to learning/teaching style which was considered the main barrier affecting the perception of the respondents in the delivery of instruction in the new normal. This was because online learning hindered social interaction between learners. During the online class, students would just listen to their teacher and recited if asked without the chance to actively interact with their classmates. This is similar to what Talbert (2020) stated that lack of social interaction was the most significant barrier to online education. In the conduct of online classes, most students are having their camera shut down, this avoids interaction during class discussions.
### Table 1

*Weighted Means on the Level of Online Distance Learning Barriers*

| Online Learning Barriers                                                                 | WM   | VI    | Rank |
|-----------------------------------------------------------------------------------------|------|-------|------|
| **Individual**                                                                          |      |       |      |
| I have difficulty adjusting to learning/teaching styles.                                | 2.92 | High  | 1    |
| I am experiencing mental health difficulties.                                           | 2.62 | High  | 2    |
| I have physical health issues.                                                          | 2.19 | Low   | 3    |
| **Overall Mean**                                                                        | 2.58 | High  |      |
| **Technological Barrier**                                                                |      |       |      |
| Unreliable or slow internet connection                                                  | 3.01 | High  | 1    |
| Lack of technical skills in using gadgets.                                              | 2.48 | Low   | 3    |
| Lack of devices or limited access due to gadget sharing                                 | 2.49 | Low   | 2    |
| **Overall Mean**                                                                        | 2.66 | High  |      |
| **Domestic Barriers**                                                                   |      |       |      |
| Limited space is conducive for learning/teaching.                                       | 2.78 | High  | 2    |
| Conflicts within the family                                                              | 2.43 | Low   | 3    |
| Financial distress within the household                                                 | 2.98 | High  | 1    |
| **Overall Mean**                                                                        | 2.73 | High  |      |
| **Institutional Barrier**                                                                |      |       |      |
| Poor communication between learners and educators                                        | 2.66 | High  | 1    |
| Poor quality of learning materials                                                      | 2.52 | High  | 2.5  |
| Policies and practices that neglect students’ welfare.                                  | 2.52 | High  | 2.5  |
| **Overall Mean**                                                                        | 2.57 | High  |      |
| **Community Barrier**                                                                   |      |       |      |
| Mobility restrictions due to community lockdown                                         | 2.93 | High  | 2    |
| Power and internet signals interruptions                                                 | 2.97 | High  | 1    |
| Sociopolitical Concerns such as discrimination                                          | 2.39 | Low   | 3    |
| **Overall Mean**                                                                        | 2.76 | High  |      |

*Legend:* 1.00-1.75=Very Low, 1.76-2.50=Low, 2.56-3.25=High, 3.26-4.00=Very High

Unreliable or slow internet connection was perceived to be the main technological barrier. This finding was coherent with Larbi et al. (2020) that the Philippines has poor network security, inadequate wireless technologies, and low-speed internet connection. In addition, most of the students in public school could not afford to subscribe to fast internet connection due to economic reasons. This scenario leaves them buying loads of data which is not reliable for synchronous class as it did not last long or will not give them a convenient experience using the internet. In worst case scenario, if the area is isolated, internet access will not be possible. As explained by Rivera (2016), the internet is a powerful tool in online learning, and having this problem with unreliable and low internet connection leaves the students unsatisfied with online learning.
Financial distress was considered the main domestic barrier. It was expected as majority of the respondents belong to low-earning families, with a total monthly income of 10,000 below. This amount is will not be sufficient to sustain online classes. They will not have enough money to buy gadgets like laptop computers, phones, and internet subscriptions. Being financially distress will just put student-learning experience in jeopardy.

For institutional barriers, poor communication between learners and educators hindered the positive online learning experience. The lack of training in the use of technology by the teachers and the incapacity of the students to buy a gadget to be used for online classes contributed to this problem of poor communication. During face to face classes, students can talk to their teachers anytime of the day even during breaks. This scenario opens a lot of opportunities for communication. This build trust and respect from the student and the teacher that will further enhance the learning experience of the students.

Finally, power and internet signal interruptions were perceived to be the greatest in terms of community barriers. The data was true to the whole archipelago as the Department of Information and Communication Technology in January 2021 that the Philippines stand 86th on the ranking of global mobile internet speed rankings. Online classes cannot be successful with many power and internet signal interruptions as it relies heavily on this and this will just add up to the burden and stress of the students.

| Level of Delivery of Instruction                                                                 | WM   | VI  | Rank |
|------------------------------------------------------------------------------------------------|------|-----|------|
| Active learning experience is fostered in online distance learning.                              | 2.74 | High| 3    |
| Prompt feedback is always given in our online class by our teachers.                             | 2.91 | High| 1    |
| Student-teacher relation is strengthened in this new academic setup.                             | 2.58 | High| 7    |
| Online distance learning allows showcasing our talents.                                           | 2.67 | High| 4    |
| Between face-to-face classes and online distance learning, I prefer the latter.                  | 2.65 | High| 5    |
| Students are more actively participating during online distance learning.                         | 2.26 | Low | 9    |
| Submission of requirements online is an easier and faster way of accomplishing the task at hand. | 2.76 | High| 2    |
| Teachers are more accommodating online than in face-to-face classes.                             | 2.53 | High| 8    |
| I learn more in online distance learning than in face-to-face classes.                           | 1.99 | Low | 10   |
| Individual talents are being tapped in the implementation of online distance learning.           | 2.61 | High| 6    |

Overall Mean: 2.57 High

Legend: 1.00-1.75=Very Low, 1.76-2.50=Low, 2.56-3.25=High, 3.26-4.00=Very High
Respondents believed that prompt feedback was always given in online classes by the teachers and that submissions of requirements online were easier and a faster way of accomplishing the task at hand as portrayed in Table 2. On the other hand, students contradict the idea that they were more actively participating during online distance learning. Moreover, they did not learn more in online distance learning than face to face. This implies that they were not satisfied with the delivery of instruction in the new normal. This is the exact reasoning of Pappas (2016) that limited tech experience causes online learners to be reluctant because they don't have much tech experience and hence have avoided it up until now. This may be due to their past experience of having trouble in the conduct of online classes. Talbert (2020) backed that respondents who could not learn well online or expected a lack of success studying online had the highest barrier ratings.

Table 3

| Profile          | Individual | Technological | Domestic | Institutional | Community |
|------------------|------------|---------------|----------|---------------|-----------|
| Chi-square Value | p-value    | Chi-square Value | p-value | Chi-square Value | p-value |
| Age              | 10.89      | 0.54          | 14.24    | 0.29          | 16.24     | 0.28      | 18.47    | 0.10      | 18.88    | 0.09  |
| Sex              | 1.29       | 0.73          | 4.98     | 0.17          | 6.98      | 0.17      | 3.47     | 0.32      | 4.18     | 0.24  |
| Monthly Income   | 26.70*     | 0.03          | 30.10*   | 0.01          | 8.10      | 0.06      | 20.19    | 0.16      | 22.16    | 0.10  |

Legend: * = Significant at p <0.05

Family monthly income was found to have a significant relationship to online distance learning barriers of individual and technological barriers. This implied that the perception of these barriers was dependent on the family’s monthly income. With a higher family monthly income, the higher the possibility of purchasing what was needed in online classes like gadgets and internet connection. These necessities played a crucial role in a successful online learning experience as these were a requirement to finish the activities. This was supported by Reich (2015) that students with higher family monthly income were least likely to experience barriers and were most likely to finish an online learning course. With the respondents involved in the study who have a family
monthly income below 10,000, it’s quite obvious how they find it difficult to adapt to an online learning setup. Students will be forced to choose between buying gadgets and internet or food. In this kind of scenario, the student will choose the latter. Moreover, it was supported by Tartaglia (2020) that online learning hurt economically disadvantaged students. Students in public school who belong to low family monthly income will find it difficult purchasing this technology. This experience will create more barriers and unpleasant learning experiences for the students.

Table 4

Test of Relationship between the Respondent’s Profile and the Level of Delivery of Instruction in the New Normal

| Profile                  | Chi-square Value | p-value |
|--------------------------|------------------|---------|
| Age                      | 10.78            | 0.55    |
| Sex                      | 4.02             | 0.26    |
| Family Monthly Income    | 27.39*           | 0.026   |

Legend: * = Significant at p <0.05

Family monthly income was significantly related to the level of delivery of instructions in the new normal. This suggested that respondents’ perception of the level of delivery of instructions was associated with their family’s monthly income. The higher the family’s monthly income, the higher their perception of the delivery of instructions. This was because students with a higher family monthly income had more capable of adapting to the online learning setup as they could meet all the requirements of this new platform compared to low family monthly income. According to Suarez et.al (2015), inequalities such as socioeconomic status produce a negative impact on the ability of children to learn. They added that poor families were less likely to meet the basic prerequisites for learning thus experiencing more barriers. This scenario created a tendency to perceive delivery of instructions in the new normal as lower compared to families with higher socioeconomic status or higher family monthly income.

Table 5 revealed that technological and institutional barriers showed a significant relationship with the respondent’s perception of the level of delivery of instruction in the new normal. An r value of -0.79 suggests that there is an inverse relationship between technological barriers and perception of the level of delivery of instruction. This implies that as the respondents experience more technological barriers, they perceived the delivery of instructions as
unsatisfactory. Students cannot learn without the internet or gadgets as these are the primary requirement. According to Himmelsbach (2021), technology is essential in increasing student engagement. The experience of technological barriers created a belief that delivery of instructions in the new normal is disparaging as they cannot learn without the necessary gadgets and reliable internet connections.

Table 6

| Barriers       | R-value | p-value |
|----------------|---------|---------|
| Individual     | -0.06   | 0.42    |
| Technological  | -0.79*  | 0.02    |
| Domestic       | -0.04   | 0.06    |
| Institutional  | -0.16*  | 0.03    |
| Community      | 0.06    | 0.41    |

Legend: * = Significant at p <0.05

On the other hand, institutional barriers were also found to have a negative significant relationship with the level of delivery of instruction. This implies that as more institutional barriers were being experienced by the respondents, the lesser their perception of the quality of the delivery of instructions in the new normal. This further suggested that the tendency to evaluate the delivery of instruction lower is evident with more experience with institutional barriers like poor communication between learners and educators. This will give an impression to the students that the delivery of instruction is a mess as they cannot learn and understand the lesson with more experience of these learning barriers. Talbert (2020) cited that perceived lack of social interaction is the most significant barrier to online education. Without this social interaction, students will just be bored doing things over and over again. It will hinder students’ spontaneity, which later suppresses students’ creativity.

Poor quality learning materials as institutional barriers hindered the delivery of instructions. The conduct of online classes was instituted without proper preparation. Learning materials were used without validation. Whether it grasp the concept or it is appropriate or not was not scrutinized. As Pappas (2016) stated, there must be a balance between the levels of difficulty
of the task to create an effective learning experience. Too challenging materials must be avoided since they frustrated the learners. On the other hand, it easily makes learners bored and disengaged. Policies and practices that neglected students’ welfare as institutional barriers also affect the delivery of instructions (Larbi et al., 2020). Many institutions did not have integrated e-learning policies to guide innovative teaching and learning practices which made it difficult to achieve a favorable response from the students.

5. Conclusions

This study found that the level of online distance learning barriers experienced by the students were all “high.” The perceived level of delivery of instructions in the new normal was also “high.” Furthermore, the result of the test of the relationship between the profile of the respondents and level of online learning distance barriers showed that family monthly income has a significant relationship with both the online distance learning barrier of individual and technological. Lower family monthly income tends to experience more individual and technological barriers. Similarly, the correlation between the profile of the respondents and delivery of instructions revealed that family monthly income has a significant relationship with the level of delivery of instructions. Higher-income families tend to rate the delivery of instructions higher compared to lower-income families. The test of the relationship between the extent of online distance learning barriers and the level of delivery of instructions showed that technological and institutional learning barriers had a significant negative relationship with the level of delivery of instructions in the new normal.

Based on the findings of the study, significant relationship between the profile of the respondents and online learning barriers in terms of family monthly income and the extent of online distance barriers as to individual and technological were evident. In addition, significant relationship between the profile of the respondents and the level of delivery of instructions in terms of family monthly income and a negative relationship between the extent of online distance learning barriers of technological and institutional with the level of delivery of instruction in the new normal were also found.
References

Abu E. (2020). *Learning Must Continue in the New Normal*. Manila Times, October 22, 2020. [https://www.manilatimes.net/2020/10/22/campus-press/learning-must-continue-in-the-new-normal/783769/](https://www.manilatimes.net/2020/10/22/campus-press/learning-must-continue-in-the-new-normal/783769/)

Ashong C. and Commander N. (2012). Ethnicity, Gender, and Perceptions of Online Learning in Higher Education. *Merlot Journal of Online Learning and Teaching*, Vol 8. No. 2. [https://jolt.merlot.org/vol8no2/ashong_0612.htm](https://jolt.merlot.org/vol8no2/ashong_0612.htm)

Baticulon R. et al (2020). *Barriers to online learning in the time of COVID-19: A National Survey of Medical students in the Philippines*. [https://www.medrxiv.org/content/10.1101/2020.07.16.20155747v1.full.pdf](https://www.medrxiv.org/content/10.1101/2020.07.16.20155747v1.full.pdf)

Becker, K., Newton, C., & Sawang, S. (2013). A learner perspective on barriers to e-learning. *Australian Journal of Adult Learning*, 53(2), 211–233.

Carroll S. (2017) *Does Gender Matter in Online Learning?* [https://silos tips/download/does-gender-matter-in-online-learning](https://silots tips/download/does-gender-matter-in-online-learning)

Center for Development Programs in the Cordillera (2020). “*Education in the New Normal: Modular Learning in Sagada*”, cdpckordilyera.org

Decker J. and Beltran V. (2016). Student’s Sense of Belonging in Online Classes: Does Age Matters. *International Journal of Online Pedagogy and Course Design (IJOPCD)* 6(3). DOI: 10.4018/IJOPCD.2016070102

Department of Education (2020) *Deped prepares SLM for education’s new normal* [https://www.deped.gov.ph/2020/07/02/deped-prepares-self-learning-modules-for-educations-new-normal/](https://www.deped.gov.ph/2020/07/02/deped-prepares-self-learning-modules-for-educations-new-normal/)

Department of Health (2021) *Covid19 Case Tracker*. [https://doh.gov.ph/2019-nCoV](https://doh.gov.ph/2019-nCoV)

Department of Information and Communication Technology (2021), “*PH moves up in mobile internet speed global rankings*” [https://dict.gov.ph/ph-moves-up-in-mobile-internet-speed-global-rankings/#:~:](https://dict.gov.ph/ph-moves-up-in-mobile-internet-speed-global-rankings/#:~:)

Fishel F. and Ferrell J, (2010). Does User Age Differ in Perceptions of Online Learning For Certified and Licensed Pesticides? *Journal of Extension*, Volume 48. No.5 [https://www.joe.org/joe/2010october/rb5.php](https://www.joe.org/joe/2010october/rb5.php)

Fleming, J., Becker, K., and Newton, C. (2017). Factors for successful e-learning: does age matter. *Education + Training*, Vol. 59 No. 1, pp.76-89. [https://doi.org/10.1108/ET-07-2015-0057](https://doi.org/10.1108/ET-07-2015-0057)
Himmelsbach V. (2021) *How Technology in the Classroom Can Impact Student Learning*. https://tophat.com/blog/how-does-technology-impact-student-learning/

Honey C. (2014). *For most Students Achievement Reflects Income*. https://www.schoolnewsnetwork.org/2014/11/03/most-students-achievement-reflects-income/?utm_campaign=elearningindustry.com&utmsource=%2F&utm_medium=link

Larbi-Apau J. et al (2020) *Barriers to online learning adoption in higher education*, https://www.universityworldnews.com/post.php?story=20200506207437

Latchem C. (2014). *Gender Issues in Online Learning” Culture and Online Learning: Global Perspectives and Research*. Stylus Publishing

Morante A. (2017). Gender Differences in Online Participation: Examining a History and Mathematics Open Foundation Course. *Australian Journal of Adult Learning* Vol.57, Number 2. https://files.eric.ed.gov/fulltext/EJ1148628.pdf

Muilenburg L. and Berg Z. (2005). Student Barriers to Online Learning: A Factor Analytic Study Student barriers to online learning: A factor analytic study. *Distance Education, 26:1, 29-48*, DOI: 10.1080/01587910500081269

Pappas C. (2016). Top 8 eLearning Barriers That Inhibit Online Learner’s Engagement With eLearning Content https://elearningindustry.com/top-elearning-barriers-that-inhibit-online-learners-engagement-elearning-content

Reich J. and Hansen J. (2015) *How socioeconomic status impacts online learning*. https://news.mit.edu/2015/how-socioeconomic-status-impacts-online-learning-1217

Simonds T. and Brock B. (2014). Relationship between Age, Experience, and Student Preference for Types of Learning Activities in Online Courses. *Journal of Educators Online*, 2014 January, 11(1)

Suarez- Orozco C., Yoshikawa H., and Tseng V. (2015). *Intersecting Inequalities: Research to Reduce Inequalities for Immigrant-Origin Children and Youth*. UCLA & William T. Grant Foundation Hirokazu Yoshikawa, New York University Vivian Tseng, William T. Grant Foundation

Taboada, J. (2020). *DepEd Schools Divisions to adopt ‘flexible’ learning for coming school year* https://palawan-news.com/deped-schools-divisions-to-adopt-flexible-learning-for-coming-school-year/
Talbert R. (2020) *What are the biggest barriers to online learning?* http://rtalbert.org/barriers-for-online-learning/

Tartaglia A. (2020). *The Potential Impact of Online Learning on Economically Disadvantaged Students.* Education Doctorate Dissertations. 9. https://research.library.kutztown.edu/edddissertations/9

Tibon J. (2020). *The New Normal in Basic Education.* https://www.lexology.com/library/detail.aspx?g=f4c146a9-7ef0-4bc1-8d6d-e6516a4a14ff