



Who are Better Digital Citizens, Professors or Students? An Exploratory Study in Leading Faculties of Communication in Turkey

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Abstract

This study aimed at assessing professors' and students' self-efficacy levels of digital citizenship in the faculties of communication in Turkey. The study employed a mixed research model to collect and integrate both quantitative and qualitative data. The sample of the study consisted of 476 participants from four leading faculties of communication. A 42 item Likert type scale was developed and implemented to collect quantitative data. This was followed by semi-structured interviews which were conducted with 13 participants who volunteered to reveal qualitative insights. The quantitative results showed significant differences between senior professors and junior professors. The difference between professors and students was not significant. Similarly, no significant differences emerged regarding the department and gender of the participants. On the other hand, a contradiction has arisen when the data from the scale and the semi-structured interviews were compared. The results from the scale suggested that both the students and the professors believed that they were competent enough in digital citizenship; however, the professors who participated the semi-structured interviews indicated that they believed in their own competencies but not the competencies of fellow professors and students. Interestingly, the students believed the same thing with regard to competencies of professors. Furthermore, all participants thought that the efforts of the government and communication faculties were inadequate in educating people as digital citizens. They had thoughtful criticisms about the rational spread and proper use of digital technologies in the society; they also had serious concerns for the future.

Keywords: Digital Citizenship, Digital Natives, Digital Immigrants, Information Society

Introduction

With the emergence of digital communication technologies, a new structure, which is called the *cyberspace*, has emerged in the non-physical environment. This new structure has similarities with the notion of "society". For example, the economic relations that Adam Smith described as society-specific qualities; or production, property relations and class conflicts, which Marxist thinkers use to describe society, has found their reflections in this virtual society. Moreover, these are protected by laws which were created in physical life, generally in favor of the elite class. Everyone is held responsible for their actions in the virtual environment and they can be negatively affected by their wrong steps in the cyberspace, even legally punished for their actions. Therefore, it is possible to call this new structure an "extension society" based on physical life. (The reason why



cyber society is called an extension society is because it cannot exist without infrastructure of the physical society).

People, who are flocking to this new society, must learn some behaviors and norms, that are required by both the small communities and the cyberspace as a whole, to be able to navigate safely in the virtual environment and to be accepted in this new world. Also, they must develop some competencies to be able to act according to these norms, and use the technology properly. In other words, they must become "digital citizens" of this new world.

Digital citizenship is not just about ethical codes that must be followed in virtual environments. At the same time, it is about having the necessary knowledge and skills to use digital technologies effectively and correctly. In this sense, to claim that an individual is literally a digital citizen, (s)he must both know and apply the necessary ethical norms well, along with having the adequate technological competencies.

Because of the computer and the Internet, which are jointly the main infrastructure of the cyberspace, are communication technologies and focused on the sharing information, communication faculties have gain importance, especially in recent years. Because the companies in the communication sector have started to carry out their works online in an increasing manner. Furthermore, there has been an increase in need for labor capable of using new communication technologies because of the emergence of new business lines related to the field as well as companies that are active in other sectors are starting to work in digital environments. However, the "Department Report on the Restructuring of the Anadolu University's Communication Department" prepared by Simsek et al. (2005) showed that the sector representatives think that graduates of communication faculties are inadequate in this manner. Also, most of the physical facilities, environments and equipment used for communication training are old and far from the technological developments of today. In addition, departments in the Communication Faculties are not enough to serve the field because they still offer a mass communication-oriented education.

Quantitative increase in communication faculties has not met qualitative criteria, and this situation brought new questions: "Taken as a whole, do the professors of the seasoned communication faculties and the faculty members assigned to the newly established communication faculties have the knowledge and experience to convey the qualifications required by today's conditions to the students?" or "Do students who prefer these faculties really believe they have acquired necessary qualifications or their skills in technology have increased as a consequence of education that they have received?" These questions are assumed to have many sources. One of them is that the digital technologies in Turkey are very new and students are in the group which Prensky (2001) called "Digital Natives" while most of the professors are in the group which the same author called "Digital Immigrants". By the concept of digital immigrants, Prensky does not refer to individuals who were born into the existing technological developments; but he refers to the individuals who meet these technologies at a certain point in their lives and try to adapt to them. According to Prensky, Digital Immigrants learn – like all immigrants, some better than others – to adapt to their environment, they always retain, to some degree, their "accent," that is, their foot in the past (Prensky, 2001, p.2). On the other hand, the digital natives are the young generation who were born into this new world and speak the language of computers, video games and the Internet like their mother tongue (Prensky, 2001).

In this framework some questions have emerged: "Do digital immigrants really have the qualifications to teach the necessities of digital citizenship to digital natives?"; "Are the university students, who are presumed to be born into technological transformation in Turkey, really carry the qualifications of being digital natives?"; "Are communication



faculties really a pioneer in the use, dissemination and control of digital technologies?”, “Are the members of these faculties (both students and professors) think that they are competent with regard to digital citizenship qualifications?” etc. In the context of all these questions, the problem of this research is to reveal the perception of digital citizenship self-efficacy of professors and students in communication faculties.

The Concept of Digital Citizenship

In the second half of the 20th century, with the invention and dissemination of the digital technologies, especially Internet, irreversible changes in terms of technological and social sense has occurred. Because of these developments, the concept of citizenship, like many other concepts, has undergone drastic changes, and "digital citizenship" emerged as a new kind of citizenship. The Internet has reshaped the concept of citizenship, and in this respect, it has become a milestone in the historical development process of the notion (Karaduman, 2011, p.14). As Ribble (2011) noted, over the years, technology users have established a digital society via digital technology and over the network. This new digital society has created many new opportunities for the individual and social arena. Like any organization with community characteristics, these digital communities also provide individuals with some new possibilities, while at the same time expecting them to move in a certain way (Ribble, 2011). Mostly unwritten rules and norms, which are expected to be followed by individuals, point to digital citizenship. Because digital citizenship is based on a set of non-written codes, it has different definitions, just as it is in the definition of citizenship. One of them is the following definition by Mossberger, Tolbert and McNeal (2007): “Digital citizens are those who use the internet regularly and effectively- that is, on a daily basis. Digital citizenship is briefly defined as the responsible behavior norms of digital citizens regarding the use of technology”. Mike Ribble simply describes digital citizenship as the ability to participate in online communities (Ribble, 2011,p.1). Digital citizens use the Internet to perform many different activities on daily basis.

Digital citizenship is the product of a world without the boundaries, which is created by digital technologies and Internet-based communications applications. It creates a new form of citizenship. While it builds upon the concepts of citizenship, subtle characteristics and nuances are part of this newer form. (Digital Citizenship Policy Development Guide, 2012, p.9). To be effectively exist in this world without borders or the hazards of the network, individuals must be digital citizens and fulfill the requirements of digital citizenship.

Elements of Digital Citizenship

Ribble (2011) dealt with nine elements required for the realization of digital citizenship in his work "Digital Citizenship in Schools: Nine Elements All Students Should Know". According to Ribble, digital citizenship is not a set of iron-clad rules; rather, it is a way to conceptualize the challenges facing all technology users (Ribble, 2011, p.12). Nevertheless, Ribble stated that individuals can only be responsible and productive digital citizens by learning the principles of digital citizenship, and these nine components will prepare the individuals to become fully-fledged digital citizens. These nine components are briefly described below:

- *Digital access*: full electronic participation in society (Ribble, 2011, p.16). In other words, digital access is the right of every individual in society to have equal access to digital technology (Sincar, 2013, p.2). For the digital access to be fully realized individuals' right for accessing must be guaranteed by many written and non-written codes, as well as the infrastructure required to implement these codes must be made available to the community.
- *Digital etiquette*: electronic standards of conduct and procedure (Ribble, 2011, p.11). While digital citizens use new technologies, they should comply with certain social norms in virtual environments or in physical environments. In this



sense, digital etiquette can be explained as the ability of the individual to act within the framework of social court rules while using technology.

- *Digital communication*: electronic exchange of information (Ribble, 2011, p.23). This element means that individuals can use digital technology to be informed and communicate with other individuals.
- *Digital law*: electronic responsibility for actions and deeds (Ribble, 2011, p.31). Individuals must respect property rights in digital environments and refrain from violating copyrights (Sincar, 2013, p.2). Any violation of legally guaranteed rights, either intentionally or unintentionally, in the digital environment will bring with it several legal sanctions. For this reason, individuals should be aware of the rules, policies and laws that apply in the digital environment (Cubukcu & Bayzan, 2013, p.151), and they must behave accordingly.
- *Digital commerce*: electronic buying and selling of goods (Ribble, 2011, p.20). Digital commerce refers to the ability to make online purchases, access to information about the product through digital technologies, and to make money transfers online.
- *Digital literacies*: process of teaching and learning about technology and the use of technology (Ribble, 2011, p.26). Digital literacy requires much more than just technical competence. It also requires critical thinking skills that can assess many different sources of information. In sum, digital literacy is the ability of an individual to have the necessary knowledge about digital technology and to apply them.
- *Digital rights and responsibilities*: those requirements and freedoms extended to everyone in a digital world (Ribble, 2011, p.35). Individuals should be able to protect their rights and defend others' rights to use digital technology.
- *Digital health and wellness*: physical and psychological well-being in a digital technology world (Ribble, 2011, p.38). New technologies brought many new psychological and physical diseases together. Individuals should be able to distinguish diseases originating from the use of digital technology and take necessary precautions against these problems (Sincar, 2013, p.2).
- *Digital security (Self-protection)*: electronic precautions to guarantee safety (Ribble, 2011, p.40). Individuals must be aware how to use digital technologies, and need to be able to use the necessary infrastructure to provide their own security in digital environments.

The use of digital technology is added as a tenth element to these nine elements. The reason for this is explained as follows: Throughout history, individuals must have certain specialties to be recognized as citizens of the community they live in, and to enjoy the rights and freedoms that citizenship brings. For example, in the Greek city states, individuals had to be 20 years old free men in order to be accepted as citizens. Nowadays, for example, people need to come from a Jewish family in order to be accepted as an Israeli citizen. If individuals don't carry these features, even if they obey the other requirements for citizenship; they wouldn't count as one. In an online society based on digital technologies and the Internet, ethnic and religious affiliations do not have an importance for citizenship. Rather, individuals need to be able to use digital technology in terms of software and hardware, even at the most basic level, in order to be digital citizens. If the individuals do not have self-sufficiency in the use of technology, the rest of the nine components will not be a precaution, as the relationship with digital environments will weaken. Because these nine elements determine level of digital citizenship of an individual, and insufficiency of them doesn't prevent digital citizenship only weaken it. This tenth component is therefore very important for the realization of digital citizenship.

Method

In this study, a mixed research model was created by combining quantitative and qualitative methods. During the research, first a Likert type scale was developed, then it



was administered to the sample, and finally the obtained data were analyzed. This way, the quantitative part of the research was completed. Following it, semi-structured interviews were conducted with volunteers from the sample. By doing this, the data obtained from the Likert-type scale were deepened, also the research was made more comprehensive by referring to the points not mentioned in the quantitative part of the research.

It is observed that a total of 38 communication faculties show activity under the roof of state universities in Turkey (YOK, 2016). The population of the present study consists of the members (professors and undergraduate students) of the communication faculties that accept students with the highest scores. The sample of the study included the Faculties of Communication at Anadolu University, Ankara University, Marmara University, and Ege University. The annual quota of all these faculties is over 200, and they accepted the most successful students based on the university entrance exam in 2014.

The scale is made of three parts. In the first part, it was tried to reveal the demographic characteristics (their status in the faculty, their title, department, income etc.) of the participants. In the second part of the scale, there were statements about how competent these people were in the use of digital technologies including both hardware and software. In the third part, the statements prepared according to Ribble's (2011) nine elements of digital citizenship were presented to participants. Thus, the digital citizenship self-efficacy perceptions of these people were measured with their social, legal and ethical extents.

Pilot application of the scale was carried out at Baskent University's Faculty of Communication. A total of 102 people respondents were reached in the pilot application. After this application, the scale form was finalized and applied to the sample. During the quantitative part of research, a total of 512 people were reached. 36 forms were eliminated with the reason that they were not filled out properly, so the data from remaining 476 participants were analyzed via SPSS. The Cronbach's alpha reliability coefficient was found to be .90 for the whole scale.

After the scale work was completed, semi-structured interviews with the volunteers from the sample were conducted. Two sets of questionnaires were prepared for students and professors for semi-structured interviews. A total of 13 people participated in the semi-structured interviews. Five of the participants were professors and eight of them were students. Also, eight of them were female and five of them were male.

Findings

Table 1. Gender-Status

		Status		Total
		Student	Professor	
Gender	Male	190	35	225
	Female	203	48	251
Total		393	83	476

A total of 476 people participated in the survey. 82.5% of the participants were undergraduate students and 17.5% were professors. 28 assistant professors, 21 associate professors, 24 full professors participated in the research. 10 professors preferred not to mention their titles. Regarding the age of the participants, the survey was based on Prensky's (2001) divergence between digital natives and digital immigrants, and it was assumed that students are in the digital native generation and professors are in the digital immigrant generation. 47.5% of the participants were men;



52,5% were females. When considering the gender-status distribution, it was seen that 190 of the students were male, 203 were female; also 35 of the professors are males and 48 were female.

Table 2. Distribution of Participants by Universities

Institution	n	%
Anadolu University	129	27,1
Ankara University	115	24,2
Ege University	112	23,5
Marmara University	120	25,2
Total	476	100,0

The distribution of the participants according to universities is as follows: 27% from Anadolu University, %24,5 from Ankara University, 23,5% from Ege University, 25% from Marmara University. Also, 28,5% of the participants were members of Radio Cinema Television/ Cinema Television departments, 29,5% were members of Public Relations and Publicity / Public Relations and Advertising departments, 14% of them were members of Communication Design and Management, Visual Communication Design departments, and 26,5% were members of Journalism department. Finally, 1.5% of the participants did not specify which department they study or work in.

Table 3. Distribution of Participants according to Income

Income	n	%
0-250	27	5,7
251-500	104	21,8
501-750	99	20,8
751-1000	98	20,6
1001+	65	13,7
999	83	17,4
Total	476	100,0

Professors were not asked about income status. Because the professors, who were working in state universities in Turkey, were accepted as state employees receiving a fixed salary determined by the state. When the students were asked about the income situation, it is seen that; 5.5% of students has income under 250 Turkish Liras (TL), 22% of them has income between 251-500 TL, %20.5% of them has income between 751-1000 TL and 13.5% of them has income over 1000 TL. The remaining 17.4% consists of professors.

Table 4. Comparison of participants' technology use self-efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.008	Male+ vs. Female-
Status	.394	
Department	.510	
Students Income	.443	
Academic Title	.026	Assoc+ vs. Prof-

Participants' average score for self-efficacy of digital technology use is 3.45/5.00; and it is above the threshold value (3.41). Therefore, participants consider themselves sufficiently competent in the use of technology. When compared, it is seen that men's average (M=3.54) is significantly higher than women's average (M=3.36) at alpha=.05 level.(p=.008) Also, the results showed that men consider themselves self-sufficient in the use of technology (3.54>3.41), and women don't (3.36<3.41). Apart from this, when the sub-groups within the professors are considered, it is seen that associate



professors' technology use self-efficacy perceptions ($M=3.76$) are significantly higher than full professors' ($M=3$). As for the assistant professors, no significant difference was found between them and the other groups. In addition, while the assistant professors ($M=3.58$) and associate professors ($M=3.76$) believe that they are competent with technology use, full professors ($M=24.13$) believe the contrary. According to the results obtained from the semi-structured interviews, professors' abstentions of technology appeared to play an important role on this. Finally, it was seen that status, income and department don't seem to make a significant difference on participants' technology use self-efficacy perceptions.

Table 5. Comparison of participants' digital access self-efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.149	
Status	.747	
Department	.872	
Students Income	.540	
Academic Title	.002	Prof-

The participants' mean score for digital access self-efficacy perception is 3.97/5.00. Participants generally believe that they are sufficient in terms of digital access. Gender, status, income, and departmental factors did not appear to have any significant effect on people's perception of digital access self-efficacy. However, title is a decisive factor on the digital access self-efficacy perceptions of professors. The digital access self-efficacy perceptions of assistant professors ($M=4.20$) and associate professors ($M=4.25$) are significantly higher ($p=.002$) than full professors' ($M=3.44$). In addition, the mean of all title groups is above the threshold ($M=3.96$), and all the groups consider themselves sufficient in this regard. When the quantitative and qualitative data are considered together, it is seen that the technological infrastructure provided to participants by their institutions plays a large role in the high access rate. Almost all participants from the interviews stated that the technological infrastructure of their faculties is quite sufficient and that their members can easily access to this infrastructure. However, as Wolf and Mckinnon (2002) mentioned, access is not just about accessing the infrastructure. It is also about accessing the necessary information and education to use this infrastructure. The qualitative part of the study showed that there are some problems on this subject.

Table 6. Comparison of participants' digital communication self-efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.215	
Status	.438	
Department	.688	
Students Income	.768	
Academic Title	.007	Prof-

Participants' mean score on digital communication self-efficacy perceptions is 3.91/5.00. This means that participants generally consider themselves sufficient on digital communication. Also, gender, status, income, and departmental factors did not appear to have any significant effect on people's perception of digital communication self-efficacy. Nevertheless, title is an influencing factor on the digital access self-efficacy perceptions of professors. Full professors mean score ($M=3.35$) is significantly lower ($p=.007$) than both assistant professors' ($M=4.01$) and associate professors' scores ($M=4.23$). Along with that, the means of assistant professors and associate professors are above the threshold score and they consider themselves sufficiently qualified in digital communication contrary to full professors. The qualitative data showed that students believe the digital communication skills are necessary tools to make their voice



heart by the others. However, the professors are more cautious and critical about this component of digital citizenship.

Table. 7. Comparison of participants' digital literacies self-efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.129	
Status	.027	Stud+ vs. Prof-
Department	.822	
Students Income	.292	
Academic Title	.009	Prof-

Participants' mean score on digital literacies self-efficacy perceptions is 3.8/5.00. In general, participants believe that their digital literacy skills are high. Gender, income, and departmental factors did not appear to have any significant effect on people's perception of digital literacies self-efficacy. Nevertheless, when a comparison is made between the professors and the students, it is seen that the mean of the professors (M=3.63) is significantly lower than the average of the students (3.84). That means that students consider themselves more sufficient than professors on this subject ($p=.027$). Also, full professors mean score (M=3.12) is significantly lower ($p=.009$) than both assistant professors' (M=3.90) and associate professors' scores (M=3.93). Also, the average of the professors is below the threshold and they do not see themselves sufficient on digital literacy (M<3.41). No significant difference was found between associate professors and assistant professors.

Table 8. Comparison of participants' digital shopping self-efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.266	
Status	.655	
Department	.280	
Students Income	.018	Below500- vs. Above 750
Academic Title	.000	Prof-

The participants' mean score for digital shopping self-efficacy perception is 4.15/5.00. Participants consider themselves sufficient on this subject. Gender, status and departmental factors did not have any significant effect on people's perception of digital communication self-efficacy. However it is seen that the income group with the highest mean self-efficacy perceptions is the ones with income over 1000 TL (M=4.31) and the income group with the lowest average is the ones with income under TL 250 (M=3.96). The mean difference between income groups was statistically significant ($p=.018$). Digital shopping self-efficacy perceptions of the individuals with income over 750 TL were found to be significantly higher than the individuals with income below 500 TL. Another factor that influences individuals' self-efficacy perceptions of digital shopping skills is title. It is seen that digital shopping self-efficacy perceptions of assistant professors (M=4.32) and associate professors (M=4.66) are significantly higher ($p=.000$) than full professors' (M=3.45) Also, there is no significant difference between associate professors and assistant professors. Regarding this issue, the average score of the professors is below the threshold value and they do not consider themselves sufficient. According to qualitative data, in this regard, participants' greatest concern is to be under surveillance. They stated that the traces they leave in online environments during digital shopping are recorded by the corporations and the government.



Table 9. Comparison of participants' digital rights and responsibilities self-efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.241	
Status	.305	
Department	.244	
Students Income	.400	
Academic Title	.009	Prof-

When the self-efficacy perceptions regarding the digital rights and responsibilities of the individuals are examined, it is seen that the mean is 3.93/5.00. In general, participants consider themselves sufficient on this manner. Gender, status, income and department did not have any significant effect on people's perception of digital rights and responsibilities self-efficacy. However, digital rights and responsibilities self-efficacy perceptions of both assistant professors (M=4.00) and associate professors (M=4.23) are significantly higher (p=.009) than full professors' (M=3.50) Also, there is no significant difference between assistant professors and associate professors (p>.05).

Table 10. Comparison of participants' digital security perceptions according to independent variables

Variables	p	Remarks
Gender	.125	
Status	.098	
Department	.338	
Students Income	.425	
Academic Title	.017	Prof-

The participants' mean score for digital security self-efficacy perception is 4.15/5.00. They consider themselves sufficient on digital security. In addition, it is seen that, gender, income and department did not have any significant effect on people's perception of digital security self-efficacy. When a comparison is made between the professors and the students, the self-efficacy perceptions of the students (M=4.17) were found to be significantly higher (p=.098) than professors' (M=4.00). Besides, when the professors are evaluated within themselves, the mean of the full professors (M=3.74) is calculated to be lower (p=.017) than averages of both assistant professors (M=4.25) and associate professors (M=4.29). There is no significant difference between assistant professors and associate professors (p>.05).

Table 11. Comparison of participants' digital law perceptions according to independent variables

Variables	p	Remarks
Gender	.000	Female+ vs Male-
Status	.000	Prof+ vs. Stud-
Department	.579	
Students Income	.154	
Academic Title	.122	

Regarding the participants' self-efficacy perceptions on digital law, the mean score was found to be 3.14/5.00. This score is below threshold value and it means that participants consider themselves insufficient on this subject. When a gender-based comparison was made, it was seen that the mean of women (M=3.28) was significantly higher (p=.000) than the mean of men (M=2.97). Apart from this, the digital law self-efficacy perceptions of the professors (M=3.70) are significantly higher (p=.000) than students' (M=3.00). Also professors' mean score is above the threshold value which means that they consider themselves sufficient on knowing and applying digital laws. Department, income and title



were not found to make a significant difference on the perception of digital law self-efficacy.

Table 12. Comparison of participants' digital etiquette perceptions according to independent variables

Variables	p	Remarks
Gender	.562	
Status	.201	
Department	.672	
Students Income	.394	
Academic Title	.241	

The participants' mean score for digital etiquette self-efficacy perception is 3.87/5.00. It seems that participants are aware of the digital rules of etiquette and consider themselves sufficient in this regard. Furthermore, none of the factors (gender, title, department, status) seem to have a significant effect on participants' digital etiquette self-efficacy perception.

Table 13. Comparison of participants' digital health and wellness self- efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.000	Female+ vs Male-
Status	.886	
Department	.457	
Students Income	.455	
Academic Title	.203	

The participants' mean score for digital health and wellness self-efficacy perception is 3.66/5.00. Participants consider themselves sufficient on protecting their health while using the digital technologies. When a gender-based comparison was made, it was seen that the average of women (M=3.79) was significantly higher (p=.000) than the average of men (M=2.52). Also, it is seen that none of the other factors (title, department, status) seem to have a significant effect on participants' digital etiquette self-efficacy perception.

Table 14. Comparison of participants' digital citizenship self-efficacy perceptions according to independent variables

Variables	p	Remarks
Gender	.998	
Status	.992	
Department	.712	
Students Income	.138	
Academic Title	.002	Prof-

Finally, when the participant's digital citizenship self-efficacy perceptions are generally considered, participants' mean score is calculated as 3.76/5.00. This demonstrates that the participants in general consider themselves sufficient in terms of digital citizenship self-efficacy. It is seen that both the professors' and the students' mean scores are higher than the threshold value, and both groups believe they have the sufficient digital citizenship skills. Also, there is no significant difference between the means of the students (M=3.76) and the professors (M=3.76). Therefore, both the professors and the students consider themselves equally sufficient in the context of digital citizenship self-efficacy. However, this is not exactly the case according to the data obtained from the semi-structured interviews. According to interviews professors stated that they believe both their colleagues and the students don't have sufficient digital citizenship skills; and the students stated that they have the sufficient skills but professors don't. This



contradicts the results of quantitative data. Besides, it was seen that the digital citizenship self-efficacy perceptions of assistant professors ($M=3.91$) and associate professors ($M=4.10$) are significantly higher ($p=.002$) than full professors' ($M=3.39$) self-efficacy perceptions. In addition, the mean of the professors is below the threshold value. This means that only professors consider themselves insufficient for digital citizenship skills.

Findings from Qualitative Data

During the interviews, first the participants were asked what the concept of digital citizenship meant to them. Three of the participants stated that they don't know anything about the concept. Two participants considered digital citizenship social media skills, and two of them considered it the necessary skills to use the digital technology in general. The remaining seven participants stated that digital citizenship refers to the individuals' relations with the state and realizing these relationships by using digital technologies. Following this question, participants were asked what they thought about the existence of a relationship between digital citizenship and traditional citizenship. Four participants stated that they don't believe that there is a relationship between the concepts of digital citizenship and citizenship in general. Five participants believe that there is a relationship between these concepts in negative sense. According to these participants, digital citizenship makes it easier for state to use surveillance mechanisms on the citizens. The remaining three participants indicated that there is a positive relationship between digital citizenship and citizenship in general. These participants stated that thanks to digital citizenship, participation is more possible, and requirements of citizenship can be fulfilled more easily.

Then, the participants were asked what their strengths and weaknesses were in using technology in the context of digital citizenship. Professors talked about the actual use of physical technology while describing their weaknesses. The students complained about being a regular user and not knowing their rights at all. When the strengths of the participants are examined; faculty members generally view themselves as good digital literates, especially in academic works, and they believe they are open to learning the technology. Students, on the other hand, believe that they can use digital technologies as an effective means of opposition.

The participants were also asked about their opinions whether their institution has adequate technological infrastructure or not. Nine participants stated that their institutions have adequate technological infrastructure. However, the two participants pointed out that these technologies bring extra workload to them. Also, they said that the technology which is offered to them by their institution is too complex; thus, making their job difficult. So, technology has negative effects for them. Three participants indicated that they believe technological infrastructure in their institutions is inadequate. One participant said that communication faculties in Turkey are institutions that do not produce the technology on their own but provide it from outside and consume. For this reason, he believes that if they do not produce technology, they will be inadequate no matter what.

Furthermore, the professors and the students were asked about their ideas regarding digital citizenship efficacies of each other. Professors view their students as inadequate in terms of their lack of production within the context of digital technologies, their dependence on digital technologies, and their inability to distinguish where and how to use digital technologies. Students, in general, view professors as inadequate and feel that their own self-efficacy is higher.

In addition, the participants were asked about their expectations and concerns about digital technologies. It was found that, while using digital technologies and surfing online participants seem to be expecting to be able to do this safely. It appears that especially



students assign a great deal of importance in digital technology, and their expectations in this regard are high. However, it was seen that, the lack of digital citizenship education in communication faculties brings with it future concerns for the students. Also, participants concerns include increased security vulnerabilities, surveillance, state control on digital technologies and oppression.

The participants were finally asked what their thoughts and criticisms were in terms of the use of digital technologies in communication faculties. Participants stated that technology and communication concepts can't be separated from each other. They think that the studies on the subject should be increased in communication faculties. According to the participants, there is an inadequacy in using technology in communication faculties. For this reason, especially the use of digital technologies in communication faculties should be increased. Besides, participants, especially professors, stated that students in communication faculties are using technology very unconsciously. Students are adequately skilled while using the physical technology; however, while using these technologies, they do so by ignoring social, ethical and legal contexts.

Conclusions

According to the results of the Likert scale, members of the communication faculties consider themselves sufficiently competent in digital citizenship skills. Also, no significant difference was found between students and professors. However, the results of the semi-structured interviews showed the opposite. While conducting this research, a previously-conducted digital citizenship study on communication faculties in Turkey could not be found. However, there seems to be a resemblance between the results of this study and the results of the graduate thesis work done by Bakir (2016) on teacher candidates who study in the education faculty of Karadeniz Technical University. Bakir's work also indicated that participants viewed themselves sufficient in terms of digital citizenship in the application of scale. However, she also found out that the findings from the interviews and observations aren't in line with the responses to the scale (Bakir,2016). This situation makes it debatable that the reliability of the Likert scale and its use in studies carried out on digital citizenship.

Based on Prensky's digital natives and digital immigrants distinction, there is no significant difference between professors and students. This shows that, being a digital native or immigrant is not only determined by the age of the individual; different factors (income, gender, department, title, education etc.) may also be determinants of this issue. Especially education seems to have an important role on this matter. All the participants of the present study have undergraduate and postgraduate training. This has led all other factors being ineffective, the only the exceptions are professors.

The participants generally believe that their institutions have impact on their members' digital citizenship self-efficacy. Communication faculties can only provide technological infrastructure to their members but they can't provide any support for the use of this technological infrastructure. Along with this, both professors and students are not fully aware of the concept of digital citizenship, and they generally evaluate the digital citizenship through "e-government" policies. This situation is similar to the results of Bakir's (2016) study. According to Bakir, this is due to the recent popularity of e-government applications and the government's electronification of many applications (Bakir, 2016). Another important point that needs to be addressed is the political content of the concept of "citizenship". People, who are strangers to the digital citizenship concept, might be thinking only about the state-citizen relationships when they hear the concept due to the political connotation of citizenship.

Finally, according to the participants, the concept of digital citizenship and the components required by this concept are ignored in the training of students who will



become prospective professionals in communication faculties Bakir (2016) also obtained the same result when she looked at education faculties and prospective teachers (Bakir, 2016). This situation points to the existence of a general problem in the Turkish university system that needs to be addressed carefully and comprehensively.

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