Students’ Perception on Online and Distance Learning and their Motivation and Learning Strategies in using Educational Technologies during COVID-19 Pandemic

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Abstract. This descriptive study calculated the perceptions of 258 freshmen students of the Polytechnic University of the Philippines' Ragay, Camarines Sur Branch on the use of educational technologies in online and distance education, their level of motivation, and their learning strategies for the First Semester of Academic Year 2020-2021. It revealed that the students perceived that distance learning is excellent and essential. However, their access to the computer and other devices is limited. They perceived that their university branch's online or distance learning is moderately successful and that the university and their subject professors are moderately helpful in providing support and understanding during this type of learning arrangement. Likewise, they are motivated to use the educational technologies and perceived themselves to Often Utilized different learning strategies in using educational technologies during the COVID-19 pandemic. Thus, it is recommended that instructors and students train before the start of the semester to improve the level of acceptance of students to this new kind of learning set up to ensure that they will achieve better competence relative to their chosen and enrolled degrees.

Keywords: Perception, Motivation, Learning Strategies, Educational Technologies, COVID-19

1. Introduction

The Coronavirus 2019 (COVID-19) has shaken the educational systems in the Philippines and all parts of the world. It created a series of pedagogical shifts that posed opportunities and threats to the quality of education, especially on the over 2,000 Private and State Universities and Colleges in the Philippines that cater to over 1.83 million students in 2020. The sudden closure of basic and higher education institutions in the country disrupts the academic calendars that resulted in online, distance, modular, and flexible learning known as "New Normal." In the current academic year, all lessons are taken virtually through various learning management systems, social media platforms, and learning applications that are new to most teachers and students [1], [2].

Due to the sudden closure of schools and the sudden transition to online learning, numerous issues on the difficulties and challenges the faculty members and students face in the use of online education were observed in connection to the concern on the quality of education received by the latter. There was an increasing level of anxiety, study behavior, and academic stress experienced by students[3]. Depression, unhealthy diet, social isolation, trouble sleeping, dissatisfaction, physical inactivity were observed [4] aside from the other biopsychosocial factors and issues affecting the mental health of
educators and learners such as increased eating and sleeping, increase or decrease of goal achievement, anxiety due to extreme harmful media exposure [5]. Thus, educators should study students' learning strategies and motivation by integrating physical exercise or activities, healthy eating practice, and finding a new hobby within their lesson and prospectus. The faculty transition and adaption to the new normal teaching in higher education should be addressed by training, administrative support, and professional development to improve the promise of online and distance education[1]. Aside from that, the Institutions of Higher Education must also establish strategies and approaches to maintain mental balance among students, thereby encouraging researches and researchers to focus on anxiety, knowledge, personal coping strategies, and knowledge, and competence development during the New Normal [3].

Likewise, since access to online resources, ownership of devices being used during the online learning, [6] identified the community, technological, domestic, individual, and institutional barriers that affect the learner's adaptation to online and distance learning. To address the said barriers, student-centered interventions among the college students should be implemented among the HEIs to improve their motivation and learning strategies, thereby motivating them to use educational technologies and resources to improve their study habits and capacity for online learning. They also need to foster the values of commitment, self-reliance, technological adaptation, and time management. Also, instructors are recommended to avoid giving students with overwhelming activities, assignments and modify their assessment techniques to boost their appreciation of the educational materials given to them during the Academic Year being affected by this COVID-19 pandemic [7].

Thus, this study premised that the student perceptions on distance and online learning affect their motivation and learning strategies to use educational technologies despite its importance and promise for learning to happen even during a pandemic. Hence, this study can help faculty members and institutions of higher learning understand how to impact more than thirty million college students from 62 countries worldwide.

2. Methodology

During the COVID-19 Pandemic, this study used a descriptive design to understand better students' perceptions of online and distance learning and their motivation and learning strategies while using educational technologies. Researchers used a complete enumeration of 258 Freshmen Students at the Ragay, Camarines Sur Branch of the Polytechnic University of the Philippines. There are 45 Bachelor of Science in Secondary Students majoring in English, 43 Bachelor of Science in Elementary Education students, 38 Bachelor of Science in Office Administration students, 42 and 49 Bachelor of Science in Business Administration students majoring in Human Resource Management and Marketing Management, and the remaining 41 students are Bachelor of Science in Information Technology students for the First Semester of the Academic Year 2020-2021.

To collect data, the researchers used the Motivated Strategies for Learning Questionnaire (MSLQ), which was developed by Teresa Duncan and Wilbert J. McKeachie in 1991 and published in 2015. It was tailored to meet the demands of determining motivation and learning strategies for the use of educational technologies during the COVID-19 pandemic. It is a self-report tool that evaluates college students' motivational orientations and learning styles in a college course. The MSLQ is focused on a broad understanding of motivation and learning techniques from a cognitive perspective. McKeachie, Pintrich, Lin, and Smith (1986) introduced the general theoretical framework that underpins the MSLQ [8], and descriptive statistics were used to determine its interpretation. The analysis of [9] was used since it has a similar interpretation.

This study aims to determine students' perception of online and distance education, the level of motivation, and the learning strategies of freshmen students of Ragay, Camarines Sur Branch of the Polytechnic University of the Philippines. This was conducted in the First Semester of the Academic Year 2020-2021. To avoid bias and preserve the integrity of the courses and the respondents, the researchers utilized the average means of the entire population of the study.
3. Result and Discussion

The findings are drawn from data analysis and interpretation to wit:

3.1. Student’s Perception on Online and Distance Learning

Table 1. The Extent of Student’s Perception on Online and Distance Learning

| Indicators                                                                 | Average Mean | Verbal Interpretation          |
|---------------------------------------------------------------------------|--------------|--------------------------------|
| Overall feeling about distance and online learning                        | 3.90         | Good                           |
| Access to a device for online learning                                    | 3.47         | Not accessible sometimes       |
| Availability of devices used for Online learning                          | 3.50         | Averagely available            |
| Self-perception on the effectiveness of online or distance learning       | 3.73         | Moderately effective           |
| The helpfulness of the university in offering resources and the faculty member's understanding extended during online and distance education. | 3.93         | Moderately helpful             |
| The stressfulness of online and distance learning is during the COVID-19 pandemic. | 3.66         | Moderately stressful          |
| Level of enjoyment on the online, distance, and remote learning during COVID-19 pandemic. | 3.58         | Moderately enjoyed             |
| Perceived helpfulness of online, distance and remote learning improves one's competence during the COVID-19 pandemic. | 3.85         | Moderately helpful             |

Based on Table 1, the results revealed that the freshmen students across six programs perceived that distance learning is good and is necessary for their degrees; however, their access to the device that they will use in online learning is sometimes not available and averagely available. They likewise perceived that the university branch's online or distance learning is moderately effective, and the university and their subject professors are moderately helpful in offering resources. Their instructors are understanding during this kind of learning setup. They also perceived that online, distance, and remote learning are moderately helpful in improving students' competencies as they start their baccalaureate degrees and moderately enjoy the learning activities. However, they are moderately overwhelmed in this type of learning environment because it is new to them. As a result, it confirms [10]'s findings that students should be able to engage in online education because it is a relatively successful forum for learning, considering the obstacles that obstruct their ability to improve their knowledge transfer method.

3.2. Students Motivation in using Educational Technologies during COVID-19 Pandemic

Table 2. The Extent of Motivation in using Educational Technologies during COVID-19 Pandemic

| Indicators                        | Average Mean | Standard Deviation | Verbal Interpretation |
|-----------------------------------|--------------|--------------------|-----------------------|
| Task value                        | 4.10         | 0.60               | Often Utilized        |
| Control Learning Beliefs          | 3.92         | 0.67               | Often Utilized        |
| Extrinsic Motivation              | 3.90         | 0.73               | Often Utilized        |
| Intrinsic Motivation              | 3.70         | 0.58               | Often Utilized        |
| Anxiety Test                      | 3.67         | 0.66               | Often Utilized        |
| Self-Efficacy and Performances    | 3.33         | 0.58               | Sometimes Utilized    |
| Average                           | 3.77         | 0.64               | Often Utilized        |

Using the updated MSLQ instrument, all freshmen students were asked to score their motivation in using Educational Technologies during the COVID-19 Pandemic. According to [8], [9], the degree of use of learning techniques varies from 1 to 5, with five being the most used.
It can be gleaned that all freshmen students across six programs being offered at Ragay, Camarines Sur Branch of the Polytechnic University of the Philippines revealed that they Often Utilized educational technologies with an average mean of 3.77 (SD 0.64). Furthermore, it can be seen that they are motivated to use the educational technologies in their task value (4.10) followed by Control of Learning Beliefs (3.92), Extrinsic Motivation (3.90), Intrinsic Motivation (3.70), and in Anxiety Test (3.67). Therefore, despite the sudden shift in the teaching modalities from the traditional classroom setup, the students often utilized the educational technologies as they are often motivated to join their online and distance classes. However, it is noteworthy to observe that their self-efficacy and performance are slightly off. Therefore teachers should consider different teaching strategies in this learning setup to enjoy and appreciate the distance and online learning.

3.3. The Learning Strategies of Students in using Educational Technologies during COVID-19 Pandemic

| Indicators             | Average Mean | Standard Deviation | Verbal Interpretation |
|------------------------|--------------|--------------------|-----------------------|
| Rehearsal              | 4.19         | 0.79               | Often Utilized        |
| Elaboration            | 4.09         | 0.81               | Often Utilized        |
| Organization           | 4.07         | 0.83               | Often Utilized        |
| Critical Thinking      | 3.74         | 0.84               | Often Utilized        |
| Self-Regulation        | 3.74         | 0.89               | Often Utilized        |
| Time and Study         | 3.71         | 0.86               | Often Utilized        |
| Effort Regulation      | 3.68         | 0.89               | Often Utilized        |
| Peer Learning          | 3.64         | 0.88               | Often Utilized        |
| Average                | 3.86         | 0.85               | Often Utilized        |

As shown in Table 3, the study respondents or the freshmen students from the Polytechnic University of the Philippines-Ragay, Camarines Sur Branch perceived themselves to often utilize different learning strategies in using educational technologies COVID-19 pandemic as they generated an average mean of 3.86. It was further revealed that their rehearsal strategies ranked first with an average mean of 4.19, followed by elaboration (4.09), organization skills (4.07), critical thinking and self-regulation (3.74), and time and study strategies (3.71) while the effort regulation and peer learning ranked last with an average mean of 3.68 and 3.64.

The preliminary findings support [11]'s findings that a variety of factors influence students' academic success during e-learning, including teaching methods, psychological factors, proficiency level, and language skills, which can prompt them to develop learning strategies based on their exposure to various educational technologies used by their professors or required of them.

4. Conclusion

The freshmen student respondents revealed that distance learning is excellent and essential for their degrees, but their access to the computer and other devices they would use for online learning is sometimes not accessible and averagely available. They also believe that the university branch's online or distance learning is moderately successful, and that the university and their subject professors are moderately helpful in providing support, and that their instructors are understanding during this type of learning arrangement. Similarly, they are inspired to use educational technologies and often use various learning techniques during the COVID-19 pandemic.

Given that the respondents or first-year students recognized and appreciated the value of educational technologies they used during online and distance learning, it is recommended that before the onset of the semester, they should be trained in using the applications, technologies, and websites that their instructors will adopt in their classes. Also, instructors should be trained in this new kind of earning set up to ensure the success of its implementation in the field, and they are likewise be trained in offering support to their students who will encounter burnout, low motivation, stress, and
difficulties in using technology. Likewise, the school administrators should also consider the nature of socio-economic conditions of learners to adjust to their needs and thereby improve the learning condition in Higher Education Institutions during the New Normal set up to ensure quality graduates from their college or university.

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