

## ONLINE LEARNING ENVIRONMENT AND TEST ANXIETY: INPUT TO GUIDANCE TESTING SERVICE PROGRAM FOR COLLEGE STUDENTS IN A FLEXIBLE EDUCATION SYSTEM

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### **Abstract**

*Online learning is being adapted by most schools across the globe. The burden of adapting to a new mode of learning method is taking a serious effect to the students of higher education.*

*This study was focused on the online learning environment and its relationship to the test anxiety among the college students of Tanauan Institute, Inc. In order to examine the relationship between the online learning environment and test anxiety, the researcher utilized the descriptive correlation method of research. A total of 160 students from the BS Education and BS Criminology programs were included in the study. The data were obtained using a survey questionnaire with a five-point Likert scale. For profiling, the respondents' personal information was characterized using simple descriptive statistics such as frequency count. The descriptive analysis was done with mean and standard deviation, and Pearson Product Moment Correlation was employed to prove the inferential at 0.01 level of significance. Based on the result, it was found that the students often prefer to learn online. On the other hand, students' test anxiety levels demonstrated a moderate level of anxiety, as seen by the overall mean of 3.28. Consequently, the students test anxiety is high after they have taken the examination which they worry so much whether they did well enough. Generally, the online learning environment is not significantly related with test anxiety among college students.*

**Keywords:** *online learning environment, test anxiety, online test anxiety, flexible education system*

### **INTRODUCTION**

Colleges and universities across the globe are currently pivoting towards online learning which is known as distance learning.

The country's Commission on Higher Education (CHED), on the other hand, is devoted to simplifying all difficulties connected to remote and virtual learning that have been necessitated by shutting down nearly all face-to-face learning. Even in the midst of a health crisis, the CHED believes that learning should continue (Dillera, 2020).

As higher education adjusts to teaching and learning online, the new form of learning method is taking a serious effect in every college student's life. This is a massive problem that is only getting worse. While some students benefit from online learning, many students and faculty members are feeling the effects of the virus, including loneliness, increased workloads, and other negative repercussions. It's not a good idea to undervalue it. Any organization must address these issues that jeopardize the well-being of its people (Schroeder, 2020).

While this may be true, without proper planning, many people may assume that online learning is of little benefit, that it is more stressful than effective, and that is only used as a poor substitute when face-to-face learning is not possible (Kleiman, 2020).

Thus, the Commission on Higher Education came up with the so-called “flexible learning” which focuses on online or e-learning that many universities and colleges in the Philippines have been doing in the past. This in particular, may support and enhance the Guidance Testing Program for college students in a flexible education system.

A flexible education system is a form of instruction in which students have total discretion over their education. Flexible education system also refers to the flexibility to modify one's learning rate, location, and style. Students can choose accelerated programs or participate in part-time studying to guarantee they have time to work on the side. Learning can take place anywhere, either at work, home, internet, or while traveling.

On one hand, college students, as compared to the general population, have been shown to be more prone to feelings of loneliness and to have greater rates of anxiety. During this phase of social isolation, uncertainty, and abrupt change, these feelings are likely to intensify. When students are separated from their social support structure and extracurricular activities, they may feel less constricted. Many students lost their campus or local employment as a result of the transition to online coursework. While physically separating themselves from their traditional on-campus support systems, college students are experiencing these abrupt and unexpected shifts (Hadler, 2021).

On the other hand, a test or an examination has always been the fundamental component of students' academic success. Through examination, one can determine the amount of knowledge a person learned in the course of time. Traditionally, teachers use test as a form of assessment in gauging how much of an effort a student has made on a particular subject area or discipline. They use it as a basis for evaluating the learning achievement of a person and a way of determining whether a person has learned or not.

Not just the teachers but most schools select students by means of examination system especially the state universities and some prestigious schools and universities, not just in the Philippines but even abroad. Most of them use testing to enable students' admission. Even government agencies such as the Philippine Regulatory Commission and Civil Service Commission utilize testing as a tool to determine the qualified individuals of a particular profession. Hence, you cannot earn a license without passing a licensure examination. Because of the vital role of examinations in the academe and even in one's profession, it is undeniable that it brought so much distress to the student that's why many are experiencing different emotional reactions during exams and the most common of which is the test anxiety.

The rapid shift to online learning and the test anxiety experienced by college students have prompted the present researcher to make a move in this study. It is hoped that the result of this study would pave the way to the better understanding of this certain problem among students.

### **OBJECTIVES OF THE STUDY**

The main purpose of this study was to seek information on the relationship of online learning environment with test anxiety among college students. Specifically, this aimed to:

1. Determine the profile of the respondents in terms of: age, gender, and undergraduate course.
2. Determine the level of of student's preference on online learning environment in terms of: Computer Usage, Teacher Support, Student interaction and Collaboration, Personal relevance, Authentic learning, Student autonomy, Equity, and Asynchronicity.
3. Determine the level of students' test anxiety in terms of: Intrusive Worry and Performance impairment.

4. Find out if there is a significant relationship of online learning environment with test anxiety among college students.
5. Identify the Guidance Testing Program that may be crafted for higher institution in a flexible education system

## RESEARCH METHODOLOGY

### Research Design

This research employed a descriptive and correlational research design that would determine the relationship of online learning environment with that of test anxiety among college students. The objective of descriptive research, according to Gall and Borg (2007), is to characterize a phenomenon and its features. This study is more interested in what happened than how or why it happened. As a result, data is frequently gathered using observation and survey methods.

### Respondents and Sampling Technique

The respondents of the study were college students of Tanauan Institute Inc. and who were enrolled in the Academic Year, 2020-2021. The respondents are those who were taking board-courses of the institution, to wit, Bachelor of Science in Criminology students and Bachelor of Secondary Education students. The respondents were chosen using a method known as purposive sampling. It is a non-probability sampling method in which the researcher selects the persons to be included depending on the specified objective.

### Instruments

The instruments used in the study were the Online Learning Environment Survey (OLES) developed by Pearson & Trinidad (2005) and Westside Test Anxiety Scale developed by Driscoll (2004). The Online Learning Environment Survey (OLES) was developed to provide educators with information on students' perceptions of the online learning environment and to see if these perceptions are linked to e-learning enjoyment. The Online Learning Environment Survey (OLES) is a 48-item survey questionnaire consisting of 8 scales (Computer Usage, Teacher Support, Student Interaction and Collaboration, Personal Relevance, Authentic Learning, Student Autonomy, Equity and Asynchronicity).

The Westside Test Anxiety Scale is a 10-item questionnaire that was created to identify students who might benefit from an anxiety reduction program. The scale components encompass self-reported anxiety impairment and cognitions that may impede performance. The Westside Test Anxiety Scale employs a five-point rating scale, with 1 representing not at all or never true and 5 representing highly or always true. It also includes six questions that assess impairment, four items that test concern and dread, and no items that assess physiological over-arousal.

The survey instrument used by the researcher was floated for its pilot testing and there were 30 student-respondents who participated. The data were analyzed through Cronbach's alpha testing its reliability and internal consistency which resulted in a value of 0.804 and above showing that the indicators tested in the survey instrument posted a good to excellent level of internal consistency. There was no item deleted in the survey questionnaires.

## DATA COLLECTION

The first step before the administration of the tests was to ask permission from the Dean of the

College of Education and College of Arts and Sciences by writing a letter of request. Upon approval of the request, the researcher prepared for the conduct of the study. The samples were selected through random sampling and were taken from the colleges under study.

The data was gathered using the Online Learning Environment Survey and the Westside Test Anxiety Scale. The two sets of questionnaires were combined into a single document with two sections. The survey instruments were delivered online through Google Forms to reduce cost and allow participants to fill out the online surveys via an invitation that included a link. The research study's goal was made clear in the invitation, which included the link. After reading the message, respondents would have to select whether or not to participate. If they so desired, the questionnaire would be provided to them with an introduction in which the survey's purpose was defined in courteous and intelligible language, as well as a statement that the survey was voluntary and that the data would be kept private. After answering some demographic questions (Age, Sex and Course), the participants moved on to the Online Learning Environment Survey and Westside Test Anxiety Scale. After data gathering, the researcher collected and tallied the scores and applied appropriate statistical treatment.

**DATA ANALYSIS**

The researcher used frequency distribution for profiling, mean and standard deviation were used for descriptive analysis and Pearson Product Moment Correlation was used to prove that the variables had a significant relationship.

**RESULTS AND DISCUSSION**

**Profile of the Respondents**

The tables below show the profile of the respondents, level of students' preference on Online Learning Environment and Students' level of Test Anxiety.

**Table 1. Distribution of Respondents as to Age, Sex and Course**

Profile		Sex	
		Female	Male
Age	19 and below	54	28
	20-24	48	22
	25-29	4	1
	30 and above	2	1
Course	BS Criminology	24	25
	BS Education	84	27

Table 1 shows that the respondents were comprised of 160 students. There were 54 females and 28 males between the ages of 19 and below. There were also 48 females and 28 males between the ages 20 and 24. Similarly, respondents between the ages of 25 and 29 are made up of 4 females and 1 male, while those between the ages of 30 and above were comprised of 2 females and 1 male.

The table clearly shows that the age population is distributed in first year college level and female respondents were the main source of data of this study.

On the other hand, there were 24 females and 25 males from the Bachelor of Science in Criminology program, and 84 females and 27 males from the Bachelor of Secondary Education

program. This indicates that majority of the respondents are from the College of Education.

**LEVEL OF STUDENTS' PREFERENCE ON ONLINE LEARNING ENVIRONMENT**

Table 2 summarizes the weighted mean distribution on students' responses in their level of preference of online learning environment. An overall mean of 3.87 which reflected as *often* will be seen in table 11. The respondents gave an *often* rating in all of the indicators such as computer usage (3.92), teacher support (4.11), student interaction and collaboration (3.58), personal relevance (3.82), authentic learning (4.11), student autonomy (3.85), equity (3.73), and asynchronicity (3.84). As what the results imply, it could be thought that the students *often* prefer online learning environment.

**Table 2. Summary on Level of Students' Preference of Online Learning Environment**

Online Learning Environment	Mean	SD	Interpretation
Computer Usage	3.92	.70	Often
Teacher Support	4.11	.78	Often
Student Interaction and Collaboration	3.58	.72	Often
Personal relevance	3.82	.74	Often
Authentic learning	4.11	.77	Often
Student autonomy	3.85	.78	Often
Equity	3.73	.93	Often
Asynchronicity	3.84	.72	Often
Overall	3.87	.77	Often

*Legend: 4.50-5.00 Always, 3.50-4.49 Often, 2.50-3.49 Sometimes, 1.50-2.49 Seldom, 1.00-1.49 Almost Never*

The table reveals further that teacher support and authentic learning are the two indicators that got the highest mean. It simply means that students will be better able to learn online if their teachers provide them the necessary support they need for their learning and if they learn something that they can apply and relate to their everyday lives and the real world.

On the other hand, it revealed that student interaction and collaboration has the lowest mean of 3.58 that is not far to the highest mean and it has a verbal interpretation of *often*. Even though the preference level of online learning environment of students in terms of student interaction and collaboration has the lowest mean on the result, still, the student respondents prefer it as an important factor in an online learning environment. It may be the least priority of students, but interaction and collaboration are essential to support effective and satisfying learning online. It helps the student to achieve higher performance and develop problem-solving and critical thinking abilities.

As cited by Faja, et al. (2013), student collaboration and interaction is an effective tool for increasing students' motivation and participation as they get acquainted with the language of the discipline and assists in their capacity to read and rewrite effectively within the discipline.

On the contrary, the result of the study differs to that of Northenor (2020), wherein the impact of online learning is seen as inefficient in the use of technology particularly in the actual set-up. It is more difficult for students to understand what is being taught. It can also lead to social isolation and can make students not develop the needed communication skills.

**Students' Level of Test Anxiety: Table 3. Summary on Level of Test Anxiety among Students**

Indicative Statements	Mean	SD	Verbal Interpretation
Intrusive Worry	3.21	.87	Moderate Anxiety
Performance Impairment	3.35	.95	Moderate Anxiety
Overall	3.28	.91	Moderate Anxiety

Legend: 4.50-5.00 Extreme Anxiety, 3.50-4.49 High Anxiety, 2.50-3.49 Moderate Anxiety, 1.50-2.49 Low Anxiety  
1.00-1.49 No Anxiety

Table 3 summarizes the mean distribution of students' test anxiety level in terms of intrusive worry and performance impairment. It shows that intrusive worry (3.21) and performance impairment (3.35), respectively, have a verbal interpretation of moderate anxiety which means that the test anxiety level of the students is moderate.

These findings imply that students experienced some levels of anxiety and it is a part of their academic life. And having a test anxiety is very common as it will motivate a person to study ahead of time, stay attentive throughout the exam, and concentrate on the task at hand. Also, some people may feel tense or under pressure during the exam but they are able to withstand these feelings that they can still provide the answers to the questions in their exam. If a student does not adequately study for a test, he or she is likely to get too concerned, affecting his or her performance and making it difficult to concentrate on the exam. Similarly, a high level of test anxiety can impair one's performance to a point that a student may struggle answering the exam, may feel exhausted, may not do his best, may lose attention and focus, and may forget all he has learned.

According to Oxford Learning (2018), even the best students struggle with test anxiety. There are usually two types of students who are likely to have trouble with test anxiety; the high achieving students and the underprepared students. Test anxiety is more common among students who have high expectations, place a lot of pressure on themselves, and have a hard time dealing with mistakes. During a test, they get overwhelmed, and their minds freeze or go blank. Also, students who have not adequately studied for an exam may experience test anxiety. These students either put off studying for an excessive amount of time or just could not comprehend the learning content. When it comes time to take the test, this might contribute to a lack of confidence. And it is true that when pupils believe they will fail the exam, they will.

**Correlation between the Level of Preference of Online Learning Environment and Level of Test Anxiety: Table 4. Correlation between the Level of Preference of Online Learning Environment and Level of Test Anxiety**

Online Learning Environment	Test Anxiety	
	Intrusive Worry	Performance Impairment
Computer Usage	-.048	-.014
Teacher Support	-.065	.051
Student Interaction and Collaboration	-.053	-.048
Personal relevance	.027	.117
Authentic learning	-.065	.023
Student autonomy	.046	.115
Equity	-.003	.046
Asynchronicity	-.088	-.047

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows the Pearson Product Moment Correlation between students' level of preference of Online Learning Environment and the level of Test Anxiety among students.

The data revealed a very weak correlation in all of the variables which means that there is no significant relationship between online learning environment and the test anxiety among college students. It implies that students do not feel anxious about their examination or test online.

This also means that online learning environment do not contribute much to the test anxiety of the students as many students prefer to learn online because of the convenience and flexibility it gives to them. Also, since online can be done remotely, students can have an access to their learning materials and examination anytime and anywhere they want. With this kind of flexible learning set-up, anxiety is mitigated as it eases the students' hassle of traveling and going to the examination room just to take the exam.

Furthermore, students are tech-savvy these days that online classes or examinations give them the satisfying experience in the way they prefer. Also, online assessments give them faster results that they don't have to wait for a long period of time to know if they pass or fail, as waiting for examination results can add stress and anxiety to students. According to Gray, et al. (2017), the students of higher education nowadays are so accustomed and adaptive to technology that they have been dubbed as the "multi-tasking generation."

This indicates further that students' moderate level of test anxiety is their typical reaction when they are placed in a testing situation or when their knowledge of a certain topic or subject is being tested.

The anxiety level of the students towards an examination depends on their preparation and the kind of support they get from their teacher and learning environment. Typically, tests or examinations are used to determine how much a student has learnt about a certain subject or topic. However, if a student did not understand the lesson, he or she may experience anxiety throughout the exam, since taking an exam without comprehending the material adds to the students' anxiety. If a teacher conducts the discussion well and provides lessons that students can relate to, their anxiety levels will certainly decrease.

As cited by Abrazado (2019), 53% of the students agreed that they prefer computer-based assessment over the pen and paper test. Some of the reasons why they prefer so are that students get the result immediately and it gives them the peace of mind. They can also take the exam anytime and anywhere they want using any device, such as cellphone, computer, tablet, or laptop. Another factor that online assessment is preferable among students is that it avoids them from commuting which can also add to their stress. The traffic and the noise exacerbate the anxiety of the students prior to taking exams. Another reason is that the traditional classroom is not designed for learning and testing in a comfortable manner. The uncomfortable chairs, bright lighting, and close closeness to other students make an already unpleasant scenario even worse.

#### **GUIDANCE TESTING SERVICE PROGRAM CRAFTED FOR HIGHER INSTITUTION IN A FLEXIBLE EDUCATION SYSTEM**

The researcher has developed a testing service program for higher institution that could enhance the students' ability, skills and knowledge in their academic area particularly their test taking performance.

Further, the researcher had developed the Online Group Review for Board Program (BS Education and BS Criminology) and one-on-one Routine Interview Survey for all students that would prepare and help them in reducing the test anxiety they experience during board examination.

### CONCLUSION AND RECOMMENDATION

The result of the study revealed that out of 160 respondents, majority are female and at the age of 18 and above. Most of the respondents are from the Bachelor of Secondary Education.

Also, according to the results, respondents' preference level of online learning environment in terms of computer usage, teacher support, student interaction and collaboration, personal relevance, authentic learning, student autonomy, equity and asynchronicity is perceived as "often". Which means that online learning environment is often preferred by most students.

Concerning the level of test anxiety among students, the results revealed a moderate level of test anxiety among college students in terms of intrusive worry and performance impairment.

Further, the findings revealed that the variables under online learning environment which include computer usage, teacher support, student interaction and collaboration, personal relevance, authentic learning, student autonomy, equity and asynchronicity were not significantly related to the test anxiety of college students.

It is recommended for the students to attend their online courses and engage in the online class activities in order to better grasp the lessons. They may learn to participate in an online discussion and raise their questions or concerns if there are topics that they have a hard time understanding. They may study well and prepare for their examination ahead of time in order to avoid high level of test anxiety and so that they can focus and perform well during their important examination.

For the teachers, they may foster a supportive and create an online learning environment for real-life learning, social interaction, and realistic learning, which are very important for students to develop an authentic learning task as well as help them better understand the lessons. They can also incorporate effective teaching and test-taking strategies into their online learning environment so that students may better cope with test anxiety and improve their test performance. Also, a healthy relationship between the teacher and students is helpful. The teachers are encouraged to provide constructive feedback as it helps the students assess their performance.

Parents are encouraged to support their children and partner with the school in order to uplift their children's academic performance particularly with their test performance. Their engagements are important to mitigate anxiety of their children especially when taking an online class.

The administrators may continue and maintain to support the needs of their teachers and learners when it comes to the enrichment of their abilities and skills. The strengthening of online learning environment for teachers and students can reassure the convenience of learning for students

Guidance counselors are encouraged to conduct testing to students to assess their level of anxiety. By identifying them, the Guidance Counsellors will be able to do interventions that will help the students to manage their test anxiety.



For the future researchers, it is recommended that when conducting similar study, other variables to be included such as the economic status as well as the employment status, student's motivation, parent's support, and different school setting.

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