Study of the relationship between digital citizenship and basic technology qualification levels of social studies teachers

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ABSTRACT

The main purpose of this research is to determine whether digital citizenship and basic technology proficiency levels of social studies teachers are predictors of each other by examining it in terms of various variables. The research group of the study consists of 94 social studies teachers working in public schools of the central district of Afyonkarahisar province between 2021 and 2022. In the study, the screening method was used among quantitative research methods. To determine the digital citizenship levels of teachers "Digital Citizenship" and to specify the basic technology proficiency levels, "Basic Technology Proficiency for Educators" was used. At the end of the study, it was concluded that the digital citizenship levels of social studies teachers were intermediate. It has been observed that there is a significant difference between the digital citizenship levels of social studies teachers and the gender and social network usage variables. There has been no significant difference between the age variable and digital citizenship level. Basic technology proficiency levels of social studies teachers were determined to be intermediate. It has been concluded that there is a significant difference between the basic technology proficiency levels of social studies teachers and the gender variable. There was no significant difference between age and social network usage variables and the level of basic technology proficiency. In the correlation analysis to determine the relationship between the digital citizenship levels of social studies teachers and the basic technology proficiency levels, it was found that there was a moderate, positive and statistically significant relationship.

Keywords: Digital citizenship, basic technology proficiency, social studies.

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INTRODUCTION

The developments in the 20th and 21st centuries bring about change in every aspect of life and affect the lifestyles of societies. Especially in the last half century, developments in information technology have brought about changes in the social structure in terms of social, political and cultural aspects. It can be said that these changes also affect the concept of citizenship, which is an important element of the social structure. The globalization developed by digital technologies, the traditional understanding of citizenship based on individual-state, rights and responsibilities based on geographical borders, has left its place to the concept of digital citizenship, which brings all people together on a common ground and has unique value judgments. In line with these developments, the concept of digital citizenship has emerged (Çubukçu and Bayzan, 2013). Karaduman and Öztürk (2014) define digital citizenship as paying attention to basic norms and acting in this direction while using technology. Farmer (2010), on the other hand, defined digital citizens as those who filter the information obtained in the digital environment and use this information for both their own development and social benefit. In another definition, digital citizenship is defined as being able to predict the dangers in digital

environments and develop behavior against these dangers (Aydın, 2015).

Ribble (2011) approached the concept of digital citizenship in 9 dimensions and emphasized that knowledge, skills and competence in this field should be transferred to individuals at a young age.

• Digital Access: Being actively involved in digital environments.
• Digital Ethics: Online behavioral norms.
• Digital Law: Responsibility for online behavior and actions.
• Digital Literacy: Knowledge and skills related to the use of technology.
• Digital Health: Online physical and psychological well-being.
• Digital Security: Online person, information security.
• Digital Communication: Exchange of information online.
• Digital Rights and Responsibilities: Online rights and freedoms.

In this age where technology is developing rapidly, the characteristics that the individual should possess have also changed in light of these developments. It is understood that the need for individuals who can affect the future of the world, who can think quickly, who are active participants, creative, who can use the information for their own benefit, who can make studies that facilitate learning, who draw their boundaries, who learn the way to access information, and who can use technology correctly and effectively, is increasing day by day (Açıkgöz, 2002). For this reason, the increase in the use of technologies such as general network, computer, smart board in educational processes has revealed the necessity for students and educators to use information and communication technologies effectively. In order to effectively benefit from technological developments in the education and training process, it is of great importance for the teacher to provide coordination between information and communication technologies and the student and to carry out this process effectively (Yıldız et al., 2002). Considering that teachers are the basis of innovations in education, the fact that teachers play a key role in adapting technology to the teaching process emerges. In this context, it is expected that teachers constantly update themselves by following technological developments and encouraging students to learn (Kılbaş, 2000).

Social studies course is one of the courses in which teachers use technology effectively. Social studies teachers are in the position of instructors of values and achievements related to digital citizenship. In this respect, they differ from other teachers. The statement "Activities related to digital citizenship and its dimensions should be emphasized in order to develop students' digital citizenship competencies" (MEB, 2018) was included in the curriculum, and the social studies course and teachers were given great responsibility. The

competencies expected from individuals in the fields of "Basic Competencies in Science and Technology" and "Digital Competence" in the Social Studies curriculum are as follows: benefiting from information and communication technologies in a critical and safe way, benefiting from technology in meeting demands and needs, accessing information, evaluating and storing information, using technology for shopping and communication (MEB, 2018). In this context, it is aimed to train individuals who can use today's technologies.

With the effect of digital applications such as e-government (digital Turkey), e-pulse, e-school, e-banking, which are increasingly used in Turkey, it is of great importance to integrate individuals with high digital citizenship levels into society. Therefore, studies to determine teachers' proficiency in technology use and digital citizenship levels have become important.

It is aimed to examine the relationship between social studies teachers' digital citizenship and basic technology proficiency levels with the present study. In line with the purpose of the research, answers to the following questions were sought:

• What is the basic technology proficiency level of social studies teachers?
• Do social studies teachers' scores on the basic technology competencies scale differ significantly according to the gender variable?
• Do social studies teachers' scores on the basic technology competencies scale differ significantly according to the age variable?
• Do social studies teachers' scores on the basic technology competencies scale differ significantly according to the social media usage status variable?
• What is the digital citizenship level of social studies teachers?
• Do social studies teachers' scores on the digital citizenship level scale differ significantly according to the gender variable?
• Do social studies teachers' scores on the digital citizenship level scale differ significantly according to the age variable?
• Do social studies teachers' scores on the digital citizenship level scale differ significantly according to the social media usage status variable?
• Is there a significant relationship between social studies teachers' digital citizenship and basic technology proficiency level?

METHOD

Research pattern

In this study, which aims to determine the relationship between social studies teachers' digital citizenship and basic technology proficiency levels, the relational survey method, which is one of the quantitative research

methods, was used. The study is in a relational screening model and shows a descriptive nature. According to Karasar (2011), the relational screening model is a method used to determine the change between many variables or the level of this change.

Research group

The research group consists of 94 Social Studies teachers working in the central district of Afyonkarahisar in the 2021-2022 academic year. The gender distribution of the teachers in the study group is shown in Table 1.

When Table 1 is examined, 43 (45.7%) female teachers and 51 (54.3%) male teachers constitute the population of the study, which was determined as 94 people. Of the study population, 9 (9.6%) are 25 years old and younger, 24 (25.5%) are 26-30 years old, and 61 (64.9%) are 31 and over. Of the study population, 81 (86.2%) reported using social media and 13 (13.8%) did not use social media.

Data collection tools

Basic technology competencies scale for educators

To collect the research data, the "Basic Technology Competencies for Educators" scale consisting of 48 items, which was brought to the literature by Flowers and Algozzine (2000) and adapted into Turkish by Tekinarslan (2008), was used. This scale has nine (9) sub-dimensions: Basic Computer Usage, Database, Social, Legal and Ethical Issues, Spreadsheet, Word Processing, Media Communication, Internet Network Installation, Maintenance and Troubleshooting, and Telecommunications. It consists of 48 items in total. It was developed in a 4-point Likert type and it is in the form of "Unsatisfactory=1", "Less Sufficient=2", "Sufficient=3" and "Very Sufficient=4". The Cronbach Alpha internal consistency coefficients of the nine sub-dimensions of the scale which was adapted into Turkish and which are similar to the findings during the development of the original scale were calculated as follows from the first factor to the ninth factor: α = .91, .95, .92, .92, .88, .88, 88, .90, .61. As for the whole scale, α was calculated as .95. In this study, the "Cronbach Alpha" internal consistency coefficients of the nine sub-dimensions were similar to the findings during the development of the original scale, from the first factor to the ninth-factor α = .91, .89, .92, .91, .94, .86, 81, .87, .90, and α = .97 for the entire scale.

Digital citizenship scale

The "Digital Citizenship" scale consisting of 34 items, which was brought to the literature by Ribble and Bailey

Table 1. Demographic characteristics of social studies teachers.

	F	%
Gender		
Male	51	54.3
Female	43	45.7
Total	94	100
Age groups		
25 years and under	9	9.6
26 – 30	24	25.5
31 years and older	61	64.9
Total	94	100
Social media usage		
Yes	81	86.2
No	13	13.8
Total	94	100

(2007) and adapted into Turkish by İşman and Canan-Güngören (2014), was used. This scale has nine (9) sub-dimensions: Digital Literacy, Digital Law, Digital Rights and Responsibilities, Digital Communication, Digital Security, Digital Shopping, Digital Access, Digital Ethics and Digital Health. It consists of 34 items in total. It was developed in a 5-point Likert type, in the form of "Strongly Disagree=1", "Disagree=2", "Undecided=3", "Agree=4" and "Strongly Agree=5". The "Cronbach Alpha" internal consistency coefficients of the nine sub-dimensions in the scale adapted to Turkish were similar to the findings during the development of the original scale from the first factor to the ninth factor respectively α = .78, .84, .80, .79, .85, .84, 90, .70. , .70, and α = .85 for the entire scale. In this study, the "Cronbach Alpha" internal consistency coefficients of the nine sub-dimensions were similar to the findings during the development of the original scale, from the first factor to the ninth-factor α = .90, .83, .86, .82, .81, .89, 82, .89. , .73, and α = .89 for the entire scale.

Data analysis

In the study, techniques suitable for quantitative data analysis were used in the analysis of the data obtained from the participants. In the analysis of quantitative data, it was first tested whether the data set and its sub-dimensions met the assumption of normality. In order to investigate whether the results obtained from the data show a normal distribution, the normality test was performed and the Kolmogorov-Smirnov test result of the "Basic Technology Competence" scale was .73 and the Kolmogorov-Smirnov test result of the "Digital Citizenship" scale was .20. As this value is greater than .05, it shows that there is a normal distribution of the data

and parametric analyzes will be used.

Descriptive analysis techniques such as mean, standard and deviation have been used to examine social studies teachers according to their digital citizenship levels and basic technology competencies sub-dimensions. In order to examine the scores obtained from the scale according to the gender, age and social media usage variables of the social studies teachers participating in the research, the independent t-test and one-way Anova were applied using the SPSS v.21 program.

RESULTS

As can be seen in Table 2, the levels of the basic technology proficiency scale and sub-dimensions of social studies teachers have been given. According to the results in the table, the basic technological competence level of social studies teachers was calculated as the medium. When the sub-dimensions are examined, it is seen that the proficiency levels of the teachers are between medium and high levels.

When Table 3 is examined a significant difference was found between the genders and the general scale of basic technology competencies of social studies teachers t = 4.20; p < .05, basic computer usage t = 4.02; p < .05, installation, maintenance and troubleshooting t = 4.48; p < .05, word Processor t = 4.63; p < .05, spreadsheet t = 3.59; p < .05, databases t = 2.48; p < .05, using internet t = 2.84; p < .05, telecommunications t = 3.24; p < .05 mediated communication sub-dimensions t = 3.04; p < .05 and social, legal and ethical issues t = 1.98 with p < .05. According to the gender variable, it was determined that the basic technology proficiency levels of the social studies teachers were at 0.05 importance level, and there was a difference in favor of male teachers. In addition, no significant difference was found between the social, legal and ethical issues sub-factor and their genders (t = 1.98; p > .05).

When Table 4 is examined, the general scale of basic technology competencies of social studies teachers (F = 18; p > .05), basic computer use (F = .23; p > .05), installation, maintenance and troubleshooting (F = .50; p > .05), word processor (F = .17; p > .05), spreadsheet (F = .003; p > .05), databases (F = .45; p > .05), web use (F = .40; p > .05), telecommunications (F = .19; p > .05), media communication sub-dimensions (F = .63; p > .05), and social, legal and ethical issues (F = 1.07; p > .05) and their ages were not significantly different. According to the age variable, no significant difference was found in the basic technology competencies of social studies teachers at the 0.05 importance level. The average of the basic technological competencies of social studies teachers was found to be below 25 (X = 136.00), those aged between 26-30 (X = 138.87), and those aged 31 and over (X = 135.42).

When Table 5 is examined, the general scale of basic technology competencies of social studies teachers (t = .59; p > .05), basic computer use (t = 1.24; p > .05), installation, maintenance and troubleshooting (t = .38; p > .05), word processor (t = .99; p > .05), spreadsheet (t = .34; p > .05), databases (t = .35; p > .05), internet network use (t = .34; p > .05), telecommunication (t = .34; p > .05), media communication sub-dimensions (t = .25; p > .05), and social, legal and ethical issues (t = .34; p > .05) and social media usage status (t =1.98; p > .05), no significant difference was found. According to the results of the analysis, the basic technology proficiency averages of the social studies teachers were found among those who use social media (X = 136.93) and those who do not use social media (X = 132.76). According to the social media usage status, no significant difference was found in the basic technology competencies of social studies teachers at the 0.05 importance level.

As can be seen in Table 6, the levels of digital citizenship of social studies teachers and their sub-dimensions are given. The "Digital Citizenship" level of Social Studies Teachers was calculated as medium level.

Table 2. Levels of basic technology competencies and sub-dimensions of social studies teachers.

	N	X	SS	Level
Basic computer usage	94	22.56	3.37	High
Installation, maintenance and troubleshooting	94	17.18	3.33	Medium
Word processor	94	15.37	2.96	High
Spreadsheet	94	12.85	3.46	Medium
Databases	94	11.95	3.70	Medium
Internet usage	94	14.63	2.60	Medium
Telecommunication	94	13.69	2.99	Medium
Mediated communication	94	14.73	2.87	High
Social, legal and ethical issues	94	13.37	3.30	Medium
Basic technological competence	94	136.36	23.41	Medium

Table 3. Analysis results between social studies teachers' basic technology competencies and gender.

	Gender	N	X	SS	T	P
Basic computer usage	Female	43	21.16	2.88	4.02	.00
	Male	51	23.74	3.33		
Installation, maintenance and troubleshooting	Female	43	15.65	3.35	4.48	.00
	Male	51	18.47	2.73		
Word processor	Female	43	13.97	3.01	4.63	.00
	Male	51	16.54	2.36		
Spreadsheet	Female	43	11.53	3.44	3.59	.01
	Male	51	13.96	3.09		
Databases	Female	43	10.95	3.70	2.48	.015
	Male	51	12.80	3.51		
Internet usage	Female	43	13.83	2.64	2.84	.006
	Male	51	15.31	2.38		
Telecommunication	Female	43	12.65	3.17	3.24	.002
	Male	51	14.56	2.54		
Mediated communication	Female	43	13.79	3.24	3.04	.003
	Male	51	15.52	2.27		
Social, legal and ethical issues	Female	43	12.62	3.75	1.98	.051
	Male	51	14.00	2.75		
Total	Female	43	126.18	24.42	4.20	.00
	Male	51	144.94	18.82		

Table 4. Analysis results between social studies teachers' basic technology competencies and ages.

		Sum of Squares	Sd	Average of Squares	F	P
Basic computer usage	Inter-Groups	5.35	2	2.67	.23	.79
	Within Group	1055.76	91	11.60		
Installation, maintenance and troubleshooting	Inter-Groups	11.44	2	5.72	.50	.60
	Within Group	1022.48	91	11.23		
Word processor	Inter-Groups	1.55	2	1.55	.17	.84
	Within Group	812.86	91	8.93		
Spreadsheet	Inter-Groups	.06	2	.03	.003	.99
	Within Group	1113.85	91	12.24		
Databases	Inter-Groups	12.63	2	6.31	.45	.63
	Within Group	1261.19	91	13.85		
Internet usage	Inter-Groups	5.53	2	6.31	.40	.66
	Within Group	624.17	91	13.85		

Table 4. Continues.

Telecommunication	Inter-Groups	3.44	2	1.72	.19	.83
	Within Group	830.60	91	9.12		
Mediated communnication	Inter-Groups	10.60	2	5.30	.63	.53
	Within Group	759.74	91	8.34		
Social, legal and ethical issues	Inter-Groups	23.38	2	11.69	1.07	.34
	Within Group	992.58	91	10.91		
Total	Inter-Groups	206.15	2	103.08	.18	.83
	Within Group	50763.54	91	557.84		

Table 5. Analysis results between social studies teachers' basic technological competencies and social media usage situations.

	Social media usage	N	X	SS	T	P
Basic computer usage	Yes	81	22.83	3.38	1.24	.23
	No	13	21.84	2.91		
Installation, maintenance and troubleshooting	Yes	81	17.23	3.47	.38	.69
	No	13	16.84	2.30		
Word processor	Yes	81	15.49	3.05	.99	.32
	No	13	14.61	2.25		
Spreadsheet	Yes	81	12.90	3.60	.34	.72
	No	13	12.53	2.47		
Databases	Yes	81	12.01	3.90	.35	.73
	No	13	11.61	2.06		
Internet usage	Yes	81	14.47	2.74	.95	.34
	No	13	14.00	1.35		
Telecommunication	Yes	81	13.72	3.14	.29	.76
	No	13	13.46	1.85		
Mediated communication	Yes	81	14.70	2.98	.25	.80
	No	13	14.92	2.13		
Social, legal and ethical issues	Yes	81	12.62	3.75	1.98	.52
	No	13	14.00	2.75		
Total	Yes	81	136.93	24.57	.59	.55
	No	13	132.76	14.36		

When Table 7 is examined, a significant difference was found between social studies teachers' digital citizenship levels and their genders (t = 2.60, p < .05). The digital citizenship averages of social studies teachers were found for males (X = 129.09) and females (X = 122.76). According to the gender variable, it was determined that the digital citizenship levels of social studies teachers were at 0.05 importance level, and there was a difference in favor of male teachers. In addition, according to the gender variable, it was determined that the "Digital Health" sub-factor of social studies teachers was at the 0.05 importance level and there was a difference in favor

Table 6. Levels of digital citizenship and sub-dimensions of social studies teachers.

	N	X	SS	Level
Digital literacy	94	22.56	3.37	High
Digital law	94	17.18	3.33	Very High
Digital rights and responsibilities	94	15.37	2.96	High
Digital communication	94	12.85	3.46	High
Digital security	94	11.95	3.70	High
Digital trade	94	14.63	2.60	Very High
Digital access	94	13.69	2.99	Very High
Digital ethic	94	14.73	2.87	Very High
Digital health	94	13.37	3.30	Very High
Digital citizenship	94	136.36	23.41	Medium

Table 7. Analysis results between social studies teachers' digital citizenship levels and gender.

	Gender	N	X	SS	T	P
Digital literacy	Female	43	22.30	3.43	1.91	.059
	Male	51	23.72	3.72		
Digital rights and responsibilities	Female	43	17.37	2.13	.46	.64
	Male	51	17.56	1.93		
Digital security	Female	43	16.30	1.50	.60	.54
	Male	51	16.50	1.77		
Digital access	Female	43	15.00	3.19	1.86	.66
	Male	51	16.03	2.19		
Digital health	Female	43	10.39	1.80	1.63	.10
	Male	51	11.01	1.88		
Digital law	Female	43	11.44	2.01	1.74	.085
	Male	51	12.17	2.05		
Digital communication	Female	43	11.90	1.44	1.59	.11
	Male	51	12.39	1.48		
Digital trade	Female	43	10.34	1.27	.97	.33
	Male	51	10.68	1.94		
Digital ethic	Female	43	7.69	2.14	2.59	.011
	Male	51	8.98	2.58		
Toplam	Female	43	122.76	11.01	2.60	.011
	Male	51	129.09	12.27		

of male teachers.

No significant difference was found between sub-dimensions of social studies teachers' digital literacy (t = 1.91; p > .05), digital law (t = .46; p > .05), digital rights and responsibilities (t = .60; p > .05), digital communication (t = 1.86; p > .05), digital security (t = 1.63; p > .05), digital commerce (t = 1.74; p > .05), digital access (t = 1.59; p > .05), and digital ethics (t = .97; p > .05) and their genders.

When Table 8 is examined, no significant difference was found between their ages and the overall scale of digital citizenship levels of social studies teachers

Table 8. Analysis results between social studies teachers' digital citizenship status and age.

		Sum of Squares	Sd	Average of Squares	F	P
Digital literacy	Inter-Groups	8.64	2	4.32	.32	.72
	Within Group	1227.83	91	13.49		
Digital law	Inter-Groups	6.57	2	3.28	.80	.45
	Within Group	372.88	91	4.09		
Digital rights and responsibilities	Inter-Groups	1.32	2	.66	.23	.78
	Within Group	251.49	91	2.76		
Digital communication	Inter-Groups	4.51	2	2.25	.29	.74
	Within Group	688.60	91	7.56		
Digital security	Inter-Groups	4.31	2	2.15	.61	.54
	Within Group	318.03	91	3.49		
Digital trade	Inter-Groups	13.15	2	6.57	1.57	.21
	Within Group	381.44	91	4.19		
Digital access	Inter-Groups	2.15	2	1.07	.48	.61
	Within Group	201.12	91	2.21		
Digital ethic	Inter-Groups	3.73	2	1.87	.66	.51
	Within Group	255.66	91	2.81		
Digital health	Inter-Groups	6.41	2	3.20	.52	.59
	Within Group	558.02	91	6.13		
Total	Inter-Groups	14.97	2	7.48	.05	.95
	Within Group	13552.18	91	148.92		

(F = .05; p > .05), digital literacy (F = .32; p > .05), digital law (F = .80; p > .05), digital right and responsibility (F = .23; p > .05), digital communication (F = .29; p > .05), digital security (F = .61; p > .05), digital commerce (F = 1.57; p > .05), digital access (F = .48; p > .05), digital ethics (F = .66; p > .05), and digital health sub-dimensions (F = .52; p > .05). According to the results of the analysis, the digital citizenship status averages of the social studies teachers were found for those under 25 (X = 125.22), those aged between 26-30 (X = 126.70) and those aged 31 and over (X = 126.14). According to the age variable, there was no significant difference in the digital citizenship levels of social studies teachers at the 0.05 importance level.

When Table 9 is examined, a significant difference was found between the overall scale of social studies teachers' digital citizenship levels and their use of social media (t = 2.13; p < .05). The digital citizenship status averages of social studies teachers were found for those who use social media (X = 127.24) and those who do not use social media (X = 119.69). According to their social media usage status, it has been determined that the digital citizenship levels of social studies teachers are at 0.05 importance level and there is a difference in favor of those who use social media. While there is a significant difference between the sub-dimensions of digital literacy (t = 2.52; p < .05), digital communication (t = 2.51; p < .05), and digital access (t = 2.10; p < .05) and social media usage status, no such difference was found between digital law (t = 2.06; p > .05), digital rights and responsibility (t = 1.16; p > .05), digital security (t = .23; p > .05), digital commerce (t = .71; p > .05), digital ethics (t = 1.24; p > .05) and digital health sub-dimensions (t = .22; p > .05) and social media usage status.

When Table 10 is examined, it is seen that there is a moderate, positive and statistically significant relationship between social studies teachers' digital citizenship scores and basic technology competencies (r = .41; p < .05). As social studies teachers' basic technology proficiency levels increase, their digital citizenship levels also increase.

Table 9. Analysis results between social studies teachers' digital citizenship status and social media usage status.

	Social media usage	N	X	SS	T	P
Digital literacy	Yes	81	23.44	3.49	2.52	.013
	No	13	20.76	3.87		
Digital law	Yes	81	17.56	2.05	1.06	.28
	No	13	16.92	1.75		
Digital rights and responsibility	Yes	81	16.49	1.74	1.16	.24
	No	13	15.92	.64		
Digital communication	Yes	81	15.83	2.65	2.51	.014
	No	13	13.84	2.64		
Digital security	Yes	81	10.71	1.90	.23	.81
	No	13	10.84	1.62		
Digital trade	Yes	81	11.90	2.13	.71	.47
	No	13	11.46	1.50		
Digital access	Yes	81	12.29	1.48	2.10	.038
	No	13	11.38	1.19		
Digital ethics	Yes	81	10.61	1.71	1.24	.21
	No	13	10.00	1.29		
Digital health	Yes	81	8.37	2.49	.22	.82
	No	13	8.53	2.33		
Total	Yes	81	127.24	12.21	2.13	.036
	No	13	119.69	9.12		

Table 10. The results of the relationship between digital citizenship and basic technology competencies of social studies teachers.

			Digital citizenship	Core technology competencies
	Digital citizenship	R	1	.41**
		P		.00
		N	94	94
Pearson*				
	Core technology competencies	R	.41**	1
		P	.00	
		N	94	94

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

In this section, the conclusions reached based on the findings and the discussions and suggestions based on the results are given.

When the basic technology proficiency levels of social studies teachers were examined in terms of gender factor, it was determined that male teachers had higher basic technology proficiency levels than female teachers. Menzi et al. (2012) found in their study that male pre-service teachers were more competent than female pre-service teachers in all sub-dimensions of technology use. The reason for this situation can be shown as the fact

that male teachers are more interested in digital tools and equipment than female teachers and that they are introduced to computers and the Internet at a younger age.

When the basic technology competencies of social studies teachers were examined in terms of age variable, no significant difference was found. In the study of Yılmaz et al. (2015), it was determined that there was no significant difference in terms of teacher candidates' use of technology in education and computer proficiency according to their grade levels. In this respect, it supports our research.

When the basic technology competencies of social studies teachers were considered in terms of the social network-media usage variable, no statistically significant difference was found.

As a result of the research, it was concluded that the digital citizenship levels of social studies teachers are moderate. The result of the study is similar to the findings of Tatlı (2018) in this aspect.

It has been determined that the digital citizenship levels of social studies teachers differ more significantly between males and females favoring males. According to the results of the analysis, the Digital Citizenship averages of the social studies teachers were found for males (X = 129.09) and females (X = 122.76). According to TÜİK (2021) Household Information Technologies Usage data, the rate of internet use in 2021 was 87.7% for men and 77.5% for women. In this respect, it supports our research results.

Taking the digital citizenship levels of social studies teachers into consideration in terms of age variable, no statistically significant difference was found. In the study conducted by Aslan (2016), no significant difference was found between the digital citizenship levels of social studies teachers and the age factor. In this respect, the findings of the study support the current research.

A significant difference was found between the level of digital citizenship of social studies teachers and their use of social media. According to the results of the analysis, the digital citizenship status averages of the social studies teachers were found for those who use social media (X = 127.24) and those who do not use social media (X = 119.69). In the study conducted by Aslan (2016), it was determined that there is a statistically significant difference between the attitudes of social studies teacher candidates towards digital citizenship and the variable of social media (network) membership. It has been determined that the pre-service teachers who are members of one of the social networks have a more positive attitude towards digital citizenship than the pre-service teachers who are not members of any social network.

It is seen that there is a moderate, positive and statistically significant relationship between the digital citizenship level scores of social studies teachers and their basic technology competence scores (r = .41; p <

.05). As social studies teachers' basic technology proficiency levels increase, their digital citizenship levels also increase. It can be said that basic technology competence is an important predictor of the digital citizenship level. In the study conducted by Algan (2021), a positive and highly significant relationship was found between teachers' self-efficacy levels in computer and general network use in the education process and their digital citizenship levels. The study findings support the current research.

According to the results of the findings obtained from the research, various suggestions for teachers, school administrators and researchers are listed below:

• It is aimed to make social studies teachers gain the concept of digital citizenship, which is a new concept in the national literature, as a skill. Accordingly, in-service training on digital citizenship education can be given to social studies teachers by collaborating with experts in the field of social sciences.
• "Digital Citizenship" can be given as an elective course in social studies teaching undergraduate education.
• Technologically-based structuring of the courses that social studies teachers have taken during their undergraduate education may contribute to increasing their technological competence levels.
• It is very important to act together with parents and school administrators in the adoption of the concept of digital citizenship by society. In this context, workshops and congresses can be organized within the scope of related fields.
• Qualitative and quantitative research can be conducted on the use of education and instructional technologies in Social Studies teaching.
• School administrators can make digital citizenship a part of the school climate by making school-specific practices related to digital citizenship.
• Digital citizenship and basic technology proficiency levels of teachers in different branches can also be investigated.
• Experimental studies can be conducted to include students as well. In addition, studies to reveal the digital citizenship and basic technology proficiency levels of academicians who train teachers can contribute to the literature.

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