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Equipped Upon Evaluation: Online Delivery Preparedness as an Input for Management and Psychosocial Support

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Abstract:This quantitative study aimed to assess the level of students' readiness for online instructional delivery and to investigate the factors contributing to it. This study provided a comprehensive analysis of the phenomenon, shedding light on student's readiness characteristics and its contributing elements. The study employed a two-stage probability sampling method, beginning with a random selection of 388 participants from a total population of 1,782 students enrolled in a state university in the Philippines. Subsequently, a probability-stratified random sampling technique was applied to ensure representation across year levels and gender categories within each college. The findings of this study indicated that students exhibited a high level of readiness for online instructional delivery. This readiness was consistent across five dimensions, namely: Computer and Internet Skills (CIS), Self-Directed Learning (SDL), Learning Commitment (LC), Motivation for Online Learning (MFL), and Online Communication Skills (OCS). Moreover, the analysis revealed that when students were grouped by sex or year level, there were no significant differences in their readiness levels. These results suggest that students possess a strong potential to embrace online instruction not only during times of significant disruptions but also as a regular mode of the teaching and learning process. This study contributes valuable insights for educational institutions and policymakers, highlighting the readiness of students to engage in online learning, which can be leveraged to enhance educational practices and facilitate a seamless transition to online instruction when needed.

Keywords*: online learning readiness, higher education, online instruction, student preparedness, management of online education.*

1. Introduction

The unanticipated Coronavirus Disease (COVID) - 19 pandemic has radically changed and disrupted education, which eventually led educational institutions to implement remote setups through online or offline platforms to ensure learning continuity. Online learning, more specifically, had become a necessity at the height of the pandemic. At the onset, the Philippine setting proved to struggle in the transition to online learning. Major challenges included the purchase and use of Information and Communications Technology (ICT) alongside the unstable internet connectivity and the psychological and mental unpreparedness of both teachers and learners (Dayagbil et al., 2021). However, after months of getting accustomed to the new learning modality, the Philippines eventually made adjustments: teachers were capacitated not only in terms of teaching methodologies but also in navigating technologies that assist in digital learning, and learners were provided options on the learning modality that is most suited to their context.

In the last two years, both teachers and learners have embraced the online learning modality setup (Dayagbil et al., 2021; Zheng et al., 2021). According to Jamilah and Fahyuni (2022), this setup must be continued because digital skills are 21st-century abilities that learners must master. They underscored that online learning could continue to be carried out in the post-COVID era, which is supported by 76% of the (21) articles that they reviewed around the world. They suggested that in the post-COVID era, online learning can be modified and combined with face-to-face learning for a blended learning method.

Meanwhile, an empirical study by Zheng et al. (2021) in the US emphasized the effectiveness of online classes during the pandemic; it could even achieve better student performance than the pre-pandemic in-person modality. The results of their study pointed out that most online courses were well accepted by the students, and 80% of them wanted to continue with some online instruction post-pandemic.

With the research presented, one may contend that implementing an online learning modality does not guarantee the same results in the Philippine setting. However, Dayagbil et al. (2021), based on their study conducted in Cebu, recommended that an online learning modality as a regular offering in Higher Education Institutions (HEIs) is possible. They emphasized that HEIs just need to conduct strategic scenario analysis for the best, possible, and worst scenarios in the areas of curriculum and instruction, student engagement, and technology and infrastructure. To ensure teaching and learning continuity amid and beyond the pandemic, they stressed that HEIs must migrate to flexible teaching and learning modalities by recalibrating the curriculum, capacitating the faculty, and upgrading the infrastructure. They added that the mentioned strategic actions must be continuously assessed, modified, and enhanced to respond to the volatile, uncertain, and changing scenarios in times of crisis.

Considering the context of the study's research site, the University's enrolment has drastically increased during the pandemic. As students' last hope to land a degree, the university cannot deny enrollment of students who are mostly from underprivileged families. Challenged by the increasing enrollment and insufficient classrooms to accommodate such numbers, online learning has paved the way for learning continuity. To elucidate, faculty members have been provided with technology and were capacitated to navigate these technologies that would assist them in the implementation of online modality. The University has also come up with a strategic plan on how to execute blended learning without jeopardizing the performance of the students. For instance, online learning was only implemented on fundamentally theoretical subjects, those which do not generally require much practical applications. If the University was able to transcend boundaries in providing higher education during the pandemic, it is just proper to believe that the same or more can be provided this time. Hence, this study will further determine the readiness of higher education students forthe online modality of learning.

The utilization of online learning modality is such a logical one as the University adheres to the Commission on Higher Education's (CHED) mandate that is "to promote relevant and quality higher education, and to ensure that quality higher education is accessible to all who seek it, particularly those who may not be able to afford it".

2. Objectives

This study aimed to determine the readiness of students in an online learning delivery in a higher learning institution in the Philippines.

Specifically, this study sought to answer the following questions:

1. What is the level of students' readiness for online delivery in terms of five dimensions: computer/Internet self-efficacy (CIS), self-directed learning (SDL), learner control (LC), motivation for learning (MFL), and online communication self-efficacy (OCS)?

2. What is the level of students' readiness for online delivery in terms of five dimensions (CIS, SDL, LC, MFL, and OCS) when grouped according to:

   a. sex
   b. year level?

3. Are there significant differences in the level of students' readiness for online delivery in terms of five dimensions (CIS, SDL, LC, MFL, and OCS) when grouped according to sex and year level?

3. Methods

The purpose of this study was to quantitatively determine the level of students' readiness for the online mode of instruction and from such quantitative data, assess the factors that contribute to such level of readiness. A descriptive diagnostic research design was utilized for this study. This design aims to provide a systematized and elaborated analysis of a phenomenon or problem to gain a better comprehension of its characteristics, components, and potential contributing factors. This design is particularly useful when the goal is to describe and diagnose a situation without necessarily establishing strong causal relationships.

Participants

Participants were taken randomly using a two-stage probability sampling. In the first stage, the sample size of 388 was taken from a population of 1782 students of the University as of August 2023. Then, in the second stage, the researcher utilized a probability-stratified random sampling for each year level and each sex category enrolled per college within a university.

3. Data Collection and Analysis

Data were gathered using a validated online survey tool composed of a participation consent part, a personal data section, and a five-point Likert-type scale that let the respondents assess their level of readiness based on the pre-identified dimensions.

The data were analyzed using descriptive statistics to determine the common constraints and trends. The analysis includes calculating frequencies, percentages, means, and standard deviation. Furthermore, inferential statistics was used to determine the significant difference across variables, sex, and year level. The scale of means below is utilized to interpret the results of each online readiness dimension.

TABLE 1. SCALE OF MEANS AND ITS EQUIVALENT READINESSINTERPRETATION

Scale of Means	Readiness Interpretations
4.50-5.00	Extremely Ready
3.50-4.49	Very Ready
2.50-3.49	Neutral
1.50-2.49	Slightly Ready
1.00-1.49	Not at all ready

4. Results

With the general goal of assessing students' readiness for online instruction, the findings of this study are presented based on the sequence of the research questions previously stated in the initial parts of this paper.

For the first research question on the level of students' readiness for online delivery in terms of five dimensions (computer/Internet self-efficacy (CIS), self-directed learning (SDL), learner control (LC), motivation for learning (MFL), online communication self-efficacy (OCS)), the table below summarizes the result:

TABLE 2. STUDENTS' LEVEL OF READINESS FOR ONLINE DELIVERY IN TERMS OF FIVE DIMENSIONS

	N	Mean	SD
Students' Readiness (Overall)	338	3.95	.52
CIS: Computer/Internet self-efficacy	338	3.87	.69
SDL: Self-directed learning	338	3.94	.62
LC: Learner Control	338	3.76	.65
MFL: Motivation for Learning	338	**4.36**	.63
OCS: Online communication self-efficacy	338	3.81	.71

Table 2 showed that students' overall readiness for online delivery of classes was *very ready* (M=3.95, SD=.52) and students' readiness across five dimensions namely CIS (M=3.87, SD=69), SDL (M=3.94, SD=62), LC (M=3.76, SD=.65), MFL (M=4.35, SD=.63), and OCS (M=3.81, SD=.71) were all *very ready* as well. In addition, results also showed that MFL (4.36) garnered the highest mean while LC (3.76) got the lowest.

For the second research question on the level of students' readiness for online delivery in terms of the five dimensions (CIS, SDL, LC, MFL, and OCS) when grouped according to **sex**, the table below shows the result:

TABLE 3. STUDENTS' LEVEL OF READINESS FOR ONLINE DELIVERY IN TERMS OF FIVE DIMENSIONS WHEN GROUPED ACCORDING TO SEX

	Male		Female	
	M	SD	M	SD
Students' Readiness for Online Delivery (Overall)	3.91	.57	3.98	.47
CIS: Computer/Internet self-efficacy	3.87	.80	3.88	.58
SDL: Self-directed learning	3.88	.67	4.00	.57
LC: Learner Control	3.72	.68	3.79	.62
MFL: Motivation for Learning	**4.24**	.68	**4.46**	.57
OCS: Online communication self-efficacy	3.85	.74	3.78	.68

This table revealed that students' overall readiness for online delivery of classes when grouped according to sex were all *very ready* (Female - M=3.98, SD=.58 and Male -M=3.01, SD=.67). Moreover, looking into students' readiness across the five dimensions when grouped according to sex, results still showed that all are *very ready*. MFL garnered the highest mean for both sexes. Meanwhile, LC got the lowest mean for the male group, while OCS got the lowest for the female group.

Still, for the second research question on the level of students' readiness for online delivery in terms of five dimensions (CIS, SDL, LC, MFL, and OCS), this time when grouped according to **year level**, the table below shows the result:

TABLE 4. STUDENTS' LEVEL OF READINESS FOR ONLINE DELIVERY IN TERMS OF FIVE DIMENSIONS WHEN GROUPED ACCORDING TO YEAR LEVEL

	1st Year		2nd Year		3rd Year		4th Year	
	M	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
Students' Readiness for Online Delivery	3.91	.56	3.96	.45	3.91	.53	4.08	.55
CIS	3.79	.69	3.90	.67	3.89	.67	4.04	.75
SDL	3.92	.65	3.96	.60	3.90	.61	4.05	.57
LC	3.79	.69	3.78	.60	3.61	.66	3.87	.62
MFL	**4.23**	.68	**4.44**	.54	**4.41**	.67	**4.36**	.63
OCS	3.80	.71	3.76	.68	3.80	.70	4.02	.80

The table revealed that students' overall readiness for online delivery of classes when grouped according to year level were all *very ready*. The 4th year group got the highest meanwhile the 1st and the 3rd year groups tied having the lowest. As for students' readiness for online delivery across the five dimensions when grouped by year level, results still showed that all are *very ready*. MFL consistently yielded the highest mean across the different grade levels while LC was also consistent in garnering the lowest mean across the year levels.

For the last research question on the significant differences in the level of students' readiness for online delivery in terms of five dimensions (CIS, SDL, LC, MFL, and OCS) when grouped according to sex and year level, the table shows the result:

TABLE 5. SIGNIFICANT DIFFERENCES ON STUDENTS' LEVEL OF READINESS FOR ONLINE DELIVERY IN TERMS OF FIVE DIMENSIONS WHEN GROUPED ACCORDING TO SEX AND YEAR LEVEL

Students' Readiness on Online Delivery	**P value**	**Remarks**
Sex	.297	
CIS: Computer/Internet self-efficacy	.972	
SDL: Self-directed learning	.079	
LC: Learner Control	.367	
MFL: Motivation for Learning	.002	**Significant**
OCS: Online communication self-efficacy	.382	
Year Level	.309	
CIS: Computer/Internet self-efficacy	.221	
SDL: Self-directed learning	.596	
LC: Learner Control	.182	
MFL: Motivation for Learning	.234	
OCS: Online communication self-efficacy	.224	

The table revealed that there were *no significant differences*in the level of students' readiness for online delivery classes when grouped according to sex (p=.297) and year level (p=.309). Therefore, the null hypothesis was accepted. However, there was a significant difference in sex in one of the five dimensions of students' readiness for online delivery of class with MFL (p=.002), which can be interpreted that students' MFL varies across sex. Accordingly, further analysis revealed that females were more motivated to learn than male students.

5. Discussion

This study that sought to assess students' level of readiness for online delivery found that when taken as a whole, students are very ready. Furthermore, when gleaned in terms of five dimensions (CIS, SDL, LC, MFL,

and OCS), they were also assessed to be very ready. This study also revealed that when the respondents were grouped according to sex and year level, they also manifested to be very ready for the online mode of instruction. Results further showed that there are no significant differences in the level of students' readiness when grouped either by sex or by year level.

The very ready result of students' level of readiness for online delivery of instruction, when taken as a whole and in terms of the five dimensions (CIS, SDL, LC, MFL, and OCS), shows the preparedness of ISUFST students to embrace online learning as a regular modality. This finding resembles those found by Hung et al. (2010) and Rasouli et al. (2016) who reported high to above-average readiness of university students in utilizing the online mode of learning. The local study of Fearnly and Malay (2021) supports this finding as they also reported positive readiness of freshmen students for online learning in their study conducted in a private HEI in Manila, Philippines.

Interestingly, motivation for learning (MFL) garnered the highest mean. Consistent with the findings of related studies (Cigdem & Ozturk, 2016; Cigdem & Yildirim, 2014; Fearnly and Malay, 2021), this is reflective of the interest and eagerness of university students to embrace online learning as a modality for instruction. The MFL dimension considers how enthusiastic a student is in terms of participating in learning activities and how much attention and effort the student puts into different academic engagements (Cave, 2003, as cited in Horzum et al., 2015). In an online setting, students with high MFL are expected to perform online tasks more readily (Geng et al., 2019) and achieve better grades (Horzum et al., 2014). On the other hand, although the rating for LC was very ready, it still garnered the lowest mean among the other dimensions, also affirming the study of Engin (2017). LC speaks of students' capacity to monitor their learning and make necessary adjustments whenever necessary. Nevertheless, successful online learning will challenge learners to be comfortable and confident in terms of monitoring their learning progress (Chung et al., 2020).

When grouped by sex and by year level, results also showed a very ready level of readiness for online instruction. This finding indicates that regardless of sex and year level, college learners are ready to engage in online learning modality. This level of readiness is also affirmed by various international and local studies (Min-Ling Hung et al., 2010; Rasouli et al., 2016; Fearnly and Malay, 2021) which post a huge potentiality for online learning to be utilized as a regular mode of instruction.

Lastly, results also showed that there were no significant differences in the level of students' readiness when grouped either by sex or by year level. However, there is a significant difference in sex in one of the five dimensions of online readiness: the motivation for learning (MFL). This shows a similar result with Fearnly and Malay (2021) who reported a significant difference in MFL together with computer/Internet self-efficacy (CIS) and online communication self-efficacy (OCS). A significant difference was found among students' academic programs, though. Consequently, further analysis revealed that female students are more motivated to learn than male students. This finding sheds light on the idea that female students are more interested and are more open to exploring online learning as a modality for instruction as compared to their male counterparts.

Implications

The findings of this study have strong implications for the University. The high level of students' readiness for online learning shows a robust potentiality to embrace online instruction, not only during major learning disruptions but also as a regular mode of the teaching-learning process. Evidently, online learning may likewise be strategically utilized by the University in cases of increasing enrollment which may result in insufficient physical classrooms.

Moreover, the findings can be used to generate a sound foundation for the school administration's policy modification and policy adoption in terms of embracing online learning as a regular mode of instruction.

The results of this study also imply that college instructors must also be capacitated to match the readiness of students to embrace online learning as a regular mode for the teaching-learning process. This means that they

must also possess instructional readiness in using different online platforms and in practicing multi-various online pedagogies.

Since this study already established the readiness of college students for online instruction, further research may be done to investigate the readiness of college instructors, support administrative personnel, and the institution as a whole to provide a more comprehensive perspective on institutional readiness in offering a regular online mode of instruction.

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