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Student Perception of The Implementation of Online Teaching and Learning

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Abstract: This study aimed to investigate the student's perception of online teaching and learning implementation on the selected DTTE students at College of Education, MSU-IIT, Iligan City. It utilized descriptive research design. In order to have the essential information needed in this study, a questionnaire, divided into five (5) parts, was adopted and modified that would determine the students' profile, online readiness in terms of availability essentials for online learning, digital literacy, accessibility of online learning platforms and ability of students for using online learning, and the perception of the students towards online learning and the difficulty faced in online learning. The Online Readiness of the respondents in terms of the Availability Essentials for Online Learning, Digital Literacy, Accessibility of Online Learning Platforms, Ability of Students for Using Online Learning was Good by the students of the Department of Technology Teacher Education (DTTE) students. On the other hand, Students' Perception of Online Learning was also Good. The result of the correlation between the Sex of the respondents is not significantly related to the Online Readiness, while Age and Parent's Monthly Income are significantly related to Online Readiness. On the other hand, Sex and Age are significantly related to Students' Perception of Online Learning. At the same time, a Parent's Monthly Income is not significantly related to Students' Perception of Online Learning. It is recommended that teachers use Online Teaching and Learning appropriately and wisely to enhance the teaching-learning processes for the students.

Keywords: online learning, digital literacy, online teaching, online readiness, online teaching,

1. Background of the Study

The term "online learning" refers to learning environments facilitated by the internet. Online learning refers to several programs that use the internet to deliver instructional materials and allow interaction between teachers and students both within and outside of the classroom. Online learning can be done entirely online or in combination with face-to-face interactions (Steven et.al., 2021). According to Davis (2019), this type of teaching may be synchronous, where students watch instructors deliver their lectures live, or asynchronous, where students watch lecture recordings at a later point in time. Best practices for remote teaching include providing ongoing feedback, making assignment guidelines clear, and using online resources effectively. According to Ascough (2002), because learners are different, online education provides a different learning experience

than traditional education, (b) communication is via computer and the Internet, (c) participation in the classroom by learners is different, (d) the social dynamic of the learning environment is changed, and (e) discrimination and prejudice are minimized. New technologies, the internet, streaming video, and net-meeting now make higher education more accessible and affordable for many students and those who would have been unable to pursue higher education in a traditional in-class setting (Bianco & Carr-Chellman, 2002).

The study of Mohalik and Sahoo (2020) found that during this pandemic majority of student teachers believed that online learning was a preferable mode of learning. However, they did agree that it is an alternative to the face-to-face mode of learning, which was a traditional teaching method. Also, Mohalik and Sahoo (2020) conclude that due to the pandemic, the urgent need for online learning left student teachers unprepared for financial, physical, social, and mental aspects during their teaching internship and even teachers have difficulties in delivering the method due to the unfamiliar pedagogical approaches in online education. According to Pokhrel and Chhetri (2021), the way educators deliver quality education through multiple online platforms is undergoing a structural shift. Online learning, distance learning, and continuing education have become panaceas for this worldwide pandemic. Making the transition from traditional face-to-face instruction to online learning can be challenging. Hardman and Ntlhoi (2021) also stated that moving from traditional to online education would be the best option in this circumstance. However, access to information technology equipment, as well as Internet coverage and speed, is critical. In specific instances like COVID-19, technology cannot replace good teaching or teachers.

Amid the lockdown due to the COVID-19 pandemic, many institutions shifted from face-to-face learning to online learning to provide uninterrupted learning opportunities for the students. According to Mohalik and Sahoo (2020), most people say it is beneficial, whereas others argue that online education has disadvantages. The advantages of online learning are uninterrupted learning, flexibility, and learning at own pace, and it is very convenient. Students can access computers and internet connections anywhere, and it is cheaper than a traditional classroom. On the other hand, online learning has negative aspects. The limited social interaction online programs give people a possibility of limited use of their program. The only method of communication is through e-mail, chat rooms, or discussion groups. With Online Learning (OL) opportunities increasing in higher education, there is a need to understand students' perceptions regarding online learning to know how effective and the accessibility of the learning materials that the students need. The gap that the researchers found between the study of Mohalik and Sahoo (2020) is that most of the respondents agree that online learning is not as effective as face-to-face classes. They also have the same problem when it comes to connectivity. The current study shows that the respondents lacked preparedness and unfamiliarity with technological approaches. In this study, the researchers found out that the respondents have prepared in terms of devices for online learning, and most of them already have skills and knowledge in using the technology. This study aims to know the students' perception of online teaching and learning implementation and answer questions regarding online readiness, challenges, and the significant relationship between students' profiles and online readiness. Specifically, it attempts to answer the following questions:

1. What are the students' levels of perceptions towards online readiness in terms of: a) Availability essentials for online learning, b) Digital literacy, c) Accessibility of online learning platforms, and d) The ability of students to use online learning.
2. What is the student's perception of online learning?
3. What are the challenges faced by students during online learning?
4. Is there a significant relationship between students' profiles and online readiness?

5. Is there a significant relationship between students' profiles and students' perception of online learning?

2. Research Methods

The research design used in this study is quantitative Research. The researchers used this design to determine the students' perceptions of implementing the online mode of teaching and learning delivered in these days' classes. An online survey was done via google forms containing the relevant questions to collect the necessary data that the researchers needed.

2.1 Sampling and Participants

The sampling design that the researchers used is Purposive Sampling. According to Crossman (2020), purposive sampling is a non-probability sample selected based on the characteristics of a population and the objective of the study. The sampling design utilized will be used in this study since the respondents were chosen by the researcher purposely in answering the questions for the survey. The researchers used Purposive Sampling because the study participants were chosen based on their experience in face-to-face and blended learning.

The respondents of the study are from the Department of Technology Teacher Education, thirty-three (33) respondents are Drafting technology, twenty-nine (29) from Industrial Arts and, thirty-six (36) from Home Economics with a total of ninety-eight (98) respondents who have experienced face-to-face, and flexible teaching and learning. Ninety-eight (98) respondents, most students are female, with a frequency of 79 and a percentage of 80.60% of the total population. At the same time, males have a frequency of 19 and a percentage of 19.40% of the total population. In terms of age, the majority are students are 21 to 23 years old with a frequency of 82 and a percentage of 83.70% of the total population, followed by the 18 to 20 years old with a frequency of 16 and a percentage of 16.30% of the total population.

2.2 Research Instruments

The instrument that the researchers used is an adopted and modified questionnaire that was based on the study of Mohalik and Sahoo (2020) entitled "E-Readiness and Perception of Student Teachers' towards Online Learning in the Midst of COVID-19 Pandemic." The researchers used a 4-point Likert scale on these studies, which are: (4) Strongly Agree, (3) Agree, (2) Disagree, and (1) Strongly Disagree. A questionnaire was designed to gather information in the study. Specifically, the questionnaire is composed of four (4) parts formulated according to the aims and objectives of the study. The first part is the students' level of perception towards online readiness in terms of (a) Availability Essentials for Online Learning (b) Digital Literacy (c) Accessibility of Online Learning Platforms (d) Ability of Students for Using Online Learning. The second part is the Perception of Students towards Online Learning. The third part is the Difficulties Faced in Online Learning.

2.3 Data Gathering Procedure and Data Analysis

The researchers gave all the respondents an online survey since a face-to-face survey is not allowed due to the pandemic (COVID-19). The respondents were encouraged to participate and answer the questions honestly with informed consent that they can accept or decline if the respondents feel that it is not secure and safe. The online surveys were sent online to the respondents via My IIT e-mail accounts. Then these respondents were given an online questionnaire via Google forms. After the respondents answered the questionnaire, the researchers collected and gathered all the responses of the ninety-eight

respondents. After collecting the data, these were tabulated and interpreted via statistical analysis and interpretation.

As soon as the questionnaires were retrieved and the required data obtained, these were tabulated, analyzed, and interpreted using the appropriate statistical tools in this study.

The data were analyzed using the following statistical tools:

The mean and the percentage were utilized to determine the degree of responses and the numerical rating of the questionnaires.

1. Means were computed to determine the result of the survey.

2. Standard deviations were used in this study to determine the homogeneity of scores obtained on the survey.

3. Pearson's R was used in this study to test and measure the strength of a linear association between the independent, which is the profile of the respondents, and the dependent variables.

The responses to questions in the given variables were scaled using the "four-point-scale" or the Likert Scale and given weight as follows:

Table 1: Numerical Rating for the Evaluation Criteria

Point	Scale	Response	Verbal Interpretation
4	3.25 – 4.00	Strongly Agree	Very Good
3	2.50 – 3.24	Agree	Good
2	1.75 – 2.49	Disagree	Fair
1	1.0 – 1.74	Strongly Disagree	Poor

Table 2: Numerical Rating for the Correlation Criteria

Size of Correlation Coefficient	Strength of Correlation
.91 until 1.00 or -.91 until -1.00	Very Strong
.71 until 90 or -.71 until -.90	Strong
.51 until .70 or -.51 until -.70	Moderate
.31 until .50 or -.31 until -.50	Weak
.01 until .30 or -.01 until -.30	Very Weak
.00	No correlation

2.4 Ethical Consideration

In this study, the name of the respondents can be optional; there will be no psychological harm, emotional harm, and no physical contact in answering the survey. All gathered information would be used for this research purpose only. The research would present an informed consent to the participants in which the respondents can participate or decline. To make an informed decision about whether they will participate in the survey or not. The researcher would also provide additional information if the participants become distressed in participating in the study. Rest assured that the respondent's responses and profile will remain confidential.

3. Theoretical and Conceptual Framework

3.1 Theoretical Framework

According to Huang (2002) stated that "the increased difficulty in detecting and responding to students' feelings is some reason why a deeper understanding is needed as new technologies and increasing class sizes impact education. The online learning environments, especially distancing learning environments, are often explicitly designed to have flexibility and autonomy in their class. Students can access material all have and find their sources and their own time or place constrained by centralized timetables".

Based on the theory above, the researchers concluded that difficulties are the challenges that make learners need to work hard to solve the problematic situation of what they learned. Prior training in technical abilities is required to efficiently use computers and the internet to support students in online education. Other factors, such as the students' perceptions and attitudes toward the internet, their level of English knowledge, and how the students manage their time, are also important. The researcher discovered that the respondents are already proficient in using computers and the internet in this study.

3.2 Conceptual Framework

In determining the students' perception of the implementation of online teaching and learning through this Framework, the readers can understand the flow and identify the dependent and independent variables of the study.

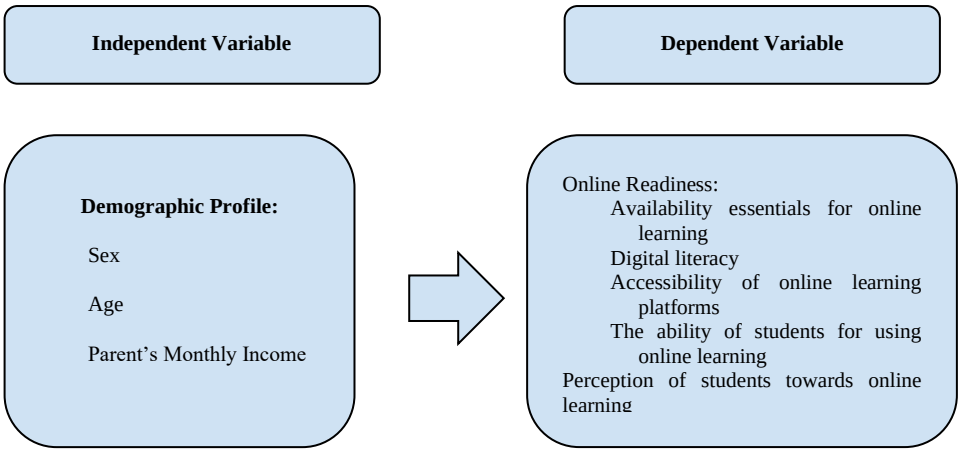

Figure 1: Schematic Diagram of the Conceptual Framework

4. Results and Discussions

Researchers presented Results and Discussions in order of question and objectives as follows:

4.1 What are the students' levels of perceptions towards online readiness in terms of:

4.1.1 Availability essentials for online learning

The respondents' availability essentials for online learning can be used to know what difficulties the students face during online learning.

Table 3: Means and Standard Deviation on the Availability Essentials for Online Learning

Statements	Mean	Standard Deviation	Description	Interpretation
1. I have a digital device (computer/laptop/smartphone).	3.59	.571	Strongly Agree	Very Good
2. I have a suitable audio device (Headphones/Speaker/Microphone).	3.12	.662	Agree	Good
3. I have financial support.	3.04	.573	Agree	Good
4. I have no experience with power interruptions (brownouts).	1.83	.862	Disagree	Fair
5. I have good internet connectivity.	2.37	.778	Disagree	Fair
6. I have a space to study at home.	2.73	.711	Agree	Good
Overall mean	**2.78**		**Agree**	**Good**

Table 3 shows the Availability Essentials for Online Learning of the respondents. It is shown in Table 1 that the question "I have a digital device (computer/laptop/smartphone)." got the highest mean of 3.59, which was described as "Strongly Agree" and interpreted as "Very Good.". In contrast, the question "I have no experience on power interruptions (brownouts)." got the lowest mean of 1.83 respectively, described as "Disagree" and interpreted as "Fair." With an overall mean of 2.78, which is interpreted as "Good." It implies that the respondents have the essential things for studying online.

The study of Bazimaziki (2020) implies that ICT gadgets need to be provided to students because E-learning cannot run without those resources. In Covid-19 lockdowns, successful E-learning cannot be effective without parents' contribution and the institution's part. Parents accept ICT gadgets as a teaching tool and a new teaching method that will help their children improve their knowledge. However, they do not want their children to overuse new technologies significantly when absent. When students are provided with the necessary resources, including, without limitation to, personal computers or smartphones, internet bundles, and electricity, they are motivated because those tools are taken as the engine of E-learning. Students should first and foremost get engaged and engage more efforts to increase their ICT skills; if not, the situation will become rampant.

4.1.2 Digital Literacy

The respondents' experience towards digital literacy is necessary to know how literate the students are in using all of the learning materials in online learning. The schools can use it to integrate proficiency in high-quality teaching and learning.

Table 4 shows the Digital Literacy of the respondents. It is shown in Table 2 that on the question "I am familiar with digital devices." got the highest mean of 3.37, which was described as "Strongly Agree" and interpreted as "Very Good.". In contrast, the question "I know all sources of online study materials." got the lowest mean of 2.69 respectively, described as "Agree" and interpreted as "Good." With an overall mean of 3.06 interpreted, the digital literacy is "Good." It implies that the respondents are digitally literate in terms of using devices, applications, and software that are needed for online learning.

Table 4: Mean and Standard Deviation on the Digital Literacy

Statements	Mean	Standard Deviation	Description	Interpretation
1. I am familiar with digital devices.	3.37	.485	Strongly Agree	Very Good
2. I have knowledge and skills in using computer/smartphone applications and software.	3.35	.500	Strongly Agree	Very Good
3. I am proficient in digital skills.	3.07	.503	Agree	Good
4. I know all sources of online study materials.	2.69	.545	Agree	Good
5. I know the validity of online learning materials	2.99	.508	Agree	Good
6. I have adequate knowledge of internet security.	2.90	.527	Agree	Good
Overall mean	**3.06**		**Agree**	**Good**

The study of Yazon et al. (2019) signifies that digital competence, defined as an awareness of how digital technology works in conjunction with opportunities, enables people to live in an information society, which is in line with survey findings. This competence states that people should use digital technology to support creativity and innovation. A prerequisite for using this technology is adopting a critical and responsible approach to information and interactive media. According to Tang and Chaw (2016), to be digitally literate, one must search and manage digital information and examine and integrate it. Students require planning, monitoring, and regulating skills in connection to information management and critical thinking skills.

4.1.3 Accessibility of Online Learning Platforms

The accessibility of Online Learning Platforms experienced by the respondents will help the schools to assess the students for the online learning platforms.

Table 5 shows the Accessibility of Online Learning Platforms of the respondents. It is shown in Table 3 that the question "I can access google suites suited for online learning." got the highest mean of 3.24, which was described as "Agree" and interpreted as "Good.". In contrast, the question "I always interact with teachers during online classes." got the lowest mean of 2.68 respectively, described as "Agree" and interpreted as "Good." And an overall mean of 2.95 implies that the accessibility of online learning platforms is "Good." It implies that the respondents can access online learning platforms.

Table 5: Mean and Standard Deviation on the Accessibility of Online Learning Platforms

Statements	Mean	Standard Deviation	Description	Interpretation
1. I have easy access to online learning resources.	2.90	.519	Agree	Good
2. I get teachers' support as and when required.	3.02	.454	Agree	Good
3. I always interact with teachers during online classes.	2.68	.636	Agree	Good
4. I always interact with classmates during online classes.	2.94	.534	Agree	Good
5. I can easily access our school's online learning platforms.	2.92	.586	Agree	Good
6. I can access google suites suited for online learning.	3.24	.557	Agree	Good
Overall mean	**2.95**		**Agree**	**Good**

These results also have the same implications as Odunlade's (2017) study; availability of information resources plays a significant role in teaching and learning. For effective teaching to occur, teachers must have access to many resources, particularly in their areas of specialization, and information resources must be offered. It will broaden their knowledge base and prepare them ahead of the challenges they may face in imparting knowledge. Teachers rely on a close connection with diverse information resources in their areas of competence `to carry out several activities as part of their professional responsibilities. Preparing course materials, communicating in the discipline's language, facilitating learning activities with relevant materials, engaging in extended discourse with learners, and giving critical thinking exercises are just a few examples.

4.1.4 The Ability of Students for using Online Learning

The Ability of the Students to use the Online Learning experiences of the respondents will help the school facilitate the students' use of the resources.

Table 6 shows the Ability of Students to use Online Learning of the respondents. It is shown in Table 4 that the question "I can use e-mail and other online tools to ask my classmates and instructors questions." has the highest mean of 3.38, which was described as "Strongly Agree" and interpreted as "Very Good.". In contrast, the question "I can easily comprehend online discussions." got the lowest mean of 2.61 respectively, described as "Agree" and interpreted as "Good." And an overall mean of 3.14 implies that the ability of students to use online learning is "Good." It implies that the respondents can use online learning.

Table 6: Mean and Standard Deviation on the Ability of Students for using Online Learning

Statements	Mean	Standard Deviation	Description	Interpretation
1. I am capable of learning new skills for an online course.	3.12	.542	Agree	Good
2. I can easily comprehend online discussions.	2.61	.652	Agree	Good
3. Gained experience of learning in a new online environment.	3.14	.537	Agree	Good
4. I am familiar with submitting online assignments.	3.37	.505	Strongly Agree	Very Good
5. I can use e-mail and other online tools to ask my classmates and instructors questions.	3.38	.566	Strongly Agree	Very Good
6. I can download resources online.	3.21	.523	Agree	Good
Overall mean	**3.14**		**Agree**	**Good**

The results gathered imply that with the study of Abuhassna et al. (2020), students' background regarding online platforms is defined as their ability and desire to use and adapt to various online platforms while receiving the necessary guidance and assistance. The student's prior experience with online learning is an essential factor to consider during this process, besides students' resistance to accept online learning platforms and the Learning Management System (LMS) platforms as educational tools.

4.1.5 Summary of Means

Table 7: Perception towards Online Readiness: Summary of Means in the Perception towards Online Readiness

Perception towards Online Readiness	Overall Mean	Interpretation
1. Availability Essentials for Online Learning	2.78	Good
2. Digital Literacy	3.06	Good
3. Accessibility of Online Learning Platforms	2.95	Good
4. The ability of Students for using Online learning	3.14	Good
GRAND MEAN	**2.98**	**Good**

Table 7 summarizes the Perception of Online Readiness in online learning. It can be noted that the variable "Ability of Students for using Online Learning" got the highest

mean of 3.14, which can be described as "Agree" and interpreted as "Good." In contrast, the variable "Availability Essentials for Online Learning" obtained the lowest mean of 2.78, which can be described as "Agree" and interpreted as "Good." An overall mean of 2.98 means that the Online Readiness of the students in online learning was "Good."

4.2 What is the student's perception of online learning?

Students' Perception of Online Learning can further improve education quality in schools.

Table 8: Mean and Standard Deviation on the Perception of Students towards Online Learning

Statements	Mean	Standard Deviation	Description	Interpretation
1. Online learning is a better choice in lockdown.	3.17	.813	Agree	Good
2. Online learning promotes self-directed learning.	3.17	.674	Agree	Good
3. I can speed up learning through online learning.	2.37	.778	Disagree	Fair
4. Online learning gives opportunities for comprehensive study.	2.68	.712	Agree	Good
5. Students are skillful in online learning.	2.33	.757	Disagree	Fair
6. Online learning is better than the traditional approach.	1.86	.799	Disagree	Fair
Overall mean	**2.60**		**Agree**	**Good**

Table 8 shows the Perception of Students towards Online Learning of the respondents. It is shown in Table 5 that the question "Online learning is a better choice in lockdown" and "Online learning promotes self-directed learning" got a tie and got the highest mean of 3.17, which is described as "Agree" and interpreted; as "Good." In contrast, "Online learning is better than the traditional approach" got the lowest mean of 1.86 respectively, described as "Disagree" and interpreted as "Fair." Furthermore, an overall weighted mean of 2.60 implies that students' perception of online learning is "Good." It implies that the respondents can learn through online learning.

The results are relevant to the study of Smart & Cappel (2006); a key consideration about online learning that seems to have emerged in this study is the completion time required for the online modules. Most students did not feel that the time it took to complete the modules was worth what was gained. It was pretty likely that students' perceptions of this experience would have been more favorable if shorter online units were utilized, if the two modules had been spread over a more extended time, or if only one of the two learning units had been required of students who have limited experience with e-learning.

4.3 What are the challenges faced by students during online learning?

The challenges faced by students during Online Learning experienced will be able to know what the students' difficulties they faced during online learning.

Table 9: Mean and Standard Deviation on the Difficulty Faced in Online Learning

Statements	Mean	Standard Deviation	Description	Interpretation
1. I face difficulty in the sudden swap to online learning.	3.37	.545	Strongly Agree	Very Good
2. Students face difficulty in online learning.	3.61	.510	Strongly Agree	Very Good
3. I feel isolated in online learning.	3.23	.729	Agree	Good
4. I experienced stress in online classes.	3.62	.508	Strongly Agree	Very Good
5. I am easily distracted from other family members during online lectures.	3.39	.652	Strongly Agree	Very Good
6. I feel frustrated and lack interest in learning while being locked down.	3.37	.709	Strongly Agree	Very Good
Overall mean	**3.43**		**Strongly Agree**	**Very Good**

Table 9 shows the Difficulties Faced in Online Learning of the respondents. It is shown in Table 6 that the question "I experienced stress in online classes" got the highest mean of 3.62, which is described as "Strongly Agree" and interpreted as "Very Good." At the same time, "I feel isolated in online learning" got the lowest mean of 3.23 respectively, described as "Agree" and interpreted as "Good." Furthermore, an overall weighted mean of 3.43 implies that the difficulty faced in online learning is "Very Good." It implies that the respondents are having difficulties in online learning.

The number 3 statement was supported in the study of Yang & Cornelius (2004); various reasons caused a sense of isolation for online learners. One reason was the lack of interpersonal communication or interaction between instructors/students.

4.4 Is there a significant relationship between students' profiles and online readiness? And is there a significant relationship between students' profiles and students' perception of online learning?

4.4.1 Sex versus Online Readiness and Perception of Students towards Online Learning

Table 10: Correlation between Sex and Online Readiness and Perception of Students towards Online Learning

Independent Variable	Dependent Variable	r	p	Interpretation
Sex	**I. Online Readiness**	**.143**	**.161**	**Not Significant**
	IA Availability Essentials for Online Learning	-.098	.338	Not significant
	IB Digital Literacy	.021	.232	Significant
	IC Accessibility of Online Learning Platforms	.127	.211	Not significant
	ID. The ability of Students to Using Online Learning	.080	.178	Not significant
	II. Perception of Students towards Online Learning	**-.054**	**.601**	**Significant**

*Correlation is significant at the 0.05 level

Table 10 shows the correlation between the Online Readiness and Perception of Students towards Online Learning and Sex. On Online Readiness, it can be noted that Sex is significantly related only to Digital Literacy (r= .021, p= .232) which denotes a Very Weak positive correlation while it has no significant relationship to the rest of the variables under the Online Readiness. It implies that Sex plays a significant role in determining how digitally literate the respondents are. The result further revealed that Sex is not significantly related to Online Readiness (r= .143, p= .161) which denotes a Very Strong positive correlation. Thus, the null hypothesis stating no significant relationship between Online Readiness and Sex is rejected. Meanwhile, it can also be noted that Sex is significantly related to the Perception of Students towards Online Learning (r= -.054, p= .601) which denotes a Moderate negative correlation. Thus, the null hypothesis stating that there is no significant relationship between the Perception of Students towards Online Learning and Sex is accepted.

These results also have the same implications as the study of Yu (2021); findings on gender disparities in online learning outcomes are uneven, if not contradictory. Female online students are more perseverant and engaged than males, while males hold more stable positive attitudes toward online learning. While females have more robust self-regulation than males in online learning contexts, males have more vital technical skills and can employ more learning methodologies than females. Gender preferences in online learning lead to no significant gender differences in online learning outcomes. Rationales for inconsistent findings in gender differences may not be limited to the above. Future research could do more in-depth research into this field.

4.4.2 Age versus Online Readiness and Perception of Students towards Online Learning

Table 11: Correlation between Age and Online Readiness and Perception of Students towards Online Learning

Independent Variable	Dependent Variable	r	p	Interpretation
Age	**Online Readiness**	**.038**	**-.210**	**Significant**
	A. Availability Essentials for Online Learning	-.140	.169	Not Significant
	B. Digital Literacy	.018	-.238	Significant
	C. Accessibility of Online Learning Platforms	-.020	.843	Significant
	D. Ability of Students for Using Online Learning	.022	-.232	Significant
	A. Perception of Students towards Online Learning	**-.039**	**.705**	**Significant**

*Correlation is significant at the 0.05 level

Table 11 shows the correlation between Online Readiness and Perception of Students towards Online Learning and Age. On Online Readiness, it can be noted that age is not significantly related only to Availability Essentials for Online Learning (r= -.140, p= .169) which denotes a Very Strong negative correlation while it has a significant relationship to the rest of the variables under the Online Readiness. It implies that age does not play a significant role in determining the resources of the respondents. The result further revealed that age is significantly related to Online Readiness (r= .038, p= -.210) which denotes a Weak positive correlation. Thus, the null hypothesis stating no significant relationship between Online Readiness and Age is accepted. Meanwhile, it can also be noted that age is significantly related to the Perception of Students towards Online Learning (r= -.039, p= .705) which denotes a Moderate negative correlation. Thus, the null hypothesis stating that there is no significant relationship between the Perception of Students towards Online Learning and Age is accepted.

These results imply with the study of Dabaj (2008), cross-tabulation of the data between age and these questions, 4% of them were aged younger than 18.64% with the age range in 18-25, and 32% were above 25 years old, 71% of the students perceived online education as mechanical due to its dependence on technology, nearly 48% students prefer face to face education than online class. Almost 83% of students were concerned about the sufficiency and competence of online instructors, 76% of them were not happy about the punctuality information received. 60% faced difficulty with nonverbal communication and collaboration.

4.5.3 Parent's Monthly Income versus Online Readiness and Perception of Students towards Online Learning

Table 12: Correlation between Parent's Monthly Income and Online Readiness and Perception of Students towards Online Learning

Independent Variable	Dependent Variable	r	p	Interpretation
Parent's Monthly Income	**I. Online Readiness**	**.006**	**.275**	**Significant**
	A. Availability Essentials for Online Learning	.132	.153	Not Significant
	B. Digital Literacy	.022	.231	Significant
	C. Accessibility of Online Learning Platforms	.102	.166	Not Significant
	D. Ability of Students for Using Online Learning	.004	.285	Significant
	II. Perception of Students towards Online Learning	**.071**	**.489**	**Not Significant**

*Correlation is significant at the 0.05 level

Table 12 shows the correlation between the Online Readiness and Perception of Students towards Online Learning and Parent's Monthly Income. The result further revealed that Parent's Monthly Income is significantly related to Online Readiness (r= .006, p= -.275) which denotes a Very Weak positive correlation. Thus, the null hypothesis stating no significant relationship between Online Readiness and Age is accepted. Meanwhile, it can also be noted that Parent's Monthly Income is not significantly related to the Perception of Students towards Online Learning (r= .071, p= .489) which denotes a Strong positive correlation. Thus, the null hypothesis stating no significant relationship between Students' Perception of Online Learning and Parent's Monthly Income is rejected.

With the study of Xu & Jaggars (2011), these results imply that most online students are not getting the support they must assist them in achieving success in the online environment. Mixed-offering colleges (those that provide both on-campus and online courses) frequently include a campus-based support infrastructure. Library assistance, financial aid services, the technical help desk, advising and counseling, and tutoring may be challenging to come by for online students.

5. Limitations of the Study

This study is limited to the Students Perception of Implementation of Online Teaching and Learning during the COVID-19 pandemic, in which all the institutions shifted in online learning. The researchers have encountered an insufficient sample size for statistical measurement due to the subjective selection of respondents that focused mainly on the whole population of third-year Department of Technology Teacher Education students comprising one hundred seven (107) students. Also, the researchers encountered limited access to data and connectivity issues in gathering data from the respondents. Thea result, the researchers collected ninety-eight (98) total responses from the respondents.

6. Conclusion

COVID-19 pandemic has brought changes in the educational system, especially in higher education. In this study, Age and Parent's Monthly Income are significantly related to Online Readiness, while Sex is not significantly related. On the other hand, Sex and Age are significantly related to the Perception of Students towards Online Learning, while Parent's Monthly Income is not significantly related.

Based on the initial findings and conclusions drawn, the following recommendations were made:

1. It is recommended that teachers use Online Teaching and Learning appropriately and wisely to enhance the teaching-learning processes for the students.

2. Future studies may be conducted with students from other college departments as respondents to validate the study results.

3. Future studies may be conducted to promote the efficacy of online teaching and learning.

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