Analyzing Student's Perceptions about the Values of Digital Citizenship

Abdelsalam F. ALAwAmRAh[1,], Hadi Al Ajmi[2], Najwa A. Darawsheh[3], Hanadi Alrashdan[3], Khaleda Kh Alkailanee[4], Abdulla sultan bin Hareb almheiri[5], Ibrahim A. E. Aldarmaki[5], O. Darawsheh[6], and Ola A. Urabi[7]*

[1]Foundation of Education, the University of Jordan, Amman, Jordan
[2]Educational Management, Arab Open University, Al-Ahsa, Saudi Arabia
[3]Department of Educational Foundations and Administration, Faculty of Educational Sciences, Jadara University, Irbid, Jordan
[4]Department of Educational Foundations and Administration, Faculty of Educational Sciences, the Hashemite University, Zarqa 13133, Jordan
[5]Department of Islamic Studies, College of Humanities and Social Sciences, Zayed University, Abu Dhabi, United Arab Emirates
[6]Business Management, Luminus Technical University College, Irbid, Jordan
[7]Department of English language and literature, Jadara University, Irbid, Jordan

Abstract: In this paper, we examine the impact of the pandemic on university students in Jordan, focusing on their digital citizenship and attitudes towards distance learning. A cross-sectional study was conducted using an online survey, with 780 participants. The findings reveal that distance learning is widely applicable, with 89.87% of students utilizing live online learning content. The majority of students exhibit responsible online behavior, respecting others and refraining from bullying. They also actively engage in digital activities, express their opinions, and share their expertise online. Additionally, many students use technology for legitimate purchases during the pandemic. However, 95% of participants are aware of the potential health issues caused by excessive digital device use. Finally, it is shown that the university students in Jordan demonstrate good knowledge and positive attitudes towards digital citizenship, highlighting the importance of digital literacy and responsible online behavior in the face of the COVID-19 crisis.

1 Introduction

Coronavirus has spread in the world and affected all its sectors, such as health, education, the economy, etc, the education sector is one of the most important pillars for the whole world and not for a specific country, However, most countries were not ready to face such a burden, but most countries sought to preserve this sector by activating distance learning and people started to use digital technology and social media [1]. However, during the pandemic lockdown, the only intervention for people was using the internet such as social media and online games. In addition the digital communication revolution and the speed and ease it provides in accessing information and its sources, and with the positive effects this revolution contains on individuals and societies, where social media and modern technology means are exploited at high levels [2].

Whereas the negative effects of communication means appear with the emergence of moral rebellion against the social rules and regulations, laws and general principles that regulate the life and affairs of humanity [3]. Here, the importance of enabling us to define the interests of our sons and daughters from among the students of the University of Jordan, as monitoring them and their relationships with others has become extremely dangerous, as our children have come in contact with anonymous people daily, who can influence the essence of their thinking and charge them with any ideas they want, it is possible [4]. They are destructive ideas, so ask me how you destroy the homelands less by managing the minds of the youth, these strangers pose a clear danger that cannot be overcome except through awareness and only by spreading the national digital culture on the most used by our youth, namely the Internet and communication sites Socialite [5].

Now, after it has become impossible to monitor everything that students do on social media or the internet in general especially after the proliferation of tablets and Smartphones all the time and everywhere, we recall that previous scientific studies have proven that the rates of student's use of this technology reach eight hours per day. Within one day! In other words, it means more than the number of hours that are spent with their relatives or families [6].

So now we are talking about a huge influence that is very effective on the students and young generation.

Hence, we have a choice. Either we make this digital transfer a negative effect, where we do not know how social media

*Corresponding author e-mail: a.awamrah@ju.edu.Jo

direct university students can or affect students positively by making social networking sites an educational tool in a new and more effective way, where we spread useful digital citizenship values in it [7], [8]. However, a digital citizen is someone who uses information technology to participate in society, politics, and government. Digital citizens, according to Karen Mossberger: The Internet, Society, and Participation use theInternet regularly and effectively. So digital citizenship is nearly synonymous with the quality of a response to membership in a digital community, however, the quality of a response to membership in a digital community. the differences between physical and digital communities, digital citizenship is also defined by Self-monitored participation that reflects conscious interdependence with all visible and less visible community members[9].

So digital citizenship is important to motivate students to excel in various scientific, technical, medical, and psychological fields and every field that the student can innovate to raise his country with science and scientific research, and this is what the University of Jordan encourages its students and scientific staff, which is invaluable [10, 11]. The perception of internet dangers and the requirement for digitalcitizenship motivate Parents, teachers, professors, administrators, anduniversities to embrace the idea of teaching studentsabout media literacy and responsible internet use . Recently, in response to the perceived dangers of online life, such as cyberbullying, sexting, harmful contact, and other psychological or physical threats. There is a need to advocate formal education that teaches students how to use information technology effectively to maintain student safety, privacy, health, and well-being[12]. The rapid development of technology and communicationhas resulted in a lifestyle style which had an impact on all aspects of citizens' lives. This new digital world is commonly referred to as social media; a new media that arose in the digital era as a result of the internet's existence[13]. This media has accelerated the mobility of citizens' lives, resulting in almost limitless interaction among them, and more importance of of digital citizenship concepts. The heavy use of social media undoubtedly had both positive and negative consequences disrupting 'citizens behavior [14], the exploitation of technology, the Internet, and its techniques has contributed to harming other people in a reliable and repeated hostile manner, and this includes sending offensive electronic messages, or pictures and videos, containing images of insults and insults that degrade the status and value of others, and cause them an amount of moral or material pain. The means may vary, electronic bullying of the psyche of some students through the use of communications and messages that seek to intimidate and harm, intimidate and manipulate, oppress and distort reputation, humiliate the recipient, and modify and publish pictures of people on the Internet. Electronic bullying may be through impersonation or excluding the person from an electronic group [15].

Social media platforms and e-learning platforms have become more attractive and widespread among students who use various electronic communication tools. This has led cyber bullies to move from the real world to the virtual world, which has significantly contributed to the prevalence of many negative behaviors. This phenomenon is experienced by all societies, as it has facilitated the spread of violence and crime. Consequently, students suffer from various social and psychological problems such as anxiety, depression, social exclusion, and low self-esteem. This drives individuals to seek refuge in another world, represented by the virtual (electronic) world of the internet, to compensate for their deficiencies. It requires concerned parties to strive to address this electronic phenomenon before it worsens [16].

According to Gupta & Parch [17] the reasons for internet addiction among some university students can be attributed to poor time management and easy access to the internet within universities, which increases their internet usage, this coincides with the challenges that new students face in adapting to university life and finding new friends, leading them to rely on available social media platforms to compensate for these difficulties and escape from the academic stress, thus, their virtual relationships become strong due to the comfort they provide.

Electronic communication and modern technologies in their various forms have paved the way for the establishment of a culture shaped by children, teenagers, and young people, these technologies grant them the ability, from their perspective, to overcome traditional culture, however, they may find a loss of privacy in technology as they venture into a virtual world that stimulates their imagination, entertains them, and provides hidden pleasures. Yet, behind these pleasures lie depression, bullying, dependence, intellectual deviation, extremism, and ethical challenges [18].

The Study Problem

Given the scarcity of previous studies that dealt with the level of digital citizenship and students' attitudes about distance learning in light of the digital development in developing a sense of patriotism, and the urgent need for such studies, the problem of this study aimed to identify digital citizenship among university students and to know their attitudes about distance learning among them. Students of Jadara University and Jerash National University by answering the following two questions:

1.   What is the level of digital citizenship the students from their point of view?

2.   What are students' attitudes towards distance learning from their point of view?

Practical importance:

The practical importance of this study contributed to:

This study may contribute to enriching applied knowledge about the levels of digital citizenship and students' attitudes toward distance learning, through the results and recommendations of the field study that help those concerned in Jordanian universities.

-   It may contribute to providing university administrations with how digital citizenship contributes to enhancing students' attitudes towards distance learning in Jordanian universities.

-   Providing relevant authorities in Jordanian universities with feedback on the level of digital citizenship and students' attitudes towards distance learning.

Study methodology:

The researchers used the descriptive approach, which aims to describe the phenomenon as it is in reality, then analyze and interpret it and provide appropriate recommendations regarding it, because this approach is the most appropriate for the study.

Study Aims

According to the nationally announced precautionary and control steps to tackle COVID-19 in Jordan the ending of face-to-face activities on campus and the move towards emergency distance learning from mid-March 2020 Further, the lockdown caused people to spend most of their time on social media and the internet [19]. Thus, digital citizenship has become very important. This emerging pandemic can lead to unexpected effects on students as they now gain knowledge and values from the web and social networks [20]. therefore, our study aims are:1) To explore digital citizenship values among students and the effect of social networks and electronic means on students by studying total digital citizenship, Ethics for the Digital environment, Reasonable Activity, Self-identity in the digital world, and Social/cultural engagement, 2) To explore the challenges of the emergency remote learning strategy among students and the attitudes of students towered distance learning and any associated technology, and their effects on education.

2 Methods and instruments

Study population and sample:

In the period 15/2 to 15/04/2021, a web-based survey was used to perform a cross-sectional analysis. The survey was distributed to the students at the educational sciences school using different electronic means such as Microsoft Teams as well as Model which is the official platform for teaching in the school; we delivered the survey to the students' groups via social media, Face book, besides bureaucratic emails.

Students interested in attending the university will open a connection and obtain a comprehensive cover letter with informed electronic permission. No fee for participating in the study was paid to the participants. Because of the second wave of COVID-19, there are a lot of COVID-19 cases recorded each day about 5000 to 7000 cases daily and the university transferred all lectures online, so data collection was carried out online. In addition, using an online survey helped to reach students in different geographical areas, thus reaching potential participants from different cities and regions in Jordan, and this has been addressed in a recent systematic review that reported the effective use of social media platforms and electronic means in educational research studies. It was estimated that school students about 2983 students [21].

The study sample:

The study was applied to a random stratified sample of (800) students in the scientific and human colleges in Jadara universities and Jerash Al Ahlia, (400) male and female students from each university, in the first semester of the

2023/2024 academic year, and (300) questionnaires were for analysis with a retrieval rate (88.4) Table 1 shows the distribution of the study sample according to the independent variables.
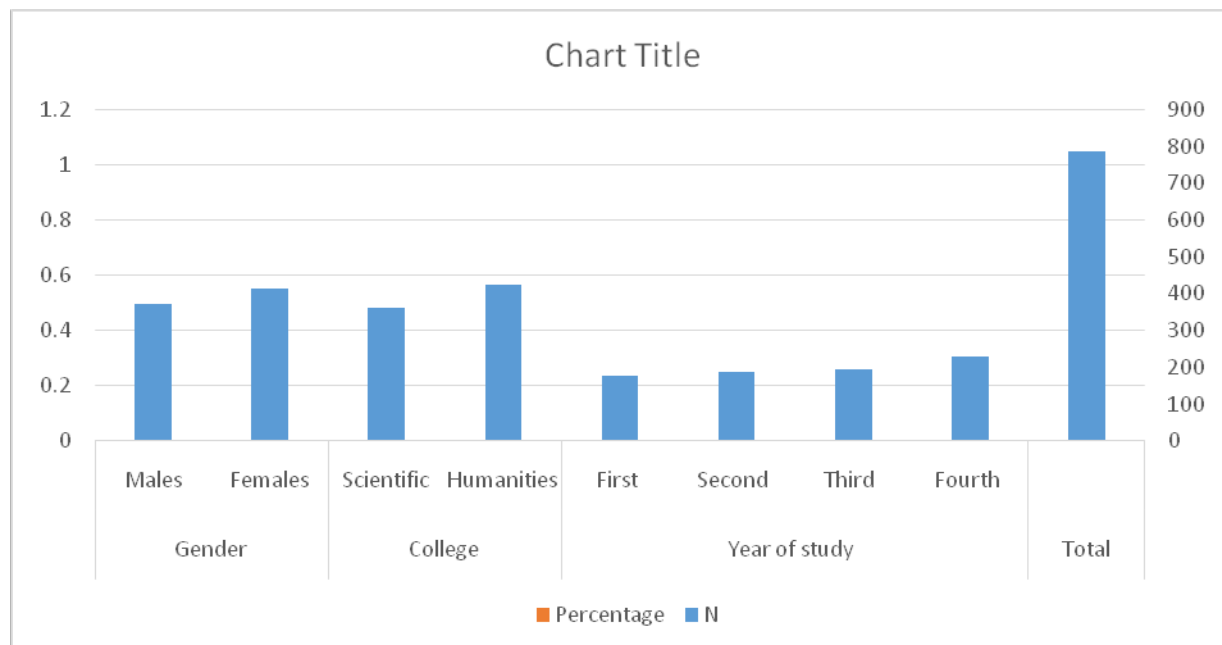

Fig. 1: Distribution of the study sample according to the levels of their variables

Survey instruments and related measures

The survey was conducted online, using Google Form®. This survey contains two sections divided into two parts:

- Part One: Demographic variables, consisting of: University, gender, academic year, and college.

- Part Two: Areas of study divided into the following areas:

The first field: digital citizenship, consisting of (18) paragraphs.

The second area: students' attitudes about distance education, consisting of (15) items.

Validity of the tool:

To verify the validity of the study tool, the content validity method was adopted, as the questionnaire was presented in its initial form to (10) arbitrators of university professors who are experts in the specializations of educational administration and educational policies in Jordanian universities, if they were asked to read the items of the questionnaire paragraphs, and to delete, modify, add, or merge, or reformulate and clarify some of the phrases that they believe are inappropriate from their point of view, the arbitrators unanimously agreed on the validity of a large number of paragraphs, and they suggested some amendments in the wording of the paragraphs, which had already been amended, and the addition of other paragraphs, the researchers collected the observations, amended and added them, the items proposed by the arbitrators, and to ensure the stability of the tool, internal consistency (Cronbach alpha) was used for the questionnaire areas, according to the degree of availability and the degree of suitability, as Table 1 shows.

Table 1: shows the internal consistency reliability coefficient (Cronbach alpha) of the questionnaire measuring the level digital citizenship, and Students' attitudes to distance learning

N	Field	Internal consistency stability	Replay stability
1	digital citizenship Scale results	0.92	0.89
2	Students' attitudes distant learning	0.90	0.90
	Total tool	**0.91**	**0.89.5**

It is clear from the table that the study tool has a high reliability coefficient, and accordingly, these values are appropriate for the purposes of this study, reaching its goals, and trusting its results.

Note that the responses of the survey sample were expressed according to a five-point Likert scale (very high, high,

average, low, and very low).

The statistical criterion was adopted using the following equation:

Category range = (highest value - lowest value) divided by the number of options Category range = 5-1 = 4 ÷5 = 133.3, so the judgment criterion becomes as follows:

The statistical criterion for determining the level of digital citizenship, Students' attitudes to distance learning

Arithmetic average	Degree
From 1.00 Less than 2.33	Low
From 2.34 less than 3.67	Average
From 3.68 Below 5.00	High

3 The Results

- The results related to the first question: **What is the level digital citizenship the students from their point of view**?

To answer this question; Arithmetic means and standard deviations were calculated for the estimates of the study sample members on the tool items as a whole, and each of its fields, and Table (3) shows this.

Table 2: digital citizenship Scale results

No	Rank	Attitude	Mean	SD	Degree
1	1	Students should immediately manage unnecessary files and programs on their computers.	4.30	.65	High
4	2	Students should use digital technology to achieve various goals	4.24	.85	High
15	3	Students should be aware of the health problems caused by the abuse of digital devices, such as addiction and stress.	4.22	.61	High
18	4	Students should take care of the computer immediately if something goes wrong.	4.21	.77	High
4	5	Students should express their emotions reasonably through communication when problems or inconveniences arise in the online digital environment.	4.20	.76	High
6	6	Students should use the Internet to access information about domestic and international issues.	4.19	.70	High
19	7	Students should be active on SNS such as Twitter and Face book.	4.17	.76	High
8	8	Students should express their opinions online and learn and share their expertise.	4.15	.75	High
12	9	Students should establish their own beliefs and values about the digital environment.	4.14	.71	High
16	10	Students should respect the people in the online environment and not engage in bullying behavior.	4.12	.81	High
	11	Students should work with others online to solve regional or school problems.	4.05	.57	High
11	12	Students should present their feelings, thoughts, and opinions while posting text, photos, music, or videos online.	4.03	.73	High
12	13	Students should belong to an online community related to legal social or political issues.	4.02	.79	High
13	14	Students should be responsible for their own online activities	4.01	.79	High
14	15	Students should purchase legitimate goods during- commerce activities.	3.87	.78	High
15	16	Students should be aware of the order of others in the online digital environment and should obey the order of the school.	3.79	.81	High
16	17	Students should always check the price on the Internet when purchasing goods.	3.63	.85	Average
17	18	Students should immediately delete emails from -suspicious senders.	3.62	.72	Average
		digital citizenship Scale results	4.07	.81	High

The results showed that the arithmetic averages for the digital citizenship scale items came with a total score of (4.07), with a rating of "high." Paragraph (1) states that "students must manage unnecessary files and programs on their computers immediately." He received first place with a high score, as for Paragraph No. (18), which states: "The student must delete

emails received from suspicious senders immediately.", and came in last place, with a moderate degree.

Results of The Second question: **What are students' attitudes towards distance learning from their point of view?**

To answer this question; Arithmetic means and standard deviations were calculated for the estimates of the study sample members on the tool items as a whole, and for each of its fields, and Table (4) shows this.

Table 3: Students' attitudes towered distant learning

No	Rank	Attitude	Mean	SD	Degree
8	1	Most students can use live online learning content	4.19	.75	High
7	2	The veracity of certificates attained through Distance learning must be acknowledged	4.17	.75	High
1	3	Distance learning is applicable in educational science school	4.14	.79	High
2	4	Distance learning is a possible substitute for standard education	4.13	.74	High
9	5	Distance learning can cover the practical aspect of education	4.10	.81	High
3	6	Distance learning can be easily applied in educational science school	4.08	.77	High
4	7	The Distance learning content should be sufficient to satisfy an educational requirement	4.06	.76	High
5	8	Downloadable Distance learning content is better than Live content in educational science school	4.05	.82	High
10	9	E-testing can replace the current traditional testing methods	4.03	.81	High
14	10	Interactive electronic content with discussions can be achieved through Distance learning	4.02	.60	High
15	11	Library and information science students have financial difficulty in gaining access to Distance learning	4.00	.67	High
6	12	Adherence of students to Distance learning schedules should be similar to direct learning	3.96	.86	High
11	13	Distance learning is more convenient and flexible than conventional learning	3.94	.84	High
12	14	It is possible to obtain educational material through Social Media and electronic means	3.91	.88	High
13	15	Interaction between students and lecturers is possible through Distance learning	3.89	.90	High
		total	4.06	0.87	High

Attitudes towards distance learning in Jordanian universities were measured through an electronic application. each answer was recorded using a Likert scale (high, medium, low), as shown in Table 3.

The arithmetic averages for the total domain items (4.06) were high, and with a high degree, which states "Most students can use live online learning content ", ranked first and with a high degree, and paragraph (13) which states "Interaction between students and lecturers is possible through Distance learning ", ranked last and with a high degree.

4 Discussing the results

A digital citizen is defined as someone who knows how to use technology and digital technologies that have entered our lives correctly, values ethical and human rights on digital platforms, and knows how to make secure and responsible use of those devices [24]. Given the activities in digital contexts, people must be mindful of their responsibility not only to the community in which they operate but also to the whole world. This allows people to continue their lives securely through digital citizenship comportments during the digital age [25]

Digital citizenship and the digital approach generally offer advice about the needs of students in technology, especially in the deliberate and effective use of online technologies and digital platforms [26] for students, educators, and industry representatives. [27] Considered these guidelines first and developed nine 'digital citizenship' sub-dimensions. These dimensions are digital literacy, digital engagement, digital communication, electronic security, digital ethics, digital law, digital commerce, and digital health.

This paper investigates how using social media in formal and informal learning environments can aid in developingdigital .citizenship in university students

Students are increasingly spending significant amounts of time online, with an average of nine hours of screen time per (day. excluding lectures and homeworkthey must bedeveloping skills that will allow them to responsibly find, evaluate,

and share information, engage in constructive conversation with others from diverse backgrounds, and ensure their online participation is safe, ethical, and legal despite the importance of students developing these skills, opportunities for digital citizenship in formal and informal learning environments have lagged behind our ideals.

In our study, most of the participants (89.7) accepted that the School of Educational Sciences should apply Distance learning. However, Distance learning has been the dominant method of teaching in Jordan universities since the COVID-19 pandemic started and all students have learned how to use educational technology methods to learn professionally in both the theory and practical courses. However, respondents see that Distance learning can be easily applied in Educational sciences schools and content should be sufficient to satisfy educational requirements.

This research also shows results agreed with previous studies that discuss distance learning during COVID-19 such as [28] [18]; [29]. Students see that e-learning is effective when moving from face-to-face to complete online training.

In addition, the Corona pandemic is one of the diseases that affected the whole world and affected many sectors. It was not limited to the education sector, but the education sector was one of the sectors most affected. The University of Jordan meets the purpose of universities that have used the latest and most interactive technologies such as Microsoft Teams, zoom, and other techniques to provide optimal communication between students and the educational staff.

There are many negatives to e-learning, including students 'inability to communicate and interact satisfactorily and cheating operations that occur during the exams. E-learning does not replace face-to-face education, but it is a pandemic, and we must all deal with it appropriately and with good ethics.

The results indicate that eLearning is helpful in the sense of study and applies to models and knowledge analysis, while participants don't want to use Models, in full-time teaching. However, according of the majority of the students responses show that distance learning should be used in practical terms such as online lectures, online presentations, and online discussions. Further, most of the students acknowledged that Distance Learning is a substitute for classical teaching methods and the student believes that Distance Learning is convenient and more flexible than traditional learning. Moreover, E-Learning users encounter numerous technical difficulties, such as flexibility in time and place for students, which impair the teaching and learning system [30].

Institutions and organizations should make plans for contingency in response to pandemics and natural disasters [31]. According to George [32], whether there is a crisis or not, learners must be given the chance, when comparing tutorials (in class) and office consultations, to use email consulting to approach the classroom lecturer [33].

In addition, 80.77 accepted that during Distance learning education it is possible to communicate with students and lecturers. 42,1% of students considered Distance learning difficult due to financial costs.,in addition, most of the students agreed with the importance of recognizing an electronic certificate.

The results show that distance learning faced some drawbacks, including that some students were unable to access educational platforms and some of them did not get the information in its correct form, and the absence of interaction and lack of follow-up with students directly had an impact on students' lack of commitment to the educational process. Some students faced difficulty in obtaining the Internet service, which would enable them to access the platforms and take tests.

On the other hand, the results showed that distance education has several positive aspects, including improving students' self-discipline skills and enhancing a sense of responsibility, it also saves time and effort, and among the advantages is also the student returning to watch a certain part of the lecture and this matter It is difficult to achieve it in traditional lectures, as this type of e-learning does not require attendance to the university's site to receive knowledge, it also helps the students to rely on themselves by choosing the sources from which the student can derive the information. Further, It enables the student to access the curriculum at various times without having any difficulty. Moreover, distance learning is suitable for different levels of students' intelligence and focus.

with an average of (47.31), the findings of this study indicate that most students should value other people in the online world and not engage in bullying behavior. The results also indicated that students have participated in one or more forms of digital citizenship, such as digital citizenship, digital access, full electronic participation in society, and e-commerce such as the sale and purchase of electronic goods and digital communications, electronic exchange of information, digital responsibility for business and actions, digital security and assurance procedures. Electronic prevention and protection [34], [28].

In addition, many students see that they should have an average of 34.74 responsibility for their online activities. However, 36.92 percent of students are aware that in a modern online world, they should comply with the order of the school. The findings also show that many of the participants use digital technology to achieve various goals. However, in recent years, to the use of technology is no longer what it used to be traditional, but in light of the corona virus pandemic, it has become full of the challenges of the changing environment and technical developments in all fields, and educational technologies

focus heavily at the expense of the knowledge aspect, and the use of social networks includes digital experiences and digital ethics that work to develop, change and apply knowledge, skills and attitudes to develop communication and social communication and improving student achievement. The teacher and the student must get acquainted with the transition to the digital world that depends on modern technical resources such as social networks and the Internet. In addition, a percentage of 92.3% see the use the Internet to access information about domestic and international issues.

The results illustrated that 90,6% of the students should communicate reasonably when difficulties or inconveniences occur in the digital online world. Furthermore, 47,8 student's percent see that they express their thoughts, learn, and share their expertise online. Whereas the study shows that the students have an awareness of what they should purchase online during-commerce activities and they also check the price on the Internet when purchasing goods. The results show that students have an awareness of technology and e-commerce within the awareness of the concept of digital citizenship, as well as students have shown interest in using digital technology.

The results also show that students know their rights and duties while surfing the Internet, and they realize the importance of technology in all areas of life, furthermore students realize the significance and importance of digital communication and its role. In accessing information and developing skills. Moreover, the findings show that most students are aware of the health problems caused by the abuse of digital devices, such as addiction and stress; the results show that most of the students are aware of digital citizenship rights and usage despite online community issues.

Further, many Students believe that they may establish their own beliefs and values about the digital environment, and this is due to technology's easy use and development of digital citizenship awareness.

This awareness also guided the students to immediately delete emails from suspicious senders. Further, digital citizenship awareness also gave the students trust in them to get involved in legal online communities related to social or political issues. Further, the study shows that because of the awareness of digital citizenship between students they work with others online to solve regional or school problems. They also show good values in a community such as taking care of the computer immediately if something goes wrong. Finally, the results showed that most of the students are active on social media platforms. Because they use social media to communicate with other students and people on the Internet, in addition, they can get updated news on social media too. They also have the awareness that they shouldn't talk to strangers online, and they can deal with both issues.

5 Conclusion

COVID-19 restricted procedures and has enforced education to be online and many people started to spend most of their time on the Internet due to the partial or total lockdown. Thus, our study highlighted and measured students' digital citizenship in digital environment ethics, digital environment fluency, fair and active practices, and self-identity development in the digital world using a five-factor Digital Citizenship Scale called S.A.F.E. Further the study evaluated the student's attitude toward distance learning.

The future of our society will depend upon how effectively young people will cope with the changing social environment, enhancing its positive effects on digitalization, and mitigating its negative effects, considering that their most active user is the generation of youth. This study suggested that digital citizenship should be developed with the requisite competence and education. Furthermore, it proposed that such education should not only be incorporated into schools but also into efforts to establish healthy digital citizenship both at home and in society.

The results of this study showed that distance learning applies to schools of education. Most students can use live, online learning material, as well as interaction between teachers and students through remote study. Whereas sex and age are not correlated to digital citizenship, it is important to note that most students are responsible for their own online activities, value others, and not bully.

Most of the participants see that new technologies can be used to accomplish different goals, express their views online, and learn and share their information. However, many students also buy legal products during COVID-19 via technology and e-commerce. Nearly all participants know their health issues caused by spending time on technology during the COVID-19 pandemic. Finally, students have demonstrated a strong understanding of the principles of digital citizenship and optimistic attitudes.

References

[1] O, Rubin, Nikolaeva, A., Nello - Deakin, S., & te Brömmels troet, M., (2020). *What can we learn from the COVID-19 pandemic about how people experience working from home and commuting?* Centre for Urban Studies, University of Amsterdam. Available at: https://urbanstudies.uva.nl/content/blog-series/covid-19-pandemic-working-from-home-

and-commuting.htm

[2]   C, Karaatmaca, , Altinay, F., Altinay, Z., Dagli, G. (2020).The Role of Sensitivity Training for Managing Diversities in Sustainable Smart Societies, *European Journal of Sustainable Development*, 9, (3), 13-26

[3]   A., Akour, Ala'a, B., Barakat, M., Kanj, R., Fakhouri, H. N., Malkawi, A., & Musleh, G. (2020). The Impact of the COVID-19 Pandemic and Emergency Distance Teaching on the Psychological Status of University Teachers: A Cross-Sectional Study in Jordan, *The American journal of tropical medicine and hygiene*, *103*(6), 2391-2399.

[4]   S., Tejedor, L,. Cervi, A, Pérez-Escoda , & F., Tusa Jumbo .(2020). Digital Literacy and Higher Education during COVID-19 Lockdown: Spain, Italy, and Ecuador, *Publications* 2020, (8), 48,1-17,

[5]   E., Capogna ., F., Salvi , L., Delvino , A., Giacinto & M., Velardo.**(2020).** Novice and Expert Anesthesiologists' Eye-Tracking Metrics During Simulated Epidural Block*: A Preliminary***,** Brief Observational Report

[6]   K.,Badaru& E., Adu.(2020**).**UNIVERSITY STUDENTS' MEDIA USE AND POLITICAL PARTICIPATION IN SOUTH AFRICA*, South African Journal of Higher Education, 34(1), 18–36*

[7]   G., Abaido **(**2020**).** Cyberbullying on social media platforms among university students in the United Arab Emirates. *International Journal of Adolescence and Youth, 25*(1), 407–420. https://doi.org/10.1080/02673843.2019.1669059

[8]   N., Sattar, I ., McInnes & J., McMurray.(**2020**). Obesity Is a Risk Factor for Severe COVID-19 Infection: Multiple Potential Mechanisms,*Circulation*, 142(1):4-6

[9]   J., Hair, W. Black, B., Babin, R., Anderson, & R., Tatham. (1998). Multivariate data analysis, Upper Saddle River, NJ: Prentice hall

[10]   M., Warner, J., Robinson, B., Heal, J., Lloyd, J., Mandigo, B., Lennox, L., & Davenport Huyer. (2020). Increasing physical literacy in youth: A two-week Sport for Development program for children aged 6-10, *Prospects*, 2021, 50(1-2), pp. 165–182

[11]   Mandigo, J., Lodewyk, K., & Tredway, J. (2018). Examining the impact of teaching games for understanding approach on the development of physical literacy using the Passport for Life assessment tool, *Journal of Teaching in Physical Education*, 38(2), 136–145.

[12]   A., Carr, L., Finneran, Christine Boyd, Claire Shirey, Ciaran Canning, Owen, S**,** James, L, Katie, C, Cian, P& Tom, B**. (**2023), The evidence-base for positive psychology interventions: a meta-analysis of meta-analyses, *The Journal of Positive Psychology***,** pages 1-15.

[13]   C., Lee, K., Aiken & H., Hung. (2012). Effects of college students' video gaming behavior on self-concept clarity and flow, *Social Behavior and Personality: an international journal*, 40(4), 673-679.

[14]   A., Kassam. (2013). Changing society using new technologies: Youth participation in the social media revolution and its implications for the development of democracy in sub-Saharan Africa. *Education and Information Technologies*, 18(2), 253-263.

[15]   N., Darawsheh. (2023).The Impact of Cyber Bullying on the Psychological Well-being of University Students: A Study in Jordanian Universities, *Information Sciences Letters*: 12 (8), 2757-2768 Available at: https://digitalcommons.aaru.edu.jo/isl/vol12/iss8/26

[16]   R. Al-Rafai & N., Al-Darawsha. (2022). The Role of Primary Stage Teachers in Bani Obeid District in Mitigating the Phenomenon of Electronic Bullying among Students from the Perspective of Principals, *Jordanian Association for Educational Sciences, Jordan Journal*, 7(2), 145-171.

[17]   D.,Gupta & S., Prabhu.(2020). Study of Internet Addiction in Young Adults, *International Journal of Health Sciences and Research*,10940,52-58

[18]   U., Akcil, & M.,Bastas. (2020). Examination of University Students' Attitudes towards E-learning during the COVID-19 Pandemic Process and the Relationship of Digital Citizenship, *Contemporary Educational Technology*, 13(1), ep291

[19]   M., Audah , M., Capek & A., Patil.(2020).*COVID-19 and digital learning preparedness in Jordan*, https://blogs.worldbank.org/arabvoices/covid-19-and-digital-learning-preparedness-jordan

[20]   A., Alsoufi, A., Alsuyihili, A., Msherghi, A., Elhadi, H., Atiyah, H., Ashini, A., ... & Elhadi, M. (2020). Impact of the COVID-19 pandemic on medical education: Medical students' knowledge, attitudes, and practices regarding

electronic learning. *PloS one*, 15(11), e0242905.

[21] https://www.ju.edu.jo/

[22] M., Kim,& D., Choi. (2018). Development of Youth Digital Citizenship Scale and Implication for Educational Setting, *Educational Technology & Society*, 21 (1), 155–171

[23] A.Alsoufi, A., Alsuyihili, Msherghi, A., Elhadi, A., Atiyah, H., Ashini, A., ... & Elhadi, M. (2020). Impact of the COVID-19 pandemic on medical education: Medical students' knowledge, attitudes, and practices regarding electronic learning. *PloS one*, 15(11), e0242905.

[24] K., Mossberger, & C., Tolbert.(2021).Digital Citizenship and Digital Communities: How Technology Matters for Individuals and Communities, International Journal of E-Planning Research,10(3),19-34

[25] https://profuturo.education/en/observatory/innovative-solutions/citizenship-creativity-and-problem-solving-in-the-digital-age-programmes-for-teaching-these-skills

[26] A.,Çubukcu & S., Bayzan .(2013).Türkiye'de Dijital Vatandaşlık Algısı ve Bu Algıyı Internetin Bilinçli, Güvenli ve Etkin Kullanımı ıle Artırma Yöntemleri,*Middle Eastern & African Journal of Educational Research,5,148-173.*

[27] M., Ribble & A., Shaaban. (2011). *Digital Citizenship in Schools Second Edition,*https://www.researchgate.net/publication

[28] Alameri, J., Ismail, H. B., Akour, A., & Fakhouri, H. N. (2019, October). Blended Learning and the Use of ICT Technology Perceptions Among University of Jordan Students. In *International Conference on Information, Communication and Computing Technology* (pp. 271-280). Springer, Cham.

[29] S., Ilmiyah, & A. R. Setiawan. (2020). *Students' Worksheet for Distance Learning Based on Scientific Literacy in the Topic Coronavirus Disease 2019 (COVID-19).*

[30] A., Isman, & O. Gungoren, (2014). Digital citizenship. TOJET: The Turkish Online *Journal of Educational Technology,*13(1), 73-77.

[31] F., Aladwan, H. N., Fakhouri, A., Alawamrah, & O.Rababah, (2018). Students Attitudes toward Blended Learning among Students of the University of Jordan. *Modern Applied Science*, *12*(12), 217.

[32] Jones, L. M., & Mitchell, K. J. (2016). Defining and measuring youth digital citizenship. New media & society, 18(9), 2063-2079.

[33] Hamtini, T. M., & Fakhouri, H. N. (2012). Evaluating open-source e-learning platforms based on the Qualitative Weight and Sum approach and Analytic Hierarchy Process. In *Proceedings of the International Multi-Conference Society, Cybernetics and Informatics* (pp. 1-7).

[34] F., Hamad, Al-Fadel, M., & Fakhouri, H. (2020). The effect of librarians' digital skills on technology acceptance in academic libraries in Jordan. *Journal of Librarianship and Information Science,*53(1):1-12.