

# Moderation of Perceived Usefulness and Ease of Online Learning Media on the Influence of Predictor Variables on Students' Level of Understanding

Anak Agung Ngurah Agung Kresnandra<sup>1</sup>  
I Wayan Gde Wahyu Purna Anggara<sup>2</sup>

<sup>1,2</sup>Fakultas Ekonomi dan Bisnis Universitas Udayana, Indonesia

\*Correspondences: [ngurahagungkresnandra@unud.ac.id](mailto:ngurahagungkresnandra@unud.ac.id)

## ABSTRACT

This study aims to determine the moderation ability of perceptions of the usefulness and convenience of online learning media on the influence of student computer anxiety on the level of understanding of accounting. To achieve the research objectives, primary data was collected through the distribution of questionnaires (which have passed the validity and reliability tests of the instrument) on samples determined by the purposive sampling method, namely selecting samples by determining specific characteristics that are in accordance with research objectives so that it is expected to be able to answer research problems. The data collected was first tested for compliance with the classical assumption requirements, then analyzed using the Moderation Regression Analysis (MRA) technique. The results of this study are that computer anxiety has a negative effect on the level of student understanding, interest in learning has a positive effect on the level of student understanding, perceptions of usefulness and convenience do not moderate the effect of computer anxiety on the level of student understanding, perceived usefulness moderates the effect of interest in learning on the level of student understanding, and perceived ease does not moderate the effect of interest in learning on the level of student understanding.

Keywords: Computer Anxiety; Learning Interest; Perceived Usability; Perceived Convenience; Level of Understanding of Accounting.

## *Moderasi Persepsi Kegunaan dan Kemudahan Media Pembelajaran Daring terhadap Pengaruh Variabel Prediktor terhadap Tingkat Pemahaman Siswa*

### ABSTRAK

Penelitian ini bertujuan untuk mengetahui kemampuan moderasi dari persepsi kegunaan dan kemudahan media pembelajaran daring terhadap pengaruh computer anxiety mahasiswa pada tingkat pemahaman akuntansinya. Untuk mencapai tujuan penelitian, dikumpulkan data primer melalui penyebaran kuesioner (yang telah lolos uji validitas dan reliabilitas instrumen) pada sampel yang ditentukan dengan metode purposive sampling yaitu pemilihan sampel dengan cara menetapkan ciri-ciri khusus yang sesuai dengan tujuan penelitian sehingga diharapkan dapat menjawab permasalahan penelitian. Data yang terkumpul terlebih dahulu diuji pemenuhan syarat asumsi klasik, kemudian dianalisis menggunakan teknik analisis regresi moderasi (MRA). Hasil penelitian ini yaitu computer anxiety berpengaruh negative terhadap tingkat pemahaman mahasiswa, minat belajar berpengaruh positif terhadap tingkat pemahaman mahasiswa, persepsi kegunaan dan kemudahan tidak memoderasi pengaruh computer anxiety pada tingkat pemahaman mahasiswa, persepsi kegunaan memoderasi pengaruh minat belajar pada tingkat pemahaman mahasiswa, dan persepsi kemudahan tidak memoderasi pengaruh minat belajar pada tingkat pemahaman mahasiswa.

Kata Kunci: Computer Anxiety; Minat Belajar; Persepsi Kegunaan; Persepsi Kemudahan; Tingkat Pemahaman Akuntansi.

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## INTRODUCTION

The level of students' understanding is indicated by how well they comprehend the material studied and can also be reflected in their Grade Point Average (GPA). Beyond course grades, a characteristic of students who understand the lecture material can be seen in their mastery of related concepts (Praptiningsih, 2009). Based on the GPA data of students in the Diploma III Taxation Program at the Faculty of Economics and Business, Udayana University (FEB Unud), the average GPA of students over the past three years has been relatively good, above 3.00. However, according to the results of a 2020 tracer study conducted among employers of the graduates, alumni of the Diploma III Taxation Program at FEB Unud are perceived to have certain weaknesses, including their ability to understand and perform practical tasks, such as completing office assignments using Microsoft Excel.

The current workforce highly demands accounting graduates who are proficient in computer skills, which facilitate the preparation of reports and daily tasks. Computer technology, such as Microsoft Excel, has the potential to enhance effectiveness, efficiency, and productivity for students of the Diploma III Program at FEB Unud as they transition into the professional world. However, understanding and mastering computer technology is influenced by various factors, one of which is the user's behavioral aspect. According to Fatonah (2019), an individual's desire is influenced by their belief in the consequences of the future, leading to either a liking or disliking of computer technology. One of the factors affecting students' understanding of computer technology is computer anxiety and learning interest. Learning interest refers to a state where an individual has attention towards something accompanied by a desire to learn, understand, or prove it. Meanwhile, computer anxiety is a dislike of computers caused by fear when using computer technology.

A high level of computer anxiety significantly affects students' understanding and mastery when taking practical courses that utilize computers (such as Microsoft Excel). The higher the computer anxiety, the lower the students' level of understanding. However, this effect is not always linear. This is evidenced by several previous research findings that remain inconsistent. Fatonah's (2019) study found that computer anxiety positively influences students' level of understanding. In contrast, this result differs from the findings of Harimurti and Astuti (2016), who concluded that computer anxiety negatively affects users' computer skills (mastery).

A high level of learning interest will normatively enhance students' level of understanding. Students with a strong interest in learning will independently improve their understanding, for example, through practice, in-depth analysis, and other forms of attention to the courses provided. Learning interest has a positive effect on students' level of understanding, as shown by previous researchers such as Dian (2015), Susanti (2015), Rokhana (2016), and Atmaja (2017). However, different results were found by Adevania (2018), who stated that learning interest negatively affects students' level of understanding. Based on the inconsistency of previous research findings, it is suspected that other factors or contingency factors may strengthen or weaken the influence of computer anxiety

and learning interest on students' level of understanding. Two of these factors are the perceived usefulness and ease of use of online learning media.

The goal of higher education in vocational programs is, among other things, to prepare students to become experts and skilled professionals in their fields, capable of competing globally. To achieve this goal, students need a good level of understanding, which is largely determined by the teaching and learning process (TLP). Vocational education places greater emphasis on practical skills than theoretical knowledge. Moreover, with the COVID-19 pandemic affecting Indonesia and the world, the previously in-person learning process has had to shift to virtual (online) learning. This transition has brought new challenges for students, particularly those in the Diploma III Taxation Program at FEB Unud. These challenges include poor internet connections, unequal specifications of students' learning tools such as laptops or PCs, and the online learning media used during daily TLP. Consequently, the perceived usefulness and ease of online learning media play a crucial role in mitigating the negative impact of computer anxiety while simultaneously strengthening the influence of students' learning interest on their level of understanding.

Tsani's (2011) study found that perceived usefulness and ease significantly influence learning achievement, both partially and simultaneously, as a measure of students' understanding levels at SMA Negeri 1 Kramat. Based on these findings, it can be assumed that the moderating variables of perceived usefulness and ease could strengthen the influence of learning interest on students' level of understanding. This study differs from Tsani's (2011) research, as in this study, perceived usefulness and ease serve as moderating variables, whereas in Tsani's (2011) study, they were treated as independent variables.

This study aims to obtain evidence on several aspects, including the effect of computer anxiety on students' level of understanding and the effect of learning interest on students' level of understanding. It also examines the moderating effect of perceived usefulness of online learning media on computer anxiety and its influence on students' level of understanding, as well as the moderating effect of perceived ease of use of online learning media on computer anxiety and its influence on students' level of understanding. Additionally, the study investigates the moderating effect of perceived usefulness of online learning media on learning interest and its impact on students' level of understanding, along with the moderating effect of perceived ease of use of online learning media on learning interest and its impact on students' level of understanding. Finally, the study aims to develop a prediction model for students' level of understanding, with computer anxiety and learning interest as predictors and perceived usefulness and ease of use as moderating variables.

Through the results of this study, empirical evidence will be obtained that can confirm the theory related to the negative influence of computer anxiety, the positive influence of learning interest on the level of understanding, and the involvement of moderating variables such as perceived usefulness and ease of use in the influence of computer anxiety and the level of understanding, which is not always linear. Additionally, this study will also contribute empirical evidence that provides practical recommendations to the Diploma III Taxation Program at FEB

Unud, FEB Unud, and Udayana University regarding the use of online learning media.

The theories used in this study are Bloom's Taxonomy, the Theory of Planned Behavior (TPB), and the Technology Acceptance Model (TAM). This theory was proposed by Benjamin S. Bloom, an educational psychologist, in 1956. The taxonomy classifies educational objectives or goals into three domains: cognitive, affective, and psychomotor. Each of these domains is further divided into more specific categories based on their hierarchy (Wingkel, 1987). Other terms that describe the same concepts as these three domains, which have long been recognized in the conventional educational goals taxonomy, include aspects such as creation, feeling, and will (Idris and Jamal, 1992). In addition, terms such as reasoning, appreciation, and practice are also commonly used. Bloom's Taxonomy divides the levels of understanding into three aspects: the cognitive domain, the affective domain, and the psychomotor domain. The cognitive domain relates to abilities associated with knowledge, reasoning, or thinking. The affective domain focuses on abilities related to feelings, emotions, and reactions, which differ from reasoning (Dimiyati and Mudjiono, 2013). The affective domain involves aspects related to emotions, such as feelings, interests, attitudes, and moral compliance. The psychomotor domain is related to physical skills (Dimiyati and Mudjiono, 2013).

Students with a high level of understanding have reached the third domain, the psychomotor domain, which means they not only know and analyze but also have the ability to express, make assessments, and choose the attitudes they will adopt, leading to creativity. In the context of understanding in practical courses that use Microsoft Excel, students with high understanding will be able to do many things. Not only will they complete assignments given by the lecturer, but they will also be able to independently and creatively find Excel formulas that are suitable for various cases, even creating Excel software that will help them complete daily tasks more efficiently.

The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action (TRA), which developed in 1967. According to Ajzen (1988), the Theory of Planned Behavior is based on the assumption that humans typically behave in a sensible manner. The main difference between TRA and TPB is the addition of the third determinant of behavioral intention, which is perceived behavioral control (PBC). PBC is determined by two factors: control beliefs (beliefs about the ability to control) and perceived power (perceptions about the power to perform a behavior). PBC indicates that a person's motivation is influenced by how they perceive the difficulty or ease of performing a specific behavior. If a person has strong control beliefs about the factors that facilitate a behavior, they will have a high perception of their ability to control that behavior.

Computer anxiety can be related to the Theory of Planned Behavior (TPB). Computer anxiety will highly depend on whether the student likes or dislikes using computers (behavioral beliefs), the social pressures from their surrounding environment (normative beliefs), and the presence of factors that support or hinder the behavior of not feeling anxious while using a computer. Based on the TPB framework, it can be concluded that a student's interest in learning will arise when the student enjoys the course they are taking, believes and feels supported by their

environment (such as from their parents), and when factors are present that support their interest in learning. The combination of these three factors will lead to the formation of behavioral intention or behavior intention.

Davis et al. (1989) proposed the Technology Acceptance Model (TAM), which is an extension of the Theory of Reasoned Action (TRA) model with the addition of two key constructs into the TRA model. These two main constructs are perceived usefulness and perceived ease of use. These constructs are the primary determinants of user acceptance or the success or failure of an information system project. In this study, TAM is used to explain the moderating variables of perceived usefulness and perceived ease of use of online learning media. The acceptance of online media in teaching will vary among students depending on their perceptions of the usefulness and ease of use of the application being used.

The first additional construct in TAM is perceived usefulness, which is defined as the extent to which a person believes that using a particular technology will improve their job performance. Therefore, if a person believes that an information system is useful or beneficial, they will use it. Conversely, if a person believes that the information system is not useful or beneficial, they will not use it.

The second additional construct in TAM is perceived ease of use, which is defined as the extent to which a person believes that using a particular technology will be free of effort. If a user believes that an information system is easy to use, they will use it. Research by Davis et al. (1989) revealed that ease of use refers to the degree to which a person believes that using a certain system will make them free of effort. Free of effort means that using the system requires minimal time to learn, is not complicated, and is easy to understand.

Bloom's Taxonomy explains that to be considered to have a high level of understanding, one must reach the third domain, which is the psychomotor domain. A student with a high level of understanding in practical courses that use Microsoft Excel software is characterized by adequate knowledge of Excel formulas, mastery of those formulas, and their application to the given cases, leading to creativity – using Excel not only for coursework but also for solving daily tasks. The level of understanding is greatly influenced by computer anxiety. According to the Theory of Planned Behavior, students who experience computer anxiety perceive using a computer as something they dislike or find unpleasant (behavioral beliefs). Furthermore, awareness of social pressure and other factors that hinder the behavior of overcoming computer anxiety (normative and control beliefs) will worsen the student's computer anxiety. On the other hand, if students build the belief that they like computers, social pressures are relatively controlled, and there are minimal barriers to using computers, it will help reduce computer anxiety, thus improving their understanding.

The research by Heinsel et al. (1987) in Rifa and Gudono (1999) found that university students with high levels of computer anxiety had lower self-efficacy and work outcomes compared to students with low computer anxiety. The study by Sam et al. (2005) showed that computer anxiety and computer attitude significantly influenced self-efficacy among accounting students. Furthermore, research by Sudaryanto and Istiati (2006), Harimurti and Astuti (2016), and Fatonah (2019) found that computer anxiety significantly and negatively affected

understanding levels. This means that the higher the level of computer anxiety, the lower the students' level of understanding.

H<sub>1</sub>: Computer anxiety has a negative effect on students' level of understanding.

In addition to the previous research that found computer anxiety has a significant and negative effect on the level of understanding, there are studies that found the opposite result. The research by Fatonah (2019) found that computer anxiety has a positive effect on students' level of understanding. Based on the inconsistency of previous research findings, it is suspected that there are other factors or variables (contingencies) or moderating variables that could strengthen or weaken the negative effect of computer anxiety on the level of understanding. Among the several factors that partially influence the level of understanding, two of them are the variables of perceived usefulness and ease of use.

The term "learning interest" consists of two words: "interest" and "learning." These two words have different meanings, so the author will define each of them. Etymologically, according to the *Kamus Umum Bahasa Indonesia*, "interest" is defined as "attention," a preference (tendency) towards something, or a desire. From a terminological perspective, experts have provided various opinions about interest, including: 1) According to Ramayulis (2001), interest is a state where a person has attention towards something, accompanied by a desire to know, learn, or prove it. Additionally, according to Daryanto (2010), interest is a consistent tendency to pay attention to and remember certain activities. Based on these definitions, "interest" can be understood as a tendency and strong desire towards something, accompanied by feelings of pleasure, interest, concentration, and other tendencies that lead to a particular choice.

Based on the explanation of the Theory of Planned Behavior (TPB), it can be concluded that the combination of these three factors will result in an individual's behavioral intention or interest (behavior intention). The relationship between this theory and the current research is as follows: 1) Students will intend to exhibit a certain behavior, in this case, an interest in learning accounting courses, when they perceive it positively. This attitude is determined by an individual's belief about the consequences of exhibiting a behavior (behavioral beliefs), weighed based on the evaluation of its outcomes (outcome evaluation). 2) A student's interest in learning will emerge when they perceive that important others think they should do it, for example, the student intends to study accounting because their parents believe studying accounting is a duty for accounting students. 3) A student's interest in learning accounting will arise if there is a belief in the existence of factors that support or hinder the behavior and an awareness of the strength of these factors. The combination of these three aspects will ultimately determine the level of interest students have in understanding accounting courses offered during the teaching process at the university.

H<sub>2</sub>: Learning interest has a positive effect on students' level of understanding.

Previous research on the effect of learning interest on students' level of understanding has been inconsistent. Dian (2015) stated in her research that learning interest has a positive and significant effect on students' level of understanding. This result was also found in other studies, such as those by Susanti (2015), Rokhana (2016), and Atmaja (2017). In contrast to the three previous researchers, Adeviana (2018) found that learning interest has a negative effect on

students' level of understanding. The latest research by Adeviana (2018) also supports the previous findings by Minarni (2014), which found that learning interest has a negative effect on students' level of understanding. Based on the inconsistency of previous research findings, it is suspected that there are other factors (contingency variables) that could either strengthen or weaken the effect of learning interest on students' level of understanding, two of which are perceived usefulness and perceived ease of use of online learning media.

The Technology Acceptance Model (TAM) is adopted from the Theory of Reasoned Action (TRA), a theory of action developed by Fishbein and Ajzen (1975), with the premise that a person's reactions and perceptions towards something will determine their attitudes and behaviors. This theory models a person's behavior as a function of behavioral intentions. Behavioral intentions are determined by attitudes towards the behavior. Thus, it can be understood that the reactions and perceptions of users (students) towards the online learning media used in the practical courses at the Diploma III Taxation Program, FEB Unud, will influence their behavior. There are three factors that influence the use of a system, as proposed by Davis: perceived usefulness, perceived ease of use, and behavioral intention. However, this study uses two of these three factors, namely perceived usefulness and ease of use.

Jogiyanto (2007, 114) states that perceived usefulness is defined as the extent to which a person believes that using a technology will enhance their job performance ("as the extent to which a person believes that using a technology will enhance her or his performance"). Based on this definition, it is understood that perceived usefulness is a belief about the decision-making process. Therefore, if a person believes that an information system is useful, they will use it. Conversely, if a person believes that an information system is not useful, they will not use it.

Previous studies have shown that the construct of perceived usefulness has a positive and significant effect on the use of information systems (e.g., Davis, 1989; Chau, 1996; Igbaria et al., 1997; Sun, 2003). Tsani's (2011) research found that perceived usefulness affects the level of understanding among students. Tsani's (2011) study was conducted at SMA Negeri 1 Kramat. Previous studies also show that perceived usefulness is the most significant and important construct affecting attitudes, behavioral intentions, and behaviors in using technology compared to the construct of perceived ease of use. The construct of perceived usefulness is formed from many items. Davis (1989) used six items to form this construct. These six items are: work more quickly, job performance, increase productivity, effectiveness, makes job easier, and useful.

During the Covid-19 pandemic, all practical courses at the Diploma III Taxation Program, FEB Unud, used online learning media such as Webex Meeting, Zoom, Google Meet, or OASE Udayana. Students' perceptions of the usefulness of online learning media are defined as students' belief that these media are useful for online learning. If students believe that the online media used are useful, they will use them as effectively as possible to help understand the material in practical courses every day. On the other hand, if students believe that the online learning media used are less useful for practical learning, they will not use the media, or they will feel forced to use them, which will affect their understanding of the practical course material. The indicators of students' perceptions of the usefulness

of online learning media are adapted from Davis et al. (1989) and Gardner and Amoroso (2004), adjusted to Bloom's Taxonomy, including task completion speed, achievement of understanding, increased participation, learning effectiveness, ease of completing tasks, and usefulness. A high perception of the usefulness of online learning media in the Diploma III Taxation Program, FEB Unud, can either strengthen or weaken the effect of students' computer anxiety on their level of understanding.

H<sub>3</sub>: Perceived usefulness moderates the effect of computer anxiety on students' level of understanding.

Based on the TAM theory, ease of use is a key factor in determining how technology can be accepted by users, alongside perceived usefulness. According to Davies et al. (1989), a technology is perceived as easy when users do not need to put in extra effort (free of effort) during its use. The online learning media used for daily lectures in the Diploma III Taxation Program, FEB Unud, such as Webex Meeting, Zoom, Google Meet, or OASE Udayana, are designed with user interfaces that have been arranged in such a way as to be easy for both students and lecturers to use. With this ease of use, it is expected that the influence of computer anxiety on students' level of understanding can be reduced.

Previous research by Tsani (2011) found that perceived ease of use significantly affects students' level of understanding. Students' perceptions regarding the ease of use of online learning media are defined as their belief that the online learning media are easy to operate. If students in the Diploma III Taxation Program, FEB Unud, believe that the online learning media are easy to use, they will use them to study and practice the cases provided in the practical courses. On the other hand, if students believe that the online learning media are difficult to use, they will not use them or will feel forced to use them in an inefficient manner. The indicators of students' perceptions of the ease of use of online learning media are adapted from Davis et al. (1989) and Gardner and Amoroso (2004), adjusted to Bloom's Taxonomy, including ease of learning, controllability, clarity and understandability, flexibility, proficiency, and ease of use. The extent of students' perceptions of the ease of use of online learning media will either strengthen or weaken the effect of students' computer anxiety on their level of understanding.

H<sub>4</sub>: Perceived ease of use moderates the effect of computer anxiety on students' level of understanding.

Previous studies have shown that the construct of perceived usefulness has a positive and significant effect on the use of information systems (e.g., Davis, 1989; Chau, 1996; Igarria et al., 1997; Sun, 2003). Tsani's (2011) study found that perceived usefulness affects the level of understanding. Tsani's (2011) research was conducted on students of SMA Negeri 1 Kramat. Previous studies also show that perceived usefulness is the most significant and important construct influencing attitudes, behavioral intentions, and behaviors in using technology, compared to the construct of perceived ease of use. The construct of perceived usefulness is formed from multiple items. Davis (1989) used 6 items to form this construct. These six items are: work more quickly, job performance, increase productivity, effectiveness, makes job easier, and useful.



Students' perception of the usefulness of online learning media is defined as their belief that online learning media are useful for application in online learning. If students believe that online learning media are useful for accounting education, they will use the online learning media to study accounting courses. On the other hand, if students believe that online learning media are less useful for accounting education, they will not use the online learning media to study accounting courses. A high perception of the usefulness of online learning media will either strengthen or weaken the influence of students' learning interest in the Diploma III Taxation Program, FEB Unud, on their level of understanding.

H<sub>5</sub>: Perceived usefulness moderates the effect of learning interest on students' level of understanding.

Perceived ease of use is defined as the extent to which a person believes that using a technology will be free of effort. Based on this definition, it is understood that the construct of perceived ease of use is also a belief about the decision-making process. If a person believes that an information system is easy to use, they will use it. Conversely, if a person believes that an information system is not easy to use, they will not use it.

Previous research by Tsani (2011) found that perceived ease of use significantly affects students' level of understanding. Students' perception of the ease of use of the OASE Udayana media is defined as their belief that the OASE Udayana media is easy to operate. If students believe that the OASE Udayana media is easy to use, they will use it to study their accounting courses. Conversely, if students believe that the OASE Udayana media is not easy to use, they will not use it to study their accounting courses. The level of perceived ease of use of OASE Udayana will either strengthen or weaken students' learning interest in their level of understanding.

H<sub>6</sub>: Perceived ease of use moderates the effect of learning interest on students' level of understanding.

The conceptual framework is a concept about how the theory relates to various factors that have been identified as research problems and defines the relevance between independent and dependent variables according to the theory used. This study discusses the moderation of perceived usefulness and ease of use of e-learning media on the effect of computer anxiety and learning interest on students' level of understanding.

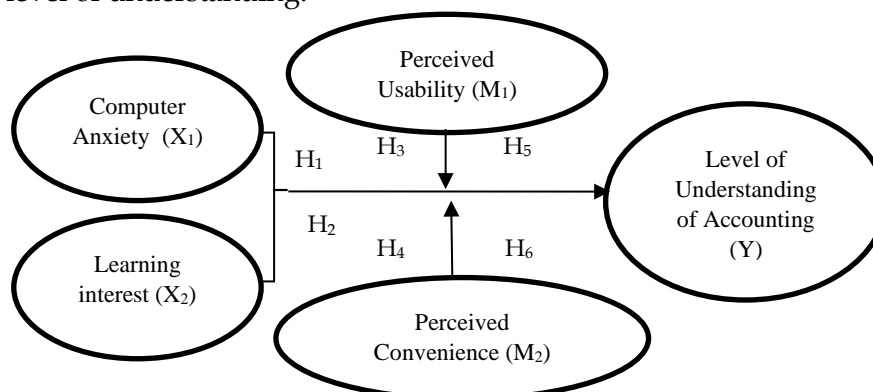


Figure 1. Conceptual Framework

Source: Research Data, 2022

## RESEARCH METHODS

The variables analyzed in this study consist of two independent variables, namely computer anxiety and learning interest, two moderating variables (perceived usefulness and perceived ease of use), and one dependent variable (students' level of understanding). Computer anxiety can be defined as an individual's tendency to experience anxiety or discomfort regarding the use of computers. According to Slameto (2010:57), interest is a consistent tendency to pay attention to and remember certain activities. Students' perception of the usefulness of online learning media is defined as the belief that the online learning media is useful for practical courses using Microsoft Excel. Students' perception of the ease of use of online learning media is defined as the belief that the online learning media is easy to use or operate. The dependent variable in this study is the level of students' understanding. Understanding refers to the level of a person's ability to recognize and comprehend accounting concepts.

**Table 1. Research Variable Indicators**

No	Variabel	Indicator/ Dimension
1	Computer Anxiety (X1)	The indicators used are: <ol style="list-style-type: none"> <li>1. Computer anxiety is fear or apprehension towards computers.</li> <li>2. Anticipation or matters related to how to cope with anxiety towards computers.</li> </ol>
2	Learning interest (X2)	The research by Ariyanti et al. (2010) developed 4 dimensions, which are: <ol style="list-style-type: none"> <li>1. Pleasant feelings</li> <li>2. Attention in learning</li> <li>3. Knowledge</li> <li>4. Awareness</li> </ol>
3	Perceived Usefulness (M1)	The indicators adapted from Davis et al. (1989) and Gardner and Amoroso (2004) are as follows: <ol style="list-style-type: none"> <li>1. Speed of task completion (psychomotor aspect)</li> <li>2. Achievement of understanding (cognitive aspect)</li> <li>3. Increased participation (affective aspect)</li> <li>4. Learning effectiveness (cognitive aspect)</li> <li>5. Ease of completing tasks (psychomotor aspect)</li> <li>6. Usefulness.</li> </ol>
4	Perceived Ease of Use (M2)	The indicators adapted from Davis et al. (1989) and Gardner and Amoroso (2004) are as follows: <ol style="list-style-type: none"> <li>1. Ease of learning (cognitive aspect)</li> <li>2. Controllability (psychomotor aspect)</li> <li>3. Clear and understandable (cognitive aspect)</li> <li>4. Flexibility (affective aspect)</li> <li>5. Proficiency (psychomotor aspect)</li> <li>6. Ease of use.</li> </ol>
5	Level of Understanding of Accounting (Y)	The level of student understanding is measured by the grades in the computer-based Excel practical course, as listed on the student's Academic Transcript (KHS). The data is obtained from the academic section of FEB Unud or the Infokom department of FEB Unud.

Source: Research Data, 2022

The population in this study is all students of the Diploma Program in Taxation, Faculty of Economics and Business, Udayana University (PS Diploma III Perpajakan FEB Unud) who have taken the introductory computer course or computer applications in taxation practical course and used online learning media in their classes. The non-probability sampling technique used in this study is purposive sampling. The reason for choosing this sample using purposive sampling is because not all samples meet the criteria set by the researcher, so the researcher opted for purposive sampling. The criteria for the sample in this study are as follows: The sample consists of active students from the PS Diploma III Taxation program at FEB Unud from the 2019, 2020, and 2021 cohorts (three cohorts). The sample includes students who have taken the introductory computer course or the computer applications in taxation course and whose classes use online learning media (Webex Meeting / Zoom / Google Meet / OASE Udayana).

In this study, the researcher aims to obtain relevant data using a questionnaire. The questionnaire technique is a data collection method where a series of questions are given or sent for respondents, who are the samples of the study, to fill out on their own. The questionnaire is distributed to students of the PS Diploma III Taxation program who meet the purposive sampling criteria in this study. Using a Likert scale, the respondents' answers will be scored, with a 5-point scale as the highest score and a 1-point scale as the lowest, with response options such as: Strongly Disagree (STS), Disagree (TS), Neutral or Indifferent (N), Agree (S), and Strongly Agree (SS).

In addition to using a questionnaire, data collection in this study also employs the documentation technique. The documentation technique is used to complement the research, including written sources, films, and images. These documents will provide information for the research process.

The instrument testing in this study includes validity tests and reliability tests. The data analysis techniques used are descriptive statistics, classical assumption tests, moderation regression analysis (MRA), hypothesis testing (t-test), model feasibility testing (F-test), coefficient of determination (R<sup>2</sup>), and model prediction development equation for MRA (PED/  $\hat{Y}$ ).

Hypothesis testing is conducted using the Statistical Product and Service Solution (SPSS) with a significance level of 5% ( $\alpha = 0.05$ ). In testing the hypothesis, an equation is developed to express the relationship between the dependent variable, which is the Students' Understanding Level (Y), and the independent variables, which are Computer Anxiety (X<sub>1</sub>) and Learning Interest (X<sub>2</sub>), as well as the interactions with the two moderating variables, Perceived Usefulness (M<sub>1</sub>) and Perceived Ease of Use (M<sub>2</sub>). Hypothesis testing with multiple linear regression analysis is formulated as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3M_1 + b_4M_2 + b_5X_1M_1 + b_6X_1M_2 + b_7X_2M_1 + b_8X_2M_2 + \varepsilon \dots \dots \dots (1)$$

Description:

- Y = Students' Understanding Level
- a = Constant value
- X<sub>1</sub> = *Computer Anxiety*
- X<sub>2</sub> = Learning Interest
- M<sub>1</sub> = Perceived Usefulness
- M<sub>2</sub> = Perceived Ease of Use

- b<sub>1</sub>- b<sub>2</sub> = Regression coefficients for independent variables
- b<sub>3</sub>-b<sub>4</sub> = Regression coefficients for moderating variables
- b<sub>5</sub>-b<sub>8</sub> = Regression coefficients for the interaction between X<sub>1</sub> and X<sub>2</sub> with M<sub>1</sub> and M<sub>2</sub>
- ε = Standar error

After inputting and processing the data using SPSS, the output or information obtained will include the constant value and the beta coefficients (b<sub>1</sub>, b<sub>2</sub>, b<sub>3</sub>, b<sub>4</sub>, b<sub>5</sub>, b<sub>6</sub>) for each variable: X<sub>1</sub>, M<sub>1</sub>, M<sub>2</sub>, X<sub>1</sub>.M<sub>1</sub>, X<sub>1</sub>.M<sub>2</sub>, X<sub>2</sub>.M<sub>1</sub>, X<sub>2</sub>.M<sub>2</sub>. Based on the constant value and beta coefficients, the prediction model equation for Students' Understanding Level ( $\hat{Y}$ ) can be developed as follows:

$$\hat{Y} = a + b_1X_1 + b_2X_2 + b_3M_1 + b_4M_2 + b_5X_1M_1 + b_6X_1M_2 + b_7X_2M_1 + b_8X_2M_2 + \epsilon \dots\dots\dots(2)$$

## RESULTS AND DISCUSSION

The population in this study consists of students from the Diploma III Taxation Program at FEB Unud, totaling 207 individuals according to the data from the Pangkalan Data Dikti (PD-Dikti). After applying the sample selection criteria, which include students from the 2019-2021 cohorts who have taken the Computer Introduction or Computer Applications for Taxation courses, the number was reduced to 150 students. However, for the final criterion – participation in classes using online learning media such as OASE and others – only 56 students (31 females and 25 males) met the criteria. For more details, refer to the table below:

**Table 2. Research Respondents**

Population	
All students of the Diploma III Taxation Program according to PD-Dikti.	207
Criteria 1:	
Cohorts of 2019-2021 who have completed the Introduction to Computers or Taxation Computer Applications courses.	150
Criteria 2:	
Using online media (OASE, Zoom, Webex, and others).	56
Final Sample Size	
-Female	31
-Male	25

Source: Research Data, 2023

The validity testing of the research instrument in this study was conducted using the Pearson Correlation value assisted by SPSS. An instrument is considered valid if the calculated r value > table r value and the value is positive, meaning the statement item or indicator is positive (Ghozali, 2018: 53). Based on the data from the r table, with a sample size of 56 and a significance level of 5%, the table r value is 0.2521. Based on the validity test results in each research variable, the calculated r values are all greater than the table r value, so it can be concluded that all statement items used in the research instrument are valid.

The reliability testing of the research instrument in this study was conducted using the Cronbach Alpha value as the basis for determining if the instrument is reliable. To pass, the Cronbach Alpha value must be greater than 0.5. Based on the results of the Research Instrument Reliability Test, the Cronbach

Alpha value for all the variables measured using the research instrument was above 0.5, so it can be concluded that the research instrument is reliable for use.

This study conducted a normality test twice because, during the first test, the data was found not to be normally distributed. After performing an outlier test (using the z-score), it was found that eight data points were outliers and were eliminated from the research sample. As a result, the sample size decreased from 56 to 48. Based on the results of the second normality test, it can be seen that the significance value in the second normality test was above 0.05, so it can be concluded that the research data is normally distributed.

If using the tolerance value as the basis for passing this test, the value must be greater than 0.10, and if using the VIF value as the basis for passing the test, the value must be below 10. Based on the table of the multicollinearity test results, it can be concluded that both the tolerance value and the VIF value meet the criteria for passing this test. The tolerance value is above 0.10, and the VIF value is below 10, so it can be concluded that the data is free from multicollinearity symptoms.

Heteroskedasticity occurs if the significance value is  $< 0.05$ ; conversely, if the significance value is  $> 0.05$ , it means heteroskedasticity does not occur. Based on Table 4.6, the results show that all independent variables have significance values above 0.05, which means the model used in this study is free from heteroskedasticity symptoms.

Based on Table 3, the beta coefficients and significance values of the influence of the two independent variables (Computer Anxiety and Interest in Learning) on the dependent variable (Student Understanding Level) can be observed. The partial beta coefficient for Computer Anxiety ( $X_1$ ) is negative, and its significance value is also significant at the 5% alpha level, so it can be concluded that Hypothesis 1 is accepted. The beta coefficient for the Interest in Learning variable is positive, and its significance value is also below the 5% alpha level, so it can be concluded that Hypothesis 2 is accepted.

**Table 3. Results of Regression Test Before Moderation Interaction**

Variable	Beta Coefficient Value	Significance	Description
Constant	101.552	0.000	-
<i>Computer Anxiety</i>	-0.471	0.000	Ha1: Accepted
Learning Interest	0.342	0.000	Ha2: Accepted

Source: Research Data, 2022

The regression equation for the results of the linear regression test is as follows.

$$Y = 101,552 - 0,471 X_1 + 0,342X_2 + e \dots \dots \dots (3)$$

In Table 4, it can be concluded that: 1) Perceived usefulness and ease of use do not moderate the effect of computer anxiety on student understanding, 2) Perceived usefulness moderates the effect of interest in learning on student understanding, 3) Perceived ease of use does not moderate the effect of interest in learning on student understanding. Based on these results, only alternative hypothesis five (Ha5) is accepted, while Ha3, Ha4, and Ha6 are rejected because the significance values are greater than the alpha of 0.05.

**Table 4. Results of Regression Test After Moderation Interaction**

Variable	Beta Coefficient Value	Significance	Description
Constants	205.969	0.002	-
Computer Anxiety (X1)	-1.126	0.039	-
Learning Interest (X2)	-1.505	0.085	-
Perceived Usability (M1)	-3.027	0.206	-
Perceived Convenience (M2)	-1.414	0.531	-
Computer Anxiety * Perceived Usability (X1*M1)	0.011	0.607	Ha3: Ditolak
Computer Anxiety * Perceived Convenience (X1*M2)	0.016	0.444	Ha4: Ditolak
Learning Interest * Perceived Usability (X2*M1)	0.070	0.050	Ha5: Diterima
Learning Interest * Perceived Convenience (X2*M2)	0.010	0.759	Ha6: Ditolak

Source: Research Data, 2023

The regression equation of the results of the moderated regression test is as follows.

$$Y = 205,969 - 1,126 X_1 - 1,505 X_2 - 3,027 M_1 - 1,414 M_2 + 0,011 X_1 * M_1 + 0,016 X_1 * M_2 + 0,070 X_2 * M_1 + 0,010 X_2 * M_2 + e$$

The results of the correlation and determination coefficient tests can be seen in Table 5. The correlation coefficient is 0.746 or 74.6%, which indicates that the relationship between the independent and moderating variables and the dependent variable in this study is strong. Meanwhile, the determination coefficient is 0.708, or 70.8%, which means that the independent and moderating variables used in the research model can explain the changes or variations in the dependent variable by 70.8%, while the remaining 29.2% is influenced by other variables outside the model.

**Table 5. Results of Correlation Coefficient, Determination Coefficient and F Test**

Description	Test Value
R	0.746
R Square	0.708
F	29.508
Significance Value	0.000

Source: Research Data, 2023

In Table 4, it can be seen that Ha1 is accepted because the significance value is smaller than the alpha of 0.05 and the beta coefficient is negative. The interpretation of this hypothesis test result is that computer anxiety has a negative effect on students' understanding levels. The higher the level of computer anxiety a student has, the lower their level of understanding. This result supports Bloom's Taxonomy Theory, where a person is said to understand something when they reach the psychomotor aspect (the highest level). Students with computer anxiety tend to lack interest in practicing, experimenting, or solving cases using Excel. As a result, these students will remain at the cognitive level (the lowest) in Bloom's Taxonomy. In addition to Bloom's Taxonomy, this research also supports the

Theory of Planned Behavior (TPB), particularly in the behavioral beliefs aspect, which leads to like or dislike based on an individual's behavior. A high level of computer anxiety is caused by students' dislike when using computers, which leads to a decrease in their understanding of practical subjects based on Excel spreadsheets. This result also supports previous research by Harimurti and Astuti (2016), as well as Fatonah (2019), which found that computer anxiety negatively affects the level of understanding.

Interest in learning has a positive effect on students' understanding levels based on the hypothesis test results in Table 4. The interpretation of this result is that the higher a student's interest in learning, the higher their level of understanding will be. Conversely, a lack of interest in learning will lead to a lower level of understanding. This result supports Bloom's Taxonomy Theory, as interest lies in the affective domain, which is one level higher than the cognitive domain. High interest in learning will naturally lead to a student's desire to apply the material provided by the course lecturer in Excel-based spreadsheet subjects. Once the student reaches the final stage in Bloom's Taxonomy, their level of understanding will be maximized. In addition to Bloom's Taxonomy, this result also supports the TPB theory across all three aspects: behavioral beliefs, normative beliefs, and control beliefs. Previous research that supports this finding includes studies by Dian (2015), Susanti (2015), Rokhana (2016), and Atmaja (2017).

Perceived usefulness does not moderate the negative effect of computer anxiety on students' understanding levels, based on the data from the moderation regression test results shown in Table 4. This result contradicts the TAM theory, which explains that perceived usefulness determines whether someone will use a technology/information system if they believe it is useful to them. Conversely, if someone perceives a technology as less useful, they will not use it. This finding contradicts previous research by Davis (1989), Chau (1996), Igarria et al. (1997), Sun (2003), and Tsani (2011). Based on the questionnaire tabulation from students, the average response for questions related to perceived usefulness was on a scale of 4.2, meaning that the students of the PS Diploma III Taxation program perceive the online learning media used in class, especially for practical courses using Excel spreadsheets, as useful. The inability of perceived usefulness to moderate this effect may be due to the students' high level of computer anxiety. This is because, when they were in middle or high school, most students did not have computer lessons after the implementation of the K-13 curriculum in 2013. The lack of computer experience before entering university leads to high computer anxiety, so even though the online learning media used is perceived as useful, it does not reduce this anxiety, which results in a lower level of understanding among the students.

Perceived ease of use does not moderate the negative effect of computer anxiety on students' understanding levels. This result contradicts the TAM theory, which states that if someone perceives a technology or information system as easy to operate, they will decide to use it. This finding rejects the result found by Tsani (2011), who discovered that perceived ease of use has an effect on the level of understanding. Based on the tabulation of the questionnaire data distributed to students of the PS Diploma III Taxation program, the average score for the questions measuring the perceived ease of use variable was around 4.2, meaning

that students perceive the OASE Udayana online media as easy to use, in terms of its user-friendly interface and relatively easy-to-use features. Although it is perceived as easy, students with high computer anxiety still cannot maximize the ease of use of OASE Udayana's online media to improve their understanding of accounting courses, especially practical courses using Excel spreadsheets. This is because students with high computer anxiety are unable to fully utilize the features of the online learning media, which are actually very easy to use, to help them understand the courses they are taking.

Pada Tabel 4, dapat disimpulkan bahwa persepsi kegunaan memoderasi The effect of learning interest on students' understanding levels. This result is consistent with the Theory of Planned Behavior (TPB). Students who perceive online learning media as something useful because they like the media (behavioral beliefs), then realize that their surrounding environment also uses the media during lectures (normative beliefs), and believe that through this online learning media, their interest in learning will be further strengthened to improve their understanding levels (control beliefs). In addition to TPB, this result also supports the Technology Acceptance Model (TAM), where if someone perceives technology as something useful, the acceptance of the technology will be better. As a result, the high learning interest of students in the PS Diploma III Taxation program, strengthened by online learning media perceived as useful for students, will further improve their understanding levels, especially in accounting courses that involve practical work with Excel spreadsheets. This research also supports previous studies by Davis (1989), Chau (1996), Igarria et al. (1997), Sun (2003), and Tsani (2011), which found that perceived usefulness positively influences the level of understanding.

Table 4 shows that alternative hypothesis six is rejected, which means that perceived ease of use does not moderate the effect of learning interest on students' understanding levels. This result contradicts the understanding of the TPB and TAM theories. According to the TAM theory, the ease of use of a technology should influence a person's desire to use that technology in their daily life. Based on the average score of students' responses to the questionnaire questions measuring the perceived ease of use variable, which is 4.2, it means that students consider online learning media to be easy to use in their daily lectures. The inability of this variable to moderate the effect may be due to the fact that students in the PS Diploma III Taxation program are already proficient in using the OASE Udayana online learning media, so the ease of use offered by OASE Udayana no longer has a significant impact on increasing the effect of learning interest on students' understanding levels. This result also rejects the findings of Tsani (2011), who stated that perceived ease of use affects the level of understanding.

## CONCLUSION

The conclusions that can be drawn from this study include the following: Computer anxiety has a negative and significant effect on students' understanding levels. High computer anxiety among students in the PS Diploma III Taxation program leads to a decrease in their understanding levels, particularly in courses based on spreadsheet excel practicals. Learning interest has a positive and significant effect on students' understanding levels. High learning interest among



students in the PS Diploma III Taxation program leads to an increase in their understanding levels. Perceived usefulness does not moderate the effect of computer anxiety on students' understanding levels. High levels of computer anxiety in PS Diploma III Taxation students prevent the ease of use provided by online learning media from reducing the negative effects of computer anxiety on their understanding. Perceived ease of use does not moderate the effect of computer anxiety on students' understanding levels. Lack of experience with computers during junior and senior high school leads to high computer anxiety, so even though the online learning media used in lectures is perceived as easy to use, it does not significantly reduce the negative impact of computer anxiety on students' understanding levels. Perceived usefulness moderates the positive effect of learning interest on students' understanding levels. The usefulness of online learning media can significantly strengthen the learning interest of PS Diploma III Taxation students, which is relatively high, in improving their understanding, particularly in practical-based courses. Perceived ease of use does not moderate the positive effect of learning interest on students' understanding levels. The use of online learning media over the past two years has made PS Diploma III Taxation students proficient in utilizing its features, which impacts the insignificance of ease of use in enhancing the positive effect of learning interest on students' understanding levels.

The recommendations based on the results of this study are as follows: The management of the PS Diploma III Taxation program should encourage the lecturers to maximize the use of online learning media such as OASE Udayana during the teaching process. Although after May 2022, the government has rarely implemented the work-from-home policy, this does not mean that lecturers should abandon online learning media in their teaching processes. Online learning media should be a supplementary tool in the teaching process at the PS Diploma III Taxation program, as based on the questionnaire responses, students perceive online learning media as very useful and easy to use. For Universitas Udayana, specifically the Digital and Information Resource Unit (USDI), it is recommended to continuously develop features that can increase the interest of both students and lecturers in using online learning media, such as OASE Udayana. In addition, the USDI should coordinate and collaborate with the Information and Communication Units in each faculty to design user-friendly and useful online learning media, as each study program has its own unique characteristics. This study has a limited scope, focusing only on the PS Diploma III Taxation program at FEB Universitas Udayana. Therefore, future researchers could broaden the sample scope of their studies, for example, to include students from a particular faculty, university, or even across universities.

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