A comparative study on digital competency among accounting students between public university and private university in Malaysia

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ABSTRACT

Digital competency is a crucial soft skill for accounting students to meet job requirements. In the accounting field, digital competency is particularly important due to the increasing reliance on technology for data analysis, reporting, and compliance. This study aims to: (1) identify the digital competency levels of accounting students and (2) compare these levels between public and private university students in Malaysia. This quantitative study collected data via questionnaires from 202 accounting students in Malaysia, achieving a 67% response rate. This sample size is representative of the broader student population. The comprehensive assessment covers six elements of digital competence: technical competency, informational competency, problem-solving competency, communication and collaboration competency, safety competency, and accounting competency. The level of digital competence among accounting students is mixed. Safety competency scored the highest at 4.17, indicating strong awareness of digital safety practices. Communication and collaboration competency was also high at 4.03, reflecting effective teamwork and communication skills in digital environments. Informational competency was medium-high at 3.92, suggesting moderate proficiency in managing digital information. Technical competency (3.54) and accounting competency (3.58) were relatively lower, while problem-solving competency was the lowest at 3.39, indicating a need for improvement in applying digital tools to solve complex problems. The t-test analysis revealed that public university students exhibited significantly higher competency levels in technical competency ($p < 0.05$), informational competency ($p < 0.05$), and problem-solving competency ($p < 0.05$) compared to private university students. No significant differences were found in communication and collaboration competency, safety competency, and accounting competency between the two groups. This research provides valuable insights into the digital competencies of accounting students and suggests a model for enhancing digital skills in accounting education. Integrating digital competencies into the accounting curriculum can better prepare students for the digital demands of the accounting profession improving by their proficiency in essential areas such as technical skills and problem-solving. Future research should explore the complex relationships between digital competency, digital awareness, and performance to further refine educational strategies.

Keywords: Digital Competency, Accounting Students, Public University, Private University, Digital Skills Assessment, Higher Education, Quantitative Research

INTRODUCTION

In the rapidly evolving landscape of the accounting profession, digital competency has emerged as a critical skill set for accounting students. Advanced technologies like artificial intelligence (AI), blockchain, and big data analytics have transformed traditional accounting roles and processes (Quinn, 2020). As a result, the ability to effectively utilize digital tools and technologies is essential for aspiring accountants to remain competitive and relevant in the job market.

Digital competency encompasses a range of skills, including the ability to use accounting software, understand data analytics, and leverage emerging technologies to enhance decision-making processes (McKinney, Yoos, & Snead, 2017). These competencies are vital for accountants to provide value-added services, improve efficiency, and ensure accuracy in financial reporting and auditing. Therefore, accounting education must adapt to equip students with these necessary digital skills.

This study aims to identify the digital competency levels of accounting students and compare them between students in public and private universities. There is a growing interest in understanding how different educational environments impact the development of digital skills among students. Public universities often have larger student bodies and may have different resource allocations compared to private universities, which might influence the quality and extent of digital competency training provided (Tapscott, 2019). Specific challenges or gaps in digital competency among accounting students include the need for advanced digital skills such as data analytics, blockchain technology, and cybersecurity, which are often not adequately covered in current curricula.

LITERATURE REVIEW

The review of literature is divided into three sections: (1) Digital Competency Levels of Accounting Students in Malaysia, (2) Comparison of Digital Competency Levels Between Accounting Students in Public and Private Universities, (3) Elements of Digital Competency Among Accounting Students

Digital Competency Levels of Accounting Students in Malaysia

The digital transformation of the accounting profession necessitates that accounting students possess strong digital competencies. Digital competency, defined as the ability to use digital technologies efficiently and ethically, is critical for modern accountants (Smith, 2020). In Malaysia, the emphasis on digital skills in accounting education has been growing, reflecting the global trend of integrating advanced technologies into the accounting curriculum (Rahman et al., 2021).

Recent studies have shown varying levels of digital competency among accounting students in Malaysia. According to a study by Lee and Wong (2022), while Malaysian accounting students are generally proficient in basic digital tools such as spreadsheets and accounting software, there is a significant gap in more advanced digital skills, such as data analytics, blockchain technology, and cybersecurity. The study highlights that although students are exposed to digital tools during their education, the depth and breadth of this exposure are often insufficient to prepare them fully for the demands of the modern accounting profession.

Moreover, the rapid evolution of digital technologies necessitates continuous updates to the curriculum to keep pace with industry standards. A study by Abdullah et al. (2022) found that while Malaysian universities are making strides in integrating digital competencies into their accounting programs, the pace of change varies significantly between institutions. The study suggests that a more standardized approach to curriculum development, with input from industry stakeholders, could enhance the digital competency

levels of accounting students nationwide.

Comparison of Digital Competency Levels Between Accounting Students in Public and Private Universities

The comparative analysis reveals notable differences in digital competency levels between accounting students in public and private universities. Public universities, with their larger student populations and often more limited resources, face unique challenges in providing up-to-date digital training (Tapscott, 2019). Conversely, private universities, which typically have more flexibility in curriculum design and resource allocation, may offer more advanced and specialized digital training.

A study by Ibrahim and Yusoff (2021) compared the digital competency levels of accounting students from several public and private universities in Malaysia. The results indicated that students from private universities generally exhibited higher levels of digital competency, particularly in areas such as data analytics and the use of enterprise resource planning (ERP) systems. The authors attribute this disparity to the smaller class sizes, better access to resources, and closer industry linkages often found in private universities.

Additionally, research by Tan and Cheong (2022) supports these findings, noting that private universities tend to invest more in state-of-the-art technology and provide more opportunities for hands-on learning experiences through internships and collaborations with industry partners. This proactive approach enables students to gain practical skills and stay abreast of the latest technological advancements.

However, it is also essential to recognize the efforts made by public universities to enhance digital competency among their students. A case study by Mohamad et al. (2022) highlights several public universities that have successfully integrated comprehensive digital training programs into their accounting curricula. These programs often involve partnerships with technology firms and the incorporation of certification courses in digital accounting tools, which have been effective in bridging the competency gap.

The literature indicates that while Malaysian accounting students are making progress in acquiring digital competencies, significant disparities exist between public and private universities. Private universities generally provide more extensive and advanced digital training, attributed to better resource allocation and stronger industry connections. In contrast, public universities, despite facing resource constraints, are also making significant strides through innovative partnerships and curriculum enhancements.

There are many elements in digital competence, and this study has identified six (6) elements of digital competence. These elements will be discussed in the next section.

Elements of Digital Competence

There are six elements of digital competence have been identified by this research include technical competency, informational competency, problem solving competency, communication and collaboration competency, safety competency and accounting competency.

The first element of digital competence is technical competency which is also considered an important need to improve digital transformation in the organization. Technical order of competency refers to user's interaction with a digital device and involves skills such as operating digital devices, managing accounts or systems, and creating or editing documents, audios, videos, and multimedia content (Desjardins, 2005). Knowing that technical competency is important, we explored past literature and found that there was only one study involving accountants and level of digital literacy (Mohammadyari & Singh, 2015).

The second element of digital competence is informational competency. Informational order of competency refers to users' interaction with

information using digital technology and involves skills such as searching for journal articles, videos, movies, music, and e-books and using digital maps and multiple kinds of aggregators (Desjardins, 2005). In terms of the informational order, both students and instructors employed smartphones frequently to search for short videos and maps, and for sharing calendars, while epistemological uses were generally low in frequency and confidence.

The third element is problem-solving competence. Problem-solving competence is an essential component of the skills required to perform interpersonal and non-routine analytic tasks successfully. In both kinds of tasks, workers need to think about how to engage with the situation, monitor the effect of their actions systematically, and adjust to feedback (OECD, 2014). Problem-solving competency is identifying digital needs and resources, making informed decisions as to which are the most appropriate digital tools according to the purpose or need, solving conceptual problems through digital means, creatively using technologies, solving technical problems, updating one's own and others' competencies. According to Programme for International Student Assessment (PISA) 2012 (OECD, 2014), problem solving is an individual's capacity to engage in cognitive processing to understand and resolve problem situations where a method of solution is not immediately obvious.

The fourth element is communication and collaboration competency. This area of competence refers to the necessary skills to establish communication and collaboration with others within digital environments (Carretero et al., 2017). Communication and collaboration competency is skills related to communication and collaboration in digital environments, cooperation and sharing documents and resources through online tools, collaborating with others through these media, as well as participating in scientific communities, forums, and spaces for interaction (Rodríguez, 2022). Most students demonstrated digital competence in several areas such as information and data literacy, communication, and collaboration (Zhao et al., 2021).

The fifth element is safety competency. Safety competency is the ability for self-protection in the digital environment, data and digital identity protection, and the use of healthy, safe, and sustainable digital media (Aisyah & Susanty, 2017). Vishnu et al. (2022) stated that more than one-third of the students were found to be moderately competent with regard to their ability to adapt and mix various media for study purposes, protect personal data and privacy, protect health and well-being while using digital technologies, and understand the impact of digital technologies on the environment.

The sixth and last element is accounting competency. Accounting competency is the ability to perform tasks and play roles as a professional accountant (Palmer et al., 2004). The fourth industrial revolution has disrupted many workers or professions, including accountants. To survive and exist, the accounting profession requires accountants to take action to survive in their fields (Prinstin et al., 2022). In order to succeed in the field, accountants must upgrade their skills and broaden their core capabilities to get ready and fortify themselves with the latest technological knowledge and skills (Azuraidah et al., 2022). The most useful phase for implementing information technology is the process of technology adoption and transfer to enhance the user's competency. To communicate with the involved decision-maker, these competent accountants must perform analysis and interpretation (Ado et al., 2020).

Hypothesis Development

The previous research has highlighted several key findings that inform the development of our hypotheses. Firstly, there is a growing emphasis on digital skills in accounting education globally, including in Malaysia (Rahman et al., 2021). However, the pace of integrating digital

competencies into accounting programs varies significantly between institutions (Abdullah et al., 2022). Studies have shown that Malaysian accounting students generally possess proficiency in basic digital tools but exhibit gaps in more advanced digital skills (Lee & Wong, 2022). Additionally, the comparative analysis of digital competency levels between accounting students in public and private universities reveals notable differences, with private universities often providing more advanced and specialized digital training (Ibrahim & Yusoff, 2021; Tan & Cheong, 2022).

Based on these findings, the following hypotheses are proposed to explore the differences in digital competency levels between accounting students in public and private universities in Malaysia:

Hypothesis 1: There are significant differences in the levels of technical competency between accounting students from public university and private university.

This hypothesis is derived from the observation that private universities may offer more advanced digital training, potentially leading to higher technical competencies among their students.

Hypothesis 2: There are significant differences in the levels of informational competency between accounting students from public university and private university.

This hypothesis is based on the need for students to effectively manage digital information, an area where disparities in training resources and approaches between public and private universities could lead to differences in competency levels.

Hypothesis 3: There are significant differences in the levels of problem-solving competency between accounting students from public university and private university.

This hypothesis is informed by the importance of problem-solving in the application of digital tools and the potential impact of different educational environments on the development of this skill.

Hypothesis4: There are significant diffeences in the levels of communication and collaboration competency between accounting students from public university and private university.

This hypothesis is proposed considering the role of digital environments in enhancing communication and collaboration skills, which may vary between public and private universities due to differences in available resources and training.

Hypothesis 5: There are significant differences in the levels of safety competency between accounting students from public university and private university.

This hypothesis is based on the critical need for digital safety awareness and the potential variations in the emphasis placed on this aspect in the curricula of different types of universities.

Hypothesis6: There are significant differences in the levels of accounting competency between accounting students from public university and private university.

This hypothesis is derived from the recognition that the integration of digital competencies into accounting education is essential for preparing students for the digital demands of the accounting profession, an area where differences in educational approaches could lead to varying levels of competency.

These hypotheses aim to systematically explore and compare the digital competencies of accounting students across different types of universities in Malaysia, providing insights into the effectiveness of current educational approaches and identifying areas for improvement.

Materials and methods

This is a descriptive quantitative study that uses a questionnaire and is distributed face-to-face. The

study aimed to collect data from a diverse sample of accounting students across Malaysia. A total of 300 Bachelor of Accounting students from various public and private universities were targeted for participation. The selection of respondents was stratified across five distinct regions in Malaysia to ensure a representative sample of the broader population of accounting students. These regions included Central (Kuala Lumpur, Putrajaya, Selangor), Southern (Negeri Sembilan, Melaka, Johor), Northern (Perak, Pulau Pinang, Kedah, Perlis), East Coast (Pahang, Kelantan, Terengganu), and Eastern (Sabah, Sarawak, Labuan). A total of 212 respondents responded to the form and only 202 forms could be used.

Ethical approval for the study was obtained from the Institutional Review Board (IRB) of the lead researcher's university. This approval ensured that the study adhered to ethical standards regarding the protection of participants' rights and confidentiality. Informed consent was obtained from all participants prior to their involvement in the study. Participants were assured that their responses would be kept anonymous and used solely for research purposes.

The study instrument used consisted of a set of questionnaires which were divided into three parts, namely part A and part B. Part A was related to respondents' information. Part B is related to digital competency. The measurements of digital competency are as follows:

Table 1 Variable Measurements

Study Variables	Measurement	Reference
Technical competency	14	Zhou et al. 2021; Silva & Morales 2022; ACCA Report: The Digital Accountant 2020
Informational competency	9	Zhou et al. 2021;Silva & Morales 2022.
Problem solving competency	6	Zhou et al. 2021
Communication and collaboration competency	12	Zhou et al. 2021
Safety competency	5	Zhou et al. 2021
Accounting competency	7	ACCA Report: The Digital Accountant 2020

This study was analyzed using the Statistical Package for Social Sciences for Windows (SPSS) version 26. The analysis used is descriptive analysis to measure the level and compare means by using independent t test..

Findings

The findings will be divided into respondent demography, reliability analysis, levels of digital competency and compare means between respondents from public universities and private universities to answer the hypotheses of the study.

Respondent Demography

The respondent demography was formed to see the characteristics of the respondents in the study. The characteristics of the respondent should be identified in order to provide the respondent background information. Table 2 shows the respondent's demography:

Table 2 Respondent Demography

Description		Sum	Percentage%
Gender	Male	47	23.3
	Female	155	76.7
	Total	202	100.0
Educational Institution	Public University	130	64.4
	Private University/ College	72	35.6
	Total	202	100.0
Age	19-20	16	7.9
	21-22	133	65.8
	23-24	44	21.8
	25 and above	9	4.5
	Total	202	100.0
Academic Semester	2	1	.5
	3	15	7.4
	4	7	3.5
	5	95	47.0
	6	19	9.4
	7	49	24.3
	8	12	5.9
	More than 8	4	2
	Total	202	100.0
Race	Malay	174	86.1
	Chinese	11	5.4
	India	8	4.0
	Others	9	4.5
	Total	202	100.0

Table 2 shows a detailed profile of the respondents in this study. Among the 202 participants, the majority are female (76.7%), and there is a diverse distribution across different educational institutions, with 64.4% from public universities and 35.6% from private universities/ colleges.

In terms of age, the majority fall within the 21-22 age range (65.8%), and participants are spread across various academic semesters, providing a comprehensive representation of the student population. The ethnic composition is predominantly Malay (86.1%), with smaller percentages of Chinese (5.4%), Indian (4.0%), and other ethnicities (4.5%). To sum up, these in-depth demographic insights give us a solid base for understanding the different traits of the people who answered our study›s questions, especially when it comes to accounting and information systems.

Reliability Analysis

The validation of a questionnaire is a crucial step in the research process, ensuring that the instrument effectively measures what it is intended to measure and produces reliable and valid results. Validation involves assessing the accuracy, consistency, and appropriateness of the questionnaire for the research objectives. The key aspects to consider when validating a questionnaire includes: (1) Content validity assesses whether the questionnaire covers all relevant aspects of the construct being measured. It includes a revision of the questionnaire by the experts to ensure it includes appropriate and comprehensive items. The questionnaires have been reviews by expert, (2) Face validity refers to the extent to which the questionnaire appears, on its face, to measure the intended construct. This is a subjective judgment by researchers or potential respondents. It involves assessing whether the questions seem relevant and appropriate for measuring the intended concept, (3) Construct validity assesses whether the questionnaire measures the theoretical construct it is intended to measure. It can be established through statistical techniques such as factor analysis, which examines the underlying structure of the questionnaire items. If the items cluster together as expected, it supports construct validity, (4) Criterion-related validity assesses whether the questionnaire is correlated with a criterion or external measure that it should theoretically be related to. This can be concurrent (measured at the same time as the criterion) or predictive (measured at a later point). Correlation coefficients are often used to establish the strength and direction of the relationship.

To test the reliability of the questionnaire, a pilot test had been done on thirty selected respondents which include the Bachelor of accounting students from Universiti Islam Selangor (UIS).

Through the collection of data received by the respondent, the most important analysis is to measure or verify the reliability value according to the items in the questionnaire. This analysis of validity and reliability is carried out to ensure that the questionnaire has stability for use by the community.

This reliability analysis is measured using Alpha Cronbach. The closer the Alpha value is to the value of 1, it indicates that the item has a high reliability value. According to Nurulhuda et al. (2009), alpha croncbach is a numerical coefficient to represent reliability. It is used to identify the consistent level of the questionnaire instrument with a value above 0.70 is categorized as its high reliability. According to Ranjit Kumar (2019), the higher the reliability of an instrument, the lower the degree of error for the instrument. Therefore, a study instrument is said to be reliable even if the measurements are made repeatedly but the results are still the same.

Table 3 Reliability Analysis

Variable	Item	Cronbach Alpha α
Technical Competency	14	0.908
Informational Competency	9	0.854
Problem Solving Competency	5	0.831
Communication and Collaboration Competency	12	0.920
Safety Competency	5	0.896
Accounting Competency	6	0.823

In this study, the reliability value of all 6 variables exceeded 0.8. (Based on Table 3: Reliability Analysis). This suggests that the questionnaire instrument used is capable of measuring the variables to be studied. However, there are items that need to be discarded for problem solving competency variables (1 item) and accounting competency (1 item).

Level of Digital Competency

Table 4 below shows the descriptive analysis of digital competency.

Table 4 Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Technical Competency	202	1.93	5.00	3.5385	.67006
Informational Competency	202	2.00	5.00	3.9219	.67264
Problem Solving Competency	202	1.40	5.00	3.3881	.80537
Communication and Collaboration Competency	202	1.75	5.00	4.0334	.75086
Safety Competency	202	1.20	5.00	4.1693	.75577
Accounting Competency	202	1.00	5.00	3.5776	.77519
Valid N (listwise)	202				

Based on Table 4, Technical Competency has a mean of 3.5385, reflecting diverse technical skills with a moderate standard deviation of 0.67006. Informational Competency stands out with a mean of 3.9219, suggesting a high proficiency in information-related skills and a relatively low standard deviation of 0.67264.

Problem Solving Competency, with a mean of 3.3881 and a standard deviation of 0.80537, indicates varied levels of problem-solving skills among respondents. Communication and Collaboration Competency demonstrates a strong mean of 4.0334, highlighting high proficiency in these areas, with a standard deviation of 0.75086. Safety Competency is notable, with a high mean of 4.1693 and a standard deviation of 0.75577, indicating a robust awareness and adherence to safety practices.

In terms of accounting skills, Accounting Competency has a mean of 3.5776 and a standard deviation of 0.77519, suggesting a moderate level of proficiency.

As a conclusion, the level of digital competence of students is mixed. The highest level of digital competency among the respondents was safety competency at 4.17, followed by communication and collaboration competency at 4.03 which was also high. Informational competency is at a medium high level of 3.92. The technical competency level is relatively low at 3.54, accounting competency 3.58 and the lowest is problem solving competency at level of 3.39 only.

Compare Means

Table 5 shows the comparative mean analysis of all elements of digital competence between accounting student from public universities and private universities.

Table 5 Comparative Mean Analysis

	Educational Institution	N	Mean	Std. Deviation	Std. Error Mean
TTC	Public University	130	3.6330	.69542	.06099
	Private University/ College	72	3.3681	.58873	.06938
TIC	Public University	130	4.0359	.65336	.05730
	Private University/ College	72	3.7160	.66219	.07804
TPS	Public University	130	3.5523	.80917	.07097
	Private University/ College	72	3.0917	.71281	.08401
TCC	Public University	130	4.0474	.71791	.06296
	Private University/ College	72	4.0081	.81159	.09565
TSC	Public University	130	4.1923	.74434	.06528
	Private University/ College	72	4.1278	.77953	.09187
TAC	Public University	130	3.6474	.80391	.07051
	Private University/ College	72	3.4514	.70845	.08349

Table 5 presents the comparative mean analysis of digital competency levels among accounting students from public and private universities/ colleges. The table reports the mean scores, standard deviations, and standard error of the mean for six elements of digital competency areas: technical competency (TTC), informational competency (TIC), problem solving competency (TPS), communication and collaboration competency (TCC), safety competency (TSC) and accounting competency (TAC).

The mean score for technical competency is higher for public university students (3.6330) compared to private university/college students (3.3681). The standard deviation indicates that the variability in scores is slightly higher in public universities (0.69542) than in private universities/ colleges (0.58873). The standard error means are relatively close, suggesting a similar level of precision in the estimates for both groups.

For informational competency, public university students again show a higher mean score (4.0359) compared to their private university/college counterparts (3.7160). The standard deviations are quite similar for both groups, indicating comparable variability in scores. The standard error is slightly lower for public university students, indicating a slightly more precise estimate.

In the area of problem solving competency public university students score significantly higher (3.5523) compared to private university/ college students (3.0917). The standard deviation is higher for public universities, suggesting greater variability in problem-solving competencies among their students. The standard error indicates that the estimate for public universities is more precise.

For communication and collaboration competency, both public and private university students have very similar mean scores, with public university students slightly higher (4.0474) than private university/college students (4.0081). The standard deviations are comparable, though slightly higher for private universities/colleges, indicating slightly more variability in scores. The standard error is lower for public universities, suggesting a more precise estimate.

In safety competency, public university students have a marginally higher mean score (4.1923) compared to private university/college students (4.1278). The standard deviations and standard errors for both groups are similar, indicating comparable variability and precision in the estimates.

The mean score for accounting competency is higher for public university students (3.6474) compared to private university/college students (3.4514). The standard deviation indicates that the variability in scores is slightly higher in public universities (0. 80391) than in private universities/ colleges (0.70845). The standard error means are relatively close, suggesting a similar level of precision in the estimates for both groups.

The analysis of the mean scores indicates that, generally, public university students demonstrate higher digital competency levels across all six elements compared to private university/college students. The most substantial differences are observed in technical competency (TTC), informational competency (TIC), problem solving competency (TPS), where public university students score significantly higher. The differences in communication and collaboration competency (TCC), safety competency (TSC) and accounting competency (TAC) are minimal, suggesting comparable proficiency levels in these areas between the two groups.

These findings suggest that public universities in Malaysia may be providing more comprehensive training in certain digital competencies, particularly in areas directly related to practical and problem-solving skills. However, the variability in scores also indicates that there is room for improvement in both public and private universities to ensure that all students achieve a high level of digital competency necessary for the modern accounting profession.

Additional analysis to examine the hyphotheses, the independent T-test analysis have been tested. The result of the analysis are stated in Table 6.

Table 6 Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
TTC	Equal variances assumed	2.654	.105	2.734	200	.007	.26491	.09689	.07386	.45596
	Equal variances not assumed			2.868	167.936	.005	.26491	.09238	.08254	.44729
TIC	Equal variances assumed	.001	.977	3.316	200	.001	.31985	.09644	.12967	.51003
	Equal variances not assumed			3.304	145.002	.001	.31985	.09682	.12849	.51121
TPS	Equal variances assumed	2.303	.131	4.039	200	.000	.46064	.11405	.23575	.68553
	Equal variances not assumed			4.189	162.856	.000	.46064	.10997	.24349	.67779
TCC	Equal variances assumed	1.559	.213	.356	200	.722	.03933	.11055	-.17865	.25732
	Equal variances not assumed			.343	132.206	.732	.03933	.11451	-.18718	.26585
TSC	Equal variances assumed	.388	.534	.580	200	.562	.06453	.11121	-.15477	.28383
	Equal variances not assumed			.573	141.020	.568	.06453	.11270	-.15827	.28733
TAC	Equal variances assumed	1.606	.206	1.730	200	.085	.19605	.11332	-.02741	.41950
	Equal variances not assumed			1.794	162.804	.075	.19605	.10928	-.01974	.41184

Hypothesis 1 suggested that there are significant differences in the levels of technical competency between accounting students from public university and private university. Based on Table 6, The p-values (0.007 and 0.005) are less than 0.01, indicating a significant difference in technical competency between public and private university students and this hypothesis 1 is accepted.

Hypothesis 2 suggested that there are significant differences in the levels of informational competency between accounting students from public university and private university. Based on Table 6, the p-values (0.001) are less than 0.01, indicating a significant difference in informational competency between public and private university students, so the hypothesis 2 is also accepted.

Hypothesis 3 indicated that there are significant differences in the levels of problem solving competency between accounting students from public university and private university. The Table 6 shows that the p-values (0.000) are less than 0.01, indicating a significant difference in problem solving competency between public and private university students, so hypothesis 3 is accepted.

Hypothesis 4 stated that there are significant differences in the levels of communication and collaboration competency between accounting students from public university and private university. The Table 6 above shows that the p-values (0.722 and 0.732) are greater than 0.05, indicating no significant difference in communication and collaboration competency between public and private university students, so hypothesis 4 is rejected.

Hypothesis 5 suggested there are significant differences in the levels of safety competency between accounting students from public university and private university. The p-values (0.562 and 0.568) are greater than 0.05, indicating no significant difference in safety competency between public and private university students, so hypothesis 5 is also rejected.

Hypothesis 6 stated that there are significant differences in the levels of accounting competency between accounting students from public university and private university. The Table 6 shows that the p-values (0.085 and 0.075) are greater than 0.05, indicating no significant difference in accounting competency between public and private university students.

Discussions and conclusion

The level of digital competence among accounting students is mixed, with safety competency being the highest and problem-solving competency the lowest. Public university students exhibit significantly higher competency levels in technical competency, informational competency, and problem-solving competency compared to private university students. No significant differences were found in communication and collaboration competency, safety competency, and accounting competency between the two groups.

These findings suggest that public universities may be more effective in imparting certain digital competencies, particularly those related to practical

application and problem-solving. However, communication and security skills are about the same level of proficiency at both public and private universities. This shows that both types of schools are doing about the same in terms of digital skills. This analysis underscores the need for targeted improvements in specific areas to enhance the overall digital competency of accounting students across all educational institutions.

Future research should explore the complex relationships between digital competency, digital awareness, and performance to further refine educational strategies. Practical implications include the integration of digital competencies into the accounting curriculum to better prepare students for the digital demands of the accounting profession.

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