

The Role of Instructors' Technological Skills in Using Social Media in Enhancing Students' Digital Citizenship

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KEYWORDS Digital Citizenship. Higher Education. Instructors' Technological Skills. Information and Communication Technology. Saudi Arabia. Social Media

ABSTRACT Educational institutions have to work on fully preparing the next generation of students and instructors to enhance digital citizenship. This study aimed to examine the role of instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship. The methodology of the study followed a quantitative method using an electronic questionnaire. Two instruments were used to collect the data, from 292 instructors and 457 students who had participated, to collect their views about the role of instructors' technological skills in using social media to enhance students' digital citizenship. The results revealed that there is a positive relationship between instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship. This study was concluded with recommendations and future research.

INTRODUCTION

The emergence of the internet as a result of the prompt development of technology and information has greatly increased communication among individuals (Saputra et al. 2020). In addition, the movement toward globalisation has led to the emergence and vast increase in the use of social media, as well as the upsurge of Information and Communication Technology (ICT) over the past few years, which has affected the development of many fields, one of which is education (Casa-Todd 2018; Zakaria 2022). In schools, different skills are being promoted and fostered in students. Nowadays, learning and teaching in education systems are largely dependent upon the use of different IC Technologies to manage and deal with the information. According to Xu et al. (2019), modern societies have become increasingly dependent on ICTs, which have forced a convergence of face-to-face and digital behaviour. Moreover, the need to communicate socially at various educational levels and the need to facilitate social interaction between instructors and employees have argued for the increased usage of social media platforms (Casa-Todd 2018).

Social media platforms like Instagram and Twitter can be defined as sites that offer services that allow individuals to share content (Casa-Todd 2018; Haskey-Valerius et al. 2022). With the adoption of mobile technologies, digital communication will only continue to become increasingly abundant in modern society. Currently, social media platforms

have become one of the main tools used in the educational processes and the transfer of information in schools, universities, and other educational institutions (Xu et al. 2019). It is important to note also that college students constitute the highest percentage of social media users (Haskey-Valerius et al. 2022; Xu et al. 2019). Gleason and Von Gillern (2018) also noted that the number of hours students stay online and use social media per day is increasing and can reach up to 6 hours daily. When used properly, ICT and social media can enhance individual performance by compiling, converting, transferring, displaying, and storing all types of information. In addition to enhancing the capabilities of university students, ICTs and social media platforms have provided new means to facilitate interactions with many other individuals around the world (Xu et al. 2019). However, some disadvantages can occur, especially when there is a lack of proper training and education among the users (Trapero et al. 2020). Casa-Todd (2018) argues that the most important thing about social media is not what it can do but who uses it.

Instructors agree that one must teach students safe ways to navigate online environments and monitor their activities continuously (Casa-Todd 2018). Casa-Todd (2018), however, argued that it is also important to look at the positive sides of the use of social media and focus on making these experiences into social media leadership. Whether at home or school, Casa-Todd (2018) emphasised that these experiences are not sufficient and

that students are not able to take advantage of technology and social media. It is, therefore, critical to work on developing the appropriate skills among students and increasing awareness of unsafe practices, and this can be achieved only through collective work from educators, community members, and parents.

Digital Citizenship in the 21st Century

Life has changed radically since human existence shifted from an agricultural to an industrial civilisation in the 21st century. In the twenty-first century, education is expected to make further progress in improving student experience considering this is a period of rapid technological change (AlZebidi and Alsuhaymi 2021). In addition, further incorporation of digital citizenship in the educational system is also expected to advance. Consequently, people growing up in the twenty-first century have different perspectives and behaviours than past generations due to technology and unrestricted access to the Internet (Saputra et al. 2020). With the rise of social networks and collective identities in the digital age, the relationship of citizenship in the advanced world has ended up much more complex around collective personalities and within the setting of social systems (Fernández-Prados et al. 2021). For the 21st century, and considering the continuous movement toward globalisation, it is expected that everyone will have more digital access and use of technology. In addition, digital literacy will be further encouraged by incorporating the use of reading, writing, and other skills into different technology mediums (Snyder 2016; Zakaria 2022). Education needs to be tailored to prepare students for their role in 21st century society, especially when it comes to the content given in classroom education. Another focus in the 21st century must be on digital etiquette, in which individuals use technology appropriately, without harming or negatively affecting other individuals. Increasing user knowledge about digital laws is also very essential. This includes all the laws that concern the use of technology, and also the consequences of misbehaviour. At the same time, there are also rights the digital citizen must be aware of, such as privacy, free speech, and others (Choi et al. 2018).

The employment of technology as a component of progress is required. Nonetheless, the in-

attentiveness of well-applied technology stands in contrast to human ethical norms. For the 21st century, fostering digital citizenship must be the aim of schools and even parents during education. AlZebidi and Alsuhaymi (2021) argued that young people must have access to tools for making responsible decisions in online environments as part of digital citizenship, as well as a moral foundation for protecting future safety and building meaningful connections through social media. Unlike previous generations, 21st century learners and instructors are heavily exposed to influential online tools such as social networking platforms (Kammer et al. 2021). Information, insight and knowledge related to all the duties, rights, and citizenship in the 21st century can be found on such platforms. This has shifted the digital citizenship concept, as it is now up to individuals to formulate their own ethical standards (Al-Zahrani 2015). However, based on different studies, many students reported some concerns when it comes to social media use, due to factors like negativity, stalkers, bullying, inappropriate postings, lack of privacy, and others (Martin et al. 2018; Zhong et al. 2021).

When it comes to the level of digital citizenship, a study in Malaysia showed high levels of digital citizenship in terms of online wellbeing, learning, and safety among students (Mahadir et al. 2021). Another study by Erdem and Koçyigit (2019) reported medium levels of digital citizenship among undergraduate students. The level of digital citizenship was significant only concerning the skills of students, while factors like age, gender, university major, as well as the amount of time spent on computers and smartphones each day reported no significant difference. Moreover, Erdem and Koçyigit (2019) added that the highest awareness was found in technical skills, whereas the lowest awareness was found in Internet Political Activism. On the other hand, another study in China reported that students displayed more respectful behaviours in digital spaces while scoring lowest in self-protection and awareness (Kammer et al. 2021). Some countries have created agencies, such as Cybersecurity in Malaysia and programs such as CyberSAFE that are responsible for solving any safety issue at the national level, maintaining sustainability in terms of learning safely, and improving technological capacity (Mahadir et al. 2021; Zakaria 2022).

In the 21st century, everyone is a technology teacher, and all instructors must be working on reframing the way they deliver their curriculum. The COVID-19 pandemic has further emphasised this concept by shifting education toward remote learning instead of physical learning within an educational institution. This has altered digital citizenship, as most students are using this medium now. Nevertheless, Mahadir et al. (2021) concluded that nations all over the globe are attempting to participate in digital citizenship but have not completely implemented so-called digital citizenship education and the creation of digital citizens in schools. AlZebidi and Alsuhaymi (2021) support this fact and add that there are still many organisations that are unsupportive of digital citizenship, as well as students and instructors who are unwilling to learn and change. Many factors can act as a barrier to the implementation of digital citizenship. For example, Al-Zahrani (2015) stated that factors like economic growth, cultural-religious domination, conservatism, as well as centralisation can all impact the movement toward digital citizenship. When it comes to the factors that affect digital citizenship, internet efficiency was one of the strongly correlated factors (Kammer et al. 2021). It was stated that digital citizenship has multiple definitions and scales, which makes it difficult to confirm the availability of an effective and reliable measuring instrument (Fernández-Prados et al. 2021). According to Fernández-Prados et al. (2021), various ideas and perspectives about digital citizenship have been shaped by academic publications and international educational practices and programs over the last few decades. Their study identified three dimensions to measure citizenship, that is, digital competence, critical awareness, and digital activism. Another study by AlZebidi and Alsuhaymi (2021) identified nine dimensions of digital citizenship and classified them under the three categories of respect, education and protection. It is imperative to note also that there is a lack of adequate studies to tackle digital citizen behaviours and activities (Kammer et al. 2021). According to Xu et al. (2017), individual behaviours can fluctuate because of factors like socioeconomic region and status due to the differences in accessing digital technologies and social networking. More specifically, digital citizenship levels were higher among those living in cities compared to those living in villages. This argues the need to further

investigate this relationship in order to establish significant results and associations.

Purpose of Study

The main purpose of the study was to examine the role of instructors' technology skills in enhancing students' digital citizenship. In addition to that, the study focused on the relationship between the instructors' technological skills and their role in enhancing students' digital citizenship. Due to the exponential growth of the Internet and digital technologies, researchers are currently focusing their research efforts on various key competencies. According to AlZebidi and Alsuhaymi (2021), technology literacy, competence, awareness, and experience in digital technology all play an important part in ensuring that students can interact and exchange data in an online environment. Therefore, comparing instructors' and students' views about the most-used platform of social media is an important concept to be examined. The results of this study will show that instructors' and students' capabilities of digital citizenship and development of solutions can be identified for their deficient characteristics, and this identification is critical in the context of education programs that seek to produce students who are equipped with 21st-century abilities (Erdem and Koçyigit 2019). It is critical that both instructors and students are developing skills that will enable them to find and share information responsibly.

Research Questions

The research questions were the following:

1. Is there any relationship between instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship?
2. Is there any difference between instructors' views and students' views about the role of instructors in enhancing digital citizenship?
3. Is there any difference between instructors' views and students' views about the most-used platform of social media?

Objectives of the Study

The current study focused on the following goals:

1. To identify the relationship between instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship.
2. To find the difference between instructors' views and students' views about the role of instructors in enhancing digital citizenship.
3. To find the difference between instructors' views and students' views about the most-used platform of social media.

Research Background

Digital Citizenship

Digital technologies are all around nowadays, and it is becoming vital to integrate technology into public and private education. Though the use of media and digital technology is becoming more prevalent in schools, there are still some issues to face when it comes to the way these two tools are used in classes, how they are incorporated, and whether the instructors and students have the proper skills and knowledge and are fully engaged with this transition (Mahadir et al. 2021). Therefore, it is imperative to learn how to use these tools properly and wisely. Digital citizenship is defined as being able to use technology ethically and being aware of how to deal with the information that is shared and retrieved from the internet (AlZebidi and Alsuhaymi 2021). It can also be defined as the way different people who use that technology interact with one another (Elcicek et al. 2018; Zakaria 2022). The use of social media to enhance digital citizenship can provide a lot of help and entertainment, however, it can also come with a huge responsibility.

Digital citizenship, based on its different categories and models, mainly involves individual engagement, media literacy, critical resistance, and digital ethics (Choi et al. 2018). Al-Zahrani (2015) also defined Respect, Educate and Protect (REP) as the main themes for digital citizenship. These themes describe the proper behaviour that should be observed by users in digital environments. Casa-Todd (2018) debated that a major drawback is present with the variations of models adopted by schools when it comes to digital technology-the majority focus on safety during use rather than other aspects. Kammer et al. (2021) further added that it is imperative to ensure the safety of stu-

dents. However, the deficit model does not teach students how to leverage online spaces to their advantage. Students must be taught the basics of online safety. In addition, students must have the ability to determine the reliability of the information they find online and how to use it within an appropriate context. Digital citizenship for students can also include things like the ability to share ideas without being disrespectful and the ability to deal with disagreement in online spaces. AlZebidi and Alsuhaymi (2021) argued that developing digital citizenship that is truly inclusive of young people requires learning more about what disturbs them when they become involved in online communities and participating in public debates about the internet (Trapero et al. 2020). As for instructors, digital citizenship can mean the ability to teach students how to ethically and efficiently surf the internet. Moreover, the teacher must ensure that the students are aware of the possible future impacts of the things they share online. Casa-Todd (2018) reported that young individuals with strong support are more likely to engage in meaningful activities that aid in their personal development, while those without such mentorship are more likely to engage in wasteful practices.

Digital Citizen

Every time an individual uses the internet, a digital footprint is left, whether from sending messages, composing emails, or browsing any website. In order to leave an appropriate digital footprint, there is a necessity for the presence of individuals with specialised skills and knowledge of the digital world, also known as Digital Citizens. A Digital Citizen is any individual that has the power to utilise technology to make positive change and engage in a community well beyond borders (Xu et al. 2019). A good digital citizen is also a person who uses technology responsibly and appropriately (Xu et al. 2019). AlZebidi and Alsuhaymi (2021) added that being a digital citizen means that the individual is aware of the different benefits and exposures that come from digital technology and being connected with the surrounding society. Elcicek et al. (2018) noted that the digital environment can successfully be shaped by digital citizens who share the appropriate content in a way that is legitimate, secure, mindful and fitting. They added that the sophisticated views of digital citizens

about personal and societal progress in cyberspace make them vital for building communities and promoting safety. A digital citizen may successfully affect the digital world by utilising citizens' information and communication technology abilities in a legal, safe, responsible, and acceptable manner (Elcicek et al. 2018; Zakaria 2022). Digital citizens also make safety a top priority when using technology (Xu et al. 2017). Mahadir et al. (2021) noted that there are general skills for being a good digital citizen. These include communication skills during scientific problem-solving, knowledge about digital technologies, and the use of learned theories of knowledge. Most importantly, an essential skill of any digital citizen is the ability to differentiate between personal and professional social media use.

Choi et al. (2018) explained that different factors affect the teacher as a digital citizen and the level of their citizenship, such as the teacher's individual background and internet use, as well as psychological characteristics. In order to be digital citizens that use and produce professional content, students and instructors must be critical thinkers and have good media literacy (Gleason and Von Gillern 2018). In addition, they must show an ability to follow safe practices. Instructors, specifically, have expectations that they need to meet as digital citizens when their role in transferring knowledge to students is considered (Choi et al. 2018). In addition, instructors as digital citizens must post the appropriate knowledge and skills that allow them to transfer this knowledge to the next generation (Gleason and Von Gillern 2018). Instructors must also be mindful of the type of information they share with their students. Technology might make the information instantaneous. However, it is difficult to know which sources of information are fake and which ones are credible. This is essentially critical to avoid passing along wrong information to the students.

Social Media and Digital Citizenship

Social media developed with the emergence of the internet during the digital era. Its growth has been exponential over the last several years. The various social media platforms offer faster methods for communicating through the internet, such as the use of messengers instead of emails to send text messages, photographs, and videos. In addition to making the lives of citizens more mobile,

social media has enabled them to interact with one another almost without boundaries, leading to a concept called "digital citizenship" (Saputra et al. 2020). In light of global media and social change, digital citizenship is becoming more and more relevant (Zakaria 2022). This can be greatly noted in countries with rapid economic growth due to vast technology consumption (Al-Zahrani 2015). However, Gleason and Von Gillern (2018) noted that the development of digital citizenship is greatly affected by the activities on social media. Al-Zahrani (2015) added that controlling the huge amount of content offered is difficult as the content is distributed widely among social networking tools.

Inevitably, social media conveyed both positive and negative effects that disrupted citizens' behaviours. Social media can be used to help students develop digital citizenship through formal and informal learning environments in secondary schools (Gleason and Von Gillern 2018). Taking care of the environment involves using technology responsibly, including in educational settings. However, young people, especially students, want attention and validation that can be attained by the use of social media. Many students are driven by the number of likes and comments they get daily on social media platforms, and thus, they may post and communicate anything to get them, without restriction. This can harm themselves as well as others (Al-Zahrani 2015). In addition, long durations of using social media can affect the physical and mental health of students (Al-Zahrani 2015). Moreover, students must be aware that what they post is not always secure, as anyone can take their content, without permission or copyright, and share it with others.

Instructors' Views of Social Media to Enhance Students' Digital Citizenship

Transiting instructors to a digital citizenship perspective requires plenty of determination and time. Although digital citizenship is a worldwide phenomenon, it is unclear how it might be developed through coordinated global educational efforts (Zakaria 2022). Many barriers are presented, and some are still not clear to instructors and administrators (Snyder 2016). Educators are constantly being encouraged to use social media in their classroom settings in order to connect with students on a larger scale. However, the literature lacks

sufficient research studies and evidence that can guide instructors on how to implement effective methods to enhance digital citizenship. Instructors, with the help of educational institutions, must work on updating their policies related to digital technologies and citizenship. In addition, an examination of the instructors' perspectives can give a better understanding of the possible benefits and drawbacks of digital citizenship, global cooperation, and social media. Therefore, more research must be done to explore the different methods that can assist instructors in this process. Considering that privacy settings are not absolute and that the information shared can go way beyond the intended audience, teaching digital citizenship and connecting students with society is an obligation for each teacher. Cases of misuse and abuse are widely reported, especially among young, school-aged individuals (Haskey-Valerius et al. 2022). In general, Snyder (2016) noted that instructors perceive technology and social media as something that have positive and negative influences, depending on how it is used. In order to have a positive impact and enhance digital citizenship, multiple factors, based on the instructors' perspectives, must be explored.

First, instructors perceive the use of some activities and technological tools as an effective method to enhance digital citizenship within their classrooms (Gleason and Von Gillern 2018). For example, according to Gleason and Von Gillern (2018), it was beneficial to use infographic design tools to present critical facts and data on food loss and waste throughout the world. The tool was valued by the instructors, and the majority expressed an interest in enabling similar tools in their classrooms as a tool for students to think critically. Elcicek et al. (2018) added that instructors believe that online education settings are good for interaction and practicability.

Second, Snyder (2016) reported that instructors perceive things such as website filtering and the incapacity of institutions' information technology departments to address technical issues as important barriers to improving digital citizenship. Due to privacy issues and other restrictions, social media platforms and many other websites are banned from devices in many schools, leading students to use their personal phones. Having continual technology or system failure, as well as problems with Wi-Fi and cloud systems, was perceived

to be a waste of time for instructors and acted as a barrier for them in using social media.

Third, it is important to note that no comprehensive digital citizenship program can be offered without providing professional development for faculty and staff (Snyder 2016). This comes from the fact that no one can teach or model what they do not understand. It is, therefore, vital for all instructors to be well versed in digital citizenship and mindful of what they share with their students. According to Casa-Todd (2018), instructors are often hesitant to model social media use because they do not feel comfortable with it, and they argue the need to have specific individuals assist them with their classes. Snyder (2016) also supports this fact, as many instructors reported a lack of sufficient training and resources. Choi et al. (2018) added that instructors' views on digital citizenship were significantly influenced by multiple factors such as years of experience, the use of social network sites (SNSs) for teaching, and self-efficacy in using the internet. Therefore, instructors must be offered efficient resources and websites that have sufficient materials to allow instructors to effectively learn about digital citizenship and how to teach digital citizenship. In addition, formal training in the area of copyright and fair use is a must in the digital age, and educational institutions are obliged to ensure that all instructors are aware of these two concepts. Getting permission to use something that does not belong to the teacher and following the fair use guidelines when teaching, as well as transferring these two concepts to the students, are top priorities that must be addressed to avoid violations (Choi et al. 2018; Zakaria 2022).

Fourth, instructors perceived the students' knowledge of digital citizenship to vary among students, wherein some have no knowledge, others have weak or medium knowledge, and only a few demonstrate strong knowledge and experience. Although some students had basic background knowledge of digital citizenship, they did not comprehend specific aspects of digital citizenship or the degree of complexity connected with it. Based on the perspective of the majority of instructors, digital citizenship was a foreign concept among middle school students, which acts as a huge barrier to enhancing digital citizenship (Snyder 2016). Additionally, some students were reported to have difficulty collaborating with others in social set-

tings, which can negatively impact their social media use. Moreover, instructors perceive the environment at home and the parent's knowledge and understanding of the importance of digital technology as a barrier to enhancing digital citizenship (Zakaria 2022). Some parents restrict the use of the internet or do not allow their children to use the internet at home, which prevents them from revising their studies and enhancing their knowledge. It is important to note also that some students do not have access to the internet at home, which must be taken into consideration when it comes to barriers to enhancements.

In addition to the instructors' perspectives on social media, Choi and Cristol (2021) noted that there are other barriers that instructors face that prevent them from using social media to enhance digital citizenship. These include the inability to control all students, language barriers and miscommunication, technological obstacles, skill levels, and ease of use. Moreover, Trapero et al. (2020) assessed the association of digital citizenship with other variables like age, gender, region, and educational level of instructors. Moreover, indicators related to academic performance are preferentially used by male instructors, while indicators related to creating harmony within the groups are less popular. The study also noted differences in the instructors' focus among those teaching in elementary grades compared to the intermediate level. Therefore, Trapero et al. (2020) noted that it is important for schools to consider how gender, age, and educational background influence the ideas of instructors regarding digital citizenship in their educational strategy.

Students' Views of Social Media to Enhance their Digital Citizenship

School and college time are crucial for establishing an individual's identity and developing their morals and values before entering the workforce or society (Zhong et al. 2021). Those students must be counselled on how to avoid cyberbullying because they are heavily involved in the internet and digital culture. Martin et al. (2019) criticised the behaviours and views of teenagers and young individuals and reported that they do not enhance the digital citizenship concept. According to them, although teenagers are driven to keep the details about their social life secret from their parents and

instructors, they have not developed a complete understanding of and abilities for safeguarding themselves in the digital world. Hence, understanding the elements that influence cyberbullying and other digital citizenship dimensions based on viewpoint perspectives, as well as devising focused preventative efforts, is critical for effectively tackling the problem.

When it comes to the factors related to working in the digital world and social media, a study by Xu et al. (2019) reported performance expectancy, which explains whether social media can be perceived as having value among college students and being a positive predictor of students' digital citizenship in all its dimensions. More specifically, those with higher performance expectancy are more likely to use both technological devices and social media and thus can contribute to the level of digital citizenship (Haskey-Valerius et al. 2022). Moreover, social influence, which involves the perception of other peoples' opinions on social media, has a great influence on individual behaviour while using media, thus affecting the enhancement of digital citizenship (Xu et al. 2019). Haskey-Valerius et al. (2022) also reported that students perceived facility conditions, in terms of technology preparedness and availability of infrastructure, to support the transition to digital citizenship, another factor for enhancing digital citizenship. Furthermore, digital citizenship among students is also affected by effort expectancy, also known as digital complexity, which is the student's view of the difficulties involved in using social media. To enhance digital citizenship, students must perceive the use of social media as being easy or not complicated, as this can affect the students' level of trust (Xu et al. 2019).

Moving to the negative aspect, Martin et al. (2018), however, reported that middle school students were made most anxious by content that includes inappropriate posts and comments, the mean behaviours and criticism of some users, internet speed, safety, and issues related to hacking, advertisements, spam, and fake news, as well as the inability to control the content to be seen (Martin et al. 2018). Another study among college students by Kara (2018) reported that some bad behaviours affect the enhancement of digital citizenship. Since not all individuals adhere to social media guidelines, all of the students agreed that there is a need for ethical and moral standards on the

internet (Haskey-Valerius et al. 2022). Furthermore, more than half of the college students stressed the importance of restrictions or censorship of the content available on the internet. In addition, students perceived downloading copies of unregistered items as immoral behaviour, and the majority of students believed that they themselves are following ethical principles since they are respectful to everyone (Kara 2018). The students also stated that they do not desire to participate in political activities online due to mental distress, societal pressure, and concern of negatively influencing their future life. To conclude, students' views and perspectives are influenced by multiple factors. Understanding what students perceive, as well as the factors behind having such perceptions, is one of the early and essential steps that must be taken to know which categories should be targeted.

METHODOLOGY

The study applied quantitative research to achieve its objectives. The participants of the study were undergraduate students from three universities, namely, University of Ha'il, Imam Mohammad Ibn Saud Islamic University, and Umm Al Qura University in Saudi Arabia. The total number of instructors as participants was 292 and the student participants numbered 457. This study used three online surveys created for this study, that is, for instructors' technological skills, instructors' digital citizenship, and students' digital citizenship (Appendix 1). In this study, Cronbach's Alpha for instructors' technological skills, instructors' digital citizenship, and students' digital citizenship were measured and found acceptable ($\alpha = .735, \alpha = .905$, and $\alpha = .960$). Ten experts reviewed the survey items to make sure they were related and achieved the goal of the study. SPSS software was used to analyse the data and several inferential statistics were used

to answer the research questions such as the mean, standard deviation, percentage, correlation analysis, and an independent sample test.

RESULTS

Demographic Information of the Participants

Most of the instructors were from the University of Ha'il at thirty-nine percent ($n=114$). The second cadre of respondents was from Imam Mohammad Ibn Saud Islamic University at 35.3 percent ($n=103$). The smallest of the samples came from Umm AlQura University and amounted for 25.7 percent ($n=75$) of the study sample. This showed that most of the students were from the University of Ha'il as compared to Imam Mohammad Ibn Saud Islamic University. On the other hand, most of the students attended the University of Ha'il at 35.89 percent ($n=164$), followed by 32.82 percent ($n=150$) from Imam Mohammad Ibn Saud Islamic University. The smallest of these groups was in Umm AlQura University at 31.29 percent ($n=143$) (See Table 1).

Table 2 shows that most of the discipline categories were in the humanities at 41.8 percent ($n=122$), followed by science at 33.9 percent ($n=99$). The smallest of these categories was from the med-

Table 2: The frequency and percentage of the participants according to their disciplines

	Instructors		Students	
	Frequency	Percentage	Frequency	Percentage
Humanities	122	41.78	320	70.02
Science	99	33.90	96	21.01
Medical	71	24.32	41	8.97
Total	292	100	457	100

Source: Author

Table 1: The frequency and percentage of the participants according to their university

	Instructors		Students	
	Frequency	Percentage	Frequency	Percentage
University of Ha'il	114	39.04	164	35.89
Imam Mohammad Ibn Saud Islamic University	103	35.27	150	32.82
Umm AlQura University	75	25.68	143	31.29
Total	292	100	457	100

Source: Author

ical studies at 24.3 percent (n=71). These implications showed that most of the students were either in the humanities or sciences. However, most of the students were in humanities, at 70.02 percent (n=320), followed by science at 21.01 percent (n=96), and the smallest sample of 8.97 percent (n=41) in medical studies. This showed that there was a difference in the disciplines attended by the students.

According to Table 3, instructors' technological skills had an average of 4.29 (SD=0.94) and their digital citizenship skills were 4.11 (SD=0.86). Students' digital citizenship had an average of 3.65 (SD=1.04).

Research Questions

Research Question #1: Is there any relationship between the instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship?

The correlations between the instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship are presented in Table 4. There exists a positive relationship between instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship with $r(292) = .160$ at $p < .006$, which indicates that an improvement in the instructors' technology skills led to the enhancing of students' digital citizenship.

Table 4: Correlation between instructors' technological skills and their role in enhancing students' digital citizenship

Pearson's Correlation	Sig.
.160**	.006

Source: Author

**Correlation is significant at the 0.01 level.

Research Question #2: Is there any difference between instructors' views and students' views about the role of instructors in enhancing digital citizenship?

There was evidence of a significant difference between students' views and instructors' views for the instructors (M=4.11, SD=0.86) and students (M=3.65, SD=1.04) with $t(747) = -9.139$ at $p=0.000$. This illustrates that the instructors' views were more positive than the students' views on the role

Table 3: Mean and standard deviation for both surveys' items (instructors and students)

Survey	Survey items	M	SD
Instructors' Technological Skills	1	4.35	0.82
	2	4.35	0.89
	3	4.29	0.91
	4	4.34	0.83
	5	4.03	1.21
	6	4.31	0.99
	7	4.28	1.21
	8	4.32	0.86
	9	4.53	0.69
	10	4.29	0.94
	11	4.18	0.87
	12	4.28	0.86
Total		4.29	0.94
Instructors' Digital Citizenship	1	4.15	0.89
	2	4.08	0.87
	3	4.25	0.86
	4	4.04	0.86
	5	4.20	0.81
	6	4.11	0.85
	7	4.10	0.66
	8	4.26	0.85
	9	4.02	0.85
	10	4.07	0.84
	11	4.14	0.91
	12	4.24	0.88
	13	4.00	0.95
	14	4.07	0.93
	15	4.11	0.78
	16	3.89	0.77
	17	4.27	0.83
	18	3.98	0.96
	19	4.23	0.73
	20	4.12	0.92
	21	4.12	0.92
Total		4.11	0.86
Students' Digital Citizenship	1	3.63	0.92
	2	3.58	0.95
	3	3.65	1.08
	4	3.76	0.99
	5	3.60	1.10
	6	3.70	1.08
	7	3.68	1.08
	8	3.73	1.09
	9	3.73	0.99
	10	3.68	1.07
	11	3.82	1.03
	12	3.66	1.03
	13	3.55	1.04
	14	3.49	1.09
	15	3.53	1.01
	16	3.75	0.96
	17	3.58	1.03
	18	3.48	1.02
	19	3.50	1.06
	20	3.64	1.05
	21	3.85	1.03
Total		3.65	1.04

Source: Author

of instructors in enhancing digital citizenship as shown in table 5.

Research Question #3: Is there any difference between instructors' views and students' views about the most-used platform of social media?

Most of the instructors used Twitter at 27.97 percent compared to the students' use at 13.08 percent. The students scored higher on Snapchat at 35.57 percent as compared to the instructors at 26.59 percent. On Facebook, the instructors at 16.98 percent were higher than the students at 3.79 percent. On YouTube, the students were higher as compared to the instructors. This illustrates that the students used Snapchat and Instagram most of the time, while the instructors were dominant on Twitter and Snapchat as shown in table 6.

DISCUSSION

The aim of the first question was to recognise the relationship between instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship. According to the results of this question, there was a significant correlation between instructors' technological skills in the use of social media and their role in enhancing students' digital citizenship. This result showed that instructors' technological skills

have a vibrant enhancement of students' digital citizenship. Although students have good skills using social media, the instructor's role is important to guide the students and enrich them with morals and values when using these technologies (Gleason and Von Gillern 2018). It is the instructor's role to support the students' awareness of legislation concerning using social media tools in the classroom experience. Digital citizenship is acquired when students are engaged in the international collaborative environment (Kammer et al. 2021), therefore instructors are required to provide collaborative learning activities for positive engagement (Haskey-Valerius et al. 2022). Moreover, instructor awareness of using social media to enhance students' digital citizenship – teaching and preparing students to practice digital citizenship – may take a considerable amount of time and effort away from the educational systems and their instructors. Students are faced with many technology-related issues in today's world. Things like false information, privacy concerns, oversharing, altered media, and cyberbullying are common for students to come across, particularly in the increasingly digital world (Haskey-Valerius et al. 2022).

With the increase of applications in the digital world, there is a need for instructors to proactively teach digital citizenship as well as guide students on how to navigate the digital world and the important part they play in this process (Martin et al.

Table 5: Mean, standard deviation, and independent sample test

	Mean	SD	t	df	Sig. (2-tailed)
Instructors	4.11	0.86	-9.139	747	0.000
Students	3.65	1.04			

Source: Author

Table 6: The frequency and percentage of the most-used platforms of social media by instructors and students

	Students		Instructors	
	Frequency	Percentage	Frequency	Percentage
Facebook	31	3.79	136	16.98
Snapchat	291	35.57	213	26.59
Twitter	107	13.08	224	27.97
YouTube	184	22.49	108	13.48
Instagram	205	25.06	120	14.98
Total	818	100	801	100

Source: Author

2019). By increasing the number of individuals who realise that being a good citizen online is important, and by achieving the necessary level of digital citizenship literacy, it can be possible to combat technological misuse (Mahadir et al. 2021; Milenkova and Lendzhova 2021). Finally, the results proved that instructors' digital citizenship should be taught in all schools as a way for pupils to differentiate between the positive and negative events that occur when they use digital technology. By leveraging information and communication technologies, students will not only become more literate but will also be able to create a more literate society (Zakaria 2022). Understanding the evolving digital world and adolescents' developmental features is a vital starting point in the exploration of digital citizenship among students (AlZebidi and Alsuhaymi 2021).

Regarding the second research question, it focused on the difference between instructor views and student views about the role of instructors in enhancing digital citizenship. The result showed that there was a difference between the instructors' views and the students' views about the role of instructors in enhancing digital citizenship. This result could be explained by the instructors feeling they are responsible for inspiring young minds. In addition, instructors should properly explain to students about the fair use of digital technologies and help them understand their proper application. Furthermore, instructors must be the model for good, ethical behaviour in the students. To ensure that students are educated and develop their digital citizenship, it is necessary also to employ all elements of education to ensure a comprehensive concept of digital citizenship (Mahadir et al. 2021). Instructors should teach students to enjoy the benefits offered to them by digital technologies and social media, while at the same time remaining able to protect themselves when connected with others online.

On the other hand, the students' view of social media varies on different factors such as gender, age, family, friends, personal background level, society, and others (Martin et al. 2018; Choi and Cristol 2021). In addition to demographic and socioeconomic factors, there are other factors related to the students' views, which greatly affect the enhancement of digital citizenship. In order to be aware of these views, the practices of individuals and the ways they use digital technolo-

gies and social media must be understood first, as this greatly affects the direction of enhanced digital citizenship.

More specifically, the majority of students perceived social media to be a tool that allows them to be able to learn about their friends' lives and what they are up to. Only a few, however, reported using social media for information related to world news, liking these tools because of the ability to communicate with people worldwide, or using the internet to upload photos and videos. Researchers in another study supported this finding, as they found that perceived usefulness in college students predicts their intention to use social media and that perceived usefulness mediates their intention (Kammer et al. 2021). Similar to the information category, there was a large agreement among students in the communication category, as they reported chatting and communicating with friends as the important factor for them (Martin et al. 2019). In addition, social media can also serve as an entertaining tool for a number of individuals who enjoy watching entertaining movies, videos, and photos.

The third research question aimed to identify the difference between instructors' views and students' views about the most-used platform of social media. The result showed that the most-used platforms by instructors were Twitter and Snapchat while students preferred Snapchat and Instagram. The results are consistent with Snyder (2016), Gleason and Von Gillern (2018), and Choi and Cristol (2021). Many studies showed the popularity of Twitter as the social media most used by instructors (Gleason and Von Gillern 2018; Milenkova and Lendzhova 2021). Moreover, Snapchat enables users to post different media such as photos, videos, and text. Its features attract young people, as it lets the users share and reply to each other in addition to offering online and offline discussions (Alhabash and Ma 2017). These results could describe Snapchat and Instagram platforms as convenient self-expressions.

CONCLUSION

The digital world is part of the real world. Like any other world, the digital world requires responsible members that are aware and respectful of its rules. Advanced digital technologies and devices have become major features of learning reinforcement tools. Whatever the case, the digital technol-

ogy tools that are used can pose multiple risks to the users, such as incorrect site materials that lead to harmful effects on mental and physical health. Due to the disruptive state of today's society, digital literacy is an absolutely necessary skill in teaching users to behave as smart and good citizens. In addition, it has been suggested that digital citizenship may provide a solution to the cyber safety dilemma. This concept has the main objective of making a difference among generations, especially the younger ones, in order to form appropriate and sensible choices in different computerised settings and circumstances. Therefore, educational institutions should recognise the significance of beginning digital citizenship teaching at the primary level.

To conclude, despite the fact that certain barriers to access to technology may be readily overcome with instructors' support in lifting site restrictions, other barriers may be a bit more difficult to overcome. Barriers that are related to technological infrastructures such as bandwidth, simultaneous connections, and hardware devices should be tackled by the administration of the educational entities through further investments in both solutions and new technology. The role of parents should not be forgotten in future research, considering that students are greatly affected by the environment at home and the availability of supportive parents. Educational institutions need to adopt robust digital citizenship programs and do so in a systematic manner so that students can learn the skills that they need.

RECOMMENDATIONS

The use of social media has spread among young people extensively and it is important to educate them with the responsible, safe, ethical, and legal use. It is necessary to provide professional development for the teachers on integrating social media in schools and universities. In addition, students should promote media literacy in schools, and maintain an appropriate digital identity in an online environment. Teaching digital citizenship prepares students with the knowledge and the skills that guide them when they are engaged in an online environment. Teachers' perceptions and attitudes should be developed to enhance the level of social media attitudes, responsibilities, ethics, and protection. Accordingly, students would learn how to be good digital citizens.

ACKNOWLEDGEMENT

Funding

This research is funded by Scientific Research at the University of Ha'il, Ha'il, Saudi Arabia (161163). The funding is not involved in any aspect of the study design, delivery or publication.

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Paper received for publication in September, 2022
Paper accepted for publication in October, 2022