

A Causal Model on Students' Satisfaction in Relation to Teachers' Professional Skills, Students' Transactional Distance and Readiness for Online Learning

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ABSTRACT

Using Structural Equation Modeling (SEM), this study aimed to determine the best-fit model for students' satisfaction influenced by teachers' professional skills, students' transactional distance, and readiness for online learning among private Senior High School (SHS) students. The study employed stratified random sampling to select 400 respondents from around SOCCSKSARGEN region, Philippines. Standardized test questionnaires were distributed to respondents to collect study data. Statistical tools were used for data analysis, including mean, standard deviation, Pearson product-moment correlation, linear regression, and SEM. Findings revealed that teachers' professional skills were rated very high, students' readiness for online learning was high, and students' transactional distance was also high, indicating minimized transactional gaps and frequent interaction with other students, teachers, and the learning content. The overall level of students' satisfaction was also high, showing positive online learning experiences. Additionally, results further showed that the three exogenous variables significantly influenced students' satisfaction. Model 3 was identified as the best fit among the three generated models, with teachers' professional skills identified as the strongest predictor of student satisfaction. The results also indicated that students' satisfaction was best anchored in teachers' professional skills, which were measured by learning environment, assessment, and organization of content; transactional distance was characterized by student-teacher transactional distance and student-content transactional distance; and readiness for online learning was characterized by communication and online student attributes. Finally, the study provides valuable insights aligned with Sustainable Development Goal 4, or Quality Education, in formulating well-informed policies and programs to further improve online education delivery.

Keywords: Teachers' Professional Skills; Transactional Distance; Online Learning Readiness; Students' Satisfaction; Online Education

INTRODUCTION

The decrease in motivation and engagement, poor academic performance, delayed graduation, and higher attrition rates are undoubtedly some of the negative academic outcomes of student dissatisfaction (Adigun et al., 2023; Alzaanin, 2023; Behr et al., 2020; Dimitriadou et al., 2020; Lim et al., 2022; Long et al., 2020; Ma & Wei, 2022; Nurmalitasari et al., 2023; Scheunemann et al., 2022). This pattern of dissatisfaction is even more evident during the abrupt shift from face-to-face learning to distance learning. Schools' satisfaction worldwide dropped significantly between 2019 and 2020, and the sharpest decline occurred in Southeast Asia, a drop of 22% from 85% to 63%. The Philippines, Indonesia, Thailand, Malaysia, and Vietnam are among these countries from this region that showed a steep decline during the COVID-19 crisis (Crabtree & Saransomrurtai, 2021). In the Philippines, the Commission on Higher Education (CHED) declared that the attrition rate for graduating students was 18.45% in 2020-2021, increased to 38.95% in 2021-2022, and further increased to 41.16% in the succeeding year (Chi, 2023). Moreover, poor satisfaction extends beyond academic institution's overall effectiveness in the students' learning experiences and learning outcomes; that eventually affects institution's reputation, financial

stability, and students' retention rate (Al Hassani & Wilkins, 2022; Lacap & Cortez, 2023; Long et al., 2020; Moslehpour, 2020; My et al., 2022; Wong & Chapman, 2023).

Students' satisfaction is widely recognized as a key indicator of academic institution performance through how effectively students' requests, needs, and expectations are met (Kanwar & Sanjeeva, 2022; Mastoi & Saengkrod, 2019; Torrado & Blanca, 2022; Wong & Chapman, 2023; Yilmaz & Temizkan, 2022). It is a student's subjective evaluations of academic performance, experiences and learning outcomes (Aguirre et al., 2022; Alzaanin, 2023; Keržič et al., 2021; My et al., 2022; Zeng & Wang, 2021). Students with higher access to student- to- student dialogue, course structure, and technology quality are highly satisfied and achieved learning efficiency (My et al., 2022). Similarly, Khairusy and Febriani (2023) and Lacap and Cortez (2023) found that students tend to be more loyal to their academic institutions once they are satisfied, which further strengthens the goal of every institution.

Theoretical frameworks and empirical studies propose that students' satisfaction is influenced to some extent by teachers' professional skills, students' transactional distance, and their preparedness for online learning. Teachers' professional skills and student satisfaction have a positive correlation, as shown in recent studies. In his study, Aydin (2021) emphasized that student satisfaction is associated with the performance of teachers since they are responsible for creating all kinds of interactions in the online learning environment. Meanwhile, students' academic satisfaction is significantly influenced by instructional quality, specifically teachers' mastery of the learning content, pedagogical competence, clarity in communication, and adaptability of teachers (Cornillez, 2020; Gopal et al., 2021; Saeed & Akbar, 2021). In addition, classroom management and the delivery of content shape students' satisfaction (Latip et al., 2020); and giving clear instructions and employing interactive teaching approaches increases students' level of satisfaction with their learning environment (Suwarni et al., 2020).

On the other hand, transactional distance, a psychological and communication gap, affects a student's engagement with their learning experience. This gap exists due to the poor interaction between students and the teacher, other students, and the learning content (Swart & MacLeod, 2021). As transactional distance decreases, students tend to report higher levels of satisfaction (Achuthan et al., 2024). Gökoğlu et al. (2024) further reinforced the idea that frequent, meaningful connection promotes connectedness and learner engagement by noting that learner engagement increases as transactional distance decreases (She et al., 2021). Similarly, Tria (2024) validated a transactional distance scale specific to the Philippine context, revealing that a lower level of transactional distance correlates with greater student satisfaction in flexible and online learning environments.

Meanwhile, students' level of satisfaction with online learning is closely associated with their readiness. This is reflected through their technical competence, motivation, adaptability, and time management skills. When students are highly prepared, they are more likely to use digital tools with confidence, actively participate in class, and independently overcome challenges, which is directly related to how satisfied students are with the learning process (Ilgaz & Gulbahar, 2020; Wei & Chou, 2020). This readiness encompasses not only the technical skills but also attitudes and emotional preparedness. Moreover, it enhances students' self-determination and attentiveness, which contributes to more positive evaluations of their online learning experiences (Hasim & Yusof, 2023; Kumar et al., 2021; Yan-Li et al., 2022).

Teachers' professional skills, the first exogenous variable in the study, play a significant role in influencing students' satisfaction with their learning experience (Uraimova, 2019; Gopal et al., 2021). To assess this, the study employs the Teachers' Professional Skills Scale developed by Saeed and Akbar (2021), which measures the areas of organization of content, planning for teaching, assessment, and learning environment. Research studies have shown that pedagogical content knowledge, experience, assessments, and teachers' academic qualifications improve their capacity to engage students, deliver instruction effectively, and create meaningful learning experiences (Leino et al., 2022; Metsäpelto, 2022; Olawale, 2023). In particular, effective planning for teaching is crucial in creating engaging and interactive learning activities (Abd Hamid et al., 2024; Hontarenko & Kovalenko, 2024). Furthermore, when the course is well-planned, students perceive the instruction and online interaction as high in quality; satisfaction of students increases and then leads to their better performance (Almaiah & Alyoussef, 2019; Gopal et al., 2021; Yang et al., 2023).

On the other hand, to check the students' progress and measure their achievement, the teacher must create activities that will determine the competencies and skills required in the course. Assessment activities that are not aligned with the course objectives are likely to reduce student satisfaction (Martin Rodríguez et.al, 2019). Meanwhile, the learning environment also influences the students' satisfaction and their academic performance, as emphasized by Naeem et al. (2023) and Thygesen et al. (2020) in their respective studies. Specifically, Saeed and Akbar (2021) highlighted the importance of establishing classroom management, organization, and expectations from the start of the school year. When teachers are able to provide a well-organized and supportive learning environment, students are expected to achieve positive and consistent learning outcomes (Salerno, 2021).

The students' transactional distance is the second exogenous variable. According to Gavris et al. (2020), Sevnarayan (2022), and Swart and MacLeod (2021), Moore's theory postulates that physical separation in online learning creates psychological and communication gaps between students, teachers, peers, and learning content, resulting in a greater sense of distance than classroom setting. This gap is influenced by dialogue, structure, and autonomy. Autonomy and structure are positively correlated with transactional distance; as courses become more rigid or students are given more independent responsibility, the sense of psychological distance may increase. While the increase in communication and interaction reduces the perceived gap, which supports the idea of Gavris et al. (2020) that dialogue is inversely correlated with transactional distance. Transactional distance is more observed in an online and flexible learning environment as students become more isolated, demotivated, disinterested, and eventually drop out of the system (Abuhassna & Alnawajha, 2023; Achuthan et al., 2024; Sevnarayan, 2022; Swart & MacLeod, 2021).

The transactional distance variable has three indicators. Student-student transactional distance is the psychological gap students experience in online settings due to limited engagement in group discussions (Ottenheim et al., 2025). This finding challenges the idea that student-student interactions are a key factor for student success, according to collaborative learning approaches (Engel et al., 2023). Meanwhile, when students fail to partake in the informal interactions with the teacher before, during, and after the lectures, student-teacher transactional distance occurs, which limits the creation of a supportive learning environment, improvement of students' performance, and satisfaction (Elshami et al., 2021).

On the other hand, student-content transactional distance determines how well the materials meet students' learning needs and course expectations. According to research by Gavrilis et al. (2020), there is a significant and strong correlation between student-content transactional distance and satisfaction, indicating that transactional distance reduction is associated with increased satisfaction. This indicates that well-designed programs result in increased satisfaction of students from their interaction with the teacher and the development of dialogue in an online learning environment.

The students' readiness for online learning is the third exogenous variable in this study. According to Bubou and Job (2022), the successful integration of technology in academic institutions for learning requires physical infrastructure, technical expertise, and psychological readiness. Student readiness for online learning encompasses academic and technological preparedness, self-confidence in using electronic platforms, ability to engage in asynchronous environments, and complete the tasks provided (Bayrak, 2022; Martin et al., 2020; Nuh & Eralp, 2021; Polat, 2024; Ritcher, 2023; Wang et al., 2023). Several research findings indicate a positive relationship between online learning readiness and students' academic performance (Joosten & Cusatis, 2020; Ramadhana et al., 2021; Wang et al., 2023). Meanwhile, Nuh & Eralp (2021) revealed that students' readiness for e-learning contributed to self-regulation skills, satisfaction, and academic achievement. In addition, Bubou and Job (2022) emphasized the importance of students' preparedness to fully utilize ICT and related technologies for academic achievements, reduced dropout rates, social connectivism, and lifelong learning.

The variable readiness for online learning has four indicators. The first indicator is the online student attributes. According to findings, these student attributes include self-regulated and self-directed learning, locus of control, and academic self-efficacy, which are found to be significant in determining readiness for online learning (Küsel et al., 2020; Martin et al., 2020; Rafsanjani et al., 2022). These factors have been linked to student performance and satisfaction with online learning (Martin et al., 2020). Effective time management is likewise crucial for students' readiness for online learning, as highlighted by Küsel et al. (2020), Martin et al. (2020), and Rafsanjani

et al. (2022). As emphasized by Khiat (2019) and Martin et al. (2020), challenges in time management include keeping up with assignments, meeting deadlines, and actively participating in online instruction. Good time management involves scheduling sufficient, consistent time to complete learning tasks tied to set goals (Khiat, 2019).

Another indicator of online learning readiness is communication competence. For students to be prepared for online learning, they must be equipped with communication skills (Kaufmann & Vallade, 2020; Martin et al., 2020). A research study conducted by Hikamah et al. (2021) revealed that students' communication competence can be fully developed online. Communication competence allows successful interaction with teachers and other students across various platforms, including forums, emails, digital tools, and class discussions. Lastly, technical competence. It is found to be a crucial skill in the learning process (Kassymova et al., 2023). It encompasses an individual's self-efficacy in technology, showing their perceived ability to master tasks related to technology use, problem-solving (Küsel et al., 2020), and information-seeking skills (Martin et al., 2020; Rafsanjani et al., 2022).

Student satisfaction is the endogenous variable of the study. Student satisfaction is vital for both institutions and individuals (Wong & Chapman, 2023). Specifically, it includes feelings and attitudes toward the learning process, influenced by experiences (Aguirre et al., 2022; Fearnley et al., 2022; Martin & Bolliger, 2022; She et al., 2021). Moreover, Aguirre et al. (2022) and Martin and Bolliger (2022) highlighted that student satisfaction affects engagement, motivation, commitment, learning outcomes, retention, graduation, and dropout rates.

This variable has four indicators. First is student–content interaction. Student-content interaction is the process by which students elaborate and reflect on course content, resulting in changes in their understanding, perspective, and cognitive structures (Aydin, 2021; Le et al., 2022). Well-organized courses are believed to help students systematize, demonstrate, and apply new knowledge (Hu & Xiao, 2025; Kim & Kim, 2021), interact more effectively (Helou et al., 2020), and influence them to do better in their classes (Gopal et al., 2021). While the two-way communication observed in student–teacher interaction is significant in clarifying content, exchanging feedback, seeking support, and receiving encouragement on the impact of online education (Hu & Xiao, 2025; Torrado & Blanca, 2022; Wu et al., 2023). It involves teachers' organizing teaching activities, assessing student progress, offering feedback, and providing support and encouragement (Seo et al., 2021; Wu et al., 2023) which will increase the self-esteem, motivation, and confidence of students in facing challenges (Aydin, 2021; Seo et al., 2021) and develop their independence and self-regulation (Helou et al., 2020).

The student-student interaction occurs when students exchange information and ideas about course content through group activities on various digital platforms, with or without the teacher's involvement (Le et al., 2022; Torrado & Blanca, 2022). In the process, the sharing of diverse perspectives, socialization skills, and engagement among students are observed (Hu & Xiao, 2025; She et al., 2021; Wu et al., 2023). However, since students cannot be physically present, their interest in the lesson may decrease. As highlighted by Amrullah and Nanzah (2022) and Aydin (2021) in their studies, teachers play a significant role in encouraging students to attend classes, providing activities that will keep the students engaged in the lesson, and increasing their interaction with peers. In online learning and blended-learning environments, student-technology interaction also occurs. Students interact with digital tools or platforms to explore their learning tasks (Torrado & Blanca, 2022), engage through interactive tools, built-in discussion forums, or live quizzes, and give feedback by sending review forms or suggestions to other students (Garg et al., 2023; Wei et al., 2023). Hence, technological competence plays a significant role in keeping them motivated to learn (Pham, 2025; Rafsanjani et al., 2022; Siregar, 2022).

Figure 1 shows the study's conceptual framework, which presents the relationships between teachers' professional skills, students' transactional distance, and readiness for online learning, to the students' satisfaction. The single-headed arrow illustrates this point from the three exogenous variables towards the endogenous variable. The first exogenous variable is teachers' professional skills as described by Saeed and Akbar (2021), which includes organization of content, planning for teaching, assessment, and learning environment. In addition, transactional distance as described by Mbvesa (2014), consists of student-student transactional distance, student-teacher transactional distance, and student-content transactional distance. The third exogenous variable in this research investigation is the readiness for online learning by Martin et al. (2020), which involves online student attributes, time management, communication, and technical competence. Furthermore, teachers'

professional skills, students' transactional distance, and their readiness for online learning are hypothesized to influence the endogenous variable, student satisfaction. Student satisfaction includes student-content interaction, student-teacher interaction, student-student interaction, and learner-technology interaction, as described by Torrado and Blanca (2022).

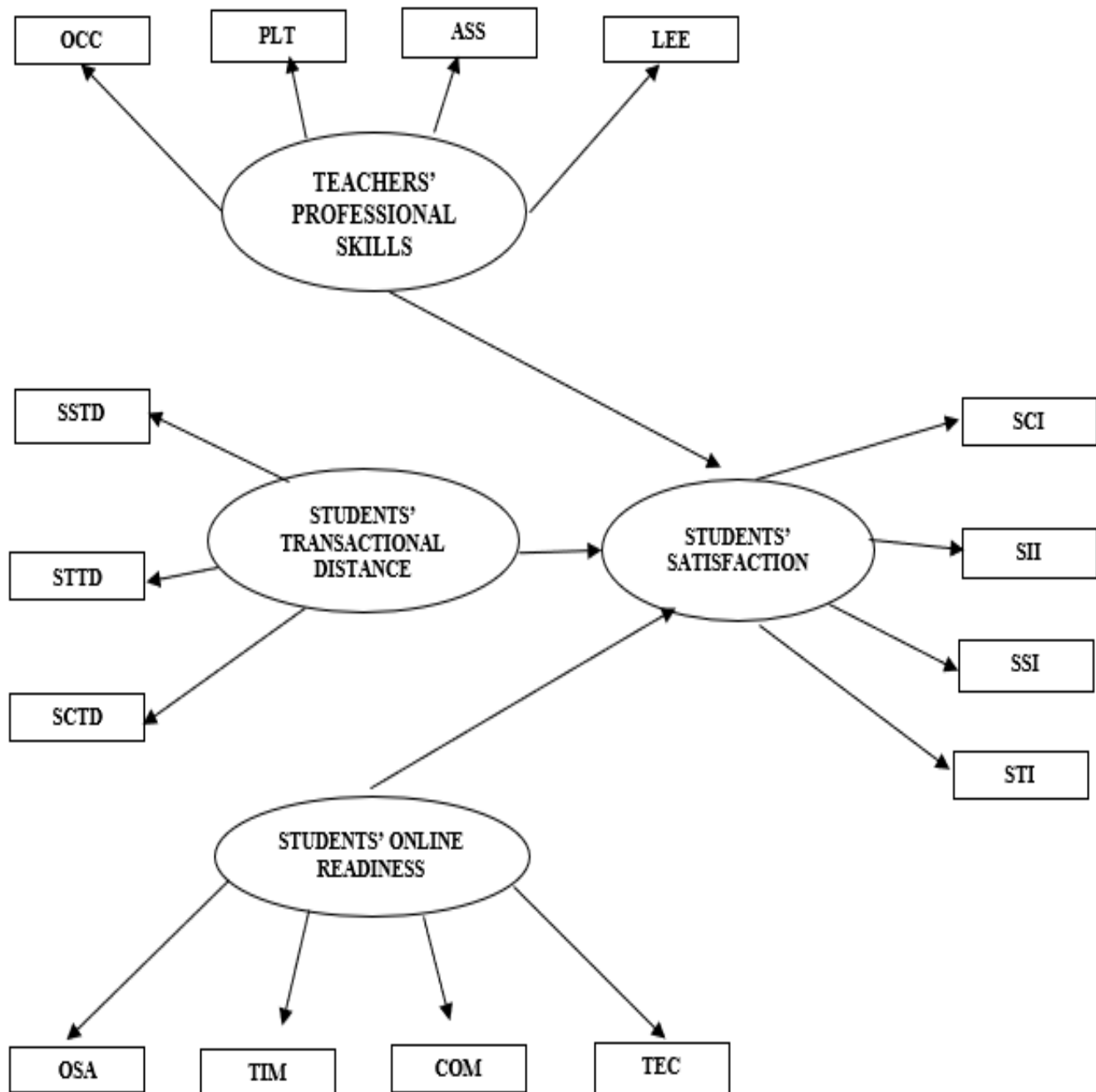


Figure 1. Hypothesized Model on the Direct Causal Relationship of Teachers' Professional Skills, Students' Transactional Distance and Readiness for Online Learning to Students' Satisfaction

Legend:

Teachers Professional Skills		Readiness for Online Learning	
OCC	Organization of Content	OSA	Online Student Attributes
PLT	Planning for Teaching	TIM	Time Management
ASS	Assessment	COM	Communication
LEE	Learning Environment	TEC	Technical Competence

Transactional Distance			Student Satisfaction	
SSTD	Student-Student Distance	Transactional	SCI	Student- Content Interaction
STTD	Student- Teacher Distance	Transactional	SII	Student-Instructor Interaction
SCTD	Student- Content Distance	Transactional	SSI	Student- Student Interaction
			STI	Student-Technology Interaction

The present investigation is grounded in Expectation-Confirmation Theory (ECT), which highlights that satisfaction is influenced by the relationship between expectations and the perceived delivery, with positive or negative confirmation between expectations and performance. Expectations, performance, confirmation, and satisfaction are the four primary constructs of this model (Pan et al., 2024; Wang et al., 2020). This investigation is supported by the Community of Inquiry (CoI). The Community of Inquiry framework is a theoretical framework developed by Garrison, Anderson, and Archer, which was grounded on collaborative-constructivist learning philosophy by John Dewey. The CoI framework places a strong emphasis on interactions among students, teachers, and peers and how these interactions contribute to deep and meaningful learning experiences (Moore & Miller, 2022; Ramatalla et al., 2024; Shea et al., 2022; Yidana & Aboagye, 2024).

The study is likewise anchored on Transactional Distance Theory, developed by Michael G. Moore, which postulates that the separation between teachers in an online learning environment, transactional distance, might lead to psychological and communication gaps, which then influence the effectiveness of the learning experience (Abuhassna & Alnawajha, 2023; Achuthan et al., 2024; Gavriliş et al., 2020; Saykil, 2019). In his study, Letsapa (2025) reiterated that teachers can bridge the transactional distance and enhance educational outcomes by promoting a strong sense of community, active engagement, and utilizing innovative strategies. Furthermore, this study is likewise anchored to the Technology Acceptance Model (TAM). The Technology Acceptance Model (TAM) was a theoretical framework developed in 1989 by Fred Davis to explain and predict users' acceptance and adoption of technology. Two important characteristics are highlighted in the TAM model: the perceived usefulness (PU) and perceived ease of use (PEOU). In the TAM model, PU refers to an individual's belief that the use of technology improves their work performance, while PEOU is defined as the degree to which one believes technology is easy to use and free from effort (Zobeidi et al., 2023). The higher the perceived ease of use and perceived usefulness, the higher the educational satisfaction is reached (Chen et al., 2023; Han & Sa, 2022).

The main purpose of this study is to determine the best-fit model on students' satisfaction in relation to teachers' professional skills, students' transactional distance, and readiness for online learning amongst senior high schools in SOCCSKSARGEN. Specifically, this study dealt with the following objectives: to evaluate the level of teachers' professional skills in terms of organization of content, planning for teaching, assessment, and learning environment; to determine the level of students' transactional distance in terms of student-student transactional distance, student-teacher transactional distance, and student-content transactional distance; to ascertain the level of students' readiness for online learning in terms of online student attributes, time management, communication, and technical competence; and to assess the level of student satisfaction in terms of student-content interaction, student-teacher interaction, student-student interaction; and student-technology interaction. Also, to determine the significant relationship between students' satisfaction and teachers' professional skills, students' satisfaction and students' transactional distance, and students' satisfaction and students' readiness for online learning; and to find out which exogenous variable best influences the academic satisfaction of senior high school students in Region XII. Lastly, to discover which model best fits the students' satisfaction of Senior High Schools in Region XII.

The following null hypotheses were tested at the 0.05 level of significance: there is no significant relationship between students' satisfaction and teachers' professional skills, students' satisfaction and students' transactional distance, and students' satisfaction and students' readiness for online learning. There is no exogenous variable

that best influences the academic satisfaction of Senior High School students in Region XII, and there is no best-fit model for the students' satisfaction of Senior High Schools in the SOCCSKSARGEN region.

This research investigation holds considerable global significance as it directly supports the United Nations' Sustainable Development Goal (SDG) #4: Quality Education (United Nations, 2018), which emphasizes inclusive and equitable quality education and promotes lifelong learning opportunities for all. This research investigation on the relationships between teachers' professional skills, students' transactional distance, and readiness for online learning as a structural equation model for students' satisfaction aims to fill a gap in the Philippines' educational landscape, as it focuses on how online learning environments can be improved to ensure meaningful access and engagement, especially in SOCCSKSARGEN. The results can help the Department of Education (DepEd) and Commission on Higher Education (CHED) get valuable insights on factors affecting students' online learning experiences in which they may use to shape policies that strengthen teacher training, enhance student support systems, and improve digital infrastructure. Moreover, the results may provide policymakers with direction for developing inclusive, responsive policies that focus on instructional quality and student outcomes in an online learning environment. The results of this study can also help school administrators assess teaching practices, professional development programs, and student services of their institution. Furthermore, the findings may prompt the teachers to assess their professional skills and adopt more responsive approaches to enhance student satisfaction. Finally, data from this study can serve as a basis for future researchers interested in developing causal models aimed at enhancing the effectiveness of online learning systems in both local and global contexts.

METHODS

This section describes the research method and procedures used in this study, including the research respondents, materials and instruments, design and procedures, data analysis, and ethical considerations adhered to during the study.

The respondents were selected from the 5,675 students enrolled in ten (10) different private senior high schools of Region XII, or SOCCSKSARGEN, Philippines. An online Raosoft® sample size calculator was applied, with a confidence level of 95%, with a margin of error of 5%. Although the generated sample size was only 360, the study included a total of 400 respondents in order to meet the university's requirements. These respondents were drawn exclusively from large private senior high schools (SHS) within the region, as these institutions were presumed to have actively implemented online distance learning and/or blended learning delivery modalities during the academic years from 2020 to 2023.

This study utilized a quantitative non-experimental research design with a descriptive-correlational method of research. The descriptive-correlational approach measures the associations of variables with varying levels of measurement and is used to create causal ties between variables (Creswell & Creswell, 2018; Cwiekala-Lewis, 2019; Kang & Ahn, 2021). Moreover, Structural Equation Modeling (SEM) was employed to develop the best-fit model, as it is widely used in scientific investigations to test and assess multivariate causal linkages (Elastika et al., 2021; Hair et.al, 2021; Mosia, 2025; Rappaport et.al, 2019). In addition, SEM provided an exceptionally adaptable method for estimating the "true" parameters of latent variables while explicitly accounting for complex direct and indirect effects (Cartaxo et al., 2023; Gana & Broc, 2019). Using fit indices, the structural equation model for teachers' professional skills, students' transactional distance, and readiness for online learning as predictors of students' satisfaction was evaluated and resulted in the model representing a good fit, with $CFI \geq 0.997$, $RMSEA \leq 0.025$, and $TLI \geq 0.994$ (Yaslioglu & Toplu-Yaslioglu, 2020).

The study employed a stratified random sampling technique to ensure fair representation of respondents from various academic strands and private senior high schools across the SOCCSKSARGEN Region. The population was first divided into strata based on academic strand (e.g., ABM, HUMSS, STEM, and others). From each stratum, respondents were randomly selected to participate in the study. This sampling technique guaranteed that each subgroup of the population was adequately represented, and the reliability, generalizability, and statistical power of the results were enhanced (Iqbal et al., 2024; Nguyen et al., 2019; Reddy & Khan, 2023). Only students who had experienced online or blended learning modalities for at least one school year (2020–2023) were included in the sampling frame.

The study data were collected using four (4) adopted questionnaires: teachers' professional skills by Saeed and Akbar (2021), transactional distance Scale developed by Mbweza (2014), readiness scale by Martin et al. (2020), and students' satisfaction, based on the scale by Torrado and Blanca (2022). All the four adopted questionnaires were modified to fit the specific context of this research and underwent validation by a pool of experts to ensure their applicability and credibility, in compliance with the standard procedure of the University of Mindanao. The expert validation process resulted in an average score of 4.38, indicating a high level of content validity. After validation, the instruments underwent a pilot test with 30 private senior high school students to determine their reliability and validity indices. The pilot results indicate that the instrument was highly dependable, as shown in the Cronbach's alpha value of .9495 for each variable. Moreover, this research study used the 5-point Likert Scale for the respondents to gauge their level of agreement and disagreement on a symmetric scale for a series of statements using a bipolar scale, which captured the neutrality, the direction, and the intensity of an opinion (DeCastellarnau, 2018; Kusmaryono et al., 2022; Robie et al., 2022).

Following the University of Mindanao's protocol, the Office of the Dean of the Professional Schools validated and approved the questionnaires before the study proceeded. Upon approval, the researcher sought permission from the school administrators of the identified private senior high schools in Region XII. Selected respondents received a letter inviting them to participate in the study, along with the questionnaires, an Informed Consent and Assent Form. The Assent Form was required only for SHS students below 18 years of age, and was completed and signed by their parent or guardian. The respondents who chose to withdraw were replaced to maintain the required sample size.

After retrieval, data were collated, tabulated, analyzed, and interpreted using statistical instruments such as mean and standard deviation to describe the exogenous and endogenous variables. Pearson's correlation determined the significance of relationships between these variables, while linear regression identified factors influencing the dependent variable. To assess multivariate causal relationships, Structural Equation Modeling (SEM) was utilized in the study to build a causal model that best fit student satisfaction and to assess the interrelationships between the hypothesized models. A goodness-of-fit standard criterion of 0.95 was applied to structural models.

In compliance with the University of Mindanao Ethics and Review Committee (UMERC) under Protocol Number: UMERC-2024-232, and the Data Privacy Act of 2012, ethical standards and procedures were strictly observed. The participation of the respondents was voluntary, all personal information was kept confidential, and it was used solely for academic purposes.

RESULTS AND DISCUSSION

This section presents and discusses the data collected and analyzed from private Senior High school students on students' satisfaction, teachers' professional skills, students' transactional distance, and their readiness for online learning

Research Objective No. 1 To evaluate the level of teachers' professional skills in terms of: organization of content; planning for teaching; assessment; and learning environment.

Shown in Table 1 is the level of teachers' professional skills measured by the *organization of content, planning for teaching, assessment, and the learning environment*. An overall mean of 4.27 and a standard deviation of 0.48 were obtained, which is described as very high. This denotes that the level of teachers' professional skills is often manifested as a homogenous response among private Senior High School (SHS) students. Moreover, it was found that among the four indicators of teachers' professional skills, *planning for teaching* has the highest mean of 4.37, or very high, with a standard deviation of 0.53, while *assessment* has the lowest mean of 4.21, or very high, with a standard deviation of 0.57.

Table 1. Level of Teachers' Professional Skills

Indicators	SD	Mean	Descriptive Level
Organization of Content	0.53	4.24	Very High

Planning for Teaching	0.53	4.37	Very High
Assessment	0.57	4.21	Very High
Learning Environment	0.67	4.27	Very High
Overall	0.48	4.27	Very High

The results indicate that teachers in private senior high schools consistently demonstrate very highly developed professional skills. This implies that teachers demonstrate a very high level of skill in organizing content effectively and are adept at connecting learning materials to students' real-world experiences. Teachers give clear instructions, manage classroom activities efficiently, and evaluate students' learning through formative and summative assessments. Additionally, teachers in private senior high schools create an inclusive, supportive learning environment that encourages student participation and accounts for individual differences. Their ability to plan, assess, organize content, and foster supportive learning environments enhances student engagement and contributes to greater academic success.

The very high descriptive levels across all indicators of teachers' professional skills suggest that private senior high schools in Region XII manifest exceptional performance in content organization, instructional planning, assessment, and classroom environment. This result matches the report of Gavrilis et al. (2020), which emphasized that teacher performance, particularly guidance and course quality, significantly influences student satisfaction in online learning. It also aligns with the UNESCO (2019) framework and the findings of Ajayi et al. (2020) and Padillo et al. (2021), that both professional and personal skills of teachers are directly associated with student achievement. Similarly, the present findings also conform the role of organized content in promoting collaboration and knowledge construction, as discussed by Stronge (2018) and Wang et al. (2022). Likewise, the Department of Education (2017) underscores the significance of well-prepared resources in designing engaging learning activities. In addition, the view of Ismail et al. (2022) that assessment allows teachers to modify teaching strategies confirms the critical role of continuous evaluation in maintaining student progress. Thus, all these supports indicate that teachers' professional skills are central to sustaining student learning and achievement.

Research Objective No. 2 To determine the level of students' transactional distance in terms of student-learner transactional distance; student-teacher transactional distance; and student- content transactional distance.

Presented in Table 2 is the level of students' transactional distance as described in terms of student-student transactional distance, student-teacher transactional distance, and student-content transactional distance. The overall mean of 4.04, which is described as high, with a standard deviation of 0.53, indicates that transactional distance is less manifested among private senior high school students, showing a frequent interaction and strong engagement with other students, teachers, and content. Among the three indicators, student-student transactional distance recorded the highest mean of 4.14, or high, and a standard deviation of 0.73. The second highest mean is student-content transactional distance, with a 4.06 mean, or high and 0.52 standard deviation, while student-teacher transactional distance obtained the lowest mean of 3.91, or high and a standard deviation of 0.69.

Table 2. Level of Students' Transactional Distance

Indicators	SD	Mean	Descriptive Level
Student-Student Transactional Distance	0.73	4.14	High
Student-Teacher Transactional Distance	0.69	3.91	High
Student-Content Transactional Distance	0.52	4.06	High
Overall	0.53	4.04	High

The result shows that transactional distance among the private Senior High School students in Region XII is consistently high, as indicated by the high mean scores across all indicators. This suggests that private senior

high schools promote collaborative, teacher-supported, and content-rich learning environments; thus, transactional distance is minimized. Correspondingly, students frequently interact and collaborate with their peers, suggesting a strong sense of community and peer support. Teachers are accessible and responsive, providing timely feedback and guidance, which enhances the learning experience. The course content is clear, relevant, and well-structured, helping students engage effectively with the material. Moreover, they appear to be satisfied with their online learning experience.

The result of this study is similar to Miao and Ma's (2022) study, who argued that success in online learning is deeply associated with active teacher–student interactions, which places emphasis to the role of interaction in reducing the transactional distance and enhancing students' learning experiences. This is further supported by Henderikx et al. (2022), who emphasized that social presence and student sociability create strong student engagement, while Tenenbaum (2020) highlighted that interaction not only sustains effective learning but also cultivates relationships, communication skills, and collaboration among learners. Moreover, Kandemir and Kılıç Çakmak (2024) and Ares et al. (2024) emphasized that if interaction is kept at the maximum level in online environments, transactional distance can be prevented; students will be satisfied with their learning and continue their studies.

Research Objective No. 3 To ascertain the level of students' readiness for online learning in terms of online student attributes; time management; communication; and technical competence.

Displayed in Table 3 is the level of readiness for online learning of senior high school students in terms of *online student attributes*, *time management*, *communication*, and *technical competence*. The level of readiness for online learning of private SHS students attained an overall mean of 4.08, which is described as High, and a standard deviation of 0.54. This means that the level of readiness for online learning of private SHS students is often manifested. Individually, *online student attributes* registered the highest mean of 4.24, followed by *technical competence* with a mean of 4.18. Both indicators were labeled as very high. The lowest indicator is *time management* with a mean of 3.95, followed by *communication*, with a mean of 3.97, both labeled as high.

Table 3. Level of Students' Readiness for Online Learning

Indicators	SD	Mean	Descriptive Level
Online Student Attributes	0.61	4.24	Very High
Time Management	0.73	3.95	High
Communication	0.70	3.97	High
Technical Competence	0.69	4.18	High
Overall	0.54	4.08	High

This high level of readiness for online learning is attributed to the following traits: strong self-discipline, goal-setting skills, and adaptability to new learning approaches. With these, SHS students stay organized, manage deadlines effectively, and maintain focus on tasks in online activities. Additionally, their good communication skills in synchronous and asynchronous sessions further highlight their satisfaction with online learning.

The findings of this study are consistent with the study of Martin et al. (2020), who found that online student attributes and technical competence ranked higher than the other components and that higher levels of readiness for online learning are achieved when students are self-disciplined and engaged in diverse learning materials. In the same way, El-Gazar et al. (2024) and Cariño and Mandigma (2024) findings highlighted that students' level of motivation, self-efficacy with computers and the Internet, online communication skills, self-directed learning, active engagement, and adaptability equate their readiness for online learning. In contrast with the present study, results from Suryanti's et al. (2021) investigation revealed that communication and technical competence scored higher than online course attributes and time management, whereas Cariño and Mandigma's (2024) study showed that students struggled with technology and time management, among the four indicators of online

learning readiness.

Research Objective No. 4 To assess the level of students' satisfaction in terms of student–content interaction; student-instructor interaction; student-learner interaction; and student–technology interaction.

Depicted in Table 4 is the level of satisfaction of private senior high school students, which is measured in terms of *student-content interaction*, *student-teacher interaction*, *student-student interaction*, and *student-technology interaction*. It obtained an overall mean of 4.03, which indicates that students' satisfaction is often manifested, and an overall standard deviation of 0.52. The indicator got the highest mean is *student-content interaction* at 4.16 or High with a standard deviation of 0.65. *Student-student interaction* obtained the lowest mean at 3.93, which is described as High, and a standard deviation of 0.93.

Table 4. Level of Students' Satisfaction

Indicators	SD	Mean	Descriptive Level
Student-Content Interaction	0.65	4.16	High
Student-Teacher Interaction	0.63	4.07	High
Student-Student Interaction	0.75	3.93	High
Student-Technology Interaction	0.76	3.95	High
Overall	0.52	4.03	High

The results show that satisfaction among private senior high school students is high, which is consistently evident. This implies that the notes, lectures, assignments, and learning activities are effective in facilitating learning and that the materials and instructional design promote critical thinking and problem-solving skills. Additionally, students value timely feedback and personalized attention from teachers. However, there is some variation observed in areas such as peer engagement in providing feedback and students' confidence and comfort in using technology.

This result is consistent with the study by Ipinnaiye and Risquez (2024), which highlighted that student-content interaction improves students' engagement, learning outcomes, and course completion rates. Similarly, Nieuwoudt's (2018) and Tang's (2021) studies, which cited Anderson's Interaction Equivalency Theorem, revealed that student-teacher and student-content interactions were highly observed in an online learning environment than student-student interaction. Furthermore, Gao et al. (2024) investigation revealed that high-quality and high-intensity interactions improve learning efficiency, retention, knowledge acquisition, and problem-solving skills. In contrast, Faize and Nawaz (2020) emphasized that the lack of meaningful interaction reduces engagement, suggesting the need for more balanced approaches to enhance student participation.

Research Objective No. 5 To determine the significant relationship between students' satisfaction and teachers' professional skills; students' satisfaction and students' transactional distance; and students' satisfaction and students' readiness for online learning.

Relationship between Teachers' Professional Skills and Students' Satisfaction

Displayed in Table 5.1 is the relationship between teachers' professional skills and students' satisfaction among private Senior High Schools in Region XII. At a 0.05 level of significance, the overall p-value of less than 0.05 and the computed r-value of .709 indicate a strong positive correlation between teachers' professional skills and students' satisfaction. This result indicates the rejection of the null hypothesis. More specifically, among the four indicators, the strongest correlation is found in *student-teacher interaction* with an r-value of .664; followed by *student-content interaction* with an r-value of .597, and *student-student interaction* with an r-value of .551. However, the weakest correlation is observed in *student-technology interaction* with an r-value of .336.

Table 5.1. Relationship between Teachers' Professional Skills and Students' Satisfaction

Teachers' Professional Skills	Students' Satisfaction				
	Student-Content Interaction	Student-Teacher Interaction	Student-Student Interaction	Student-Technology Interaction	Overall
Organization of Content	.512** .000	.566** .000	.484** .000	.328** .000	.626** .000
Planning for Teaching	.515** .000	.533** .000	.453** .000	.282** .000	.589** .000
Assessment	.457** .000	.533** .000	.410** .000	.305** .000	.564** .000
Learning Environment	.518** .000	.592** .000	.497** .000	.225** .000	.603** .000
Overall	.597** .000	.664** .000	.551** .000	.336** .000	.709** .000

The findings of this study support the Expectation-Confirmation Theory, which highlights that satisfaction occurs when perceived performance meets or exceeds individual expectations. In educational institutions, students' satisfaction influences their decision to persist or withdraw from their learning experience (Ye et al., 2022) and serves as a key indicator of the quality of education (Bayrak & Altun, 2020). The results align with the studies of Ajayi, Onibeju, and Olutayo (2020) and Padillo et al. (2021), which revealed that students' performance is associated with teachers' personal and professional attributes. Similarly, Caskurlu et al. (2020) emphasized the role of teaching presence, while Shuhua et al. (2024) reported that teachers' professional competence, high-quality teaching services, and supportive learning environments have a direct positive correlation with students' satisfaction.

Furthermore, Suwarni et al. (2020) highlighted that higher levels of teachers' competency enhance students' perceptions of teaching quality, which subsequently leads to increased overall satisfaction with their learning experience. Bakar and Quah (2023) further demonstrated that teacher's knowledge, course objectives, lecture notes, attendance, clear presentation, classroom activities, assignments, exams, teachers' interpersonal skills, and feedback all have a significant positive correlation with student satisfaction. These results further indicate that teachers' professional skills not only improve classroom interactions but also increase engagement that eventually leads to greater student satisfaction. This finding is further explained through the Community of Inquiry (CoI) framework, in which Liman Kaban (2021) and Martin et al. (2022) identified teaching presence, cognitive presence, and social presence as essential components for facilitating meaningful learning experiences and have found a significant impact on learner satisfaction.

Relationship between Students' Transactional Distance and Students' Satisfaction

Shown in Table 5.2 is a moderate positive correlation between students' transactional distance and their satisfaction, with the overall p-value of less than 0.05 and r-value of .674, which demonstrates that effective interaction within online learning environments significantly influences student satisfaction among private SHS students in Region XII. This result indicates the rejection of the null hypothesis. Moreover, among the four indicators, *student-teacher interaction* with an r-value of .618 and *student-content interaction* with an r-value of .522 emerged as the strongest contributors, followed by *student-student interaction* with an r-value of .589. However, *student-technology interaction* with an r-value of .305, showed the weakest relationship.

Table 5.2. Relationship between Students' Transactional Distance and Students' Satisfaction

Students' Transactional Distance	Students' Satisfaction				
	Student-Content Interaction	Student-Teacher Interaction	Student-Student Interaction	Student-Technology Interaction	Overall
Student-Student Transactional Distance	.365** .000	.369** .000	.543** .000	.177** .000	.486** .000
Student-Teacher Transactional Distance	.442** .000	.604** .000	.442** .000	.230** .000	.565** .000
Student-Content Transactional Distance	.481** .000	.551** .000	.431** .000	.368** .000	.608** .000
Overall	.522** .000	.618** .000	.589** .000	.305** .000	.674** .000

This result implies that reducing transactional distance in an online learning environment—whether through student-student, student-teacher, or student-content interactions—can significantly enhance student satisfaction. To achieve this, private SHS teachers require structured support, interactive content, and accessible communication tools that minimize transactional distance and promote greater student engagement. Additionally, improving these key interactions not only reduces transactional distance but also fosters higher satisfaction and better learning outcomes.

The findings of this study support the Transactional Distance Theory, which recognizes that the significant distance of distance learning is not of time or place, but by the communication and psychological gap between the student and teacher (Fabian et al., 2022). This finding is supported by Bolliger and Halupa's (2018) study, which indicated that lower transactional distance is associated with higher level of student satisfaction and positive learning outcomes. Similarly, Gavrilis et al. (2020) emphasized that reducing transactional distance requires continuous, effective interaction through dialogue, collaboration, and teamwork in order to achieve satisfaction and success.

Supporting this, Wisdom (2020) found that students in synchronous online classes have better test performance, develop positive attitudes, and achieve higher retention rates if a high level of interaction is observed. Likewise, Leong et al. (2020) revealed that student-student interaction, and student-teacher interaction, self-regulated learning, and internet self-efficacy influence learning satisfaction. In contrast, Best and Conceição (2017) reported that dissatisfaction is experienced by students due to transactional distance in student-student, student-teacher, and student-content interactions. However, Sevnarayan (2022) found that low transactional distance is characterized by a greater teaching presence, interpersonal closeness, sharedness and perceived learning among students.

Relationship between Students' Readiness for Online Learning and Students' Satisfaction

Presented in Table 5.3 is the relationship between students' readiness for online learning and their level of satisfaction among private senior high school (SHS) students in Region XII. The hypothesis was tested at a 0.05 level of significance, and results show an overall positive moderate correlation between students' readiness and satisfaction, with the overall p-value of less than 0.05 and r-value of .576. This result indicates the rejection of the null hypothesis. Moreover, the result shows that all four indicators of students' readiness for online learning have a significant relationship with student-content interaction, with an r-value of .485; student-teacher

interaction with an r-value of .461; student-student interaction with an r-value of .437; and student-technology interaction with an r-value of .347. However, in the student-technology interaction, the weakest correlation is observed.

Table 5.3. Relationship between Students' Readiness for Online Learning and Students' Satisfaction

Students' Readiness for Online Learning	Students' Satisfaction				
	Student-Content Interaction	Student-Teacher Interaction	Student-Student Interaction	Student-Technology Interaction	Overall
Online Student Attributes	.381** .000	.364** .000	.278** .000	.177** .000	.394** .000
Time Management	.363** .000	.365** .000	.335** .000	.197** .000	.417** .000
Communication	.386** .000	.373** .000	.421** .000	.310** .000	.499** .000
Technical Competence	.407** .000	.357** .000	.340** .000	.407** .000	.507** .000
Overall	.485** .000	.461** .000	.437** .000	.347** .000	.576** .000

As shown in table, all indicators of each variable are related. This simply connotes that students who are well-prepared for an online learning environment are more likely to experience satisfaction as shown in their interactions with content, teachers, other students, and technology. Students with strong self-discipline, goal-setting, and good time-management skills achieve higher satisfaction and engagement. This suggests that the four indicators of online readiness are significant in the overall engagement and satisfaction of SHS students with online learning. Furthermore, students with strong communication skills can interact meaningfully with their teachers and other students. Good technical skills facilitate the easy use of digital tools, platforms, and content interaction.

The study's findings align with the Technology Acceptance Model (TAM), which emphasizes that perceived usefulness (PU) and perceived ease of use (PEOU) drive students' acceptance of the online learning tools, engagement, and satisfaction in online learning. Specifically, the perceived usefulness (PU) and perceived ease of use (PEOU) in this context are characterized through their readiness for online learning as manifested by students' attributes, time management, communication, and technical competence. In support of this, Chen et al. (2023), Han and Sa (2022), and Rafsanjani et al. (2022) studies revealed that the higher the perceived ease of use and perceived usefulness, the higher students' readiness is reached and which leads to greater engagement and higher learning satisfaction in online learning. Similarly, Amka and Dalle (2022) and Kumar's (2021) research supported that student satisfaction levels increase when students enter online classes with the ability to direct their learning progress and enhance their academic performance. These findings support that if students are prepared for online learning, they are more likely to perceive the environment as usable and beneficial, thereby engaging themselves more fully and experiencing higher satisfaction. In contrast, Yilmaz's (2023) investigation identified a low-level correlation between various indicators of e-learning readiness and student satisfaction.

Research Objective No. 6 To find out the significant influence of teachers' professional skills, students' transactional distance, and their readiness for online learning on the students' satisfaction.

Presented in Table 6 is the influence of teachers' professional skills, students' transactional distance, and

readiness for online learning on the satisfaction among private senior high school students in Region XII, with an overall combined significant influence of less than 0.05 level of significance. This implies that the three identified exogenous variables significantly influenced the endogenous variable, which results in the rejection of the null hypothesis.

Table 6. Influence of Teachers' Professional Skills, Students' Transactional Distance, and Students' Readiness for Online Learning on Students' Satisfaction

Students' Satisfaction					
(Variables)		<i>B</i>	β	<i>t</i>	<i>Sig.</i>
Constant		.384		2.375	.018
Teachers' Professional Skills		.465	.432	8.645	.000
Students' Transactional Distance		.231	.234	4.331	.000
Students' Readiness for Online Learning		.177	.184	4.228	.000

R	.755
R ²	.570
ΔR	.567
F	175.136
ρ	.000

Moreover, the R^2 of .570 signifies that 57.0 percent of the variation in students' satisfaction is explained by the predictor variables- teachers' professional skills, students' transactional distance, and readiness for online learning. This means that 43.0 percent of the variation could be attributed to other factors aside from these three variables. The presentation revealed that the standard coefficient of teachers' professional skills has the highest beta value of .432. It indicates that teachers' professional skills have the greatest influence on the satisfaction among private senior high school students in Region XII, compared to students' transactional distance with a beta value of .234 and students' readiness for online learning with a beta value of .184.

The result of the combined influence of the three exogenous variables, teachers' professional skills, students' transactional distance, and readiness for online learning, indicates a significant effect on student satisfaction among private senior high school students in Region XII, with teachers' professional skills emerging as the most influential factor. This aligns with the findings of previous studies focusing on the crucial role of teachers' professional skills in shaping students' learning experiences and overall satisfaction. For instance, Latip et al. (2020) and Lukman et al. (2020) found that both student satisfaction and academic achievement are strongly determined by teacher professional skills. Similarly, Gee (2018) highlighted that when teachers build good rapport, provide purposeful assignments, deliver quality discussions, set learning outcomes, organize varied activities, ensure fairness, and give timely feedback, students report higher satisfaction levels. Furthermore, Briñosa and Briñosa's (2025) study revealed that students are more likely to be satisfied when they feel that their teachers are effective, lessons are clear, and the learning environment is comfortable and well-equipped, while Azis et al. (2021) found that higher levels of satisfaction are achieved when better teaching performance is observed.

Research Objective No. 7 To determine the best-fit model for students' satisfaction.

This part examines the interrelationships among the variables in the study. Three models were generated to obtain the best-fit model of students' satisfaction among private senior high school students. The models were assessed against the given fit indices and served as a basis to accept or reject the model.

Revealed in Table 7.1 are the goodness-of-fit results for the three generated models. Generated Structural Models 1 and 2 were not a good fit due to their failure to meet the acceptable goodness-of-fit criteria. Generated Structural Model 1 exhibited a high chi-square to degrees of freedom ratio ($CMIN/DF = 10.141$), indicating a poor model fit, while its Goodness of Fit Index ($GFI = .788$), Comparative Fit Index ($CFI = .738$), and Root Mean Square Error of Approximation ($RMSEA = .151$) fell outside acceptable thresholds.

Table 7.1. Summary of Goodness of Fit Measures of the Three Generated Models

Model	P-value (>0.05)	CMIN / DF ($0 < \text{value} < 2$)	GFI (>0.95)	CFI (>0.95)	NFI (>0.95)	TLI (>0.95)	RMSEA (<0.05)	P-close (>0.05)
1	.000	10.141	.788	.738	.719	.684	.151	.000
2	.000	3.892	.900	.920	.896	.900	.085	.000
3	.210	1.244	.987	.997	.985	.994	.025	.925

Legend: CMIN/DF – Chi-Square/Degrees of Freedom

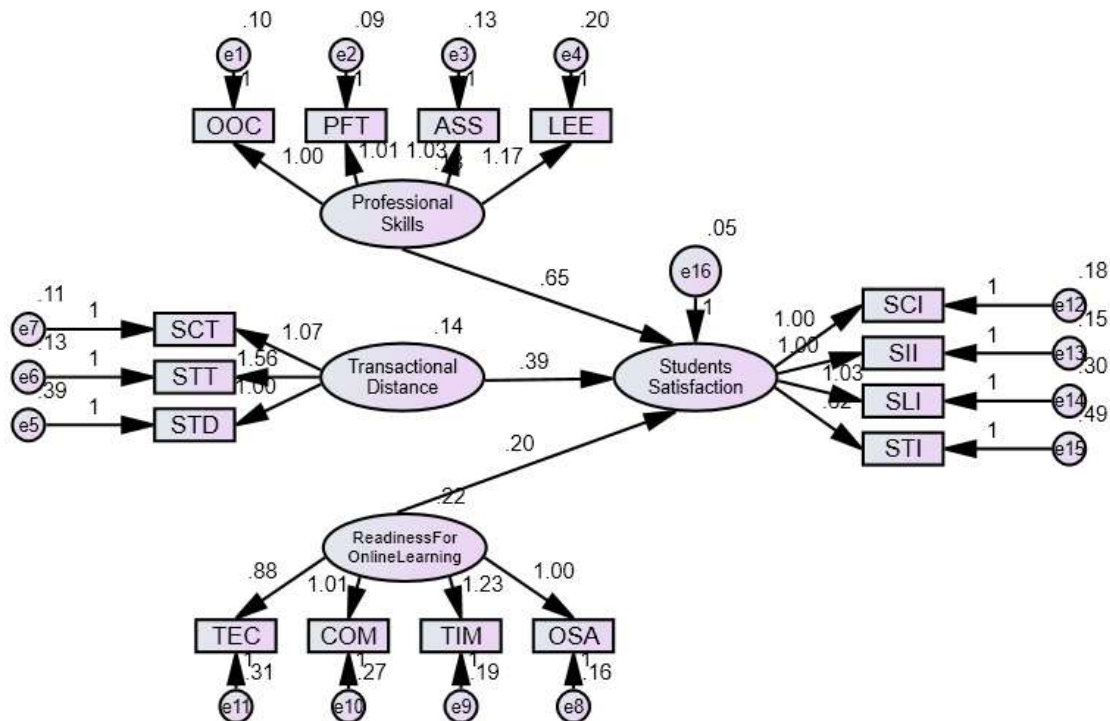
GFI – Goodness of Fit Index

RMSEA – Root Mean Square of Error Approximation

NFI – Normed Fit Index

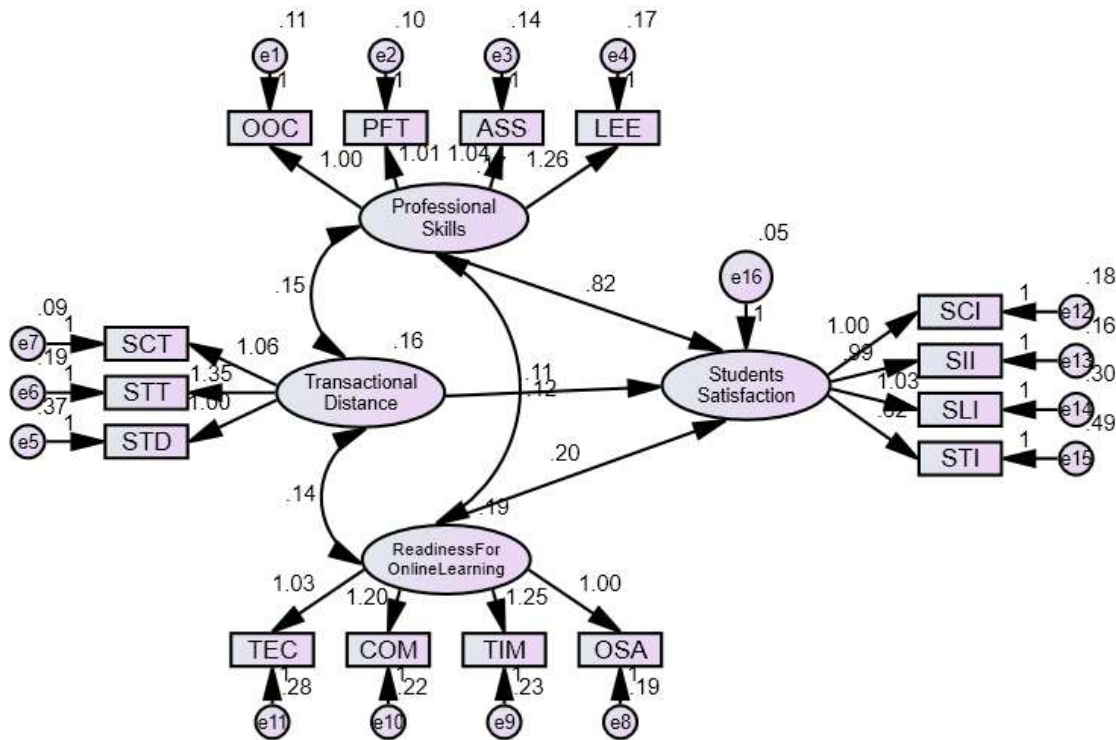
TLI – Tucker-Lewis Index

CFI – Comparative Fit Index



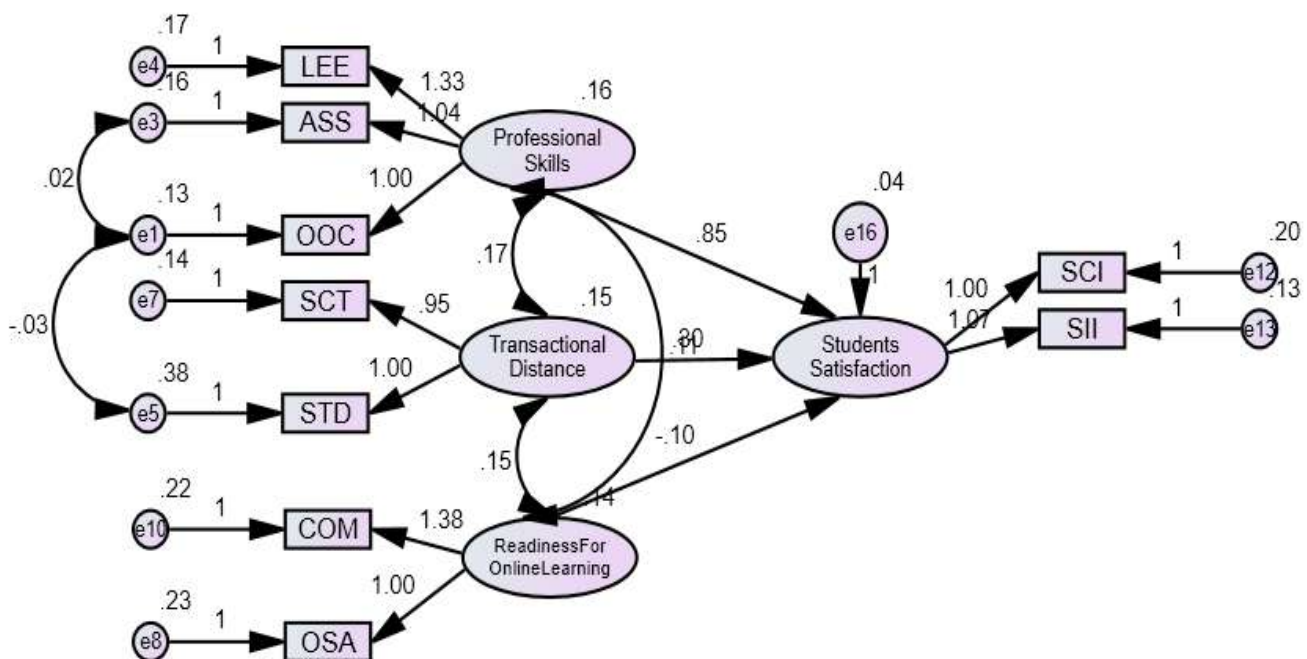
Generated Structural Model 1

Similarly, Generated Structural Model 2, though an improvement, still had $CMIN/DF = 3.892$, with $GFI (.900)$, $CFI (.920)$, and $RMSEA (.000)$ failing to meet standard fit indices. The p-values of both models were .000, further confirming that they do not satisfy the requirements for the best-fit model of students' satisfaction among private senior high schools in Region XII.



Generated Structural Model 2

Meanwhile, the Generated Model 3 met all the specified criteria for model fit across all indices. As displayed above, it obtained a p-value of .082, a CMIN/DF of 1.244, a Goodness of Fit Index (GFI) of .987, a Comparative Fit Index (CFI) of .997, a Normed Fit Index (NFI) of .985, a Tucker-Lewis Index (TLI) of .994, an RMSEA of .025, and a P-Close of .925. These fit indices collectively meet the required thresholds, indicating that Model 3 is regarded as the best-fit model. Consequently, all exogenous variables are appropriately incorporated, supporting Model 3 as the most suitable framework for examining the student's satisfaction among private senior high schools in Region XII.



Generated Structural Model 3

Table 7.2. Regression Weights of the 3 Generated Models

Exogenous Variables to Endogenous Variable			
Model	Professional Skills	Transactional Distance	Readiness for Online Learning
1	.652***	.389***	.196***
2	.815***	.106 ^{NS}	.199 ^{NS}
3	.851***	.303 ^{NS}	-.099 ^{NS}

* $p < 0.05$, ** $p < 0.01$, *** $p = 0.000$

As displayed in Table 10, the regression weights demonstrate the influence between latent variables and between measured and latent variables. The paths presented in the model achieved p-values of 0.000, signifying their statistical significance. Specifically, professional skills exhibit a strong and significant influence across models. Additionally, the covariances in the best-fit model further confirm significant relationships between professional skills, transactional distance, and readiness for online learning, with the p-value $p = 0.000$. These findings highlight the critical role of teachers' professional skills in the reduction of transactional distance and promotion of online readiness competencies of students toward satisfaction.

Table 7.3. Direct and Indirect Effects of the Independent Variables on Students' Satisfaction of Best Fit Model

Variables			Estimates	S.E.	P-value
Professional Skills	<-->	Transactional Distance	.167	.019	***
Transactional Distance	<-->	Readiness for Online Learning	.151	.020	***
Professional Skills	<-->	Readiness for Online Learning	.109	.015	***

The results in Table 7.3 revealed the significant positive covariances among Professional Skills, Transactional Distance, and Readiness for Online Learning ($p < .001$). The positive covariance between Professional Skills and Transactional Distance (.167) highlighted that teachers with stronger professional competence promote more meaningful communication and interaction, reducing student's perceived distance or gap. Similarly, the relationship between Transactional Distance and Readiness for Online Learning (.151) indicated that when students experience open communication and well-structured learning environments, their readiness for online learning increases. Moreover, the positive association between Professional Skills and Readiness for Online Learning (.109) emphasized the significant role of teacher's professional skills in developing students' confidence and preparedness to engage effectively in online learning environments.

These findings supported the study's structural model's assumption that professional skills and transactional distance are interrelated factors influencing students' readiness for online learning and that teachers who design interactive and supportive online environments can minimize transactional distance and strengthen learners' readiness to engage effectively in online learning contexts (Abuhassna & Alnawajha, 2023; Chen, 2023; Achuthan et al., 2024; Gökoğlu et al., 2024; Yilmaz, 2023).

Best Fit Model of Students' Satisfaction

Figure 2 expounds the standard estimates of the Generated Model 3. The generated Structural Model 3, the best-

fit model, revealed that teachers' professional skills, transactional distance, and readiness for online learning are exogenous variables that have a direct causal relationship with students' satisfaction among private senior high school students in Region XII. The model also showed the interconnectedness of these variables, indicating that teachers' professional skills are linked with both transactional distance and readiness for online learning.

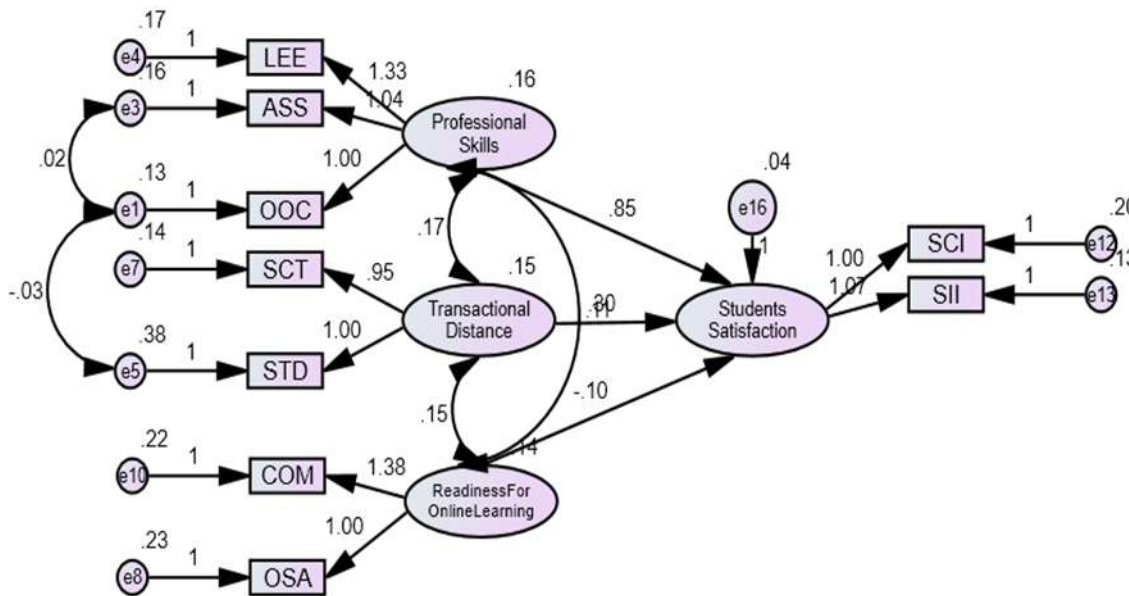


Figure 2. Generated Structural Model 3

Legend:

Teachers Professional Skills		Readiness for Online Learning	
OOC	Organization of Content	OSA	Online Student Attributes
PLT	Planning for Teaching	TIM	Time Management
ASS	Assessment	COM	Communication
LEE	Learning Environment	TEC	Technical Competence
Transactional Distance		Student Satisfaction	
SSTD	Student-Student Transactional Distance	SCI	Student- Content Interaction
STTD	Student- Teacher Transactional Distance	SII	Student-Instructor Interaction
SCTD	Student- Content Transactional Distance	SSI	Student- Student Interaction
		STI	Student-Technology Interaction

Among the indicators, three out of four for teachers' professional skills—learning environment, assessment, and organization of content—remained significant predictors of students' satisfaction. For transactional distance, student-teacher transactional distance and student-content transactional distance were found to significantly affect students' satisfaction. Similarly, readiness for online learning-maintained communication, and online student attributes as significant contributors. The endogenous variable, students' satisfaction, was measured in terms of student-content interaction, student-teacher interaction, student-student interaction, and student-technology interaction, but only student-teacher interaction and student-content interaction remained viable indicators.

Furthermore, the model supports previous findings, indicating that student satisfaction increases when teachers create engaging environments and are adaptive and efficient in using technology. Well-designed learning activities enhance student-teacher interaction and reduce transactional distance, especially among students with

less online learning experience (Lengetti et al., 2021; Zakaria et al., 2021). Finally, the results suggest that students' readiness for online learning correlates with transactional distance and students' satisfaction, highlighting that teachers' skills in providing clear instructions, feedback, and a supportive environment improve students' readiness, reduce transactional distance, and increase students' satisfaction (Thakur et al., 2023).

CONCLUSIONS AND RECOMMENDATIONS

The findings revealed that the overall level of teachers' professional skills was very high, with planning for teaching receiving the highest rating and assessment the lowest, which indicates that teachers consistently demonstrate strong professional skills across all indicators. The low rating in the assessment emphasizes the need to strengthen online assessment practices where teachers are encouraged to adopt diverse, technology-enhanced assessment strategies and provide timely feedback to better evaluate students' skills and competencies, address misconceptions, and support continuous learning. Professional development on online assessment tools and collaboration through Professional Learning Communities (PLCs) and or Learning Action Cell (LAC) will further enhance teachers' capacity to design valid, reliable, and student-centered learning tasks aligned with the Department of Education and or the Commission and Higher Education's standards.

The level of students' transactional distance was described as high, which reflects that transactional distance is less manifested among private senior high school students and that frequent interaction and strong engagement with other students, teachers, and content are strongly observed. Student-student transactional distance recorded the highest mean, while student-teacher transactional distance obtained the lowest mean, implying the need to strengthen student-teacher engagement in the online learning environment. To reduce the transactional distance, schools are encouraged to enhance teacher presence in online platforms, provide prompt and personalized feedback, adopt interactive teaching strategies, and offer academic and emotional support in order to create a more engaging, supportive, and effective online learning environment.

On the other hand, the overall level of readiness for online learning was high, with online student attributes rated as very high, while time management and communication remain the lowest, but still at a high level. The conduct of training workshops or seminars on effective time management and integrating structured study schedules can help students develop better planning skills, prioritize tasks, and manage deadlines effectively. Moreover, students' communication competence could be strengthened through collaborative learning activities, peer discussions, and interactive activities that will encourage more meaningful interaction in both synchronous and asynchronous platforms. While the overall level of students' satisfaction is high, with the highest satisfaction observed in student-content interaction and the lowest in student-student interaction, indicating that private senior high school students are generally satisfied with their learning experiences, particularly with the content provided. To further enhance peer engagement in the online learning environment collaborative activities, peer-review activities, and virtual discussion platforms must be integrated and must be facilitated by teachers to ensure active participation, knowledge sharing, and a stronger sense of community among students.

There was a strong positive relationship between teachers' professional skills and students' satisfaction, with the strongest correlation observed in student-teacher interaction and the weakest correlation found in student-technology interaction. This indicates that teachers' organization, planning, assessment, and creation of a positive learning environment highly influence students' engagement and teaching-learning process, but have a limited impact on students' satisfaction when integrating technology into the learning process. Training and workshops on effective integration of educational technologies should be incorporated as part of the teachers' capacity building in order to strengthen teachers' digital competency. Schools should upgrade their ICT facilities and resources and adopt technology-enriched pedagogies, such as interactive multimedia, and collaborative digital platforms, to make lessons more engaging. Lastly, improving students' digital literacy through orientations, hands-on training, and peer-assisted programs will equip them with the skills needed to effectively and efficiently use technological tools.

In addition, there was a moderate positive correlation between students' transactional distance and satisfaction, with the strongest correlation observed in student-teacher interaction and the weakest correlation found in student-technology interaction. This reveals that technological issues may hinder students' overall online learning experience and satisfaction. To address this, schools should strengthen technological infrastructure,

enhance students' digital literacy through training, and provide teachers with professional development on technology-integrated pedagogy. In addition, orientations, technical support, and feedback mechanisms can be provided to improve student-technology interaction, enhance transactional distance, and increase overall student satisfaction.

Similarly, a significant positive moderate correlation between students' readiness for online learning and their satisfaction is revealed in this study. All four online readiness indicators—online student attributes, time management, communication, and technical competence—show significant relationships with students' satisfaction across content, teacher, student, and technology interactions. However, the weakest correlation is observed in student-technology interaction, indicating that while students are generally prepared for online learning, challenges remain in effectively utilizing digital tools and platforms. To address this gap, schools should upgrade their ICT infrastructure, enhance students' digital literacy through training and workshops, provide technical support, and establish peer mentorship programs. Moreover, strengthen teachers' technology-integrated pedagogy in order for them to be able to integrate technology-based learning activities in their classes to improve engagement and interaction with online platforms.

The findings of the study support the Expectation-Confirmation Theory, which emphasizes that satisfaction arises when expectations align with perceived performance, mediated by confirmation. Satisfaction is achieved when teachers' professional skills exceeded expectations and transactional distance is reduced. The results also support the Community of Inquiry framework, which highlights that professional skills strengthen teaching presence, while reducing transactional distance enhances social and cognitive presence, collectively supporting the online learning experience. The study also confirms Transactional Distance Theory, showing that reducing the gaps between students and teachers increases engagement and satisfaction. Moreover, the study supports the Technology Acceptance Model, highlighting that student attributes, time management, communication, and technical competence shape perceptions of technology's usefulness and ease of use, and directly impact satisfaction with online learning.

Furthermore, the study revealed that the three exogenous variables, teachers' professional skills, students' transactional distance, and students' readiness for online learning, significantly influence the level of satisfaction among private senior high school students in SOCCSKSARGEN. Among the predictors, teachers' professional skills have the greatest influence, followed by students' transactional distance and readiness for online learning.

To further validate the high results of this study, future researchers are encouraged to employ triangulation methods by integrating both quantitative and qualitative approaches such as interviews, focus group discussions, and classroom observations. These complementary methods can provide deeper insights into students' experiences and strengthen the validity and interpretative depth of the results. Furthermore, conducting longitudinal studies could better examine causal relationships and track changes in satisfaction, transactional distance, and readiness for online learning over time. The combination of triangulation and longitudinal approaches would offer a more comprehensive and dynamic understanding of how these factors interact and evolve. Additionally, exploring additional variables, such as technological infrastructure, self-regulation, and socio-emotional support could deepen understanding of factors affecting online learning satisfaction. Finally, aligning recommendations with educational policies and teacher training programs would enhance the study's practical applicability for improving online education delivery.

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