

THE DETERMINANTS OF DIGITAL LITERACY AMONG ACCOUNTING STUDENTS IN A TVET INSTITUTION

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Article history

Received date : 15-2-2025
Revised date : 16-2-2025
Accepted date : 24-3-2025
Published date : 15-4-2025

To cite this document:

Salem, N. A., Asat, S. H., & Ahmad, N. F. (2025). The determinants of digital literacy among accounting students in a TVET Institution. *Jurnal Penyelidikan Sains Sosial (JOSSR)*, 8 (26), 237 - 261.

Abstract: *Digital literacy is crucial in today's world, influencing career opportunities, productivity, and education. As Malaysia moves towards a technology-driven economy, improving digital skills, especially among technical and vocational education (TVET) students, is essential. This study focuses on accounting students at Politeknik Mukah, Sarawak, to examine how attitude, social norms, and self-efficacy influence digital literacy. Mukah, a growing educational hub with institutions like Politeknik Mukah was chosen for this research. Using Social Cognitive Theory (SCT), the study surveyed 136 Diploma in Accountancy students through online surveys, distributed via Google Forms, email, and WhatsApp. The analysis shows that attitude and self-efficacy significantly boost digital literacy, while social norms have little impact. Hypothesis testing reveals a strong correlation between attitude and digital literacy, suggesting that a positive outlook enhances digital skills. Social norms, however, have minimal influence, indicating that societal expectations do not greatly shape students' digital capabilities. Self-efficacy stands out as the most influential factor, highlighting the importance of students' confidence in their abilities to improve digital literacy. This research expands on the application of Social Cognitive Theory in TVET education and provides valuable insights for educators and policymakers. It underscores the need for strategies that promote confidence and positive attitudes towards technology, ensuring a digitally skilled future workforce. Future studies could involve larger samples and longitudinal methods to track digital literacy development and uncover additional influencing factors across different educational contexts.*

Keywords: *Digital Literacy, Accounting Students, Social Cognitive theory, Attitude, Social Norms, Self-Efficacy, TVET*

Introduction

In today's rapidly evolving digital landscape, accounting professionals are expected to possess far more than just traditional bookkeeping and financial reporting skills. As businesses embrace automation, artificial intelligence, and cloud-based systems, the role of accountants has expanded to include data analysis, real-time financial reporting, and the use of complex accounting software (Wang et al., 2023; Georgieva, 2019). These changes demand a new level of digital proficiency from future professionals. Therefore, digital literacy is no longer optional—it has become a core competency required to stay competitive and relevant in a technology-driven industry. In line with this shift, Malaysia is actively working toward becoming a high-income digital economy. The government has emphasized the importance of equipping students with digital skills through strategic policies like the National Digital Education Policy, which aims to strengthen digital infrastructure, promote digital inclusivity, and embed digital learning across all levels of education (Hakim & Nizam, 2023). This is especially important for students enrolled in Technical and Vocational Education and Training (TVET) institutions, such as Politeknik Mukah in Sarawak, where practical, job-ready skills are essential.

However, while these initiatives improve access to technology, they do not automatically lead to improved digital literacy. The ability to use digital tools effectively is influenced by more than just availability. Psychological and social factors play a crucial role. Attitude toward technology determines a student's willingness to engage with digital tools. Social norms, including peer and cultural influences, can either support or discourage digital learning. Most importantly, a student's self-efficacy can significantly impact how they approach technology (Bandura, 1997; Miranda et al., 2018). Without confidence, students may avoid using digital tools altogether, even when resources are available. Understanding these factors is vital to ensure that students are not just digitally equipped but also digitally empowered.

Problem Statement

Despite various national initiatives to promote digital education, many accounting students in Malaysia especially those in TVET institutions still struggle with achieving adequate digital literacy. While access to digital tools has expanded, this has not guaranteed that students are confident or competent in using them. The issue extends beyond infrastructure to include personal and social challenges. Negative attitudes toward technology, low motivation, and discomfort with digital environments often prevent students from fully engaging with digital tools in their studies. Social influences such as peer pressure and unsupportive academic cultures can further reinforce this hesitation. Most critically, students with low self-efficacy those who doubt their ability to succeed using digital platforms are more likely to avoid digital learning altogether.

This concern is amplified by the accounting profession's rapid shift toward digitalization. Businesses now rely heavily on tools such as cloud accounting systems, data analytics, and AI-driven reporting, requiring graduates to possess more than just basic digital knowledge. However, many students remain limited to foundational digital skills, as shown in Figure 1, which highlights that while 65% of Malaysian employees recognize digital skills as essential, 83.1% still focus only on basic competencies. This mismatch reflects a growing gap between educational outcomes and industry expectations.

If left unaddressed, this skill gap risks leaving future accountants underprepared and less competitive in the digital workforce. As Malaysia moves toward a more digital and service-oriented economy, closing this gap requires more than just technology access it demands

targeted strategies that address student mindset, social support, and confidence. A deeper understanding of how attitudes, social norms, and self-efficacy shape digital literacy is key to preparing career-ready graduates and ensuring sustainable digital transformation in the education sector.

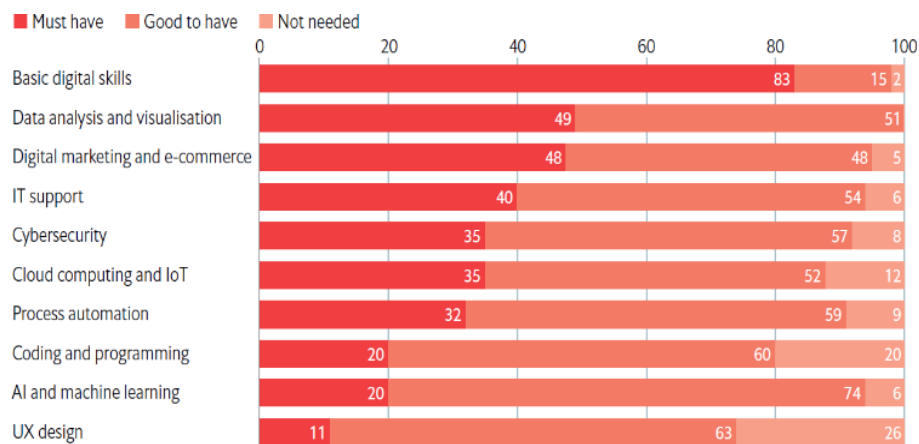


Figure 1: Survey by Economist Impact and Google on Skills Gap (Nov 2022 - Jan 2023).

Source: Economist Impact, 2023

Research Objectives

Understanding the complexities of digital literacy concerns among accounting students becomes critical as the demand for digital literacy in the accounting profession increases. By defining these objectives, the researcher hopes to shed light on the complexities of digital literacy and make a significant contribution on how to best prepare accounting students for success in the digital age. Hence, the objectives for this study are:

- To examine the relationship between attitude and digital literacy among accounting students.
- To examine the relationship between social norms and digital literacy among accounting students.
- To examine the relationship between self-efficacy and digital literacy among accounting students.

Research Questions

Accounting students need to be very proficient in digital literacy given how quickly the field of accounting is changing. Employing research questions as a guide, this paper aims to clarify the complex problems related to accounting students' digital literacy. The research questions are:

- What is the relationship between attitude and digital literacy among accounting students?
- What is the relationship between social norms and digital literacy among accounting students?
- What is the relationship between self-efficacy and digital literacy among accounting students?

Significance of Study

This study is important because it helps us understand why some accounting students are better at using digital tools than others. By focusing on attitude, social norms, and self-efficacy, the research shows how these personal and social factors influence digital literacy. The findings add to existing theories, especially Social Cognitive Theory (Bandura, 1997), by showing how

students' confidence and mindset affect their ability to learn and use technology. Practically, this study gives useful ideas for educators, institutions, and policymakers. It helps them create better learning environments that support digital skill development. For example, teachers can focus on building students' confidence, encouraging positive attitudes, and creating peer support to improve digital learning. Schools and colleges can also design training programs that combine technical skills with motivation and mindset-building. In short, this study can help improve how digital tools are taught in accounting programs, especially in TVET institutions. It ensures students are not just using technology but also using it confidently and effectively, so they are better prepared for today's digital workforce.

Literature Review

Digital Literacy

Digital literacy refers to the ability to use, understand, and evaluate digital tools and information effectively. It involves skills such as finding information online, assessing its accuracy, and using digital platforms for communication, learning, and problem-solving (Gilster, 1997; Sogalrey et al., 2024). In today's world, digital literacy is essential not only for academic success but also for career development and participation in the digital economy (Reddy et al., 2020; Budiman & Syafrony, 2023). Globally, many countries have taken steps to promote digital literacy. For example, European nations have developed national programs, while countries like Singapore and Korea integrate digital citizenship into school curriculums (European Commission, 2020; Jang et al., 2021). However, in developing countries such as South Africa and Kenya, digital literacy gaps remain due to limited access to infrastructure and training (Shibambu & Mojapelo, 2024; Radovanovic et al., 2020). In Malaysia, digital literacy is part of national plans to support a digital economy. Government efforts like MyDIGITAL and the Digital Economy Blueprint aim to reduce the digital divide and improve digital skills (Nur & Yu, 2024). In education, improving digital literacy is linked to better academic performance and employability (Nasreen et al., 2022). Overall, digital literacy is a key competency for the 21st century, especially in professional fields like accounting. However, success depends not only on access to technology, but also on students' ability, confidence, and support to use it effectively.

The Institutional Setting of Digital Literacy in Malaysia

Malaysia's transition to a digital society highlights the importance of digital literacy. The government has played a pivotal role in reshaping the ICT sector and promoting digital government initiatives, such as MyDIGITAL, which focuses on digital inclusivity, rural connectivity, and improving digital skills in education (Nur & Yu, 2024). Workshops and educational campaigns aim to bridge the digital divide and ensure equitable access to digital public services. In higher education, digital literacy is increasingly seen as essential for preparing students for the workforce. The Malaysian Education Development Plan emphasizes its importance, as research shows that digital skills improve academic performance and employability (Nasreen et al., 2022). A study by Shuhidan et al. (2022) found that Malaysian secondary students exhibit strong digital literacy, with sociocultural factors influencing their learning motivation. In the accounting sector, the adoption of AI and Accounting Information Systems (AIS) is transforming business practices. Many SMEs are still in the early stages of adopting AI, but studies show that AIS attributes such as accuracy and user-friendliness positively impact financial performance and competitiveness (Shamsul et al., 2023; Edwin et al., 2024). Enhancing digital literacy in accounting programs is key to preparing graduates for the demands of a digital economy.

Digital Literacy Among Accounting Students

Digital literacy is crucial for accounting students as it plays a key role in their academic and career advancement. As technology evolves, accountants are moving away from traditional bookkeeping to using digital tools, software, and data analytics. Proficiency in tools like SAP, Xero, and QuickBooks is now just as important as traditional accounting knowledge (Beer & Mulder, 2020). Digital skills help students stay competitive and develop critical and creative thinking (Warizal et al., 2023). Institutions like Politeknik Mukah focus on practical training with digital tools, including accounting software and automated financial reporting systems. This approach prepares students for the rapidly evolving accounting field, equipping them with the skills needed for Malaysia's digital economy. Additionally, integrating data analysis and critical thinking into curricula is essential for developing students' abilities to work with digital information (Ekki & Putra, 2024). Studies show that while students possess general digital skills, many struggle with digital content creation and safety (Kusalawat et al., 2020). Digital literacy improves productivity, as workers with advanced skills contribute to higher company performance (Sogalrey et al., 2022). In the future, lacking digital competencies will hinder success, making digital literacy essential for accounting students to thrive in the digital age (Li, 2022).

Attitudes

The attitudes of accounting students toward technology play a crucial role in their digital literacy. Positive attitudes toward technology encourage students to adopt and use digital tools both academically and in their future careers. According to the Social Cognitive Theory, attitudes influence intentions and actions (Griffith et al., 2024). Students with a positive attitude toward technology report higher digital literacy (Ayalon & Aharony, 2024), with critical thinking and responsible use being key components of a positive attitude (Miranda et al., 2018). However, not all students are equally open to learning digital skills; some may be hesitant or skeptical. A study by Hatane et al. (2020) found that learning environments, including the influence of peers and teachers, significantly impact students' attitudes. Positive attitudes are linked to better self-regulated learning and problem-solving, which in turn improve academic success (Luo et al., 2019; Dunn & Kennedy, 2019). Research by Mudamakin et al. (2023) and Hermawan et al. (2021) showed that although accounting students may experience anxiety about using accounting software, they generally have a positive attitude toward adopting it. Cultivating positive attitudes is essential to ensure that accounting students are ready for the technological demands of the profession, bridging the digital literacy gap and preparing them for future careers.

Social Norms

Social norms significantly influence how individuals behave, shaping attitudes and actions in both personal and group contexts. They represent shared expectations about appropriate behavior within a community and guide decision-making (Hechter, 2018). According to Social Cognitive Theory (SCT), these norms impact behavior by affecting attitudes and intentions (DeNisi, 2024). Norms also influence academic self-efficacy and self-regulation in education (Dos Santos et al., 2020). For example, positive attitudes toward technology often lead to better academic outcomes and increased digital literacy (D'Adda et al., 2020; Dunn & Kennedy, 2019). Digital literacy is also shaped by social norms, influencing online and offline behaviors (Adhani et al., 2024). Students with a strong understanding of digital tools engage more responsibly, enhancing their social skills and communication (Shams et al., 2024). Observational learning, where students learn by watching peers and mentors, also plays a role in shaping their digital behavior (Moch et al., 2024). Cultural values, like respect for authority, impact how Malaysian accounting students interact with technology (AlSaqqaf et al., 2024).

However, intrinsic motivations or personal values can sometimes reduce the influence of social norms, as seen in studies showing individuals making choices contrary to prevailing standards (Bukuluki, 2024). In conclusion, social norms shape how accounting students develop digital literacy, impacting their use of technology in learning.

Self-Efficacy

Self-efficacy (SE) refers to an individual's belief in their ability to complete tasks and achieve goals (Bandura, 1997). In the context of accounting students, high self-efficacy boosts confidence, reduces anxiety, and encourages perseverance, especially in learning digital skills. Bandura (1982) emphasized that personal traits, circumstances, environment, and behavior interact to influence self-efficacy. Strong self-efficacy is linked to better learning outcomes, as it fosters motivation and resilience (Bandura, 2010). However, disparities in self-efficacy among accounting students can affect their digital literacy. These differences often stem from varying levels of institutional support, which can either enhance or hinder students' ability to develop digital competence. Research shows that students with higher self-efficacy are more likely to engage with digital tools, improving their skills (Alvarez-Risco et al., 2022). Studies have also shown that female students often exhibit higher self-efficacy than male students (Mulu et al., 2023). Additionally, self-efficacy influences the use of e-learning platforms, with higher self-efficacy improving students' motivation and acceptance of digital learning (Asojan & Omar, 2024). Thus, fostering self-efficacy is essential for improving digital literacy in accounting students, enhancing their academic and professional readiness in a digital world.

Social Cognitive Theory

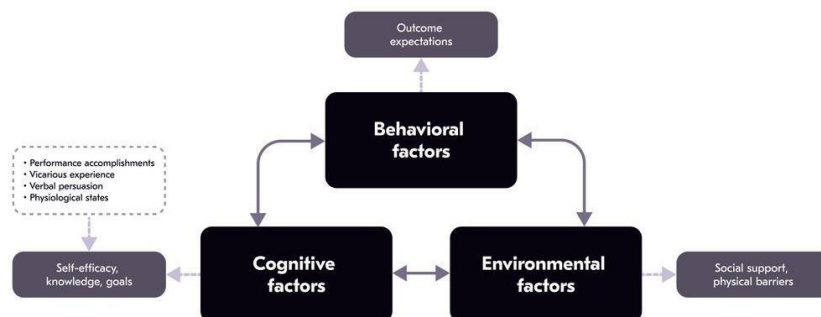


Figure 2: Social Cognitive Theory

Social Cognitive Theory (SCT), developed by Albert Bandura, emphasizes the interaction of personal, behavioral, and social-environmental factors in learning. Unlike behaviourist theories, SCT suggests that learning occurs through reciprocal relationships with the environment and by observing others (Bandura, 1986). It focuses on how people regulate their thoughts, emotions, and behaviors, particularly through mechanisms like modelling and self-efficacy. Self-efficacy, or the belief in one's ability to accomplish tasks, is a key element of SCT (Sánchez et al., 2023). The theory also includes cognitive factors, such as knowledge and goal setting, which influence behavior. Cognitive factors highlight how mental processes shape learning and problem-solving, which is crucial for developing digital skills. SCT suggests that people's intentions and behaviors are influenced by social surroundings and psychological cognition. It highlights the importance of feedback cycles, where individuals shape their behaviors based on experiences and internal beliefs. Education should address social, emotional, and cognitive aspects of learning (Bakhrudin et al., 2023). Research shows that teachers and environmental factors significantly impact student engagement and success in

group projects, especially in digital learning environments (Herda et al., 2024). Overall, SCT stresses the importance of understanding how people learn and adapt through social interactions.

Hypotheses Development

The Relationship between Attitude and Digital Literacy among Accounting Students

This study examines the impact of attitude, social norms, and self-efficacy on the digital literacy of accounting students. The relationship between attitude and digital literacy is particularly important, as technology plays a growing role in the field. The COVID-19 pandemic and the shift to online learning have emphasized the need for students to have a positive attitude toward digital technology for effective learning and future success (Paetsch & Drechsel, 2021). Research suggests that students generally have a positive self-assessment of their digital competence (Miranda et al., 2018). Studies by Hermawan et al. (2021) and Oh et al. (2019) show that a positive attitude towards technology enhances self-esteem and encourages the use of IT resources for academic work. Moreover, Karaca and Meriç (2023) found that favorable attitudes towards technology are linked to higher digital literacy in accounting education, especially in cognitive areas. Falloon (2020) and Paetsch & Drechsel (2021) further emphasize the importance of a positive attitude for effective use of technology in learning. Based on this, the hypothesis is proposed:

H1: There is a significant relationship between attitude and digital literacy among accounting students.

The Relationship between Social Norms and Digital Literacy among Accounting Students

The use of technology in accounting is influenced by various factors, including social norms. Social norms are the shared expectations within a community about how digital tools should be used. Kim et al. (2015) found a strong connection between student motivation and social interactions, highlighting how collaboration fosters a sense of togetherness. However, Bowden et al. (2021) noted that while social interaction is valuable for learning, it doesn't always guarantee success. Research by Sogalrey et al. (2022) revealed that school culture has a significant impact on digital literacy services, emphasizing the role of social and digital literacy in helping accounting students adapt to modern, technology-driven practices. Steenkamp et al. (2023) found that societal expectations and perceived usefulness directly affect students' intentions to use digital tools. Furthermore, Qurat-ul-Ain et al. (2024) showed that digital literacy enhances communication and social skills, which improves interactions, critical thinking, empathy, and civic participation. These skills are vital for students' academic and professional growth, especially in a world increasingly shaped by digital technologies. Based on this, the hypothesis is proposed:

H2: There is a significant relationship between social norms and digital literacy among accounting students.

The Relationship between Self-Efficacy and Digital Literacy among Accounting Students

The success of accounting students in a digital age depends on their ability to combine confidence in their academic abilities with digital skills. Self-efficacy, or the belief in one's ability to succeed, influences behaviour, motivation, and emotions (Sánchez & Guo, 2023).

Giap et al. (2022) found that self-efficacy improves online learning satisfaction and participation. According to Miranda et al. (2018), students with high digital self-efficacy feel confident completing digital tasks. This suggests that digital literacy is closely linked to self-efficacy, which boosts students' confidence and engagement. Getenet et al. (2024) also emphasized the importance of self-efficacy in improving learning outcomes. Yuan et al. (2024) showed a positive link between academic self-efficacy and digital literacy, particularly in helping students manage academic challenges. Similarly, Li (2020) and Budiman & Syafrony (2023) found that strong self-belief leads to better motivation and task completion. Naidoo and Govender (2021) reported that confident accounting students perform better, especially in tech-driven settings. Additionally, Alvarez-Risco et al. (2022) noted that institutional support enhances self-efficacy and digital platform use. Therefore, students with high self-efficacy are better prepared for the evolving demands of the accounting field. Hence the following hypothesis is developed:

H3: There is a significant relationship between self-efficacy and digital literacy among accounting students.

Conceptual Framework

A proposed conceptual framework as shown below is constructed based on the underpinning theory of Social Cognitive Theory. From this theory, the independent variables are attitude, social norms and self-efficacy. As for the dependent variable, it is the digital literacy among accounting students. Building on this framework, hypotheses are formulated in order to examine the precise connections among the variables that have been identified and how they affect the growth of digital literacy abilities in the accounting industry.

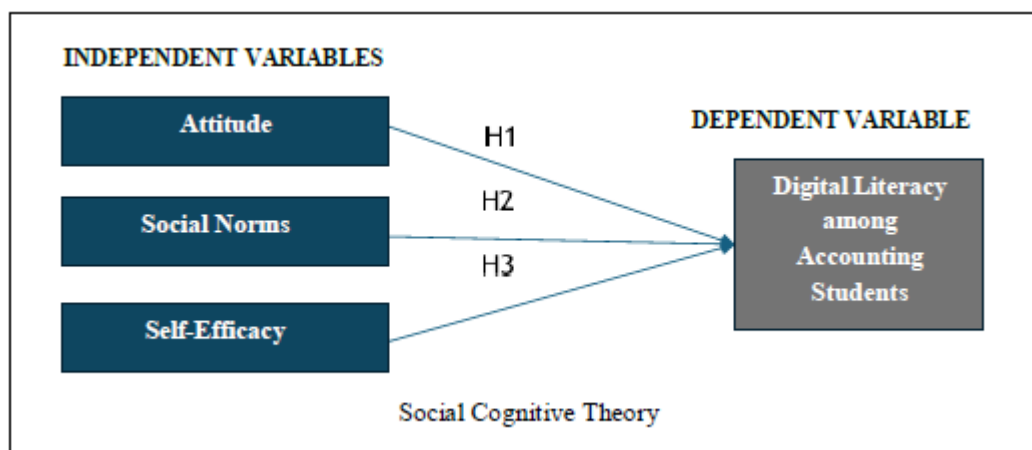


Figure 3: Proposed Conceptual Framework

Methodology

The study targets Diploma in Accountancy students at Politeknik Mukah, Sarawak, during Session 1:2024/2025. With a total population of 204 students from Semester 1 to Semester 5, this group represents the full scope of the target demographic. The choice of Politeknik Mukah is driven by its role in Malaysia's Technical and Vocational Education and Training (TVET) system and its alignment with the nation's digital transformation goals. Its strategic location and the presence of multiple educational institutions make it an ideal research setting. The institution's proactive shift to digital learning platforms during the COVID-19 pandemic further emphasizes its relevance in exploring students' digital literacy skills. To ensure a fair and

representative sample, this study uses systematic sampling, where every 2nd student is selected from a list of 204 Diploma in Accountancy students at Politeknik Mukah. The selection begins at a randomly chosen starting point to avoid bias. This method ensures that each student has an equal chance of being included in the sample, making the selection process both systematic and unbiased. As a result, students from all semesters (Semester 1 to Semester 5) are fairly represented. The individual student serves as the unit of analysis, allowing the study's findings to be accurately applied to the entire population. By spreading the selections evenly, this approach prevents clustering and supports a diverse sample, which helps improve the reliability and generalizability of the research outcomes. Overall, this method strengthens the validity of the study and contributes valuable insights into the role of digital literacy in the education of Malaysian accounting students.

The questionnaire was distributed online using Google Forms as part of a quantitative research approach to collect primary data. It targeted Diploma in Accountancy students at Politeknik Mukah, Sarawak. This method was chosen for its convenience, speed, and cost-effectiveness. To ensure easy access, the questionnaire link was shared via WhatsApp, allowing students to respond quickly and easily. The questionnaire used a 5-point Likert scale, where 1 indicates “strongly disagree” and 5 indicates “strongly agree.” This scale helps capture different levels of agreement, providing more detailed insights into the study’s focus areas. The questions were written in both English and Bahasa Melayu to ensure clarity and understanding among all students. Using an online platform also made it easier for the researcher to manage, organize, and analyze responses efficiently. Overall, the combination of online tools and a clear, bilingual questionnaire created a smooth, structured, and effective way to collect accurate data from the target group. This approach ensured that the data collection process was not only easy to manage but also thorough and reliable.

Data Analysis and Results

Demographic Profile

Table 1: Demographic Profile

Demographic Items	Frequency (N=136)	Percentage (%)
Age		
18 years old	50	36.8
19 years old	42	30.9
20 years old	28	20.6
21 years old	12	8.8
22 years old	1	0.7
23 years old	2	1.5
26 years old	1	0.7
Gender		
Male	35	25.7
Female	101	74.3
Academic Year		
Year 1 (semester 1 -2)	61	44.9
Year 2 (semester 3-4)	40	29.4
Year 3 (semester 5)	35	25.7

Based on Table 1, the study's sample consists of 136 respondents, with a clear gender imbalance: 74.3% (101) are female, and 25.7% (35) are male. Most students are between 18 and 20 years old, making up 88.3% of the total sample. Specifically, 39% (42 students) are 19 years old, and 26% (28 students) are 20 years old. Smaller age groups include 21 year olds at 8.8% (12 students), with very few respondents aged over 22, 23, and 26 years old each representing less than 2% of the sample. In terms of academic standing, students are divided into three groups: Year 1 (Semesters 1–2), Year 2 (Semesters 3–4), and Year 3 (Semester 5). Year 1 has the highest representation with 44.9% (61 students), followed by Year 2 with 29.4% (40 students), and Year 3 with 25.7% (35 students). This diverse demographic profile including a mix of age groups, genders, and academic levels ensures a well-rounded understanding of the digital literacy experiences and perceptions among Diploma in Accountancy students at Politeknik Mukah. It reflects a broad range of student perspectives from different stages of their academic journey.

Descriptive Statistics

Based on data from 136 respondents, the study reveals that accounting students generally have a positive attitude, strong self-efficacy, and are influenced by social norms regarding digital literacy. Attitude scores were high, especially for enjoying learning new tools (mean = 4.61), though interest in ICT varied slightly (mean = 4.31). Social norms and peer influence also played a strong role, with scores ranging from 4.22 to 4.38. Self-efficacy scores were consistently high (4.43–4.54), showing strong confidence. However, technical skills like software installation scored lower (mean = 4.00), indicating a need for improvement in more advanced digital tasks.

Normality Test

The normality test results show that all variables fall within the acceptable skewness range of -1.96 to 1.96, indicating no severe deviations from normality. The dependent variable, digital literacy, has a moderate negative skew of -0.703, suggesting most students have higher digital literacy levels. Among independent variables, Attitude (-1.039), Social Norms (-0.564), and Self-Efficacy (-0.914) also show mild to moderate leftward skewness, with more responses leaning toward higher values. Although Shapiro-Wilk and Kolmogorov-Smirnov tests returned significant p-values ($p < 0.05$), indicating non-normality, the skewness values suggest the data distributions are not severely non-normal.

Validity Test

Factor loadings in factor analysis represent the relationship between observed variables and underlying latent factors. Values closer to -1 or 1 indicate stronger correlations, while values near 0 suggest weaker correlations. The significance of factor loadings is influenced by sample size. Hair et al. (2009) suggest that for a sample size of 200, a factor loading of 0.40 is considered significant. In this study, with 136 respondents, a factor loading of 0.45 is deemed significant. This threshold ensures that the relationships identified between observed variables and latent factors are meaningful and statistically valid.

Pearson Correlation

Table 2: Pearson Correlation

			Digital Literacy among accounting students (DV)	Attitude (AT)	Social Norms (SN)	Self- Efficacy (SE)
Digital among students (DV)	Literacy accounting	Pearson Correlation	1			
Attitude (AT)		Sig. (2-tailed) Pearson Correlation	.692**	1		
Social Norms (SN)		Sig. (2-tailed) Pearson Correlation	.565**	.599**	1	
Self-Efficacy (SE)		Sig. (2-tailed) Pearson Correlation	.738**	.779**	.648**	1
		Sig. (2-tailed)				

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

* Correlation is significant at the 0.05 level (2-tailed)

The correlation analysis using Pearson Correlation in SPSS reveals significant positive relationships among the constructs of digital literacy (DV), attitude (AT), social norms (SN), and self-efficacy (SE). The strongest correlation is found between digital literacy and self-efficacy ($r = 0.738$, $p < 0.001$), suggesting that students' digital literacy levels increase alongside their confidence in using technology. A strong positive correlation is also observed between digital literacy and attitude ($r = 0.692$, $p < 0.001$), indicating that students with a positive attitude toward technology tend to be more digitally literate. Digital literacy and social norms are moderately correlated ($r = 0.565$, $p < 0.001$), highlighting the influence of peers and societal expectations on students' digital literacy. Among the independent variables, the strongest correlation is between attitude and self-efficacy ($r = 0.779$, $p < 0.001$), suggesting that students with a positive attitude are more confident in their digital skills. Additionally, moderate correlations are found between attitude and social norms ($r = 0.599$, $p < 0.001$), and between self-efficacy and social norms ($r = 0.648$, $p < 0.001$), emphasizing the role of social influence on students' technology confidence. Overall, the analysis underscores the key role of attitude, social norms, and self-efficacy in enhancing digital literacy, with self-efficacy being the most influential factor.

Regression Analysis

Table 3: Regression Analysis

	Unstandardized Coefficients	Standardized Coefficients	t	Sig	Tolerance	VIF
	B	Std. Error	Beta			
(Constant)	0.752	0.269		2.795	0.006	
Attitude (AT)	0.263	0.088	0.272	2.984	0.003	2.649
Social Norms (SN)	0.093	0.067	0.105	1.398	0.164	1.795
Self-Efficacy (SE)	0.455	0.095	0.458	4.779	<0.001	2.931
R Square	0.586					
Adjusted R Square	0.576					

Std. Error of the Estimate	0.34486
F Value	62.256
Significant	<0.001

The multiple regression analysis reveals that attitude, social norms, and self-efficacy significantly affect students' digital literacy, explaining 58.6% of the variance in digital literacy ($R^2 = 0.586$). Self-efficacy emerges as the strongest predictor, with a standardized coefficient (Beta) of 0.458, indicating that higher confidence in using technology leads to greater digital literacy. The p-value for self-efficacy (<0.001) confirms its significant role in digital literacy, supporting H3. Attitude also positively impacts digital literacy (Beta = 0.272), with a coefficient ($B = 0.263$), suggesting that students with a positive attitude toward technology are more likely to develop their digital skills. This result supports H1. However, social norms (SN) show a weaker influence on digital literacy, with a minimal unstandardized coefficient ($B = 0.093$) and a p-value of 0.164, indicating no significant correlation with digital literacy and not supporting H2. The overall model is statistically significant (F-statistic = 62.256, $p < 0.001$), demonstrating that the predictors collectively enhance the model's explanatory power. In conclusion, self-efficacy and attitude are key drivers of digital literacy, while social norms have a limited effect, highlighting the importance of fostering confidence and positive attitudes in students. Further research into social influences may be needed.

Homoscedasticity

The regression model satisfies the assumption of homoscedasticity, which ensures that the variance of errors remains constant across all levels of the independent variable. The scatter plot of standardized residuals vs. standardized predicted values shows no clear pattern, with errors dispersed randomly around zero, indicating no signs of heteroscedasticity. This suggests that the model's assumptions are met, ensuring the reliability of the regression findings, including confidence intervals, hypothesis tests, and coefficient estimations. In conclusion, the model appears to fulfill the homoscedasticity assumption, reinforcing the validity and accuracy of the regression results.

Multicollinearity Test

The regression model does not show significant multicollinearity, as evidenced by the collinearity statistics. The tolerance values for the predictors Attitude (0.377), Social Norms (0.557), and Self-Efficacy (0.341) are all well above the critical threshold of 0.1. This suggests minimal correlation between the independent variables, ensuring that they do not exhibit multicollinearity. Furthermore, the Variance Inflation Factor (VIF) values for each predictor Attitude (2.649), Social Norms (1.795), and Self-Efficacy (2.931) are all below the 10-point cutoff, which is considered acceptable for confirming the absence of multicollinearity. The absence of this issue is crucial as it ensures that the regression model's coefficients are reliable and not inflated due to high correlations between predictors. As a result, the findings of the regression analysis can be trusted, allowing for accurate interpretation of the relationships between attitude, social norms, self-efficacy, and digital literacy.

Summary of Hypotheses Results

Table 4: Summary of Hypotheses Results

	Hypotheses Statement	Beta Coefficient	t	p-value	Results
1	H1: There is a significant relationship between attitude and digital literacy among accounting students.	.272	2.984	0.003	Supported
2	H2: There is a significant relationship between social norms and digital literacy among accounting students.	.105	1.398	0.164	Not Supported
3	H3: There is a significant relationship between self-efficacy and digital literacy among accounting students.	.458	4.779	<0.001	Supported

The findings of this study offer important new information about the variables affecting digital literacy in accounting students, with a focus on attitude, social norms, and self-efficacy. According to the regression analysis, social norms have little influence on digital literacy, but attitude and self-efficacy are important predictors of the latter. According to the results of the hypothesis test based on Table 4, H1 and H3 are supported while H2 is not supported.

Discussion and Conclusion

Overview on Study Findings

This study investigated digital literacy among accounting students at Politeknik Mukah, Sarawak, using Social Cognitive Theory (SCT). The research focused on three independent variables: attitude, social norms, and self-efficacy, with digital literacy as the dependent variable. The study found that attitude (H1) and self-efficacy (H3) had significant positive relationships with digital literacy, supporting the hypotheses and answering the related research objectives and questions. Specifically, a positive attitude toward technology and greater self-confidence in using digital tools strongly influenced students' digital literacy. However, the hypothesis regarding social norms (H2) was not supported, suggesting that external social influences did not significantly affect digital literacy among the students. This finding emphasizes that internal factors like attitude and self-efficacy are more crucial in developing digital literacy. The research concludes that fostering a positive attitude and enhancing self-efficacy are essential for improving digital literacy among accounting students.

Discussion on Hypothesis Results

H1: There is a significant relationship between attitude and digital literacy among accounting students.

Regression analysis revealed that attitude is a significant predictor of digital literacy among accounting students at Politeknik Mukah, with a positive correlation indicated by a standardized coefficient (Beta = 0.272) and unstandardized coefficient (B = 0.263). A positive attitude towards digital technology enhances students' digital literacy, aligning with findings from Falloon (2020) and Paetsch and Drechsel (2021). The study highlights the importance of fostering positive attitudes, especially given the limited access to technology in Mukah compared to urban areas. The results support H1, showing that students with positive attitudes towards digital tools are more likely to develop digital literacy, consistent with studies by

Miranda et al. (2018) and Hermawan et al. (2021). The findings emphasize the need to create a technology-friendly environment in TVET education, especially in rural areas, and support Malaysia's educational goals outlined in the 12th Malaysia Plan and Poli Digital initiative.

H2: There is a significant relationship between social norms and digital literacy among accounting students.

The study found that social norms do not significantly impact digital literacy among accounting students, as indicated by a p-value of 0.164, which is above the 0.05 significance level. The weak relationship is further supported by the unstandardized coefficient ($B = 0.093$) and standardized coefficient ($Beta = 0.105$). This suggests that external societal influences are not crucial in shaping students' digital literacy, contrary to previous studies by Kim et al. (2015) and Steenkamp et al. (2023), which highlighted the role of social factors. The results may be due to the unique sociocultural context of Mukah, where rural areas have less emphasis on technology. The findings align with Bukuluki (2024) and Wenzel and Woodyatt (2024), suggesting that intrinsic factors, such as personal motivation, play a more significant role in developing digital literacy. Therefore, H2 is not supported, and further research into intrinsic factors is recommended.

H3: There is a significant relationship between self-efficacy and digital literacy among accounting students.

The study found that self-efficacy is the most significant predictor of digital literacy among accounting students, with a strong positive correlation supported by a p-value of <0.001 . The unstandardized coefficient ($B = 0.455$) and standardized coefficient ($Beta = 0.458$) suggest that students with higher self-efficacy are more likely to develop stronger digital literacy skills. This finding aligns with previous studies by Sánchez and Guo (2023), Giap et al. (2022), and Miranda et al. (2018), which emphasized the role of self-efficacy in enhancing digital competency and academic performance. In regions like Mukah, where access to technology may be limited, self-efficacy is crucial for overcoming barriers to digital skills. The study supports the idea that educational programs should focus on building students' confidence in using digital tools. Overall, the results highlight the importance of self-efficacy in preparing students for a digitalized accounting profession, supporting H3.

Contribution of Research

Theoretical Contribution

This study extends Bandura's Social Cognitive Theory (SCT) by illustrating how self-efficacy, attitudes, and social norms impact accounting students' digital literacy. It broadens SCT's application to higher education, showing that both psychological and social factors significantly influence digital literacy. The research highlights the importance of considering behavioral and mental aspects in developing digital literacy, beyond just technical skills. It suggests that fostering positive attitudes and self-efficacy in students can enhance their overall digital competence, supporting the idea that educational approaches should focus on both technical proficiency and confidence-building.

Practical Contribution

The study emphasizes the critical role of digital literacy in accounting students' academic and professional success. It contributes to curriculum development by recommending the integration of both basic and advanced digital skills in accounting education. Educators can use

the findings to design programs that enhance students' technical skills, self-efficacy, and positive attitudes toward technology. By addressing gaps in technical proficiency, the study proposes that TVET programs be restructured to better prepare students for the digital demands of the accounting industry. Policymakers can also use these insights to support digital literacy initiatives in higher education.

Limitation of Research

One limitation of the study is its small sample size, which only includes accounting students from one institution, potentially limiting its generalizability. Future research should expand the sample to include students from multiple universities for a broader understanding of the factors influencing digital literacy across diverse student populations. Another limitation is the reliance on self-reported data, which may lead to biases, as students could exaggerate their digital abilities or provide socially desirable responses. Future studies could incorporate teacher-administered assessments to obtain a more accurate measure of students' digital proficiency. Additionally, the study examines students at a single point in time, making it unclear how their digital literacy might evolve with further education or training. Longitudinal studies tracking students' progress over time would offer deeper insights into how digital literacy develops and how different teaching methods influence student outcomes.

Future Research

Future studies could examine how various instructional strategies affect the development of digital literacy. Future research could investigate how different teaching methods, including online modules or hands-on learning, impact students' digital skills. To determine which approaches are the most effective in raising accounting students' digital literacy, researchers could, for instance, contrast more interactive or technology-based learning environments with standard classroom instruction. This would assist teachers in determining which instructional techniques best improve pupils' digital literacy. Also, a larger and more varied sample of students from various nations or areas may be included in future research. Although the current study concentrated on a particular subset of accounting students, it would be helpful to observe how students in other fields.

Conclusion

This study explored the relationships between attitude, social norms, self-efficacy, and digital literacy among accounting students. It found a significant positive relationship between attitude and digital literacy, highlighting that students with a positive attitude towards technology are more likely to demonstrate higher digital literacy. Similarly, self-efficacy was found to be a strong predictor of digital literacy, with students who feel confident in their digital abilities showing greater proficiency. However, social norms did not significantly influence digital literacy, suggesting that intrinsic motivation may play a larger role in rural areas with limited technological exposure. These findings emphasize the importance of fostering a positive attitude and self-confidence in students to enhance their digital skills, particularly in accounting education. Future research should further examine the role of digital literacy across different disciplines and over time to deepen our understanding of its development.

Acknowledgements

A million thanks to our team members for their commitment, dedication and perseverance in making this research a success and may it contribute as a gist of knowledge towards others and for future improvements.

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