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## Teachers' Awareness of Students' Learning Situations During Distance Learning: Implications for Students' Academic Performance

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Abstract: This study focused on teachers' awareness of students' learning situations during distance learning. It took place at the Nueva Ecija University of Science and Technology (NEUST) - Gabaldon Campus during the academic year 2021-2022. The study employed descriptive-comparative and descriptive-correlational designs. The 249 students were selected using a stratified sampling technique, whereas the 25 teachers were selected using a purposive sampling technique. Findings revealed that teachers are aware of their students' situations. The students believe that they faced learning challenges during distance learning. There is a significant difference between male and female teachers in terms of student learning environment awareness, but no statistically significant difference in the teacher's awareness of the student's learning situation across age groups, service years, and academic rank. There is a significant difference in the learning anxiety of male and female students but not in the learning environment and blended learning readiness. The learning environment and readiness for blended learning do not differ significantly across age groups of students, but anxiety does. A statistically significant difference in student readiness in blended learning was observed based on students' courses but not on the learning environment or anxiety. There is no significant difference in students' learning situations based on family income or parental educational attainment. There was no significant difference in student achievement based on the teachers' level of awareness. Achievement is positively correlated with learning environment and readiness but negatively associated with anxiety. In addition, the study discussed its theoretical and practical implications.

**Keywords:** Blended learning readiness, learning anxiety, learning environment, students' perception, teacher's awareness.

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## Introduction

People's circumstances have changed due to the Coronavirus disease (COVID-19) pandemic, particularly in education, where the traditional face-to-face method of learning has now been converted or transformed into pure online learning, pure modular learning, and blended learning. Since the novel (COVID-19) has been declared a global emergency, the entire educational system, from primary to tertiary levels, has disintegrated (Mishra et al., 2020). The COVID-19 pandemic affects an individual's emotional, mental, and physical well-being. Son et al. (2020) discovered that among 195 students at a large public university in the United States, 138 (71%) reported increased tension and anxiety as a result of the COVID-19 outbreak. Various stress factors affect students' elevated levels of stress, anxiety, and depressive thoughts. Fear and worry about their own and their loved one's health (177/195, 91%), difficulty concentrating (173/195, 89%), disruptions to sleeping patterns (168/195, 86%), decreased social interactions due to physical distancing (167/195, 86%), and increased concerns about academic performance (159/195, 82%) were among these. Similarly, Capinding (2021) confirmed that students' activities such as sleeping, studying, and using social media differed significantly before and during the pandemic.

Teachers' factors may influence how students cope with the new normal due to these emerging problems that happen and are felt by students. According to Dobson (2012), anxiety reduction needs the efforts of students, teachers, and parents. She also discovered that mindfulness meditation, metacognition, coping strategies, and teacher participation could help lower anxiety. Teachers, on the other hand, were more aware of their students before the pandemic because,

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in face-to-face classes, teachers can quickly recognize students' faces, physical appearance, behaviour, intellectual capacity, and ability. Teachers can also discuss their lessons effectively, and the interaction between the teacher and students is active and visible. Communication and interaction between teachers and students are not as active and visible as in distance learning. Teachers can intervene quickly in face-to-face learning because they can easily observe the students; however, in a distant learning approach, teachers cannot easily keep the students and thus cannot intervene quickly. Additionally, higher education students identified some shortcomings in distance learning, including a lack of face-to-face interaction with the instructor, response time, and the absence of traditional classroom socialization (Adnan & Anwar, 2020).

Furthermore, teachers' instructional techniques and interpersonal relationships with students have been identified as potentially powerful factors that contribute to student motivation and performance (Wentzel & Wigfield, 1998). In line with this, according to Schultz (2015), it was important for teachers to get to know their students so that they would know them as people. In addition, according to Paschal and Mkulu (2020), the teacher-student relationship is a crucial determinant and catalyst to academic performance in Tanzanian public secondary schools. Moreover, different instructional practices have varying degrees of impact on student's academic performance in English, Maths, Science, Filipino, and Social Studies. This means that each unit's improvement in the aforementioned instructional management techniques could result in a measurable improvement in the student's academic performance (Francisco & Celon, 2020).

Improvement of academic performance and promotion of students' professional development in educational institutions are two of the school system's main objectives (Van Mieghem et al., 2020). There is no doubt that teachers are one of the most crucial factors in determining how well students develop. Teachers play a key role in shaping their country's future, and they are without a doubt the most significant component of the educational system. As a result, it is important to focus on teacher preparation. Examining the negative effects that prohibit potential teacher candidates from acquiring a competent education and identifying alternatives will make prospective teacher candidates more profitable for themselves, their students, and their communities (Vy, 2021).

Because of the long-term pandemic crisis and various measures such as lockdown and stay-at-home orders anxiety also occurs or arises during this pandemic, especially among students, and is referred to as "learning anxiety." Learning anxiety relates to students' negative thoughts or feelings (nervous, stressed, frightened, worried, under pressure) while participating in blended or face-to-face learning (AlKandari, 2020). According to England et al. (2019) one emotion students experience is anxiety, which can negatively impact student performance and persistence.

Furthermore, academic anxiety can have a negative effect on a student's academic performance (Mirawdali et al., 2018). Teachers and parents can learn to recognize the signs of anxiety in school students. If teachers and parents help students to learn to control anxiety early, more serious academic problems related to anxiety can be avoided. Anxiety can become more detrimental over time (Hooda & Saini, 2017). Arguedas et al. (2016) show that when students are aware of their emotions and guided by specific teaching strategies, their learning performance improves concerning their motivation, engagement and self-regulation. Likewise, when teachers are conscious of students' emotional states their attitude and feedback become more effective and timelier.

Furthermore, one of the elements that may have an impact on students' emotional health is the environment in which they learn, including the role of the faculty, their teaching methods, the academic standards, and the accessibility of learning resources (Tharani et al., 2017). This improved emotional health may lead to improved academic performance (Berger et al., 2011).

On the other hand, distance learning exposes teachers and students to various learning environments. To keep up with trends and continue the process of teaching and learning, teachers and students must learn various learning technologies. Torun (2020) asserts that e-learning readiness must be carefully considered because student academic achievement can be improved by motivation toward e-learning. Students must learn these technological advantages to conform to the new mode of learning. Additionally, evaluating students' readiness for blended learning, which is necessary for the successful implementation of blended learning, can be influenced by their right attitude toward various learning aspects (Firdaus et al., 2020).

The goal of this study is to determine whether teachers are aware of their students' learning situations and whether this impacts their academic achievement. The researcher chose this topic as it is relevant today, and the result of this could be used as a basis for further studies that could help teachers be more aware of their students' learning situations. Also, the researcher think that the proposed research can help improve the teaching and learning delivery or process. Moreover, the researcher formulated the following questions: (a) How may the awareness of the teachers towards students learning situation be described in terms of learning environment, blended learning readiness, and learning anxiety?; (b) How may the student's learning situation be described in terms of learning environment, blended learning readiness, and learning anxiety?; (c) What is the academic achievement of the students during distance learning?; (d) Is there a significant difference in the teachers' awareness of students learning situations when grouped according to sex, age, number of years in service, and academic rank?; (e) Is there a significant difference in the students' learning situations when grouped according to sex, age, course, family income, and parents' educational attainment?; (f) Is there a significant difference in the student's academic achievement when grouped according to the teacher's level of awareness of his/her student's learning environment, blended learning readiness, and learning anxiety?; and (g) Is there a significant relationship between the student's learning situation and their academic achievement?

## Methodology

## Research Design

This study utilized the descriptive-comparative and descriptive-correlational design. Comparative studies are methods of identifying differences and similarities between entities after they have been evaluated (Mokhtarianpour, 2016). The goal of a correlational study is to find relationships between different variables and predict future occurrences using data from the present (Stangor & Walinga, 2019).

## Sampling Technique

The sample size of 249 college students from Nueva Ecija University of Science and Technology, Gabaldon campus was determined using the Raosoft sample size calculator, and they were chosen using stratified sampling. The strata were the five courses: Bachelor of Secondary Education, Bachelor of Elementary Education, Bachelor of Information and Communication Technology, Bachelor of Hospitality Management, and Bachelor of Science in Agriculture. While the 25 teacher respondents were chosen on purpose.

#### Profile of the Respondents

## Teacher's Profile

Table 1 shows the teacher's distribution according to their sex, age, course, number of years, and academic rank. In terms of sex, there are 25 respondents consisting of 13 (52.00%) female teachers and 12 (48.0%) male teachers. The data shows that female teachers dominate the respondents.

In terms of age, there are 25 respondents and between the age group of 31-35 there are 5 (20%) teachers, 41- 45 years old there are also 5 (20%) teachers, 36 – 40 years old there are 4 (16%) teachers, 26 – 30 years old there are 3 (12%) teachers, 51 – 55 years old there are 3 (12%) teachers, 21 – 25 years old there are 2 (8%) teachers, 56 – 60 years old there are also are 2 (8%) teachers, and between the age group of 46 – 50, there is 1 (4%) teacher respondent. The data shows that the age group between 31 - 35 and 41 - 45 dominates the respondents.

In terms of the number of years in service, there are 25 respondents consisting of 12 (48%) who are already in 1-6 years in service, 4 (16%) are already in 7 - 12 years in service, 4 (16%) are already in 25 - 30 years in service, 3 (12%) are already in 13 - 18 years in service, 1 (4%) are already in 19 - 20 years in service, and 1 (4%) are 31 years and above in service. The data shows that teachers that have already had 1-6 years of service dominate the respondents.

In terms of the number of academic ranks, there are 25 respondents consisting of 9 (36%) LOHB, 7 (28%) Instructor 1, 3 (12%) Assistant Professor 2, 1 (4%) Instructor 2, 1 (4%) Associate Professor 4, 1 (4%) Associate Professor 3, and 1 (4%) Associate Professor 4. The data shows that teachers with an academic rank of LOHB dominate the respondents.

Sex	Frequency	Per cent
Male	12	48.0
Female	13	52.0
Total	25	100.0
Age	Frequency	Per cent
21-25	2	8
26-30	3	12
31-35	5	20
36-40	4	16
41-45	5	20
46-50	1	4
51-55	3	12
56-60	2	8
Total	25	100

Table 1. Teachers' Profile

Table 1. Continued

Number of years in service	Frequency	Per cent
1 to 6	12	48
7 to 12	4	16
13 to 18	3	12
19 to 24	1	4
25 to 30	4	16
31 and above	1	4
Total	25	100
Academic Rank	Frequency	Per cent
LOHB	9	36.0
Instructor 1	7	28.0
Instructor 2	1	4.0
Assistant Professor 2	3	12.0
Assistant Professor 4	1	4.0
Associate Professor 1	1	4.0
Associate Professor 2	1	4.0
Associate Professor 3	1	4.0
Associate Professor 4	1	4.0
Total	25	100.0

## Students' Profile

Table 2 shows the student's distribution according to their sex, age, course, family income, and parents' educational attainment. In terms of sex, there are 249 respondents consisting of 91 (36.5%) male students and 158 (65.5%) female students. The data shows that female students dominate the respondents.

In terms of age, between the age group 16-20 there are 144 (57.83%) students, 86 (34.54%) students were 21-25 years old, 11 (4.42%) students were 26-30 years old, 7 (2.8%) were students 31-35 years old and 1 (4%) student were 36-40 years old. According to the data, respondents aged 16 to 20 years old dominate, and one student proved that it is not too late to return to school, regardless of their age.

In terms of courses, there are 62 (25%) students with a Bachelor of Science in Information Technology (BSIT), 61 (24%) students with a Bachelor of Elementary Education (BEE), 48 (19%) office students from Bachelor of Science in Agriculture (BSA), 43 (17%) students from Hospitality Management (HM), and 35 (14%) of students were from Bachelor of Secondary Education (BSE). The data shows that BSIT students comprise the majority of the responses.

In terms of family income, 150 (60.2%) of them were categorized as poor (less than PHP 9,520). 77 (30.9%) of them were categorized as low-income (between PHP 9,520 and PHP 19,040), 19 (7.6%) of them were categorized as lower-middle-income (between PHP 19,040 and PHP 36,080) and 3 (1.2%) of them were categorized as middle income (between PHP 38,080 and PHP 66,640). The data shows that most of the respondents can be categorized as poor and only 3 of them are categorized as middle-income earners.

Lastly, in terms of parent's educational attainment, there are 135 (54.2%) were high school graduates, 49 (19.7%) were elementary graduates, 43 (17.3%) were college graduates, and 22 (8.8%) were elementary graduates. The data shows that most students' parents are high school graduates.

Sex **Frequency** Per cent Male 36.5 91 158 Female 63.5 Total 249 100.0 Frequency Per cent Age 144 57.83 16-20 21-25 86 34.54 26-30 11 15432 31-35 7 45140 36-40 1 .4 Total 249 100

Table 2. Students' Profile

Table 2. Continued

Course	Frequency	Per cent
BEED	61	24
BSE	35	14
BSA	48	19
HM	43	17
BSIT	62	25
Total	249	100
Family Income	Frequency	Per cent
Poor (Less than PHP 9, 520)	150	60.2
Low Income (Between PHP 9,520 to PHP 19,040)	77	45199
Lower Middle Income (Between PHP 19, 040 to PHP 38,080)	19	45084
Middle Income (Between PHP 38, 080 to PHP 66,640)	3	44958
Total	249	100.0
Parents' Educational Attainment	Frequency	Per cent
Elementary Undergraduate	22	45146
Elementary Graduate	49	45126
Highschool Graduate	135	54.2
College Graduate	43	45002
Total	249	100.0

## Research Instruments Validity and Reliability

The researcher developed the study's questionnaire, which was then validated using the Lawshe method. Initially, the questionnaire for teachers included 20 items for each of the three dimensions. Similarly, the questionnaire for students contained 20 items for each of the three dimensions. After the validation of the questionnaire for teachers, seven items were left for awareness of students' learning environments, seven items for awareness of students' blended learning readiness, and eight items for students' learning environments, seven items for students' blended learning readiness, and eight items for students' blended learning readiness, and eight items for students' learning anxiety.

The researchers recruited 8 teachers of Nueva Ecija University of Science and Technology (NEUST) Gabaldon and they assign three different categories to each item: essential, useful but not essential, and non-essential. The Content Validity Index (CVI) of each questionnaire was computed or calculated using the formula  $CVI = \sum [(2n_e - N)/N]/n_t$ , where  $n_e$  is the number of raters who recognized the item as "essential," N is the total number of raters and  $n_t$  is the total number of items per questionnaire. Table 3 shows that all the questionnaires were valid.

Table 3. Content Validity Index.

Questionnaire	<b>Content Validity Index</b>	Critical Value	Interpretation
Awareness of Students' Learning Environment	.81	.75	Valid
Awareness of Students' Blended Learning Readiness	.82	.75	Valid
Awareness of Students' Learning Anxiety	.79	.75	Valid
Learning Environment	.85	.75	Valid
Students Blended Learning Readiness	.81	.75	Valid
Learning Anxiety	.84	.75	Valid

## Research Instruments Reliability

The questionnaire about teachers' awareness was distributed to 15 teachers who were not part of the study and determined that the reliability coefficient for teachers' awareness of students learning environment, blended learning readiness and learning anxiety were 0.88, 0.87, and 0.90 respectively. While the questionnaire about students learning situation was distributed to 15 students who were not also part of the study and determined that the reliability coefficient of students learning environment, students blended learning readiness, and students learning anxiety were 0.89, 0.90, and 0.87 respectively. The reliability coefficient was calculated using SPSS - Cronbach's alpha.

## Data Collection

The researchers seek permission from the campus director of the NEUST Gabaldon campus to conduct the study and collect the necessary data. Due to face-to-face restrictions, researchers used google forms in collecting information from the respondents.

## Data Analysis

IBM-SPSS was utilized to analyze the data. The profile of teachers and students respondents was analyzed using descriptive statistics such as frequency distribution and percentage, while the teacher's awareness, students learning anxiety and academic success was described using means. The differences in the teachers' awareness based on their profiles were analyzed using a t-test of independence and multivariate analysis of variance. The differences in the student's learning situation based on their profiles were also analyzed using a t-test of independence and multivariate analysis of variance. The differences in the student's achievement based on their teacher's level of awareness were analyzed using a one-way analysis of variance. Tukey HSD was used as a post hoc test. On the other hand, Kendall's tau was applied to determine the relationship between the student's learning situation and their academic success.

The weighted mean and verbal interpretation were used to explain the teacher's awareness of students learning situation: the scale runs from 1.00 to 1.74 for unaware, 1.75 to 2.49 for slightly aware, 2.50 to 3.24 for aware, and 3.25 to 4.00 for fully aware. On the other hand, weighted mean and verbal interpretation was used to explain the student's learning anxiety: the scale runs from 1.00 to 1.74 for disagree, 1.75 to 2.49 for slightly agree, 2.50 to 3.24 for agree, and 3.25 to 4.00 for strongly agree. The academic success of the students was described using the following scale: below 75 - did not meet expectations; 75 - 79 fairly satisfactory; 80 - 84 satisfactory; 85 -89 very satisfactory; and 90 - 100 outstanding.

## Levene's Test of Equality of Variances

Table 4 shows that all the p-values for Levene's test are non-significant. It means that the variances are equal for all samples. It also implies that parametric tests such as t-test, MANOVA and ANOVA were appropriate for testing the data.

Teacher's Profile F Sig. Awareness of the Learning Environment 1.317 .263 Sex Awareness of Students' Readiness .271 .607 Awareness of Students' Learning Anxiety .353 .558 Awareness of the Learning Environment 1.706 .174 Age Awareness of Students' Readiness 1.005 .461 Awareness of Students' Learning Anxiety 2.333 .073 Number of Years in Service Awareness of the Learning Environment 3.275 .053 Awareness of Students' Readiness 1.502 .262 .09 Awareness of Students' Learning Anxiety 2.346 Academic Rank Awareness of the Learning Environment 1.163 .377 Awareness of Students' Readiness 1.239 .339 Awareness of Students' Learning Anxiety 1.586 .206 Student's Profile F Sig. .002 Sex Student's Learning Environment .961 **Students Readiness** 7.066 .08 .689 **Students Learning Anxiety** .16 .275 Student's Learning Environment 1.301 Age .946 **Students Readiness** .124 .356 Students Learning Anxiety 1.086 Student's Learning Environment 808. Course .401 **Students Readiness** 2.637 .055 Students Learning Anxiety 1.137 .34 Family Income Student's Learning Environment 1.106 .347 Students Readiness .432 .73 .707 Students Learning Anxiety .465 Parents Educational Student's Learning Environment .935 .424 Attainment **Students Readiness** .077 .972 Students Learning Anxiety .218 .884 Teachers' level of awareness Teacher's level of awareness of student's Student's Academic Achievement 5.248 .075 learning environment Teacher's level of awareness of student's Student's Academic Achievement 1.646 .201 blended learning readiness Teacher's level of awareness of student's Student's Academic Achievement 3.266 .156 learning anxiety

Table 4. Levene's Test of Homogeneity of Variances

## Findings/Results

## Teachers' Awareness of Students' Learning Situation

Table 5 shows the awareness of teachers of students learning situations. In terms of teachers' awareness of students learning environment, the data shows that the teachers are fully aware that their students do not all have a good internet connection (3.52), and that the learning activities they gave to their students are suited to their current situation (3.72), that some of their students' learning environments make it difficult for them to learn effectively (3.56), that some of their students did not have sufficient cash to purchase the gadgets and other materials needed for online classes (3.36), and their advice to their students encourages their learners to be calm in the face of the current crisis (3.64). On the other hand, teachers are aware that some of their students have a hard time finishing their activities and assignments because they are working students (3), and slightly aware that some of their students are experiencing family problems (2.36). Overall, the teachers are fully aware of their student's learning environment with a total weighted mean of 3.31. The statistics suggested that during remote learning, teachers attempt to determine their students' learning environment.

In terms of teacher's awareness of student's blended learning readiness, the data shows that the teachers are fully aware that their students can be able to use asynchronous technology (discussion boards, emails, chats, modules, etc.) (3.8), can be able to use synchronous technology (google meet, zoom, messenger, etc.) to communicate (3.4), can perform basic computer features (e.g. creating and editing documents, managing files and folders, video editing, etc.) (3.36), can use the learning management system to navigate through the course (Moodle, canvas, blackboard, google classroom, etc.) (3.32), can be able to take part in course activities (quizzes, discussions, assignments, and asynchronous sessions) (3.48), and have access to the NEUST online health desk (MIS, registrar, etc.) (3.68). While teachers are aware that their students can use the online grade book to get feedback on their performance (2.88). Overall, teachers are fully aware of students' blended learning readiness with a total weighted mean of 3.41. Data reveal that teachers make an effort to assess whether their students can use different learning platforms, such as printed modules, gadgets, applications and the internet, to have a successful blended learning modality.

In terms of teachers' awareness of students learning anxiety, the data shows that the teachers are fully aware that their students feel nervous when they call for an online meeting or class (3.32). While they are aware that their students experience frustrations due to their activities (2.96), experience stress when they give short deadlines (2.88), feel worried that they will not be able to complete their activity on time (3), and experience frustration because they are unfamiliar with the topic (2.72), feel tense or nervous when they give their students a short amount of time to complete a quiz or exam (3.08), procrastinating when the deadlines for activities and assignments approach (3.24), and feel nervous when they call for an online meeting or class (2.56). Overall, teachers are aware of students learning anxiety with a total weighted mean of 2.97. According to the data, teachers are aware of their students' experiences during distance learning and how the COVID-19 epidemic affected their learning settings. Furthermore, teachers are aware that their students experience learning anxiety while participating in distance learning.

Table 5. Teachers' Awareness of Students' Learning Situation

Awareness of students learning environment	WM	Interpretation
My students do not all have a good internet connection.	3.52	Fully aware
The learning activities that I gave to my students are suited to their current situation.	3.72	Fully aware
Some of my students' learning environments make it difficult for them to learn effectively.	3.56	Fully aware
Some of my students did not have sufficient cash to purchase the gadgets and other	3.36	Fully aware
materials needed for online classes.		
Some of my students have a hard time finishing their activities and assignments because	3	Aware
they are working students.		
Some of my students are experiencing family problems.	2.36	Slightly aware
My advice to my students encourages them to be calm in the face of the current crisis.	3.64	Fully aware
TWM	3.31	Fully aware
Awareness of Students' Blended Learning Readiness	WM	Interpretation
My students are able to use asynchronous technology (discussion boards, emails, chats,	3.8	Fully aware
modules, etc.).		
My students are able to use synchronous technology (google meet, zoom, messenger, etc.)	3.4	Fully aware
to communicate.		
My students can perform basic computer features (e.g. creating and editing documents,	3.36	Fully aware
managing files and folders, video editing, etc.)		-
My students can use the learning management system to navigate through the course	3.32	Fully aware
(Moodle, canvas, blackboard, google classroom, etc.).		<u>-</u>

Table 5. Continued

Awareness of Students' Blended Learning Readiness	WM	Interpretation
My students are able to take part in course activities (quizzes, discussions, assignments,	3.48	Fully aware
and asynchronous sessions).		
My students can use the online grade book to get feedback on their performance.	2.88	Aware
My students have access to the NEUST online health desk (MIS, registrar, etc.).	3.68	Fully aware
TWM	3.41	Fully aware
Awareness of Students' Learning Anxiety	WM	Interpretation
My students experience frustrations due to their activities.	2.96	Aware
My students experience stress when I give a short deadline.	2.88	Aware
My students are worried that they will not be able to complete their activities on time.	3	Aware
My students are frustrated because they are unfamiliar with the topic.	2.72	Aware
When I give my students a short amount of time to complete a quiz or exam, they become	3.08	Aware
tense or nervous.		
My students feel nervous when I give a surprise recitation.	3.32	Fully aware
When the deadlines for activities and assignments approach, my students, procrastinate.	3.24	Aware
My students feel nervous when I call for an online meeting or class.	2.56	Aware
TWM	2.97	Aware

## Students' Learning Situation

Table 6 shows the students' learning situation. In terms of students learning environment, respondents agree on the following statements: our teacher gave us activities that were appropriate for our current situation (2.78), and our teacher encouraged and advised us to be calm in the current crisis (3.12). While the statements; I have no stable internet connection (2.49), I have no conducive place to study in our home (2.19), and I don't have enough money to afford the devices and other resources required for the online session (2.43), I can't finish my activities and assignments on time because I 'am a working student (1.87), and I have experienced family problems (2.12) got the verbal interpretation of slightly agree. Data demonstrate that each student has a unique learning environment that may influence their learning style. Some of them do not have a conducive learning environment, whilst others do.

In terms of students' blended learning readiness, respondents all agree on the statements: I can use asynchronous technology (discussion boards, emails, chats, modules, etc.) (2.99), I can use synchronous technology (google meet, zoom, messenger, etc.) to communicate (3.04), I can complete basic computer operations (e.g., creating and editing documents, managing files and folders, video editing, etc.) (2.69), I can navigate through the course in the learning management system (Moodle, canvas, blackboard, google classroom, etc.) (2.63), I can participate in course activities (quizzes, discussions, assignments, and asynchronous sessions) (2.97), I can access the online grade book for feedback on performance (2.63), and I can access online health desk of NEUST (MIS, registrar, etc.) (2.81). Overall, students agree on the blended learning readiness with a total weighted mean of 2.82. According to the findings, the majority of students agree that they are equipped to learn using blended learning modes.

In terms of students learning anxiety, respondents agree on the following statements: I am afraid that I cannot pass my activity on time (3.07), I feel nervous when we have surprise recitation (3.03), I feel stressed when we have too many activities (2.96), I feel frustrated about the topic that is unfamiliar to me (2.96), I feel stressed when our professor gives us a short deadline (2.90), I feel frustrated about the topic that is unfamiliar to me (2.80), and I am procrastinating when the deadline of activities and assignments is near (2.59). On the other hand, students are slightly agreeing with the statement; I feel nervous when my teacher calls for an online meeting or class (2.49). Overall, students agree that they are experiencing learning anxiety, with a weighted mean of 2.85. It is well known that during remote learning, students experience various levels of anxiety, including how they learn through various learning modes.

Table 6. Students' Learning Situation

Learning Environment	WM	Interpretation
I have no stable internet connection.	2.49	Slightly agree
Our teacher gave us activities that were appropriate for our current situation.	2.78	Agree
I have no conducive place to study in our home.	2.19	Slightly agree
I don't have enough money to afford the devices and other resources required for the online session.	2.43	Slightly agree
I can't finish my activities and assignments on time because I 'am a working student.	1.87	Slightly agree
I experienced family problems.	2.12	Slightly agree
Our teacher encouraged and advised us to be calm in the face of the current crisis.	3.12	Agree

Table 6. Continued

Blended Learning Readiness	WM	Interpretation
I can use asynchronous technology (discussion boards, emails, chats, modules, etc.).	2.99	Agree
I can use synchronous technology (google meet, zoom, messenger, etc.) to communicate.	3.04	Agree
I can complete basic computer operations (e.g. creating and editing documents, managing	2.69	Agree
files and folders, video editing, etc.)		
I can navigate through the course in the learning management system (Moodle, canvas,	2.63	Agree
blackboard, google classroom, etc.).		
I can participate in course activities (quizzes, discussions, assignments, and asynchronous	2.97	Agree
sessions).		
I can access the online grade book for feedback on performance.	2.63	Agree
I can access the online health desk of NEUST (MIS, registrar, etc.).	2.81	Agree
TWM	2.82	Agree
Learning Anxiety	WM	Interpretation
I feel stressed when we have too many activities.	2.96	Agree
I feel stressed when our professor gives us a short deadline.	2.90	Agree
I am afraid that I cannot pass my activity on time.	3.07	Agree
I feel frustrated about a topic that is unfamiliar to me.	2.80	Agree
I feel tense or nervous when my teacher gives me a short time to answer a quiz or exam.	2.96	Agree
I feel nervous when we have a surprise recitation.	3.03	Agree
I am procrastinating when the deadline for activities and assignments is near.	2.59	Agree
I feel nervous when my teacher calls for an online meeting or class.	2.49	Slightly agree
TWM	2.85	Agree

#### Students Achievement

Table 7 shows the students' average achievement, M=90.42, SD=5.25. The data indicates that the student's average performance is outstanding. The standard deviation demonstrates that the sample data is not greatly deviated from the mean.

Table 7. Students Achievements.

<b>Students Achievements</b>	Mean	Std. Dev.	Interpretation
Students Achievement	90.4242	5.25381	Outstanding Performance
N – Observation	249		

Comparison of Male and Female Teachers' Awareness of Students' Learning Environment, Awareness of Students' Readiness, and Awareness of Students' Learning Anxiety

Table 8 shows that there is a significant difference between male and female teachers in terms of awareness of students learning environment (t = -2.495, df = 23, p < .05) with a large effect size (Cohen's d = .99). On the other hand, there is no significant difference between males and females in terms of awareness of students' blended learning readiness (t = -1.706, df = 23, p > .05) and awareness of students learning anxiety (t = -1.633, df = 23, p > .05).

Table 8. Comparison of Male and Female Awareness of Students' Learning Environment, Awareness of Students' Readiness, and Awareness of Students' Learning Anxiety

	Sex	N	Mean(M)	t	df	Sig. (2-tailed)	Cohen's d	Effect Size
Awareness of Students'	Male	12	3.1071	-2.495	23	.020	.99	Large
Learning Environment	Female	13	3.4945					
Awareness of Students'	Male	12	3.2976	-1.706	23	.102		
Blended Learning Readiness	Female	13	3.5275					
Awareness of Students'	Male	12	2.7292	-1.633	23	.116		
Learning Anxiety	Female	13	3.1923					

Multivariate Significance Test for Teacher's Age with the Dependent Variable's Awareness of Student's Learning Environment, Awareness of Student's Readiness, and Awareness of Students' Learning Anxiety

The MANOVA results revealed that there was no statistically significant difference in the combined dependent variables, across and among age groups,  $Pillai's\ Trace = .834,\ F = .936,\ p > .05$ . The observed power of .595 means that the results had a 59.5% chance of being significant.

Table 9. Multivariate Significance Test for Teacher's Age

Pillai's Trace	Value	F	Sig.	Partial Eta Squared	Observed Powerd
Age	.834	.936	.551	.278	.595

Multivariate Significance Test for Teacher's Number of Years in Service with the Dependent Variable's Awareness of Student's Learning Environment, Awareness of Students' Readiness, and Awareness of Students' Learning Anxiety

The MANOVA results revealed that there was no statistically significant difference in the combined dependent variables, across and among the number of years in service,  $Pillai's\ Trace = 2.223$ , F = 1.429, p > .05. The observed power of .507 means that the results had a 50.7% chance of being significant.

Table 10. Multivariate Significance Test for Teacher's Number of Years in Service

Pillai's Trace	Value	F	Sig.	Partial Eta Squared	Observed Powerd
Number of years in service	2.223	1.429	.263	.741	.507

Multivariate Significance Test for Teacher's Academic Rank with the Dependent Variable's Awareness of Students' Learning Environment, Awareness of Students' Readiness, and Awareness of Students' Learning Anxiety

The multivariate test shows no significant difference in the combined dependent variables, across and among academic rank, *Pillai's Trace* = 1.049, F = 1.102, p > .05. The observed power of .201 means that the results had a 20.1% chance of being significant.

Table 11. Multivariate Significance Test for Teacher's Academic Rank

Pillai's Trace	Value	F	Sig.	Partial Eta Squared	Observed Powerd
Academic Rank	1.049	1.102	.454	.524	.201

Comparison of Male and Female Students Learning Environment, Blended Learning Readiness, and Learning Anxiety

Table 12 reveals that there is no significant difference between male and female students in terms of their learning environment (t = -.258, df = 247, p > .05) and blended learning readiness (t = -1.482, df = 247, p > .05). On the other hand, there is a significant difference between male and female students in terms of learning anxiety (t = -2.562, df = 247, p < .05), with female students being more anxious.

Table 12. Comparison of Male and Female Student's Learning Environment, Blended Learning Readiness, and Learning Anxiety

	Sex	N	Mean(M)	t	df	Sig. (2-tailed)	Cohen's d	Effect Size
Learning Environment	Male	91	2.4157	258	247	.796		
	Female	158	2.4313					
Blended Learning	Male	91	2.7615	-1.482	247	.140		
Readiness	Female	158	2.8598					
Learning Anxiety	Male	91	2.7088	-2.562	247	.011	.3349	Small
	Female	158	2.9335					

Multivariate Significance Test for Student's Age with the Dependent Variable's Learning Environment, Blended Learning Readiness, and Learning Anxiety

Results of the MANOVA yielded that there was a statistically significant difference between and among the student's age group on the combined dependent variables, *Pillai's Trace* = .941,  $F = 1303.235^b$ , p < .01. The effect size was large, *partial*  $\eta 2 = .941$ . The observed power of .951 indicates that there was a 95.1% chance that the results could have come out significant.

Table 13. Multivariate Significance Test for Student's Age

Pillai's Trace	Value	F	Sig.	Partial Eta Squared	Observed Powerd
Age	.941	1303.235 <sup>b</sup>	.000	.941	.951

Post Hoc Test for Students Learning Anxiety Grouped According to Age

Table 14 reveals that in terms of learning anxiety, the age bracket of 31 and above differs significantly from the age brackets of 20 and below and 21 - 25. However, there is no significant difference between and among the age categories

of 26 to 30, 21 to 25, and 20 and below, as well as between the age groups of 26 to 30 and 31 and above, showing that learning anxiety is comparable throughout these groups.

Table 14. The Post Hoc Test for Students Learning Anxiety, Grouped According to Age

	Age	N	Subset for Al		
			a	b	
Tukey HSD <sup>a,b</sup>	31 and above	8	2.1719		а
	26 - 30	11	2.5568	2.5568	ab
	21 - 25	86		2.7922	b
	20 and below	144		2.9470	b

<sup>\*</sup>Different letters are significantly different.

Multivariate Significance Test for Student's Course with the Dependent Variable's Learning Environment, Blended Learning Readiness, and Learning Anxiety

Results of the MANOVA yielded that there was a statistically significant difference between and among courses on the combined dependent variables, *Pillai's Trace* = .125, F = 2.646, p< .01. The effect size was medium, *partial*  $\eta$ 2 = .042. The observed power of .982 indicates that there was a 98.2% chance that the results could have come out significant.

Table 15. Multivariate Significance Test for Student's Course

Pillai's Trace	Value	F	Sig.	<b>Partial Eta Squared</b>	Observed Powerd
Course	.125	2.646	.002	.042	.982

Post Hoc Test for Students' Blended Learning Readiness Grouped According to Course

Table 16 reveals that in terms of blended learning readiness, BSE students differed significantly from IT students, BSA students, and HM students. However, there is no significant difference between and among IT students, BSA students, HM students, and BEED students, as well as between BSE and BEED students, showing that blended learning readiness across these groups is comparable.

Table 16. The Post Hoc Test for Students' Blended Learning Readiness, Grouped According to the Course

	Course	N	Subset for alpha = 0.0!		
Tukey HSD <sup>a,b</sup>		<del>-</del>	a	b	
	IT	62	2.6923		а
	BSA	48	2.7084		a
	HM	43	2.7470		a
	BEED	61	2.9434	2.9434	ab
	BSED	35		3.0914	b

Multivariate Significance Test for Student's Family Income with the Dependent Variable's Learning Environment, Blended Learning Readiness, and Learning Anxiety

Results of the MANOVA yielded that there was no statistically significant difference in the students learning situations during distance learning when grouped according to family income,  $Pillai's\ Trace = .078$ , F = .876, p > .01. The observed power of .491 indicates that there was a 49.1% chance that the results could have come out significant.

Table 17. Multivariate Significance Test for Student's Family Income

Pillai's Trace	Value	F	Sig.	Partial Eta Squared	Observed Powerd
Family Income	.078	.876	.22	.016	.491

Multivariate Significance Test for Student's Parents' Educational Attainment with the Dependent Variable's Learning Environment, Blended Learning Readiness, and Learning Anxiety

Results of the MANOVA yielded that there was no statistically significant difference in the students learning situation when grouped according to parents' educational attainment, *Pillai's Trace* = .034, F = .926, p > .01. The observed power of 0.468 indicates that there was a 46.8% chance that the results could have come out significant.

Table 18. Multivariate Significance Test for Student's Parents' Educational Attainment

Pillai's Trace	Value	F	Sig.	Partial Eta Squared	Observed Powerd

Parents Educational Attainment	.034	.926	.502	.011	.468

F-test For Teacher's Level of Awareness of Student's Learning Environment with the Dependent Variable Student's Achievement

The result of ANOVA yielded that there is no significant difference in the student's achievement when grouped according to teachers' level of awareness of students learning environment (F = 3.051, p > .05), level of awareness of student's blended learning readiness (F = .493, p > .05), and level of awareness of student's learning anxiety (F = 1.219, p > .05).

Table 19. F-test for Teacher's Level of Awareness of Student's Learning Environment, Blended Learning Readiness, and Learning Anxiety with the Dependent Variable Student's Achievement

F-test	F	Sig.	Partial Eta Squared	Observed Powera
Teacher's level of awareness of student's learning	3.051	.058	.004	.45
environment				
Teacher's level of awareness of student's blended	.493	.483	.002	.108
learning readiness				
Teacher's level of awareness of student's learning	1.219	.297	.010	.265
anxiety				

Correlation between the Students' Learning Situation and their Academic Achievement

Table 20 shows that there is a significant relationship between student's achievement and learning environment, r = .20, p<.05; students' achievement and blended learning readiness were observed, r=.117, p<.05; and student's achievement and learning anxiety, r = -.70, p < .01.

Table 20. Relationship Between the Students' Learning Situation and their Academic Achievement

Kendall's tau_b		Learning Environment	Readiness	Learning Anxiety
Achievement	Correlation Coefficient	.200*	.117*	70**
	Sig. (2-tailed)	.019	.015	.001
	N	249	249	249

#### Discussion

The findings reveal that teachers are taking steps to understand the type of learning environment students is experiencing while participating in blended or remote learning. Teachers attempt to understand their students' educational experiences to provide relevant teaching tactics. To give students a sense of the value of learning, making learning materials succinct, clear, and entertaining, employing straightforward and engaging media, and carrying out routine and ongoing evaluations are some of the strategies that teachers use during distance learning (Sutarto et al., 2020).

The study also shows that teachers make an attempt or devise a method to determine whether their students are competent in using various types of learning applications during blended or remote learning. They are fully aware that their students can use different online learning platforms. On the other hand, Alrefaie et al. (2020) proposed that there should be a suitable monitoring portfolio with relevant indicators to assess the strengths and weaknesses of technologydependent learning from an educational rather than just a technical perspective.

Findings show that teachers know that some of their students experience various kinds of anxiety during this blended or remote learning. Teachers are aware that anytime they give activities, quizzes, tests, and other online tasks, their students experience frustration, worry, and anxiety. Remote online learning uncertainty related to their academic performance, future career prospects, and financial constraints are the stressors of university students (Sundarasen et al., 2020).

According to the statistics, teachers' words of encouragement and guidance can inspire students to continue their studies despite potential problems and hardships in learning and personal life. Students also agree that their teachers provide learning activities appropriate for their current circumstances. Additionally, stronger teacher-student relationships led to greater student motivation (Yunus et al., 2011). On the other hand, some students have unstable internet connections, while others can't afford learning devices, implying that not all students can attend synchronous online sessions. Similarly, Giray et al. (2022) reveal that, although Filipino college students see online learning as positive, most of them agree on the difficulties in transitioning to online due to issues such as technology and Internet connectivity, mental health, money, and time and space management. Some students do not have a suitable learning environment because of some distractions such as noise and a proper place to conduct virtual online learning. Because the synchronous online session was held twice a month, several students in this blended learning program sought part-time work. Students can do whatever they want in their free time, even if it is not during class, because distance learning allows for schedule flexibility and allows students to choose their learning preferences (Brown, 2017). Some students have family problems

that make it difficult for them to accomplish their tasks on time. Furthermore, parental participation in their children's school activities has a significant impact on their academic achievement (Castro et al., 2015).

According to data, today's students are technologically capable. They already have the knowledge and skills to use several types of learning programs, indicating that they are prepared for blended or remote learning. Moreover, Warden et al. (2022) state that students have self-confidence in accomplishing their tasks utilizing technology regardless of their level of technology readiness or expertise in online learning.

According to the study, students experience numerous sorts of learning anxiety. Even though the students did not participate in face-to-face learning and had their own time to manage their activities, they experienced learning anxiety. It's because some of them struggle to understand and since they largely employed self-learning modules. Similarly, Unger and Meiran (2020) reveal that the majority of students expressed anxiety during distant learning, as well as disappointment in the graduation ceremony and online learning being distinct from traditional in-class learning.

According to the data, the majority of the students excelled in their academic disciplines during the pandemic. It demonstrates that, despite the difficulties and challenges of blended learning, students are working toward a common objective. Similarly, Capinding (2021) finds no substantial variation in the performance of education students before and after the epidemic, implying that students are constantly striving to learn. On the other hand, the standard deviation is quite large, indicating that the student's grades are widely dispersed from the mean. It implies that not all students were catered to by their teachers. On the other hand, Orlov et al. (2021) demonstrate in their study that during remote learning, students' assessment scores decrease by 0.2 standard deviations.

According to the findings, female teachers are more mindful of their students' learning environments than their male counterparts. It demonstrates that female teachers are putting in more effort to establish their students' genuine position in terms of the learning environment. It also implies that female teachers are more efficient in terms of observing students' learning environments and managing their classes. Similarly, Rubie-Davies et al. (2012) demonstrate that female teachers are more effective in terms of classroom management and instruction. Furthermore, their awareness of their students' learning environments may enable them to make a targeted intervention and decrease the obstacles that both teachers and students face during distance learning. According to Wu (2021), there are four instructional categories of sequential activity among teachers during distance learning modalities: identifying the teaching environment, instructing the class, and discussing and evaluating learning effectiveness.

However, the statistics suggest that there is no significant difference in male and female teachers' knowledge of their students' blended learning readiness. It suggests that male and female teachers are equally aware of their students' readiness. Data also suggests both male and female teachers are aware that students today are equipped with various technology learning platforms, as generation Z is technologically savvy (Seymour, 2019).

There is no statistically significant difference in male and female teachers' awareness of students' learning anxiety. According to the data, male and female teachers are comparable in their awareness of their students' learning anxiety. It demonstrates that both male and female teachers recognize that their students experience anxiety during remote learning. Furthermore, teachers are also anxious during this period of uncertainty, this is because a lockdown was imposed during distance learning and the COVID-19 virus remained a threat to everyone. According to the World Health Organization (2022), the global prevalence of anxiety and despair rises by 25% during the first year of the COVID-19 pandemic.

Data reveal that there is no significant difference between and among age groups in terms of teachers' awareness of students' learning environments, blended learning readiness, and learning anxiety. It means that older and younger teachers have similar evaluations of their students' learning situations during the pandemic. It also demonstrates that the younger teachers' effort in assessing and determining the student's learning situation was comparable to that of the older teachers. Data also indicates that older and younger teachers' strategies may be comparable. Similarly, Shaukat and Iqbal (2012) indicate that there is no substantial difference in teachers' instructional strategies across age groups. This also demonstrates that younger and older teachers are comparable in terms of dedication to their work. On the other hand, Butucha (2013) discovered that younger teachers, ages 26 and under, are more dedicated than older teachers, ages 26 and up.

According to the findings, there is no significant difference in the number of years in service in terms of teachers' awareness of students' learning environments, blended learning readiness, and learning anxiety. It shows that novice teachers and experienced teachers are comparable in terms of their awareness of their student's learning situation during distance learning. It is commonly known that the more seasoned the teacher, the more experience they have with training tactics and the more effective they are in the classroom (Ladd, 2013). Thus, seasoned teachers should be better at recognizing students' conditions, but the findings demonstrate that novice teachers' efforts to understand students' learning situations are comparable to seasoned teachers. Ihwana (2018), on the other hand, demonstrated that there is a substantial difference between novice and experienced teachers in terms of instructional competency, behaviour management, and people management, with experienced teachers having a higher level of classroom management.

Data show that there is no significant difference between and among academic ranks of teachers in terms of awareness of students' learning environments, readiness, and learning anxiety. It means that their understanding of students' learning situations during distant learning is comparable across academic ranks. This demonstrates that academic rank is not a factor in how teachers efficiently determine or comprehend the situation of their students during remote learning. Furthermore, across academic ranks, the strategies they adopt during remote learning to manage their class may be comparable. This is because, to deal with the current circumstances, the University provided training to its faculty members on remote and blended learning modes during the pandemic (NEUST, 2020).

Data show that there is no significant difference in learning environment between male and female students, which could imply that male and female students have the same learning environment experience. They may have family problems, financial difficulties, inability to complete activities on time, and other contextual factors that influence their learning experiences. In addition, inadequate internet connectivity and perplexing content are two challenges that hamper students' learning quality during online learning (Aji et al., 2020).

Data also show that there is no significant difference in blended learning readiness between male and female students. It implies that male and female students are both prepared to learn in different ways throughout the pandemic. Furthermore, today's students are technologically capable and competitive. Barrot et al. (2021) show that the least challenge encountered by the students during distance learning was technological literacy and competency.

Data, on the other hand, demonstrate that there is a significant difference in students' learning anxiety when categorized according to sex. It means that female students are more anxious than male students. Similarly, Bahrami and Yousefi (2011) discovered that anxiety thoughts such as health anxiety, social anxiety, and meta-worry were more prevalent in girls than in boys. It also implies that the pandemic and distance learning have a greater negative influence on female students. Similarly, Garvey et al. (2021) discovered that female students were more anxious than male students during the lockdown.

Results reveal a significant difference in anxiety levels between older and younger students. According to the data, younger students are more anxious than older ones. According to Khan et al. (2013), academic stress is much higher in younger students than in older students. Shamsuddin et al. (2013), on the other hand, found that depression and anxiety levels were considerably greater among older students. Data also suggest that the pandemic had a greater impact on younger students than on older students in terms of learning anxiety. Depression, anxiety, and stress were more common among younger students than among adult students (Debowska et al., 2020). It also demonstrates that older students adapt better to the new normal than younger students. Similarly, Babicka-Wirkus et al. (2021) discovered that younger students had a weaker coping strategy than older students.

Students learning environments, on the other hand, show no significant differences between age groups. According to statistical data, the learning environment is comparable across and within age groups. It shows that students of different ages have similar experiences with internet access, family concerns, and other situational constraints that may influence their learning experiences. On the other hand, Yan et al. (2021) show that online learning experiences differ significantly across academic levels. Similarly, data suggests that there is no significant difference in blended learning readiness across age groups. It means that student's readiness to use diverse technology learning platforms was comparable across age groups. Yau and Cheng (2012), on the other hand, found that older students were more confident in using technology for learning than younger students.

Data reveal that BSED students are significantly different from IT, BSA, and HM students in terms of blended learning readiness. This means that BSED students are far more adequately equipped for blended learning than IT, BSA, and HM students. This is because the College of Education provided online training for all of its students on how to undertake asynchronous and synchronous learning (Gabaldon College of Education [GCE], 2021). That's why BSED and BEED students are not significantly different in terms of blended learning readiness.

In terms of the learning environment, there is no substantial variation between and among courses. It demonstrates that some students in different classes may be facing the same learning environment challenges. These challenges were associated with their home learning environment (Barrot et al., 2021). Data also shows that there is no significant difference between and among courses in terms of learning anxiety. It implies that the level of anxiety is comparable between and among courses. This shows that during distance learning anxiety is prevalent in all students regardless of their courses. Several studies indicate that during the pandemic, more than one-third of students experienced anxiety (Jehi et al., 2022).

Data reveal that when students were categorized according to family income, there was no significant difference in their learning experiences during remote learning. It demonstrates that children's learning environment, readiness for blended learning, and anxiety were comparable across family income levels. It demonstrates that regardless of whether a student is poor or wealthy, they have all experienced the same learning environment. In contrast, Fuqin and Shi (2014) demonstrate that the greater the socioeconomic class, the higher the parents' expectations for their children to attend college, resulting in a different learning environment. Students from all socioeconomic backgrounds have equivalent readiness for blended learning. In contrast, Chun and Junaid (2012) demonstrate that financial position has a major impact on students' online learning readiness. Students of all socioeconomic backgrounds experience the same level of anxiety during distance learning. This demonstrates that the impact of the epidemic on students' emotional well-being is the same regardless of family's economic condition. The current study contradicts the findings of Khademian et al. (2021), who discovered that during a pandemic, stress and sadness are directly associated with a lower financial position.

Data reveal that when students are categorized according to their parent's educational attainment, there is no significant difference in their learning situation. It suggests that when students are classified according to their parent's educational attainment, their learning situations during remote learning are comparable. It demonstrates that the educational attainment of the parents has no direct influence on the learning environment of their children. During remote learning, parents provide equal learning chances and equivalent assistance to their children regardless of their educational standing. In contrast, Davis-Kean et al. (2021) show that through parents' expectations for and views about their children, as well as through the cognitive stimulation they offer both within and outside the home, parents' educational attainment lays a foundation that supports children's academic achievement indirectly.

Data show that there is no significant difference in student achievement when they are grouped according to the teacher's level of awareness of the student's learning environment, level of awareness of the student's blended learning readiness, and level of awareness of the student's learning anxiety. It means that, even if teachers are completely aware of their students' learning situations, they may not intervene, or if they do, the intervention may not significantly increase student performance. The data also shows that, while teachers' levels of knowledge of students' situations vary, being aware of students' conditions is not enough to increase students' performance. This could also imply that the students do not disclose their genuine position to their teacher during blended learning or the teacher may overlook the true situation of the students. According to Chang and Fang (2020), while instructors can develop content learning resources for remote learning, it is still difficult for them to monitor and influence students' learning habits in such a short period. In addition, determining the students' learning status during distance learning is significantly more challenging than face-to-face learning. Furthermore, achievement in this blended learning may be less trustworthy or more academically dishonest, impersonal, and lacking in emotion as compared to face-to-face classes (Oducado, 2020).

According to the statistics, if students' learning environments are conducive to learning, they will succeed more in their academics. It is because the more beneficial the environment is for students, the more they will focus on their studies. Moreover, Suleman and Hussain (2014) assert that a good learning environment improves students' academic performance. Similarly, a student's readiness for blended learning has an impact on his or her accomplishment. This suggests that the more prepared the students are in various learning platforms, the higher their achievements would be. According to Joosten and Cusatis (2020), student attributes of online learning preparedness have a substantial influence on student outcomes. Achievement is negatively strongly connected with learning anxiety, implying that the more anxious students are, the lower their achievement. It demonstrates that anxiety has a negative impact on student achievement. Anxious students are less likely to concentrate on their studies. Similarly, Ajmal and Ahmad (2019) found that anxiety had a negative impact on the academic performance of distant learners.

## Conclusion

The data shows that the teachers are fully aware of their student's learning situation, in terms of environment and blended learning readiness. Likewise, teachers are also aware of students learning anxiety. Data also shows that most of the students slightly agree that they have a learning environment that is not conducive to learning. On the other hand, they agreed that their teachers advise, and encourage them to be calm in this current situation. In addition, teachers are giving appropriate activities during this blended learning setup. Students are technologically capable and ready in using different online learning applications and platforms. On contrary, the data shows that the students are experiencing learning anxiety. During this blended learning, the majority of the students excelled in their academics. According to the findings, female teachers are more aware of their students' learning environments than their male counterparts. However, statistics indicate that there is no statistically significant difference between male and female teachers' knowledge of their students' blended learning readiness and learning anxiety. Data reveal that teachers' understanding of students' learning situations is consistent across ages. It means that during the pandemic, older and younger teachers had comparable assessments of their students' learning situations. Findings also demonstrate that novice and experienced teachers have comparable levels of awareness for their students' learning situations during distant learning. Furthermore, academic rank has no bearing on how teachers efficiently determine or comprehend their students' situations during remote learning. Male and female students have had similar experiences in their learning environment. Similarly, both male and female students are prepared to learn in a variety of ways throughout the semester. Female students, on the other hand, are more anxious than male students during remote learning. Furthermore, younger students are more anxious than older students. When students are classified by age, their blended learning preparedness and learning anxiety are comparable. Students in education are considerably more adequately equipped for blended learning than students in IT, BSA, and HM. Furthermore, data show that some students in various classrooms may be experiencing the same learning environment issues. Furthermore, anxiety levels are comparable across and within courses. Students from various socioeconomic backgrounds are comparable in terms of learning environment, readiness for blended learning, and anxiety. The educational attainment of the parents has no direct bearing on the learning

environment of their children. Students' academic achievement is comparable when categorized according to the teacher's level of knowledge of the student's learning environment, level of awareness of the student's blended learning preparedness, and level of awareness of the student's learning anxiety. Teachers' awareness of student situations is crucial and beneficial in remote learning if and only if the teacher intervenes in the observed circumstance. According to the findings, a favourable learning environment and student preparation have a positive impact on students' achievement. Learning anxiety has a negative impact on student achievement. Inferring that the more anxious the students are, the worse their achievement.

## Recommendations

Administrators may conduct seminars for teachers that aims to develop more strategies for assessing students' situation during this blended learning. Teachers may create a strategy in determining the true learning situation of the students to make a proper intervention. Students must continue to strive for learning to obtain their best performance. Even amid a pandemic, teachers of all ranks, old and new, male and female, may strive and do their best to provide suitable knowledge and skills to students. Teachers and administrators may provide blended learning technology training to all students. The government may grant not just free tuition but also free allowances to all university students in the Philippines. Teachers and administrators may also provide training to all parents on how to teach and guide their children in blended learning. In addition, the long-term extension should be conducted with parents so that they may better guide, support, and understand their children's education. There should be open communication between students and professors, and students should be transparent about their true learning status. Furthermore, teachers may intervene based on what they perceive in the students' actual learning context. This study may be used as a reference by policymakers, school administrators, schools, local government units, teachers and future researchers in adopting new practices and developing methodologies for facilitating and improving distance learning to ensure quality instruction. Teachers and researchers may utilize the result of this study as the basis for further study about teachers' awareness of students learning situations. This study topic may be the subject of additional investigation. Researchers may also look into how teachers respond to what they observe during blended learning.

## Limitations

The study's main goal is to assess teachers' understanding of students' learning situations during distant learning. The researcher's surveys were used to generate the study's findings. Furthermore, the findings of this study will be used to improve instruction at this specific institution.

#### References

- Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. Journal of Pedagogical Sociology and Psychology, 2(1), 45-51. https://doi.org/10.33902/JPSP.2020261309
- Aji, W. K., Ardin, H., & Arifin, M. A. (2020). Blended learning during pandemic Corona virus: Teachers' and students' perceptions. IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 8(2), 632-646. https://doi.org/10.24256/ideas.v8i2.1696
- Ajmal, M., & Ahmad, S. (2019). Exploration of anxiety factors among students of distance learning: A case study of Allama Iqbal Open University. Bulletin of Education and Research, 41(2), 67-78. https://bit.ly/3nZpyPa
- AlKandari, N. Y. (2020). Students Anxiety Experiences in Higher Education Institutions. In V. V. Kalinin, C. Hocaoglu, & S. Mohamed (Eds.), Anxiety disorders - The new achievements (pp. 1 - 11). https://doi.org/10.5772/intechopen.92079
- Alrefaie, Z., Hassanien, M., & Al-Hayani, A. (2020). Monitoring online learning during COVID-19 pandemic; Suggested online learning portfolio (COVID-19 OLP). MedEdPublish, 9(110), 1-10. https://doi.org/10.15694/mep.2020.000110.1
- Arguedas, M., Daradoumis, A., & Xhafa Xhafa, F. (2016). Analyzing how emotion awareness influences students' motivation, engagement, self-regulation and learning outcome. Educational Technology and Society, 19(2), 87-103. http://hdl.handle.net/10609/77045
- Babicka-Wirkus, A., Wirkus, L., Stasiak, K., & Kozłowski, P. (2021). University students' strategies of coping with stress from Poland. PLoS the coronavirus pandemic: Data ONE, 16(7), https://doi.org/10.1371/journal.pone.0255041
- Bahrami, F., & Yousefi, N. (2011). Females are more anxious than males: A metacognitive perspective. Iranian Journal of Psychiatry and Behavioral Sciences, 5(2), 83-90. https://bit.lv/2Gisf9v
- Barrot, J. S., Llenares, I. I., & Del Rosario, L. S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. Education and Information Technologies, 26(6), 7321-7338. https://doi.org/10.1007/s10639-021-10589-x

- Berger, C., Alcalay, L., Torretti, A., & Milicic, N. (2011). Socio-emotional well-being and academic achievement: Evidence from a multilevel approach. Psicologia: Reflexao e Critica, 24(2), 344-351. https://doi.org/10.1590/S0102-79722011000200016
- Brown, C. (2017). Advantages and disadvantages of distance learning. Ez Talks. https://bit.ly/3W2n060
- Butucha, K. G. (2013). Teachers' perceived commitment as measured by age, gender and school type. Greener Journal of Educational Research, 3(8), 363-372. https://doi.org/10.15580/GIER.2013.8.080913830
- Capinding, A. T. (2021). Analysis of learning and academic performance of education students before and during the coronavirus disease pandemic. European Journal of Educational Research, 10(4), 1953-1962. https://doi.org/10.12973/eu-jer.10.4.1953
- Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. Educational Research Review, 14, 33-46. https://doi.org/10.1016/j.edurev.2015.01.002
- Chang, C. L., & Fang, M. (2020). E-Learning and online instructions of higher education during the 2019 novel Coronavirus diseases (COVID-19) epidemic. Journal of Physics: Conference Series, IOP Publishing, 1574, Article 012166. https://doi.org/10.1088/1742-6596/1574/1/012166
- Chun, Y. L., & Junaid, M. S. (2012). The impacts of personal qualities on online learning readiness at Curtin Sarawak Malaysia (CSM). Educational Research and Reviews, 7(20), 430-444. https://bit.ly/3HfUiX2
- Davis-Kean, P. E., Tighe, L. A., & Waters, N. E. (2021). The role of parent educational attainment in parenting and children's development. Current **Directions Psychological** Science, 30(2), 186-192. https://doi.org/10.1177/0963721421993116
- Debowska, A., Horeczy, B., Boduszek, D., & Dolinski, D. (2020). A repeated cross-sectional survey assessing university students' stress, depression, anxiety, and suicidality in the early stages of the COVID-19 pandemic in Poland. Psychological Medicine, 52(15), 3744-3747. https://doi.org/10.1017/S003329172000392X
- Dobson, C. (2012). Effects of academic anxiety on the performance of students with and without learning disabilities and how students can cope with anxiety at school [Unpublished master's thesis]. Northern Michigan University.
- England, B. J., Brigati, J. R., Schussler, E. E., & Chen, M. M. (2019). Student anxiety and perception of difficulty impact performance and persistence in introductory biology courses. CBE-Life Sciences Education, 18(2), Article 21. https://doi.org/10.1187/cbe.17-12-0284
- Firdaus, F., Muntaqo, R., & Trisnowati, E. (2020). Analysis of student readiness for blended learning model implementation in industrial era 4.0. Indonesian Journal of Science and Education, 4(1), 48-56. https://doi.org/10.31002/ijose.v4i1.2309
- Francisco, C. D. C., & Celon, L. C. (2020). Teachers' instructional practices and its effects on students' academic performance. International Journal of Scientific Research in Multidisciplinary Studies, 6(7), 64-71. https://bit.lv/3c3GiSB
- Fugin, W., & Shi, Y. (2014). An empirical study of family background, educational expectation and college education acquisition based on Shanghai survey data. Society: Chinese Journal of Sociology, 34(1), 175-195. https://doi.org/10.15992/j.cnki.31-1123/c.2014.01.011 [In Chinese]
- Gabaldon College of Education. (2021). Orientation and training program. NEUST College of Education. https://bit.lv/3PBb8ls
- Garvey, A. M., Jimeno García, I., Otal Franco, S. H., & Mir Fernández, C. (2021). The psychological impact of strict and prolonged confinement on business students during the COVID-19 pandemic at a Spanish university. International Journal of Environmental Research and Public Health, 18(4), Article 1710. https://doi.org/10.3390/ijerph18041710
- Giray, L., Gumalin, D., Jacob, J., & Villacorta, K. (2022). Exploring the online learning experience of Filipino college students Covid-19 pandemic. Jurnal Ilmiah Peuradeun, 10(1), 227-250. https://doi.org/10.26811/peuradeun.v10i1.691
- Hooda, M., & Saini, A. (2017). Academic anxiety: An overview. Educational Quest, 8(3), 807-810.
- Ihwana, A. (2018). The comparison between novice and experienced teachers toward teacher's competence [Unpublished master's thesis]. University of Makassar.
- Jehi, T., Khan, R., Dos Santos, H., & Majzoub, N. (2022). Effect of COVID-19 outbreak on anxiety among students of higher literature. Current Advanced publication. education; Α review of Psychology. online https://doi.org/10.1007/s12144-021-02587-6

- Ioosten, T., & Cusatis, R. (2020). Online learning readiness. American Journal of Distance Education, 34(3), 180-193. https://doi.org/10.1080/08923647.2020.1726167
- Khademian, F., Delavari, S., Koohjani, Z., & Khademian, Z. (2021). An investigation of depression, anxiety, and stress and its relating factors during COVID-19 pandemic in Iran. BMC Public Health, 21, Article 275. https://doi.org/10.1186/s12889-021-10329-3
- Khan, M. J., Altaf, S., & Kausar, H. (2013). Effect of perceived academic stress on students' performance. FWU Journal of Social Sciences, 7(2), 146-151.
- Ladd, H. F. (2013, November 2014). Why experienced teachers are important and what can be done to develop them. Scholars. https://bit.ly/3F2vuLE
- Mirawdali, S., Morrissey, H., & Ball, P. (2018). Academic anxiety and its effects on academic performance. *International* Journal of Current Research, 10(6), 70017-70026. http://hdl.handle.net/2436/621849
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVIDpandemic. International Journal of Educational Research Open, https://doi.org/10.1016/j.ijedro.2020.100012
- Mokhtarianpour, M. (2016). Islamic model of Iranian pattern development process model. The Pattern of Islamic Development of Iran, 4(8), 9-30.
- Nueva Ecija University of Science and Technology. (2020). NEUST as one of the FOI CHAMPIONS for 2020. The Nurturing Ethical, Socially Responsible, and Task-driven Professionals. https://bit.ly/3q6D70C
- Oducado, R. M. (2020). Faculty perception toward online education in a state college in the Philippines during the coronavirus disease 19 (COVID-19) pandemic. Universal Journal of Educational Research, 8(10), 4736-4742. https://doi.org/10.13189/ujer.2020.081044
- Orlov, G., McKee, D., Berry, J., Boyle, A., DiCiccio, T., Ransom, T., Rees-Jones, A., & Stoye, J. (2021). Learning during the COVID-19 pandemic: It is not who you teach, but how you teach. Economics Letters, 202, Article 109812. https://doi.org/10.1016/j.econlet.2021.109812
- Paschal, M. J., & Mkulu, D. G. (2020). Teacher-students' relationship and students 'academic performance in public secondary schools in Magu district, Tanzania. Journal of Research in Education and Society, 11(1), 20-37. https://doi.org/10.31730/osf.io/tmh9c
- Rubie-Davies, C. M., Flint, A., & McDonald, L. G. (2012). Teacher beliefs, teacher characteristics, and school contextual factors: What are the relationships? British Journal of Educational Psychology, 82(2), 270-288. https://doi.org/10.1111/j.2044-8279.2011.02025.x
- Schultz, M. (2015). The importance of getting to know your students. Bam Radio Network. https://bit.ly/3FaLezW
- Seymour, E. (2019). Gen Z: Born to Be Digital. Student Union. https://bit.ly/3H8N6fu
- Shamsuddin, K., Fadzil, F., Ismail, W. S. W., Shah, S. A., Omar, K., Muhammad, N. A., Jaffar, A., Ismael, A., & Mahadevan, R. (2013). Correlates of depression, anxiety and stress among Malaysian university students. Asian journal of psychiatry, 6(4), 318-323. https://doi.org/10.1016/j.ajp.2013.01.014
- Shaukat, S., & Iqbal, H. M. (2012). Teacher self-efficacy as a function of student engagement, instructional strategies and classroom management. Pakistan Journal of Social and Clinical Psychology, 9(3), 82-85. https://bit.lv/3F0qtH7
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. Journal of medical internet research, 22(9), 1-14. https://doi.org/10.2196/21279
- Stangor, C., & Walinga, J. (2019). 3.5 psychologists use descriptive, correlational, and experimental research designs to understand behaviour. In J. Cummings & L. Sanders (Eds.), Introduction to Psychology (1st Canadian ed., pp. 119-134). Open Press.
- Suleman, Q., & Hussain, I. (2014). Effects of classroom physical environment on the academic achievement scores of secondary school students in Kohat division, Pakistan. International Journal of Learning & Development, 4(1), 71-82. https://doi.org/10.5296/ijld.v4i1.5174
- Sundarasen, S., Chinna, K., Kamaludin, K., Nurunnabi, M., Baloch, G. M., Khoshaim, H. B., Hossain, S. F. A., & Sukayt, A. (2020). Psychological impact of COVID-19 and lockdown among university students in Malaysia: Implications and policy recommendations. International Journal of Environmental Research and Public Health, 17(17), Article 6206. https://doi.org/10.3390/ijerph17176206

- Sutarto, S., Sari, D. P., & Fathurrochman, I. (2020). Teacher strategies in online learning to increase students' interest in learning during COVID-19 pandemic. Iurnal Konseling Dan Pendidikan, 8(3), 129-137. https://doi.org/10.29210/147800
- Tharani, A., Husain, Y., & Warwick, I. (2017). Learning environment and emotional well-being: A qualitative study of undergraduate nursing students. Nurse Education Today, 59, 82-87. https://doi.org/10.1016/j.nedt.2017.09.008
- Torun, E. D. (2020). Online distance learning in higher education: E-learning readiness as a predictor of academic achievement. Open Praxis, 12(2), 191-208. https://doi.org/10.5944/openpraxis.12.2.1092
- Unger, S., & Meiran, W. R. (2020). Student attitudes towards online education during the COVID-19 viral outbreak of 2020: Distance learning in a time of social distance. International Journal of Technology in Education and Science, 4(4), 256-266. https://doi.org/10.46328/ijtes.v4i4.107
- Van Mieghem, A., Verschueren, K., Petry, K., & Struyf, E. (2020). An analysis of research on inclusive education: A systematic search and meta review. International Journal of Inclusive Education, 24(6), 675-689. https://doi.org/10.1080/13603116.2018.1482012
- Vy, T. P. T. (2021). A research on factors affecting the academic performance of freshman and sophomore at Hufi. SocArXiv. https://doi.org/10.31235/osf.io/grfqh
- Warden, C. A., Yi-Shun, W., Stanworth, J. O., & Chen, J. F. (2022). Millennials' technology readiness and self-efficacy in online classes. **Innovations** in Education and *Teaching* International, 59(2), 226-236. https://doi.org/10.1080/14703297.2020.1798269
- Wentzel, K. R., & Wigfield, A. (1998). Academic and social motivational influences on students' academic performance. Educational Psychology Review, 10, 155-175. https://doi.org/10.1023/A:1022137619834
- World Health Organization. (2022). COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide. https://bit.ly/3HjowIC
- Wu, S. Y. (2021). How teachers conduct online teaching during the COVID-19 pandemic: A case study of Taiwan. In Frontiers in Education, 6, 675434. Frontiers. https://doi.org/10.3389/feduc.2021.675434
- Yan, L., Whitelock-Wainwright, A., Guan, Q., Wen, G., Gašević, D., & Chen, G. (2021). Students' experience of online learning during the COVID-19 pandemic: A province-wide survey study. British Journal of Educational Technology, 52(5), 2038-2057. https://doi.org/10.1111/bjet.13102
- Yau, H. K., & Cheng, A. L. F. (2012). Students' age difference of confidence in using technology for learning in higher education. Turkish Online Journal of Educational Technology, 11(3), 308-311. https://bit.ly/3h0GbKx
- Yunus, M. M., Osman, W. S. W., & Ishak, N. M. (2011). Teacher-student relationship factor affecting motivation and academic achievement in ESL classroom. Procedia-Social and Behavioral Sciences, 15, 2637-2641. https://doi.org/10.1016/j.sbspro.2011.04.161