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THE MEDIATING EFFECT OF E-LEARNING ON THE RELATIONSHIP BETWEEN KNOWLEDGE AND SOFT-SKILLS COMPETENCY AND ACADEMIC COMMITMENT OF TVL HIGH SCHOOL STUDENTS

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Abstract: **Academic commitment is an important indicator of a successful student, especially on readiness aspects and being ready to fit in the world of Higher Education or be hired in the industry. The primary goal of this research study project is to look at the impact of e-learning on the relationship between knowledge soft-skills proficiency and academic engagement. Using a quantitative, non-experimental research approach, this study used path analysis with 275 senior high school students in secondary education. An instrument validated and obtained from many literature sources and relevant studies has been employed. Since the study has three variables, a three-part questionnaire was used and validated by experts. The study shows partial mediation of the variables, which implies that Students' Attitudes toward E-learning can be enhanced by Knowledge and Soft-skills Competency but should passed through academic commitment; hence, higher academic commitment mediates knowledge and soft-skills competency for enhanced e-learning.**

Keywords: **technological vocational and livelihood education, e-learning, path analysis, knowledge and soft-skills competency, academic commitment, Philippines.**

SDG Indicator : # 4 (Qualtity Education), # 17 (Partnership for the goals)

1. INTRODUCTION

Academic commitment is a vital indicator of a successful student (Vogel,2016), especially on eagerness aspects (Barrot, 2019) and being ready to fit in the world of Higher Education or be hired in the industry (Orale, 2018). Understanding students' academic commitment is important because it leads to high levels of self-efficacy and strengthens career-decision readiness (Rahim et al., 2021). However, there is great concern about the percentage of Technical-Vocational-Livelihood (TVL) students in terms of academic ratings being below average (Almerino, 2020). Students focus exclusively on their chosen specialization and are very loose in their core subjects. One of the factors is the percentage of computation of grades of the written and performance-based as shown on the grading system for senior high students under the "DepEd Order no.31 s.2020: Guidelines on Grading System" (Basa, 2022).

Additionally, Pregoner (2020) cited the experiences and difficulties of TVL students in answering written assessments which affects the academic factor, while Herida et al. (2020) suggested the need to succeed in an academic career to be engaged in the real world of learning. Meanwhile, knowledge and soft skills competency is dubbed as the 21st-century skills essential for technology learning (Chaka, 2020), and a balance between hard skills and soft skills is also an important competency (Rebele, Pierre,2019). In Technical-Vocational-Livelihood (TVL) Department, there is an impression that students tend to lack the ability to communicate with others and are less likely to excel academically since they develop more on hard skills competence which supports the study conducted by Mella et al (2019) with the conclusion that the student's ability in public speaking involving an interpersonal relationship with others, building a relationship and answering the needs and satisfaction with customers were assessed and found out to be underdeveloped and not competent when assessment is concerned.

Putra et al. (2020) examined the significance of two elements every TVL student must possess, such as soft skills knowledge and academic achievement, as both play a role in the successful results in coping with their studies. In addition, successful careers indicate excellent academic knowledge, technical performance, and soft abilities. Being socially acquainted is also vital for emerging companies to keep their competitive edge in career competition.

Moreover, e-learning plays a significant factor in the motivation that greatly affects students' performance (Harandi, 2015). Information technology is a method in support of (Nehme, 2010).

In Asia, only the Philippines offers a 10-year education program and is among the three countries in the world with the same educational cycle core curriculum (Mohammad, 2023). In Davao de Oro, a researcher has observed that TLE students lacked communication skills. Mella et al. (2019) suggest fact-finding the prerequisites of students in CSS as a source for enhancing developed learning resources to materialize the competency suitable in the teaching approach appropriate for lower years such as Junior High School learners. A number of research reports are being published focusing on measuring TLE students' soft-skills competency toward academic commitment with the development of evident questionnaires/surveys to answer needed information and scales to measure validity. However, most of them appear to be focusing on the same variable. This study aims to provide the existing writings with additional insights and inputs to answer the necessary details to fill the gap. The result could be beneficial to education officials with improved intervention programs.

Despite the large body of research on the academic commitment of students, it raises concerns on the following matters in which the researcher would like to seek answers: How can it be measured: the possible connection that could link between the soft-skills competency and academic commitment of students: considering the function of e-learning as a mediation factor in the link between soft-skills proficiency and academic commitment in the TVL subject.

The study's major purpose is to investigate the effect of learning on the link between knowledge, soft skills competencies, and academic commitment. The study has answered the questions set out below in order to achieve this objective. First, the level of knowledge and soft skills students require about the following: basic information, communication ability, practical skill, leadership, or attitude. Second, the assessment of the level of students' e-learning in terms of perceived utility and behavioral intention, e-learning efficacy, e-learning system satisfaction, and perceived satisfaction. Finally, the student's commitment to studying is measured in terms of their level of commitment, satisfaction, quality alternatives, investments, and relevance.

The research's null hypotheses are as follows: 1) There is no discernible correlation between academic performance and mastery of soft skills and knowledge dedication, proficiency in knowledge and soft skills, e-learning, and academic dedication. 2) The association between students' academic commitment, knowledge, and soft-skills competency is not significantly mediated by their e-learning. Wei et. Al's (2019) study, published recently, examined the connection between knowledge and soft skills competency. It was found that if the employees of a Chinese high-tech company had good soft skills, such as communication and teamwork abilities, they were more likely to share knowledge. Their findings imply that in promoting knowledge transfer and sharing within organizations, soft skills competence must be one of the important elements—also, Mitsea et. Al's (2023) previous research looked at the influence of soft skills as inclusion amplifiers in the 21st century and is related to Metacognition, referring to a wide range of definitions, including inter- and intra-personal skills. The results showed that the training significantly enhanced employees' communication, leadership, and problem-solving skills, facilitating their ability to acquire and utilize knowledge effectively.

Overall, an increasing amount of research indicates that skills competency is the essential component for managing and exchanging knowledge inside businesses. Learning how to use knowledge effectively and efficiently can be enhanced by

developing soft skills like problem-solving, communication, and teamwork. These abilities can also promote knowledge sharing and transfer between teams and organizations.

Altintas et al. (2020) cited insight into the role of meaning in self-determination theory and the organizing role of meaningful commitment in self-regulating behavioral choices to explain students' academic commitment. Also, it is significant to know the effects of the learning outcomes and failure based on ICT students' motivation. (K Kori, M Pedaste, Ä Leijen, 2016). Furthermore, academic elitism maintains that only highly qualified, knowledgeable individuals in the field are thought to be able to acquire higher academic scores, which enhances the likelihood of academic success. Studies about the mismatch between senior high school coursework and college courses support this. (Rambe, & Moeti, 2017). According to the theory, in academic situations where competition is fierce, difficult exams and projects can only be overcome by those with a distinctive intellectual background. (Mukharji, 2017).

Undergraduates at Pampanga Agricultural College in the Philippines achieve low academic accomplishment due to their low academic adjustment. (Calaguas, 2011). It was recounted in the theory (of Hernandez 2017) that first-year students from Calapan City's certain college institutions exhibit low social adjustment.

This study focused on the correlation between attitude factors on e-learning, knowledge, soft-skills competency, and academic commitment. It is based on the following theories: Davis 1989 Technological Acceptance Model Theory to Guide E-learning; John Sweller and Jeroen van Merriënboer's Cognitive Load Theory; Jean Lave and Etienne Wenger's Situated Learning Theory; Daniel Goleman's Theory of Emotional Intelligence (1995); Edward et al.'s Self-Determination Theory (1985); and Robert Lent, Steven Brown, and Gail Hackett's Social Cognitive Career Theory (1994).

The technological acceptance model and the social cognitive theory are two theories on which this study's theoretical framework is based. Social cognitive theory says personal characteristics, environmental factors, and behavioral variables determine an individual's conduct. Personal characteristics like self-efficacy and motivation, environmental factors like the accessibility of resources, and behavioral factors like technology use can all impact the outcomes of e-learning.

According to the technology acceptance paradigm, perceptions of technology's ease of use and utility impact people's adoption of it. Within the realm of online education, perceived usefulness denotes how to rate the degree to which students feel that the usefulness and advancement of the internet will help them accomplish their academic goals, while perceived usability denotes how simple it is to use. Additionally, according to Alshehri and Drew (2017), the technology acceptance model has been used to analyze the variables influencing the uptake of e-learning in postsecondary education. Also, e-learning can help with the development of analytical and problem-solving skills. A study by Nouri and Crampton (2017) discovered that e-learning can improve academic achievement.

The connection between internship theory or soft skills and the practice of soft skills in the context of a distributed workplace was also a center of focus in the study of Bay (2021). It has been discovered that situated learning approaches influence an individual's ability to comprehend in and from a situation, which means that academic learning and all other learnings are situated. Ashleykanasy et al. (2018) looked at both the development of soft skills and emotional intelligence in the workplace. Researchers found that soft skills, including communication, leadership, and teamwork, were positively connected with emotional intelligence and that developing emotional intelligence through training was a helpful strategy.

The relationship between university students' self-determination and dedication to their academic work was examined by Jeno, Lazowski, and Askell-Williams (2019). They found that youngsters with higher levels of self-determination were better students and more committed to reaching their academic objectives.

To better understand this study's flow, a schematic diagram is illustrated in Figure 2. It can be seen in the diagram that three variables are being identified. First, the mediating variable is E-learning, which is based on the Active theory of Lev Vygotsky with indicators of perceived usefulness and behavioral intention, e-learning effectiveness, and e-learning system satisfaction Perceived satisfaction. The second independent variable is the Knowledge and Soft-skills Competency based on Victor Vrooms' Expectancy Theory with environmental and social influence indicators. The researcher then presumed that the respondent's knowledge, soft-skills competency, and academic commitment are related to e-learning. The third dependent variable is Academic Commitment, which is the student's academic engagement of the first-year high school students' experience technical-vocational livelihood track with indicators such as interest, study habits, and academic ability.

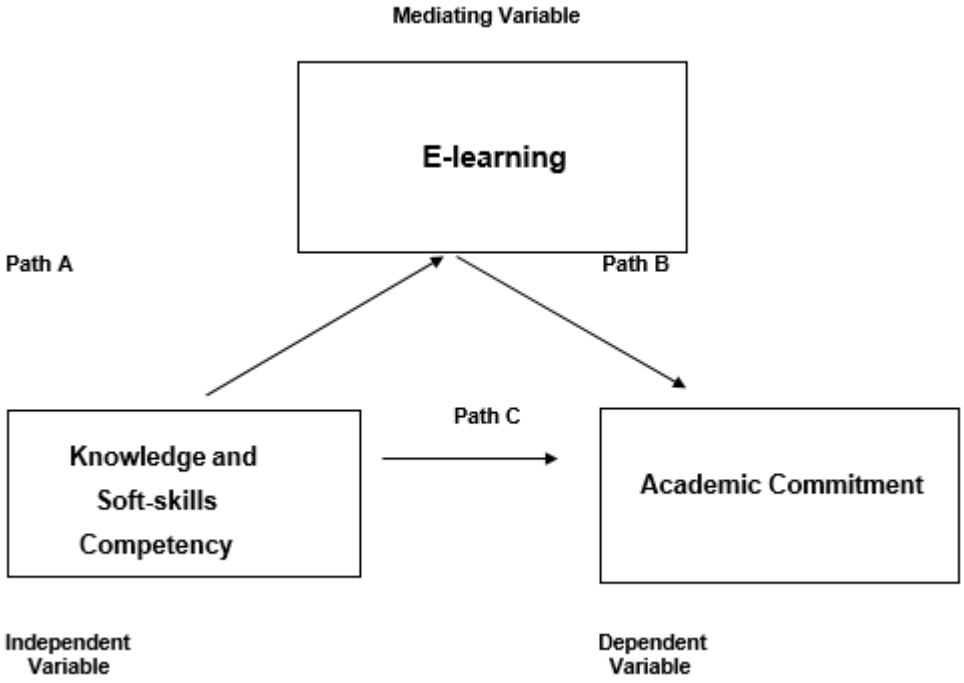

Figure 1. Conceptual Framework Showing the Variables of the Study

These research findings look forward to deepening the students' comprehension, especially about commitment and engagement in the learning process. In its totality, it is expected to offer a meaningful contribution to the field of education. Analyzing why students engage and disengage in class may increase understanding of why students could perform well in the educational setting. Knowing and understanding the reason for such a phenomenon may help the student, teacher, and school head with why students lose engagement in class. The knowledge gained from this study may help them realize the importance of engagement as a predictor of achievement and success in acquiring knowledge and skills.

This study will give significant benefit directly to its respondents, which are the students, teachers, administrators, and the stakeholders of the school in the Municipality of Maco, Division of Davao de Oro, due to the possible reasons that it will help students realize the relevance of engagement in their academic success, the teacher will have a clear solution to the problem of students disengagement that would possibly lead to drop out, the administrators will extend their support to the teachers actions towards finding immediate action on students disengagement and the stakeholders that, they would realize the importance of the students engagement in education.

2. METHOD

Participants

Respondents will be included in the research study if they meet the succeeding conditions: (1) they must be a Grade 12 Senior High School student enrolled for the School Year 2022-2023; (2) they must attend the DepEd Division of Davao de Oro public schools; (3) they must agree to partake in the conduct of study; (4) they must have resources at home such as smartphones in answering, mobile laptops/personal computers units, and strong internet connection; and (5) they must stipulate valid informed agreement and assent forms. Random sampling is the method of choosing a test so that each member of the identified populace has an evenly balanced and individual probability of remaining chosen (Mills and Gay, 2018). Entities who are not currently registered or not bonafide students in Secondary National High School are excluded from this study. These are students who are not on record as enrolled in the current school year and have no connection to fulfilling the questions. The researcher will ensure that only accurate data is reported with full honesty. The participant must notify the researcher of his or her intention to withdraw from the study. A participant has the option of telling the researcher why they are leaving the study, but they are not required to do so.

Actual survey processes and rules will be presented to the participants and their parents for confirmation and approval. The researcher will also ensure that only accurate data are reported honestly. A participant in this research who withdraws has the choice to leave at any moment. The participant must notify the researcher of his or her intention to withdraw from the study. A participant can tell the researcher why they are leaving the study, but they are not required to do so. In participating in the said study or not, they were guaranteed that the respondents have the right to decide. The researchers did not force the learners to participate.

Using the Raosoft automatic online sample size adding machine, the sample respondent population was calculated at a 95% confidence level, confidence interval of.05, standard error of 0.02551, relative standard error of 5.10, and population size of 995, yielding a total of 275 senior high school students as main respondents for this study. The sole criteria for responses to be included is that they are currently enrolled from grade eleven to grade twelve at Maco North District of Secondary High School in Davao de Oro for the current academic year of 2022-2023. This study will be undertaken at all Maco North Secondary Schools in Davao de Oro, Philippines. It is located on Mindanao's southernmost island and is part of the rapidly expanding Davao Region.

Instrument

In collecting the required data, the researcher used a self-made survey questionnaire adapted from numerous pieces of literature and sources that are scholarly suited to the objectives of this investigation.

Since the study has three variables, a three-part questionnaire was used and validated by experts.

To obtain evidence for this study, principal data were used, which comprised three questionnaires: e-learning (Tzu-chin Chou, 2015), students' knowledge and soft-skills competency (Lim Khong Chiu et al., 2016), and the Academic Commitment Scale (Salomé et al., 2014). Obtained from different related research, the survey questionnaires will be employed in the conduct of the study. The questionnaire may also be adjusted and modified to make it more appropriate for the study's current situation. The manuscript will first be presented to the researcher's adviser for feedback and ideas before being authorized by adept validators. The e-learning survey questionnaire will be based on Tzu-chin Chou's (2015) research. The measure comprised 25 items separated into six subscales: perceived utility, e-learning effectiveness, e-learning system satisfaction, perceived self-efficacy and satisfaction, and multimedia teaching. The 5-point Likert Scale was used to assess the level of working conditions. The instrument used a Likert-type scale with five points for simple interpretation of the respondents. The scale below was used to interpret the means to interpret the level of e-learning, knowledge and soft-skills competence, and academic commitment as perceived by senior high school TVL students.

Range of mean 1.0-1.79 has a descriptive story of very low interpreted as rarely manifested/evident; 1:80-2.59 has a descriptive level of low interpreted as seldom displayed/evident; 2.60-3.39 has a descriptive level of moderate interpreted as sometimes manifested/evident; 3.40-4.19 has a descriptive level of high interpreted as often manifested/evident; 4.20-5.00 has a descriptive level of very high interpreted as always manifested/evident.

Rating scale for E-learning

Range of Mean	Descriptive Level	Interpretation
4.20 - 5:00	Strongly Disagree	This means that the level of e-learning is always observed.
3.40 - 4.19	Disagree	This means that the level of e-learning is oftentimes observed.
2.60 - 3.39	Neutral	This means that the level o f e-learning is sometimes observed.
1.80 - 2.59	Agree	This means that the level e- learning is rarely observed.
1.00 - 1.79	Strongly agree	This means that the level of e-learning is not observed.

Meanwhile, the survey questionnaire for assessing students' knowledge and soft-skills competency will be adapted from the research (Lim Khong Chiu, Nor Idayu Mahat, Basri Rashid, Norhanim A. Razak, & Hamimi Omar, 2016).

Rating scale for Knowledge and Soft-skills Competence

Range of Mean	Descriptive Level	Interpretation
4.20 - 5:00	Strongly Disagree	This means that the level of assessing knowledge and soft-skills competency of student is always observed.
3.40 - 4.19	Disagree	This means that the level of assessing knowledge and soft-skills competency of student is oftentimes observed.
2.60 - 3.39	Neutral	This means that the level of assessing knowledge and soft-skills competency of student is sometimes observed.
1.80 - 2.59	Agree	This means that the level of assessing knowledge and soft-skills competency of student is rarely observed.
1.00 - 1.79	Strongly agree	This means that the level assessing knowledge and soft-skills competencyof student is not observed.

Similarly, the Academic Commitment Scale survey questionnaire will be developed from Salomé Human-Vogel and Piet Rabe's (2014) research.

Rating scale for Academic Commitment

Range of Mean	Descriptive Level	Interpretation
4.20 - 5:00	Strongly Disagree	This means that the level of academic commitment scale is always observed.
3.40 - 4.19	Disagree	This means that the level of academic commitment scaleis oftentimes observed.
2.60 - 3.39	Neutral	This means that the level of academic commitment scale is sometimes observed.
1.80 - 2.59	Agree	This means that the level of academic commitment scale is rarely observed.
1.00 - 1.79	Strongly agree	This means that the level of academic commitment scale is not observed.

Design and Procedure

This study employed a quantitative, non-experimental research design with a path analysis technique. A non-experimental research design enables researchers not to manipulate variables. Instead, it allows them to observe how the variables are related to one another and describe the findings (Bonds-Raacke & Raacke, 2014).

The survey questionnaire used in this inquiry was customized and incorporated from existing literature and comparable investigations. Before data collection, the researcher submitted the final survey questionnaire to professional validators for assessment and modification.

After being reviewed and validated by the expert validators, the survey questionnaire is expertly validated by an external validator. A three-part questionnaire was used as a data collection tool and was expertly validated. The rating of Cronbach alpha on Academic Commitment is .954; e-learning is .936, and knowledge and soft-skills competency is .963. All of Cronbach's alpha values are greater than 0.70, hence the reliability coefficient is considered satisfactory. Once the questionnaires were completed, the researcher received consent from the university's graduate school dean. The researcher then submitted all of the documentary criteria to UMERC to obtain approval and a certificate to proceed with data collection. The researcher obtained a certificate to collect data under the UMERC protocol number UMERC-2023-288. After that, the researcher presented a communication letter of permission to conduct the research to the school principal, administration officer, and department heads. For the record, the Division of Davao de Oro approved the request of the researcher. The researcher immediately began collecting data after receiving consent from the secondary school superintendent. To expedite the data collection procedures, the researcher sought assistance from the institution's principal. The following statistical tools were employed to interpret the data gathered: descriptive statistics. This will be used to identify the elements influencing students' opinions toward e-learning. Following the analysis, the researcher examined each item relating to a specific factor to determine whether it was suitable. Items that are not valid will be deleted.

Moreover, the researcher exercised utmost diligence in gathering the important data and information that can help achieve this investigation's objective: Specifically, the researcher employed the following ethical considerations. It must follow the following guidelines: voluntary involvement, privacy, secrecy, informed consent process, recruiting, dangers, rewards, biosafety, plagiarism, fabrication, falsification, conflict of interest, deception, permission from organization/location, technology concerns, authorship.

3. RESULTS AND DISCUSSION

Presented in this part are the results and interpretations of the collected information. Data gathered using the survey questionnaire were analyzed using Path Analysis. Results are presented using the following order: knowledge and soft-skills competency, academic commitment scale, and e-learning. The discussion falls within the scope of the study's major purpose, which is to create a framework that depicts the mediating influence of e-learning on the relationship between knowledge and soft-skills proficiency and academic commitment.

Level of Knowledge and Soft-skills Competency

Table 1 displays respondents' levels of knowledge and soft-skills ability. The chart revealed that the overall mean score was 2.35, with a verbal analysis of low. It implies that the students' level of knowledge and soft-skill competence is rarely or not often practiced, with standard deviation records of 0.500, implying that the knowledge and soft-skill competence of students' responses is homogeneous.

All indications of knowledge and soft-skills competency are rated as low; however, knowledge and soft-skills competency had the greatest mean result of 2.54 with a standard deviation of 0.928. It means that public secondary TVL students' conviction in their knowledge and soft-skills proficiency is rarely or never practiced.

The result is affirmed by Asis (2020), when TVL students are equipped with the knowledge and skills ability, they are more likely to be job ready. Putra 2020 cited that knowledge is significant in the realm of education, but having both soft skills and hard skills is a manifestation of improved school performance.

Table 1. Level of Knowledge and Soft-skills Competency

Items	SD	Mean	D.E.
Basic Knowledge	0.651	2.36	High
Good Communication	0.6	2.48	High
Hands on Skills and Competency	0.928	2.54	High
Leadership	0.588	2.34	High
Attitude and Discipline	0.724	2.03	High
Overall	**0.500**	**2.35**	**High**

Level of Academic Commitment

Table 2 shows statistics on students' academic dedication in selected public schools in the Davao de Oro Region, with an overall mean of 2.14, indicating a low level. The low level resulted in a low grade provided by respondents on all parameters. It implies that the student's responses to academic commitment were seldom or not often manifested in the level of commitment, satisfaction, quality of alternatives, investment, and meaningfulness. Meanwhile, the quality of alternatives has a greater mean score than the commitment level. It indicates that the students moderately practice the quality of alternatives. Altintas et al. (2020) cited insight into the role of meaning in self-determination theory and the organizing role of meaningful commitment in self-regulating behavioral choices to explain students' academic commitment.

Table 2. Academic Commitment

Items	SD	Mean	D.E.
Level of Commitment	0.713	1.69	Very Low
Satisfaction	0.546	2.14	Low
Quality of Alternatives	0.811	2.61	Moderate
Investments	0.619	2.11	Low
Meaningfulness	0.634	2.15	Low
Overall	**0.466**	**2.14**	**Low**

Level of E-learning

Table 3 displays the mean scores for students' e-learning elements, with an overall mean of 2.17, indicating Low. The low level can be linked to respondents' low ratings on most items. It means that the respondents' reactions to e-learning were uncommon or infrequent in most situations.

The given overall mean was calculated using the mean scores of all e-learning items. The respondents' responses are ordered from highest to lowest based on their mean value. These are as follows: 2.05 or Low for perceived utility and behavioral intention; 2.11 or Low for e-learning effectiveness; 2.17 or Low for e-learning satisfaction; 2.29 or Low for perceived self-efficacy; and 2.23 for multimedia teaching. All the five indicators above show that students' attitudes towards e-learning are always less evident. In the study (AYU, 2020), he stated that e-learning can transform the educational system. More than technical ability, it emphasizes critical thinking, meaning digital literacy is fundamentally a cognitive act, according to Calvani et al. (2022).

Table 3. Level of E-learning

Items	SD	Mean	D.E.
Perceived usefulness and behavioral intention	0.657	2.05	Low
e-learning effectiveness	0.661	2.11	Low
e-learning system satisfaction	0.696	2.17	Low
Perceived self-efficacy & satisfaction	0.593	2.29	Low
Multimedia instruction	0.718	2.23	Low
Overall	**0.554**	**2.17**	**Low**

Significance on the Relationship between Levels of Knowledge and Soft-Skills Competency, Academic Commitment, and E-Learning

Table 4 depicts the association between knowledge and soft skill proficiency, academic dedication, and e-learning. In-depth research showed a general r-value of 0.544 and a p-value of <0.01 for knowledge, soft-skills proficiency, and academic dedication. It shows that the null hypothesis of no substantial association between knowledge and soft-skills competency and academic commitment has been rejected. It means that knowledge and soft-skill competency influence academic commitment. The competency in knowledge and soft skills, as well as e-learning, had an overall r-value of 0.472 and a p-value of <0.01. It means that the null hypothesis of no meaningful association between knowledge and soft-skills competency and e-learning has been rejected. It implies that knowledge and soft skills competency have an impact on e-learning.

The relationship between e-learning and academic dedication was statisticallyvsignificant (r-value = 0.699, p-value <0.01). It shows that the null hypothesis of no meaningful association between e-learning and academic dedication has been rejected. It means that e-learning will influence their academic commitment.

Table 4. Overall Significance on the Relationship between Levels of Knowledge and Soft-Skills Competency, Academic Commitment and E-learning

	Knowledge and Soft-skills Competency	Academic Commitment	E-learning
Knowledge and Soft-skills Competency	**1**	**.544****	**0.472****
Academic Commitment	**.544****	**1**	**0.699****
E-learning	**0.472****	**0.699****	**1**

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

Mediation Analysis of the Three Variables

PARTIAL MEDIATION (WITH SIGN UNCHANGED)

Regression Weights: (Group number 1 - Default model)

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
OVMMV	<---	OMIV	.506	.047	10.718	***	
OVMDV	<---	OMIV	.144	.056	2.570	.010	
OVMDV	<---	OVMMV	.747	.060	12.363	***	

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
OMIV	.250	.021	11.705	***	
e1	.152	.013	11.705	***	
e2	.152	.013	11.705	***	

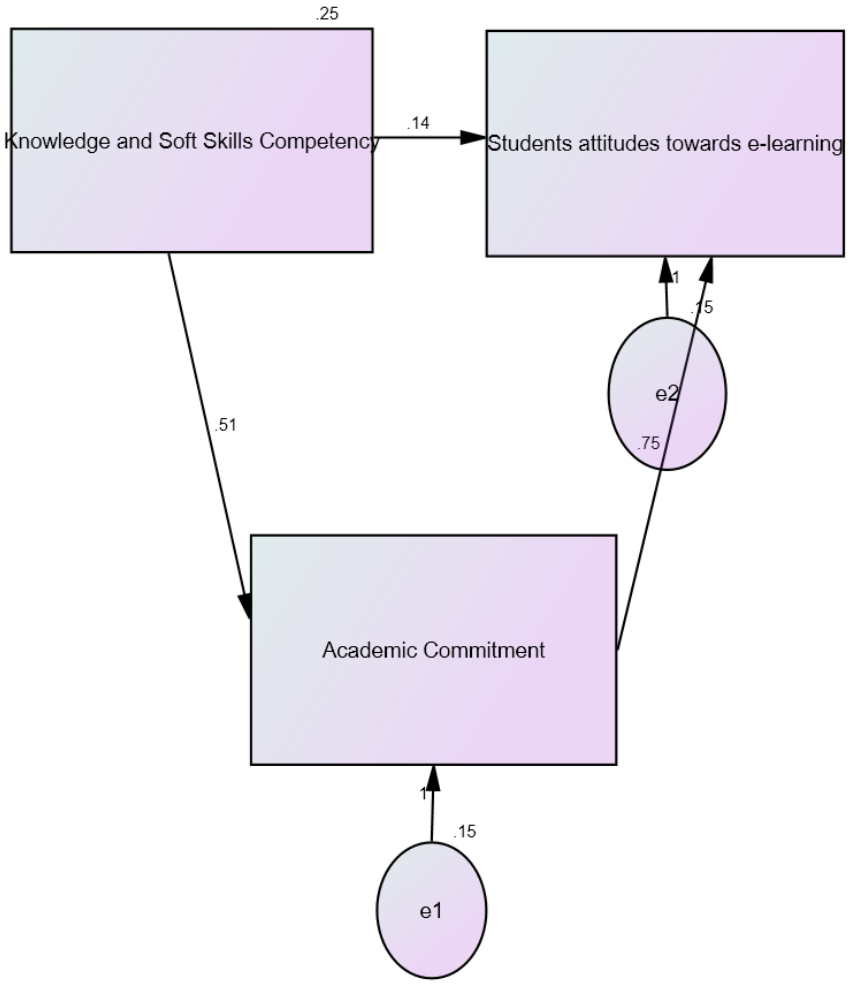

Figure 2. Mediation Model

X = KNOWLEDGE AND SOFT-SKILLS COMPETENCY Y = E-LEARNING

M = ACADEMIC COMMITMENT

Result: Using Path Analysis, the results reveal that the paths KSC (X) to AC (M), AC (M) to E (Y), and KSC (X) to E (Y) are all significant with the same sign, indicating that E partially mediates the interaction between KSC and AC. According to Figure 3, every unit improvement in Knowledge and Soft-skills proficiency corresponds to a 0.51 element obtained in M (AC). Additionally, for every unit rise in Academic Commitment, there is a 0.14 increase in E-learning. Furthermore, every unit improvement in Knowledge and Soft Skills Competency corresponds to a 0.75-unit gain in E-learning. In summary, following the KSC-AC-E path results in a 0.75-unit gain in E-learning for every unit increase in Knowledge and Soft Skills Competency. It means that E-learning can be strengthened by knowledge and soft-skill competency, but it must be conveyed through academic commitment; thus, stronger academic commitment mediates knowledge and soft-skill competency for enhanced e-learning. The findings of this study are affirmed by Hannah (2022), who states that e-learning impacts soft skills and vice versa and that the environment affects the level of commitment. (El Sayed 2021)

4. CONCLUSION AND RECOMMENDATION

The primary goal of this study is to look into the mediating influence of E-Learning on the relationship between Knowledge and Skills competency and academic commitment in TVL/TLE students to assist them cope with the other strands of the K 12 curriculum. This study also intends to disseminate knowledge about the factors that cause the TVL/TLE students not to develop knowledge and soft-skills competency essential to equip them to be job-ready and to understand the effects of its deficiency on students. As part of the competency that students need to develop, it is necessary that the students perform such skills and, therefore, must be given emphasis logically and systematically that promote thorough knowledge, understanding, and ability to perform competently.

The study shows partial mediation of the variables, which implies that E-learning can be enhanced by Knowledge and Soft-skills Competency but should passed through academic commitment; hence, higher academic commitment mediates knowledge and soft-skills competency for enhanced e-learning. The findings in the study are affirmed by (AYU, 2020) wherein he stated that e-learning can transform the educational system. E-learning is massively growing steadily, according to Aparicio et al. (2016), and during the pandemic, it has changed dramatically with almost all mediums of educational instruction being electronically processed (Algahtani, 2022). Moreover, as noted by Thorndike (1971) "The rating remains one of the best predictors of individual success later in life". This idea implies that an individual's academic and technological accomplishments are a reliable sign of the knowledge, skills, and information they have gained in courses that are extremely relevant to their work. Therefore, teachers must invest in learning materials or interventions that will hasten and improve students' soft-skill competence and academic commitment to promote learning and the acquisition of necessary learning processes. Teachers teaching TVL can collaborate and expand relationships with training centers and call center practitioners to produce realistic instructional materials based on industry norms.

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