International Journal of Modern Trends in Social Sciences
EISSN: 2600-8777
Volume 6 Issue 25 (December 2023) PP. 01-12
DOI 10.35631/IJMTSS.625001

INTERNATIONAL JOURNAL OF MODERN TRENDS IN SOCIAL SCIENCES (IJMTSS)
www.ijmtss.com

DIGITAL CITIZENSHIP SKILL AMONG STML UNDERGRADUATE STUDENTS IN UUM

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Article Info:

Article history:
Received date: 24.09.2023
Revised date: 10.10.2023
Accepted date: 31.10.2023
Published date: 17.12.2023

To cite this document:

Che Hassan, N. A., & Yaacob, N. A. (2023). Digital Citizenship Skill Among STML Undergraduate Students In UUM. *International Journal of Modern Trends in Social Sciences, 6* (25), 01-12.

DOI: 10.35631/IJMTSS.625001

Abstract:

Citizenship in the digital era promotes ethical and critical thought about what is viewed, heard, and shared through communication media technology. The inability to appropriately employ digital technology today impedes social integration and personal growth. This research examined the level of digital citizenship skills among STML undergraduates at Universiti Utara Malaysia in Sintok, Kedah. The study centred on three subcomponents of digital citizenship skills: online well-being, online learning, and online safety. 178 undergraduate STML students were surveyed, employing survey questionnaires to obtain data. Using descriptive analysis to ascertain the level of digital citizenship skills among undergraduates The Statistical Package for the Social Sciences (SPSS) is also applied to data analysis. According to the study's findings, undergraduate STML students exhibit high levels of digital citizenship skills.

Keywords:

Digital Citizenship, Online Wellbeing, Online Learning, Online Security

Introduction

Presently, the inability to effectively utilize digital technology is a barrier to social integration and individual achievement, but the majority of students have low or no digital skills. Individuals with better digital citizenship abilities may gain higher-level skills that enable them to apply digital technology. Nevertheless, with the present degree of digital interaction, several new behaviors have arisen that may not be suitable in the actual world. Cyberbullying, self-

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disclosure of sensitive information, online fraud, cyber theft, and cybercrime undermine the well-being of society. In addition, digital citizenship skills encourage ethical and critical evaluation of what is seen, communicated, and shared through communication media technology. Consequently, digital citizen behavioral norms may prohibit teenagers from participating in online and offline inappropriate conduct, such as cybercrime and cyberbullying. A digital citizen has the knowledge and abilities necessary to effectively use digital technology, connect with others in order to participate in society, and generate and consume digital information.

In the domain of digital technology, online wellness and health are defined as physical and psychological well-being. Because of this, the required abilities for digital competence are insufficient. While utilizing digital technology, everyone must be mindful of the inherent physical threats. As adolescents and preteens seek to attain a healthy media balance in the digital era, this may mean that values such as self-care and friendship are pitted against one another. In this context, we can observe the significance of important social and emotional competencies, such as interpersonal skills, social competence, and self-management skills, which are required for constructing healthy personalities, regulating emotions, demonstrating empathy, and forming satisfying relationships (James, et al., 2021).

As a measure to alleviate digital difficulties, the notion of digital citizenship was established to increase youth understanding of online dangers. To cultivate good and practical technological applications, this idea is gaining popularity among academics and stakeholders from various fields. In addition, the vast literature, including multiple conceptualizations, added to the difficulty of understanding digital citizenship in the context of higher institution students (Ahmad, et al., 2021). The failure to grasp digital citizenship will limit the implementation of future interventions on digital issues, notably in future research, as well as the thorough integration of digital citizenship into education. According to Mahadir et al. (2021), implementing digital citizenship in schools enables students to discriminate between the positive and negative outcomes of digital technology use. As is well known, cyberbullying is becoming a bigger issue in Malaysia, particularly among young people. As a result, having information about good digital citizenship is crucial for preserving privacy. The Department of Statistics Malaysia has also reported statistics showing a 99.5 percent increase in cybercrime in 2020 (Jabatan Perangkaan Malaysia, 2021).

The majority of youth in this century do not comprehend how apparent technological norms and culture are formed, making the implementation of digital citizenship important. Teenagers learn things through social media platforms that are regarded as part of a culture that compels them to follow various trends or current behavior, regardless of the risks to their personal safety online. Collier (2009) asserts that having good digital citizenship practices helps one think critically and morally about what is shared and viewed online. The inability to use digital technology effectively is now a hindrance to social integration and individual advancement. As a borderless world, the internet offers several advantages to the current generation but poses several concerns. Digital Citizenship skills must foster citizenship, especially in Malaysian students, from the beginning. So, this study examined the level of digital citizenship skills among STML undergraduate students in online well-being, online learning, and online safety.

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Literature Review

Digital Citizen

The essential for the digital environment and must be emphasized in the current era of technology. The benefits of information and communication technology have enabled digital citizens to contribute to the digital environment. Moreover, by employing information technology and the communication skills of digital citizens, a thriving digital environment might be created by applying ethical principles, legality, safety, responsibility, and appropriate measures. Al-Abdullatif, et al. (2020) cite Almekinder's conclusion that the term "citizen" refers to a person who characterizes individuals inside society because society is the context in which we live, study, and work. According to Ribble (2015), a digital citizen should be aware of technological, cultural, and societal challenges and practice moral and legal values. To establish a safe community and environment, it is necessary to assess the degree of digital citizenship among students, especially in terms of their personal and social growth in cyberspace. In addition to understanding the growing digital landscape and the developmental features of adolescents regarding digital citizenship skills. (Mahadir, et al., 2021)

Digital Citizenship

Only a few studies evaluated students' digital citizenship behaviours, including those concerned with online learning, well-being, and security. Because it enables policymakers and institutions of higher education to assess trends more thoroughly and substantively, the utilization of digital citizenship is crucial. So, in this study, most focus only on these three variables. According to Mahadir, et al. (2021), digital citizenship relates to accepted behavioural norms linked to using technology. According to the Digital Literacy and Citizenship Curriculum, published in 2010 by Common Sense Education and the Harvard Graduate School of Education, digital citizenship is described as the responsible use of technology to study, create, and participate.

According to Ribble (2004), digital citizenship can be defined as principles of behavior relating to the use of technology. To better understand the complexities of digital citizenship and the issues of technology usage, abuse, and misuse, nine general components of behavior that comprise digital citizenship are outlined.

James et al. (2021) define digital citizenship as the proper utilization of technology for learning, creation, and participation. In this perspective, the "digital world" is our community, and participants are residents. As digital citizens, our individual and collective acts contribute to the creation of the digital environment in which we choose to reside. We think that digital citizenship is an essential life and learning skill. We must train young people to harness the potential of technology for responsible involvement and active engagement as the borders between digital and real-life continue to blur.

Digital Citizenship Skills

According to Collier's findings in his research, digital citizenship competencies or skills cultivate a critical and ethical understanding of what is seen and conveyed through the medium of communication. Digital citizenship skills are important especially to students because they can prevent the behaviour and knowledge to make them good digital citizenship. As a result, digital citizen norms of behaviour can shield adolescents from engaging in inappropriate online and offline activities like cybercrime and cyberbullying (Mahadir et al., 2021).

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Online Wellbeing

A person's behaviour when utilising technology is known as their online wellbeing. Online wellbeing is often referred to as digital health since it has a significant impact on both physical and mental health in this digital age. It can also be linked to ergonomic factors. According to Mahadir, et al. (2021), this level of well-being online demonstrates how crucial this awareness is because every student frequently encounters difficulties, particularly with regard to their body posture, their vision, and other factors.

Online Learning

Online education is a talent that more effectively improves students' abilities and productivity. Digital tools will be used by students for both learning and teaching. Online learning techniques include searching for knowledge and sharing it on social media. Therefore, it is necessary to conduct research based on this characteristic to see whether it influences students' digital citizenship abilities (Fuller, 2020).

Online Security

One of the abilities that pertain to personal protection is online security. Elcicek, et al. (2018) contend that consumer self-protection when utilising online technology entails having the knowledge and skills necessary to take reasonable safeguards when using digital electronic equipment. If one wishes to correctly download any required programme, for instance. This is done to stop data theft. As a result, understanding internet security is crucial, especially for students who frequently utilise technology in their daily lives. In our study, privacy concerns topped the list of adolescent worries about growing up with today's technology, indicating that adolescents are more concerned than adults may expect. Their explanations of these concerns include worries about safety and bad actors and problems about placing themselves and their families in danger. In Privacy & Security, the emphasis is on data and information privacy, which includes procedures that keep the private data of young people secure and protect them from harm. According to James, et al. (2021) as students share more information online, such as by opening accounts, making online purchases, and posting on social media, their data is gathered by gadgets, internet algorithms, corporations, third parties, data miners, face recognition, and the internet of things.

Methodology

The focus of this study was on quantitative approaches employing survey data collecting. This study measured the respondents' digital citizenship abilities using a questionnaire; consequently, a survey served as the research approach. This approach is advantageous since it can be delivered directly to respondents, and questionnaires generate precise data based on respondents' gained abilities. Using descriptive analysis, the variables of digital citizenship skills are investigated. As a consequence, the STML undergraduate students of Universiti Utara Malaysia were selected as respondents because they represent the generation of millennials and because Universiti Utara Malaysia is an institution of higher education that creates legitimate human capital relevant to the goal of this research. 178 of STML undergraduate students responded to the survey. The questionnaire contains two sections. The purpose of the first segment was to collect demographic data in order to understand the respondent's background. The second segment questioned their digital citizenship proficiency (online well-being, online learning, and online security). Strongly disagree, disagree, neutral, agree, and strongly agree formed the 5-point Likert scale used to assess digital citizenship skills. The survey questions on the scale were suitable for gauging the varying levels of responders. The Statistical Package for the Social Sciences (SPSS) was applied for data analysis.

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Data Analysis and Discussion

Table 1 displays the demographic data of the STML undergraduate students at Universiti Utara Malaysia. Data was determined that 178 respondents would finish the survey. The data indicate that 65 individuals (36.5%) of respondents are male and 113 individuals (63.5%) are female. The bulk of respondents were Malay 103 people (57.9%), whereas the second largest group was Chinese around 48 people (27%). Moreover, 18 (10.1%) of respondents identify as Indian. The remaining 9 people (5.1%) of respondents indicated that others. All of these respondents are from Indonesia. In addition, respondents were randomly selected from three programs: Bachelor of Technology Management with Honors (53.4%), Bachelor of Operations Management with Honors (32.6%), and Bachelor of Business Administration (Logistics & Transportations) with Honors (14%).

Table 1: Demographic Profile of Respondents

Item	Construct	Frequency	Percentage (%)
Gender	Male	65	36.5
	Female	113	63.5
Races	Malay	103	57.9
	Chinese	48	27.0
	Indian	18	10.1
	Other	9	5.1
Semester	Semester 1	11	6.2
	Semester 2	9	5.1
	Semester 3	41	23.0
	Semester 4	-	-
	Semester 5	33	18.5
	Semester 6	20	11.2
	Semester 7	64	36.0
Programmes	Bachelor of Technology Management with Honours	95	53.4
	Bachelor of Operations Management with Honours	58	32.6
	Bachelor of Business Administration (Logistics & Transportations) with Honours	25	14.0
Hours of digital device usage per day	0<2	1	.6
	2-4	4	2.2
	4-6	23	12.9
	6-8	53	29.8
	8-10	62	34.8
	>10	35	19.7

Table 1: (continued)

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Item	Construct	Frequency		Percentage (%)	
		Yes	No	Yes	no
Type of digital use	Smartphone	175	3	98.3	1.7
	Laptop	171	7	96.1	3.9
	Tablet	89	89	50	50
	Desktop	42	136	23.6	76.4
Purpose of using digital tools	Education	176	2	98.9	1.1
	Entertainment	166	12	93.3	6.7
	Communication	172	6	96.6	3.4
	Politic	7	171	3.9	96.1
	Others	108	70	60.7	39.3

In addition, the majority of respondents, 64 people were students in the seventh semester or higher (36%). 41 of the respondents equivalent to 23% are in the third semester category. 18.5% or 33 of respondents fell into the semester 5 category, and 20 (11.2%) of respondents fell into the semester 6 category. The students in categories semester 1 and 2 engaged in the survey the least, with rates of 6.2% and 5.0% respectively. For semester 4, there is no participant. Smartphones were used by 98.3% of respondents, followed by laptops (96.1%), tablets (50%) and desktops (23.6%). In addition, 98.9% of digital devices were used for educational purposes, while 1.1% were not, followed by communication (96.6%) and entertainment (93.3%), and not for amusement (6%). The same holds true for political purposes (3.9%), non-political purposes (96.1%), and other uses (60.7%). The majority of respondents spent between 8 and 10 hours or 34.8% utilizing digital tools, while only 0.6% spent less than 2 hours doing so.

As indicated in Table 2, a reliability study was undertaken for each variable, and an examination of Cronbach's alpha for each structure. Babbie (1992) classifies Cronbach's Alpha values according to a categorization in which a dependability index of 0.90 to 1.00 is regarded as very high, 0.70 to 0.89 as high, 0.30 to 0.69 as moderate, and 0.00 to 0.30 as low. As mentioned by Sekaran (2003), the Cronbach Alpha must be more than 0.5. The research revealed that Cronbach's alpha score for this variable exceeded 0.912, indicating a very high level of classification. The instrument variable for this investigation has an extraordinarily high level of dependability, according to Babbie's categorization.

Table 2: Instrument Reliability

Variable	No. Item	Cronbach's alpha
Digital citizenship skill	31	.912
Online wellbeing	11	.803
Online Learning	12	.922
Online security	8	.777

This instrument has also been evaluated by a number of academic professionals. Two STML professionals assessed this research tool for this study. Assessment professionals should conduct this evaluation. Item validity describes the extent to which the items on a test represent the whole domain that the analysis intends to evaluate. Experts assess the instrument based on factors such as the suitability of the instrument's content; the appropriateness of dividing topics into subheadings; the accuracy of the meaning of each study item; the clarity of the language used; the size of the font used; and the clarity of the instructions. Appropriate spacing exists

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between words; Likert scale indications are correct; no spelling errors; the instrument aims are clearly expressed.

Table 3: The Minimum and Maximum Range for Variable Digital Citizenship Skills

	N	Minimum range	Maximum range	Mean	Std. Deviation
Online Wellbeing	178	3	5	3.60	0.552
Online Learning	178	3	5	4.29	0.426
Online Security	178	4	5	4.39	0.311

Table 3 displays the minimum and maximum scores of the distribution data. According to the findings of the study, the standard deviation value of digital citizenship skills differs for online well-being (0.552), online learning (0.426), and online safety (0.311). The mean for online learning is 4.29, while the mean for online wellbeing data is 3.60. Therefore, the average minimum range and maximum range for each question item for online learning and wellbeing is 3 and 5, respectively. Additionally, the mean score for online security is 4.39, with a typical range of 4 to 5 for each question item. Therefore, the data for this study has a normal distribution.

Table 4: Cut Off Point

Scale	Level
1.00 – 2.33	Low
2.34 – 3.66	Moderate
3.67 – 5.00	High

Table 5 demonstrates that the skill variable has been subdivided into three sub-variables. The level of online wellbeing skills is moderate (mean = 3.60, SD = 0.55), although the level of learning skills is high (mean = 4.28, SD = 0.42). The mean score for online security skills also at a high level was 4.39, with a standard deviation of 0.31.

Table 5: The Level of Digital Citizenship Skill

Variable	Mean	Std. Deviation	Level
Online wellbeing	3.60	0.552	Moderate
Online learning	4.29	0.426	High
Online security	4.39	0.311	High

The overall mean score for each question on the digital citizenship online well-being ability among STML students is shown in Table 6. Online well-being skills test elements for digital citizenship have several moderate and high levels. Based on the obtained mean, question items 1, 2, 3, 5, 6, 7, and 9 have a moderate level, whereas questions 4, 8, 10, and 11 have a high level. The greatest level of all the question items is found in question item 4, "I utilize the internet extensively to acquire self-satisfaction," with a score of mean = 4.17 and Std. Dev = 0.847. This demonstrates that many students selected question item 4, indicating that they frequently utilize the Internet for their personal satisfaction. However, there are a number of negative impacts on health from this action. This is due to the fact that this item can be

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connected to questions 8, 9, 10, and 11. Students may suffer eye strain, headaches, shoulder discomfort, and awkward body postures while using digital gadgets excessively and for extended periods of time. Question Item No. 1, "I report incidences of cyberbullying, threats, and identity theft to authorities," which has a mean of 3.09, demonstrates the low mean. This demonstrates that some students choose not to report instances of cyberbullying because they feel that doing so would be unnecessary or minor given the processes they must follow. This explains why students have a moderate level of online well-being abilities. Technology is essential, but they must know how to utilize it properly without sacrificing their health.

Table 6: Digital Citizenship Skill Level in Online Wellbeing

Item	Mean	Std. Deviation
Q1. I reported incidents of cyberbullying, intimidation, and identity theft against the authorities.	3.09	1.151
Q2. I report identity theft that occurred against the authorities.	3.13	1.086
Q3. I once bought or downloaded pirated digital materials.	3.33	1.128
Q4. I use the internet for a long time to achieve self-satisfaction.	4.17	.847
Q5. I often feel restless/depressed/angry when there is no internet.	3.10	1.061
Q6. I use the internet to escape from unwanted problems and feelings such as helplessness and anxiety.	3.26	1.145
Q7. I use the internet as a way to escape emotional problems such as depression.	3.44	1.135
Q8. I feel tired when using digital tools for a long time.	4.13	.798
Q9. My vision becomes blurred when using digital tools for long periods.	3.87	.846
Q10. I once felt a headache when looking at the screen for a long time	4.04	.765
Q11. I once felt pain in the shoulders and neck due to the incorrect posture position of the screen.	4.09	.723

Table 7 shows all the components of digital citizenship in online learning skills. On a scale with a mean of 4.06, each of the twelve items in this question received a score between 4.06 and 4.67. The item question 6 had the highest mean score of the 12 questions for online learning, at 4.67. This demonstrates that students are adept at making social media profiles, particularly STML students. However, question number 12 equals 3.92 is a question with a moderate level. Students may wish to avoid disseminating misleading information on social media platforms on the need for humanitarian relief. In addition, this research demonstrates that online learning abilities are extremely significant and are becoming increasingly successful as student skills. This can be observed in the relationship between question items 1, 2, 5, and 7, in which students use the internet as a platform to find information, engage in the learning process, investigate online learning methods, and share information via social media. The Internet is an essential component of modern life, not only for people who work but also for students who study and use the online learning platform. In addition, question items 3, 4, 5, and 10 have a high level of difficulty. This demonstrates that students have a basic awareness of digital terms, how to spot hazards when using the internet, and how to verify the legitimacy of online sources.

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Table 7: Digital Citizenship Skill Level In Online Learning

Item	Mean	Std. Deviation
Q1. I use digital tools as teaching and learning tool.	4.57	.618
Q2. I use the internet as a more competent source of learning.	4.29	.544
Q3. I am good at digital terms; browser, search engine, download, email, and more.	4.56	.562
Q4. I evaluate the validity of the material source obtained online.	4.06	.608
Q5. I explore online learning methods.	4.49	.594
Q6. I know how to sign up a social media service application account by myself.	4.67	.560
Q7. I use social media service applications for information sharing purposes.	4.11	.637
Q8. I use digital technology as a medium to provide insights.	4.11	.587
Q9. I use digital tools to share ideas and write with others	4.09	.613
Q10. I quickly identify the threats of using the internet (Examples; identity theft, online fraud).	4.28	.795
Q11. I follow the development of current issues through the medium of digital technology.	4.31	.713
Q12. I disseminate information on humanitarian aid needed on social media sites.	3.92	.717

Students' level of digital citizenship in online security is depicted in Table 8. Overall, the question item pertaining to online security competencies exceeds the mean scale level of 3.67. Question item 5 pertaining to online security got the highest mean score of 4.81. This demonstrates that students constantly take precautions to ensure the security of their transactions, particularly online, to prevent losing their bank accounts, and it also relates to question item 1. This demonstrates that, as the digital space evolves, users must be more secure with online applications that we use to protect our personal information and be aware of internet security. However, question number eight, which has a score of 3.59, is of a moderate level. It is wrong for students to purchase or download pirated digital resources since they can be penalized for doing so.

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Table 8: Digital Citizenship Skill Level of Online Security

Item	Mean	Std. Deviation
Q1. I will make sure the money transaction had done on a secure trading site.	4.71	.514
Q2. I make sure not to make purchases from suspicious business sites.	4.46	.543
Q3. I set personal settings on my digital gadget so that it is not easily accessible to outsiders.	4.63	.588
Q4. I have storage of information in Cloud Storage (Google Drive, Dropbox, and others).	4.34	.563
Q5. I logged out after using the internet banking line.	4.81	.394
Q6. I know that conducting transactions online has the risk of being scammed.	4.39	.489
Q7. I make price comparisons for each digital trading site.	4.21	.562
Q8. I once bought or downloaded pirated digital materials.	3.59	1.071

The internet has altered the lives of students in terms of their overall self-development and move towards a more digital self-concept, as indicated by previous studies. According to research conducted by Mossberger, et al., (2012), there is a substantial correlation between these various types of Internet access and others in terms of the ability for digital citizenship, which encompasses online skills and behaviors. In comparison to their online well-being, students' online learning and online security skills are demonstrated to a high degree. Students consider not overemphasizing the balance of digital use when evaluating their online well-being competencies. Many disregard online well-being abilities as insignificant. Inadvertently, the utilization of technologically advanced, physical, emotional, and moral elements is a healthy combination for the construction of a good digital citizen. The findings of this study have major significance for teaching digital citizenship, particularly at the level of three STML modules per semester. Indirectly, digital citizenship educates people that respecting, educating, and protecting themselves and other Internet users are physically and emotionally necessary. Therefore, digital technology abuse, such as excessive and uncontrolled usage, has severe consequences for its users. The emphasis on digital citizenship education, especially in terms of online learning skills, suggests that technology as a learning medium has become increasingly integrated into the contemporary education system.

Fuller (2020) notes that ISTE recommends that educators should educate youth's digital citizenship by teaching them how to grasp and apply legal concepts to the content they publish, how to manage online security, and how to judge the credibility of online information. The significance of digital citizenship education, particularly in terms of the development of skills, the construction of a young identity in the digital environment, and the establishment of an ethical digital community, is an essential launching point for the study of digital citizenship among adolescents. The discussion of digital citizenship-related issues, such as digital literacy, media literacy, 21st-century skills, and digital competence, focuses on supporting young people in comprehending the values and norms connected with the responsible and acceptable use of digital technology. According to the findings of the study, STML students need further instruction or knowledge about the significance of digital citizenship and how to be a good digital citizen. Due to the advancement of technology, digital citizenship skills are crucial, but they must be used responsibly to prevent falling victim to online scams or threats.

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According to Cortesi et al., (2020) findings, policy options, such as digital citizenship education, achieve a compromise between the opportunities and risks of the digital world. Children and teenagers should be encouraged to participate actively and creatively with digital technologies. Malaysia is without exception. Policymakers, educators, and instructors should be prepared to participate in the digital citizenship education process.

The infusion of intelligent technology into many facets of everyday life, with artificial intelligence built into most gadgets, has generated worries, especially considering that technology addiction difficulties have persisted for decades. People began to explore media's beneficial and destructive effects on their lives and relationships, causing this subject to acquire traction. In addition, people's living and working patterns have evolved, demanding their ongoing contact with technology. For instance, students who learn exclusively online rely heavily on technology to complete coursework, take tests, and reside in houses with 24-hour internet connectivity. To fight the issue of technology addiction, the emotional component is being included in the concept of digital citizenship.

Conclusion

Citizenship in the digital age may be defined as the ability to interact with others online in a way that is courteous of others and mindful of one's actions, minimizing the likelihood of hurting or offending others. This skill must be taught and learned to establish the anticipated behaviour norm. In addition, the study results indicate that the competence level of STML undergraduates is high. Students' willingness to become digital citizens concerned with well-being, learning, and safety demonstrates inferentially that they have a high degree of knowledge regarding the proper use of technology. Nonetheless, instructors must be more conscious of their duties in educating their pupils about the values and responsibilities of being digital citizens. In addition, national development necessitated the formation of policies and practices to cultivate digital citizenship abilities, particularly beginning with the school.

Last, but not least, it is envisaged that more studies on digital citizenship abilities based on various demographics and characteristics would be possible in the future. Students need to become excellent digital citizens and utilize technology properly. Further study should be conducted using alternative paradigms for this digital citizenship competence.

Acknowledgments

The authors would like to acknowledge and extend special gratitude to the School of Technology Management and Logistics (STML) for their invaluable assistance in conducting this study, including their support in providing access to student data and the cooperation of the respondents who participated in this research.

References

Ahmad, N. A., Hassan, A., Abdullah, S. I. S. S., & Salim, S. S. (2021). The 4th Wave Evolution of Digital Citizenship Concept? Proposing Digital Citizenship Concept for Malaysia Context. International Journal of Human Resource Studies, 11(4S), 5679. doi:10.5296/ijhrs.v11i4S.19231

Agosto, D. E., & Abbas, J. (2017). "Don't be dumb—that's the rule I try to live by: A closer look at older teens' online privacy and safety attitudes". New Media & Society, 19(3), 347–365.

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IJMTSS
EISSN: 2600-8777
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DOI 10.35631/IJMTSS.625001

Al-Abdullatif, A., & Gameil, A. (2020). Exploring students' knowledge and practice of digital citizenship in higher education. International Journal of Emerging Technologies in Learning (iJET), 15(19), 122-142.

Al-Zahrani, A. (2015). Toward digital citizenship: Examining factors affecting participation and involvement in the Internet society among higher education students. International Education Studies, 8(12), 203-217.

Babbie, E. (1992). The Practice of Social Research. Belmont, California: Thomsom Wadsworth.

Ben Youssef, A., Dahmani, M., & Ragni, L. (2022). ICT use, digital skills and students' academic performance: Exploring the digital divide. Information, 13(3), 129.

CHIEF STATISTICIAN MALAYSIA OFFICE. (2021). Media Statement Crime Statistic, Malaysia 2021. Putrajaya: Jabatan Perangkaan Malaysia.

Collier, A. (2009). A definition of digital literacy & citizenship. Net Family News. Retrieved from https://www.netfamilynews.org/a-definition-of-digital-literacy-citizenship

Cortesi, S., Hasse, A., Lombana-Bermudez, A., Kim, S., & Gasser, U. (2020). Youth and digital citizenship+ (plus): Understanding skills for a digital world. Berkman Klein Center Research Publication.

Elcicek, M., Erdemci, H., & Karal, H. (2018). Examining the relationship between the levels of digital citizenship and social presence for the graduate students having online education. Turkish Online Journal of Distance Education, 19(1), 203-214.

Fuller, M. T. (2020). ISTE standards for students, digital learners, and online learning. In Handbook of research on digital learning (pp. 284-290). IGI Global.

James, C., Weinstein, E., & Mendoza, K. (2021). Teaching digital citizens in today's world: Research and insights behind the Common Sense K–12 Digital Citizenship Curriculum (Version 2). San Francisco, CA: Common Sense Media.

Landell, K. (1997). Management by Menu. London: Wiley dan Sons Inc.

Mahadir, N. B., Baharudin, N. H., & Ibrahim, N. N. (2021). Digital Citizenship Skills among Undergraduate Students in Malaysia: A Preliminary Study. International Journal of Evaluation and Research in Education, 10(3), 835-844.

Mossberger, K., Tolbert, C. J., & Hamilton, A. (2012). Broadband adoption| measuring digital citizenship: Mobile access and broadband. International Journal of Communication, 6(37), 2492-2528.

Ribble, M. (2015). Digital citizenship in schools: Nine elements all students should know. International Society for Technology in Education.

Ribble, M. S., Bailey, G. D., & Ross, T. W. (2004). Digital citizenship: Addressing appropriate technology behavior. Learning & Leading with Technology, 32(1), 6.

Sekaran, U. (2003). Research Methods for Business: A Skill Building Approach (2nd Edition). New York: John Wiley & Sons, Inc.