Utilizing Digital Citizenship in Developing Skills of Tourism Human Resources: An Analytical Study of the Opinions of a Sample of Students from the College of Tourism Sciences - Karbala University

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ABSTRACT

The research investigates the impact of the digital citizenship use in developing the touristic human resources of the students at College of Tourism Sciences, Karbala University. The study obtained Andrea's (2022) model in measuring the digital citizenship using three digital dimensions: contact (CO), culture (CU) and ethics (ET). The of human resources skills is measured as one dimension variable. The questionnaire is the main tool used in collecting required data of the study. The sample includes 209 seclected from a total of 457 stduetns including, at the Tourism Studies and Hotel Department according to Steven Thompson equation. Data were analyzed data statistically using the modelling of structural equation (the confirming factorial analysis) and set of statistical descriptive measures and rank correlation coefficient (parson) besides simple linear deviation through a set of statistical programs one of them is (Spss.Amos, V.24).Results of statistical analysis have proved the significant influence of the digital citizenship on developing the touristic human resources skills. Furthermore, results showed a progress of the digital culture dimension, digital ethics and finally the digital contact in the impact of developing the touristic human resources skills on the college of tourism sciences.

Keywords: *Culture; digital citizenship; ethic; human resources skills; impact.*

INTRODUCTION

In recent times, the world has witnessed a rapid and diverse virtual information revolution in all sectors, including the tourism education sector. Countries around the world have sought to keep up with modern technology in order to achieve a quality tourism education that competes with global educational institutions in building knowledge and innovation. With the increasing use of digital citizenship, there has been a need for high-quality skills that are in line with its human resources. It requires updating and renewing training and descriptive programs. Therefore, the research sought to highlight the importance of using digital citizenship in tourism education and how students at the College of Tourism Sciences - University of Karbala benefit from such education as part of their curriculum.The significant shift towards digital education is a natural occurrence in today's changing world. Digital citizenship is a standard for the safe use of technology by tourism educational institutions, with secure policies that encourage students to use it for educational purposes and proper social communication. The aim of this research is to establish a level of digital citizenship usage under non-independent conditions, indicating that students will not be disconnected from education no matter what challenges arise. Moreover, this research also aimed to determine the extent to which the use of digital citizenship affects the development of human resource skills (HRS). Many tourist educational institutions have endeavored to innovate many technological tools to face the challenges that have arisen in our world today due to political, security, economic, health, and educational challenges. The focus has been on delivering education to students through various digital means.

Research Questions

The research problem was formulated based on intellectual and practical frameworks through several questions:

1. What is the importance of using digital citizenship in developing tourism human resource skills in tourism?
2. What is the importance of the intellectual frameworks of digital citizenship dimensions?
3. To what extent does the use of digital citizenship dimensions affect the development of human resource skills in tourism?

Research Significant

Due to the rapid changes resulting from the technological revolution and current circumstances, the importance of research has emerged in the followings:

1. The use of digital citizenship has become an urgent necessity for many educational institutions, giving it an important role in discovering and makig use of students' skills to ensure they do not drop out of education.
2. Digital citizenship is important as an alternative to confronting wrong ideas that conflict with values and principles and facing them with moderate ideas.

Research Objectives

1. To identify the extent of the use of digital citizenship in university-level tourism education institutions and its role in developing the skills of students at the College of Tourism Sciences,
2. To understand digital citizenship from the perspective of students at the College of Tourism Sciences.
3. To identify the extent to which students benefit from using digital citizenship and their satisfaction with it.

Research Hypotheses

The research problem was formulated through several questions that express its concept, and here we must mention expected solutions to address it through the included research hypotheses:

1. There is a significant correlation between digital citizenship dimensions and human resource skills in tourism.
2. There is a significant impact relationship between digital citizenship dimensions and human resource skills in tourism.

LITERATURE REVIEW

Digital citizenship (DC)

DC has become increasingly important in the digital age and the developments that have occurred to meet the requirements of digital life. DC is now a crucial tool used by educational institutions in general and tourism specifically to build a digital generation with diverse skills capable of keeping up with the current situation by using technology correctly. Al-Shafi'i (2018) refers to DC as all the information, knowledge, and values that learners write down under the guidance of their academic department to develop their technological skills and behaviors. DC particiapes in making them individuals capable of dealing with technology in a secure and positive manner. DC indicates that citizenship represents the behavioral rules that individuals need when dealing with technological means to respect themselves and others and communicate with them in a way that protects them and others (Perddy, 2016). Likewise, Assaf (2020) points out that DC is a set of behavioral, ethical, and legal controls that ensure the proper and optimal use of digital technology applications and limit their negative effects for the purposes of peaceful coexistence and openness in a healthy digital society. Kaminski (2015) adds that DC means the using digital technologies regularly and effectively to support learning and social participation. Al-Hammadi (2017) refers to DC as a set of standards that students must adhere to when using digital media, consisting of a set of rights that they should enjoy while dealing with it and duties that they must comply with while using it. To sum up, it can be said that DC is a set of ideas and principles followed in the optimal use of digital technology applications regularly and effectively to support learning.

Digital Citizenship Objectives

Ribble and Park (2022) and Al-Maamari and Al-Wahibiya (2019) set the objectives of digital citizenship as follows:

1. Familarizing different age stages of digital citizenship in a good way.
2. Enhancing the level of electronic security.
3. Protecting youth with proper digital behavior.

4.   Setting the ideal groups in dealing with individuals by preparing a comprehensive reference.
     Spreading the culture of ideas.
5.   Reducing the negative impacts of internet and social media use.

Dimensions Of Digital Citizenship

The electronic exchange of information is one of the most prominent developments in modern technology and communications. It has turned the world into a small village. Digital citizenship also focuses on the individual who has the ability to make the right decision in the face of many available digital communication options and is aware of how to use them.

Digital Communication

Educational institutions face significant challenges due to the crises surrounding the world and the absence of a general understanding of digital communication. Communincation defines the capabilities of such instituational human resources. It affects digital education processes, curricula, and tools. According to Rahim et al. (2022), digital communication is the ability of a faculty member to deal with modern technology in using their work field and employing it in electronic lesson planning, testing, and correction. Due to the circumstances that COVID-19 pandemic brought and the negative effects that led to the interruption of students' educational process, it was an important factor in demonstrating the development in the field of digital communication and its use in tourism higher education. Akram and Munkar (2022) point out that digital communication is the ability of instructors to communicate with students through technological means such as social media platforms and educational platforms for the purpose of communication and raising their digital academic and scientific level.

Digital Culture

It is one of the contemporary digitization issues that has led many students to avoid acquiring and working with it due to its social and health risks. Developing students' digital culture requires a training strategy through specialized scientific courses to demonstrate the process of using digital communication tools that benefit the educational process. Abu Aqleh (2021) views digital culture as the employment of the academic administration's capabilities and potential to enable them to perform their various tasks efficiently within the required time.

Digital Ethics

Due to the rapid changes in technology worldwide, it has become important to establish ethical standards that define digital interactions among human resources in all state institutions. Digital ethics is one of the influential concepts in the digital educational process. It is an integrated educational program subject to ethical values defined by educational institution systems. Salman (2019) perceives digital ethics as an educational program that focuses on stimulating students' skills for positive participation in society. It enhances their understanding while practicing theoretical and applied scientific knowledge. Finally, Rajan (2016) points out that digital ethics is a set of standards and principles that define students' behaviors that contribute to the safety use of digital citizenship in educational institutions in a way which promotes mutual trust between all parties.

Human Resource Skills (HRS)

HRS in tourism lie in the ability of educational institutions to develop their systems and integrate their educational processes with advanced digital systems that help them practice a number of activities and tasks that require different behavioral skills and knowledge. Jager (2017) points out that HRS are the abilities and experiences that human resources possess and employ in managing the activities of their assigned job.

Abu-Nahel et al. (2020) connect HRS with the ability of possessing fast application alternatives and options that help in successfully changing the work reality, whether technical or administrative. Meanwhile, Daividescu et al. (2020) referred to HRS as the precise knowledge of digital technology and their ability to prepare modern digital programs aimed at raising the scientific level of human resources. It also refers to creating a digital environment that has a direct relationship with various sciences, which fosters a team spirit through the use of digital citizenship that, in turn, creates a unified digital climate for exchanging ideas and work to achieve desired goals. In summary, human resource skills are the abilities, experiences, scientific and applied knowledge that human resources possess, enabling them to use technology to efficiently execute their assigned tasks.

The Importance of Human Resources Skills

Mahmoud (2014) induced the importance of HRS in:

1. Performing HRS increases the learner's knowledge of concepts and processes in general.
2. Mastering HRS directs the learner's thinking, effort, and time better.
3. Acquiring HRS facilitates the performance of many tasks
4. Some situations rely entirely on the individual's HRS and mental ability.
5. Mastering HRS helps learners understand ideas and concepts.

METHODOLOGY

Research Design

Based on these challenges, the idea of scientific research came to shed light on digital citizenship and its importance in facing environmental changes. Before discussing the main steps of the current research methodology, the researchers used a descriptive-analytical approach to suit the nature of the field research.

Participants

To determine the sample size, we relied on the Thompson's (1987) equation. A sample of students from the College of Tourism Sciences at the University of Karbala was selected, totaling 457 students, with 201 in the Tourism Studies Department and 256 in the Hotel Studies Department. The sample size was determined to be 209 students, and 209 survey questionnaires were distributed, all of which were retrieved and valid for statistical analysis.

Tentative Research Outline

According to the theoretical framework of the study variables and the methodological treatment required for the research problem and its hypotheses, the tentative research outline can be crystallized through studying its variables and the nature of the impact relationship in the following outline.
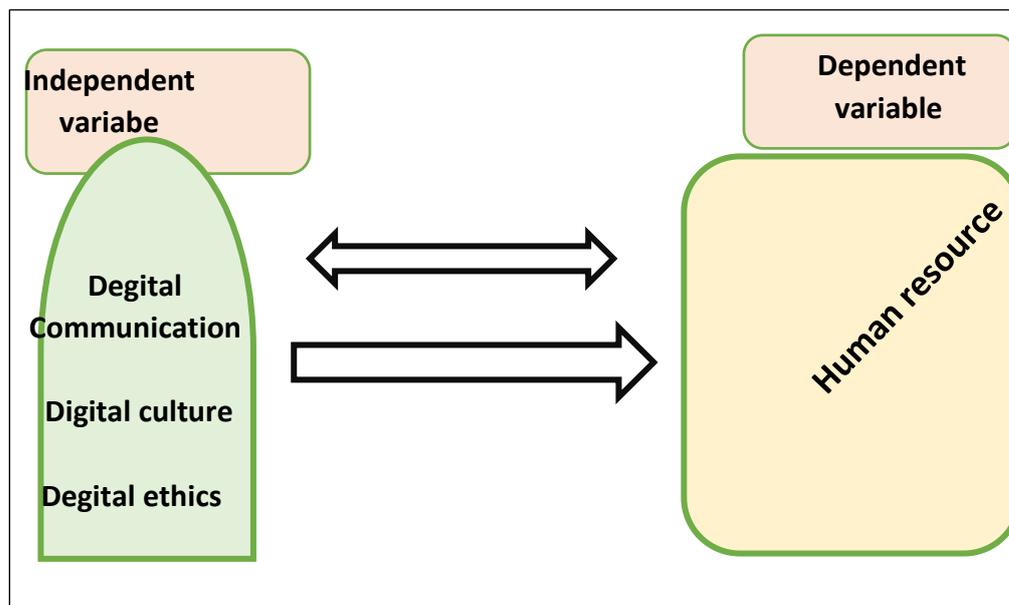

Figure 1. *Research outline*

Data Analysis

To ensure the accuracy of theoretical structures of variables and their field accuracy, we conducted confirmatory factor analysis (CFA) on the measures adopted to measure the variables. We used the SPSS Amos V 24. in processing the CFA. To evaluate the resulting structural model from the CFA outputs, researchers recommend verifying two criteria: parameter estimates, which represent the values of paths connecting latent variables with unmeasured variables, and model fit indices, which determine the degree of fit and accuracy of the structural model (Al-Hasnawi & Abu Shakir, 2019). Based on the above, the results of the CFA for the research variables are as follows:

Confirmatory Factor Analysis for DC

Figure (2) shows that all standard parameter estimates for the items of the DC variable exceeded a percentage of (40%), as indicated by the arrows connecting the three dimensions to their items, all of which are statistically significant. This

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indicates the existence of coherence in the theoretical structure on which the scale was designed. When following the critical ratio (CR) shown in Table 1, it becomes clear that it is greater than (2.56) at a significance level of (0.01), indicating the usefulness and validity of the parameters. As for the fit indices, they meet the acceptance criteria assigned to them, as shown in Figure 2. This confirms that the DC variable is measured by three dimensions, the first measured by 5 items, the second by 4 items, and the third by 4 items as well.
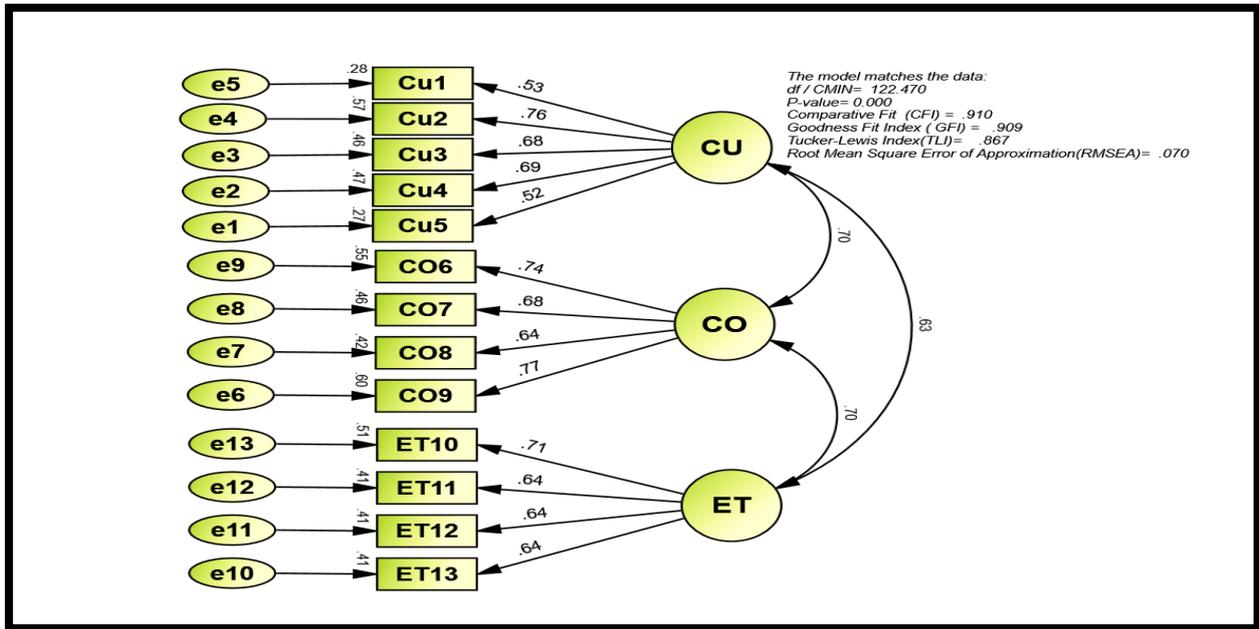

Figure 2. *Confirmatory factor analysis of the DC scale*

Table 1: The critical ratio

Variable			Estimate	S.E.	C.R.	P
Cu5	<---	CU	1.000			
Cu4	<---	CU	1.063	.126	8.429	***
Cu3	<---	CU	1.008	.144	7.020	***
Cu2	<---	CU	1.233	.150	8.211	***
Cu1	<---	CU	.771	.121	6.356	***
CO9	<---	CO	1.000			
CO8	<---	CO	.967	.087	11.136	***
CO7	<---	CO	.788	.090	8.784	***
CO6	<---	CO	.975	.091	10.724	***
ET13	<---	ET	1.000			
ET12	<---	ET	1.121	.173	6.480	***
ET11	<---	ET	.821	.125	6.586	***
ET10	<---	ET	.861	.120	7.172	***

Confirmatory Factor Analysis Of HRS In Tourism Scale

Figure (2) shows that all standard parameter estimates for the items of the HRS variable exceeded (40%), as indicated by the arrows connecting the variable to its items, all of which are statistically significant. This affirms the existence of coherence in the theoretical structure on which the scale was designed. Table 2 dispalys the the critical ratio (CR) clearly assints values are greater than (2.56) at a significance level of (0.01), indicating the usefulness and validity of the parameters. As for the fit indices shown in Figure 3, they meet the acceptance criteria assigned to them, confirming that the HRS variable is measured by 10 items.
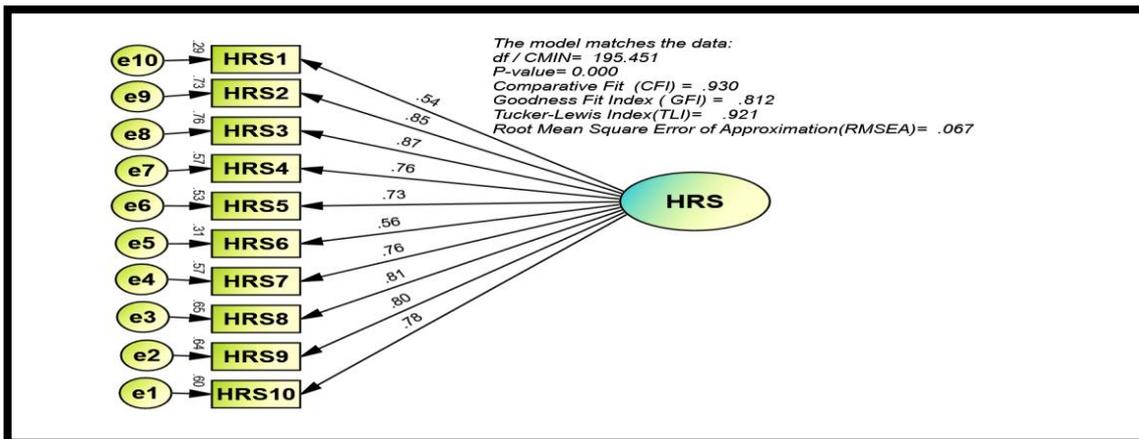
Table 2: *Statistical results for the HRS scale*

			Estimate	**S.E.**	**C.R.**	**P**
HRS10	**<---**	**HRS**	**1.000**			
HRS9	**<---**	**HRS**	**1.013**	**.097**	**10.430**	*******
HRS8	**<---**	**HRS**	**1.076**	**.116**	**9.250**	*******
HRS7	**<---**	**HRS**	**.894**	**.104**	**8.566**	*******
HRS6	**<---**	**HRS**	**.724**	**.115**	**6.283**	*******
HRS5	**<---**	**HRS**	**.992**	**.129**	**7.676**	*******
HRS4	**<---**	**HRS**	**.994**	**.119**	**8.342**	*******
HRS3	**<---**	**HRS**	**1.291**	**.159**	**8.116**	*******
HRS2	**<---**	**HRS**	**1.210**	**.125**	**9.710**	*******
HRS1	**<---**	**HRS**	**.688**	**.120**	**5.707**	*******

RESULTS AND DISCUSSION

Digital Citizenship

Table 3 shows that DC variable achieved a mean of (4.43) and a standard deviation of (1.39), with a coefficient of variance (33.32%) and a relative significance of (89.54%). The statistical results indicate that DC has a high degree of importance according to the responses of the research sample. This confirms that DC is important for educational institutions as it works to develop HRS in tourism. As for the importance of the dimensions of DC, the *digital communication* (CO) dimension ranked first with a relative importance of (90.14%), followed by the *digital culture* (CU) dimension in second place with a relative importance of (89.55%). The *digital ethics* (ET) dimension came in third place with a relative importance of (88.93%). Figure 4 shows the relative importance ranking of each dimension of DC based on weighted arithmetic means.

Table 3: *Statistical results of digital citizenship*

Varaibles	**Mean socre**	**Standard deviation**	**Coefficient of variance**	**Relative importance %**	**Rank**
CO	4.4	1.24	33.93	90.14	1
CU	4.5	1.37	30.64	89.55	2
ET	4.4	1.57	35.40	88.93	3
Digital Citizenship	4.43	1.39	33.32	89.54	

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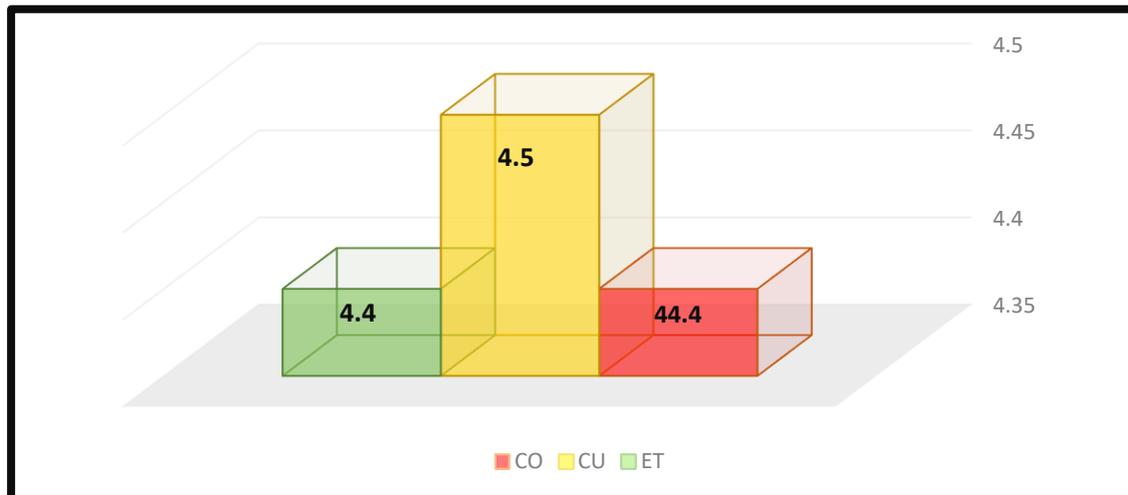
Figure 4. *Graphical representation of digital citizenship dimensions*

Human Resource Skills

Table 4 shows that the HRS variable achieved a mean of (4.15) and a standard deviation of (1.06), with a coefficient of variance (25.62%) and a relative significance of importance of (83.062%). The statistical results indicate that HRS in tourism variable has a high degree of importance according to the responses of the research sample. This indicates the importance of skills that are built within scientific standards aimed at developing tourism education institutions. As for the HRS variable, it was measured by ten items, with HRS7 ranking first with a relative importance of (87.85%), while HRS8 ranked tenth with a relative importance of (77.8%). Figure 5 shows the relative importance ranking of each item of HRS in tourism based on weighted arithmetic means.

Table 4: *Statistical results of human resource skills*

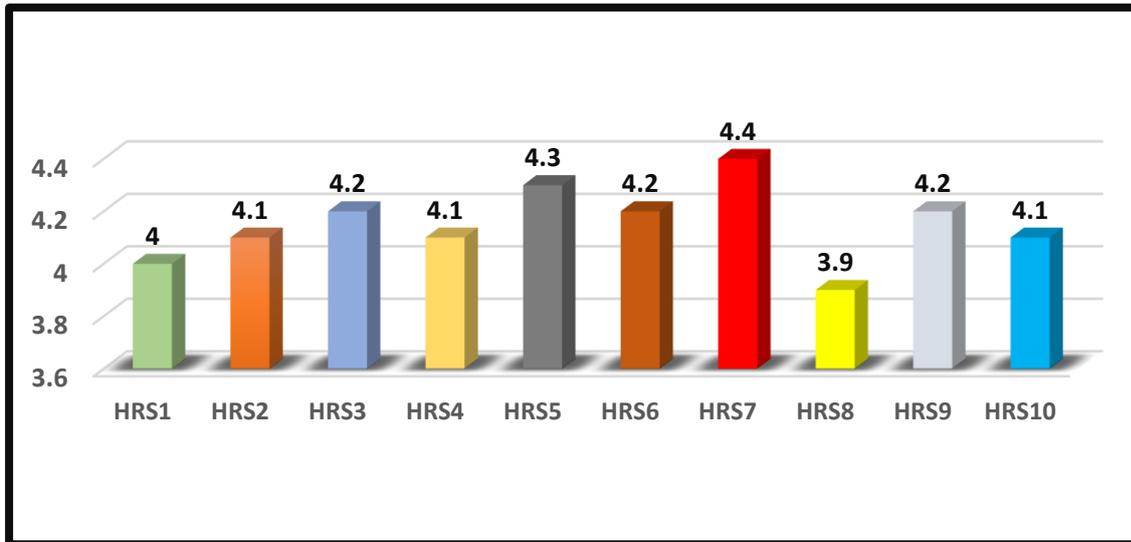| Varaibles	Mean socre	Standard deviation	Coefficient of variance	Relative importance %	Rank
HRS1	4	0.74	18.44	80.57	7
HRS2	4.1	0.97	23.58	82.3	6
HRS3	4.2	0.89	21.03	84.5	4
HRS4	4.1	1.02	24.69	82.39	8
HRS5	4.3	1.2	27.98	85.74	2
HRS6	4.2	1.49	35.2	84.78	3
HRS7	4.4	1.12	25.4	87.85	1
HRS8	3.9	1.57	40.29	77.8	10
HRS9	4.2	0.93	22.43	83.35	5
HRS10	4.1	0.7	17.11	81.34	9
HRS	4.15	1.063	25.615	83.062	

Figure 5. *Graphical representation of HRS*

Hypotheses Testing

Testing the first hypothesis

Table 5 shows a positive correlation between *digital citizenship and human resource skills in tourism*, with a correlation coefficient of (.899**0) at a significance level of (1%).

Table 5: *Correlcation beteween DC and HRS*

Correlations		Digital citizenship	Human resource skills
Digital citizenship	**Pearson Correlation**	1	**.899****
	Sig. (2-tailed)		**.000**
	N	209	209
Human resource skills	**Pearson Correlation**	.899**	1
	Sig. (2-tailed)	.000	
	N	209	209

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

Table 5 proves a positive correlation between DC and HRS in tourism with a correlation coefficient of (.899**0) at (0.01). In light of these results, it can be interpreted that the use of DC in tourism education institutions has an important impact on discovering the skills of their human resources, ensuring the quality of their educational outputs. This confirms the acceptance of the first hypothesis with its dimensions, which stated "There is a significant correlation between digital citizenship dimensions and human resource skills in tourism."

Testing the second hypothesis

Table 6 dispalys results important for testing the second hypothesis. The researchers analyzed multiple regression (MR) with its statistical parameters, represented by the (F) test, the partial regression coefficient (Beta/B), and the coefficient of determination (R2) to determine the impact of DC on developing HRS in tourism among students of the College of Tourism Sciences/ University of Karbala. Table 6 also calculated value of the (F) statistic for the simple linear regression model which scored 876.239. This result is greater than the tabulated value (3.071) at (0.05). The finding indicates a strong correlation. The coefficient of determination (R^2) was (0.809), demonstrating that *digital citizenship* explains (81%) of the variations of *human resource skills* in tourism among the research sample. The remaining percentage of (19%) is attributed to the effect of variables not included in the research model. The researcher also found the regression value of (B) to be (0.885), which determines the contribution of *digital citizenship* to the model and is statistically significant. Furthermore, the calculated value of (t) was (29.601), which is greater than the (1.658) of tabulated value at a significance level of (0.05) with a confidence level of (95%). To finish up, this shows signify the cance of the regression coefficient.

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Table 6: *Simple liner regession results*

Dependent variable / Independent vairalbe	HRS			test)f(	R^2)(
Digital citizenship	**Constant**	**B**	**test)t(**	**876.239**	**.809**
	1,155	.855	29.601		

CONCLUSION AND RECOMMENDATIONS

Conclusions

1. Digital citizenship is one of the most important variables of technology that should be used in educational institutions in general and in tourism institutions in particular, as it is a primary motivator for outstanding educational performance.
2. Digital citizenship scale achieved a good level of constructive validity, which confirms the compatibility of the scale with the research data collected. This indicates the strength of the relationship between the variable with its dimensions and items, and that the dimensions were measured by an acceptable and clear number of items.
3. The variable of DC achieved a good level of importance at the College of Tourism Sciences research sample with a value of 89.54% This confirms DC general importance according to the responses of the sample individuals.
4. The variable of *human resource skills in tourism* achieved a relatively high level of importance at the College of Tourism Sciences research sample with a value of 83.06%. This confirms HRS importance at the research sample level.
5. The administrative leadership at the College of Tourism Sciences which paid attention on the research sample to the dimensions of *digital citizenship* indicates to their acceptance of technological change that enhances the educational process at the research sample college. This helps the administration to discover the HRS, as evidenced by the strong positive correlation between DC with its dimensions and HRS.
6. The administrative leadership at the College of Tourism Sciences seeks to adopt the DC dimensions (communication, culture, ethics) in its educational processes, which would have a moral and scientific impact on developing HRS in tourism and enhance the potential of future educational outputs.
7. The digital communication dimension achieved the highest significant impact of DC dimensions on HRS in tourism at the College, followed by digital culture dimension and finally digital ethics dimension according to the research sample responses.

Recommendations

Based on the above conclusions, some recommendations can be made for using the digital citizenship system in the educational process at the research sample college, as follows:

1. Working on developing digital citizenship culture among the students and encouraging them to use it according to ethical standards that represent the student's good behavior and adopting educational rules that address the variables that occur.
2. Encouraging the faculty members at College of Trourism to conduct scientific research studies on topic of digital citizenship and its importance in managing students' skills electronically and scientifically within a clear scientific plan.
3. Enhance the human resource skills possessed by the employees at College of Tourism especially the various technological skills that contribute to developing the student's educational process.
4. Including digital citizenship curriculum within the computer courses to enable students to work according to a well-studied educational program supervised by specialized teaching staff, making it easier for them to deal with this culture on a daily basis with direct and high efficiency follow-up.
5. Utilizing the computer labs available at College of Trourism and employing them in spreading digital citizenship culture and benefiting from them in the educational process in general.
6. Equipping the classrooms in the departments of College of Trourism with advanced devices that serve digital citizenship, so that the faculty members can employ them in electronic educational processes.
7. The Ministry of Higher Education and Scientific Research's should pay attention on digital citizenship to enhance its culture among students to face future global variables to ensure their continuity in education.
8. The necessity of directing the teaching staff at College of Trourism to hold courses and workshops with students to demonstrate the mechanism of using digital citizenship in the educational process.

9. Highlighting the importance of digital citizenship in the educational process through activating programs and plans for courses and conferences that address the importance of digital citizenship and are included in the annual scientific plan of the research sample college, and highlighting the most important results achieved by this program.

10. Building and enhancing creativity among students at College of Trourism by managing their HRS and investing these skills in enhancing digital citizenship culture.

11. Involving students who possess distinctive electronic skills in promoting the concept of digital citizenship at the College of Trourism under the supervision of specialized faculty members.

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