Education Quarterly Reviews

The online version of this article can be found at:
https://www.asianinstituteofresearch.org/

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.

ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide

Teacher Candidates' Views about the Effects of Information and Communication Technologies on Human Rights and Freedoms

Nazike Karagözoğlu[1]

[1] Assist. Prof., Yozgat Bozok University, Faculty of Education, Turkey

Correspondence: Assist. Prof., Yozgat Bozok University, Faculty of Education, Department of Social Studies Education, 66100, Yozgat, TURKEY., https://orcid.org/0000-0002-7410-3286., nkulantas@gmail.com

Abstract

The recent rapid developments in technology have caused great changes in all areas of human life. This study aimed to determine the views of teacher candidates on the rights and freedoms affected by information and communication technologies (e.g., telephone, computer, and internet). The study was carried out in the spring term of the 2020-2021 academic year, and the sample consisted of 100 volunteer teacher candidates studying the "Human Rights and Democracy Course" at the Faculty of Education of Yozgat Bozok University. The data of this qualitative research were collected through teacher candidates' compositions and were analyzed using content analysis. According to the results of the research, the rights and freedoms that are thought to be positively affected by the use of information and communication technologies are as follows: freedom to obtain and disseminate information, freedom of communication, right and duty of education, right to congregate / right of organization, right to legal remedies, freedom of expression and dissemination of thought, and right to enter public services. The negatively affected rights and freedoms are determined as privacy of private life, right to request the protection of his/her personal data, personal liberty and security, freedom of information and dissemination, and right to health. To minimize the negative impact of information and communication technologies on rights and freedoms, teacher candidates expressed some suggestions such as information and communication technologies education, human rights education, sanction/punishment, personal security measures, and increasing supervision.

Keywords: Rights and Freedoms, Information and Communication Technologies, Teacher Candidate

1. INTRODUCTION

Latest developments in science and technology have changed the concept of time and space in accessing information. Today, people can instantly access information no matter where they are. Tools such as computers, the Internet, and mobile phones have started to be considered as compulsory needs. From trade to politics, from education to entertainment, many works and transactions can be carried out online quickly and easily, without traveling far and without waiting in line. This makes the use of information and communication technologies (ICT) widespread in daily life. According to the results of the Survey on Information and Communication Technology

Usage in Households conducted by the Turkish Statistical Institute (TUIK), 92% of the households will have access to the internet from home in 2021, while the rate of internet usage is 82.6% in individuals between the ages of 16-74 (TUIK, 2021).

While technology refers to the process of facilitating human life through reason and logic, ICT (an important part of this process) is defined as the whole of technologies that enable information to be collected, processed, transmitted and accessed at the desired place and time (Atılgan, 2006: 2; Alaca & Yılmaz, 2016: 512). ICT is a comprehensive category that includes hardware and software that facilitate the production, storage, transmission and retrieval of digital information (McPherson, 2015: 2). ICT is an umbrella term that includes any communication tools or applications that cover various services and applications such as various mass media (radio, television, telephone, etc.), computer hardware and software, satellite systems (Khandagale, 2016: 2).

Information technologies are the result of scientific knowledge accumulated throughout the history of civilization (Yeşilorman & Koç, 2014: 120) and they have become comprehensive enough to change and transform all natural and social life (Bitirim Okmeydan, 2017: 351). Today, the use of ICT has become an increasingly common lifestyle (Alaca & Yılmaz, 2016: 513). Developments in ICT have also affected state institutions, so systems (e-government, e-pulse, EBA, etc.) have been developed to provide public services quickly, efficiently and with high quality (Pektaş, 2011: 67).

The rapid progress experienced has accelerated all kinds of information flow, deeply affected social, cultural and economic life, and changed many values and concepts (Atılgan, 2006:2). Human rights and freedoms are also affected by the changes and developments in the age of technology. The ever-increasing use of ICT and several violations make it obligatory to question its impact on human rights and freedoms.

Human rights are the rights that people have from birth just because they are human, without discrimination for any reason such as language, religion, race, gender, and socioeconomic status (Yavuz, Duman, & Karakaya, 2016: 57). While an individual is using his rights and freedoms within the framework of the law and with his free will, the individual can never be compelled by anyone to waive their rights. In a constitutional state, laws guarantee the rights of individuals and leave the use of these rights to the free will of the individual within the framework of the individuality of the rights (Yıldız, 2016: 60). With the expansion of the usage areas of the internet, it is inevitable that more than one human rights and freedom will be affected at the same time, since people from all over the world who know or do not know each other can communicate through ways such as virtual games, social media, and e-mail (Kaya, 2020: 163).

Thanks to ICTs, any injustice experienced in one part of the world can be public property all over the world in a short time. It can be acted with common feeling and consciousness against violation of rights. Information on rights and remedies can also be obtained easily. In extraordinary situations such as pandemics, education can be maintained through these tools.

ICT has provided human rights activists with new tools to defend human rights (Puddephatt, Horner & Hawtin, 2010: 3). According to McPherson (2015: 3), ICT supports the exercise of human rights and the prevention of human rights violations in various ways. However, these applications bring risks as well as support. For example, recordings of digital video cameras may prevent some abuses, but may also violate the right to privacy. As stated in the 2011 report of the United Nations Human Rights Council, the ability to access and effectively use these technologies has become an indispensable tool for the realization and support of human rights, especially freedom of expression, political participation, and the fight against inequality (Karppinen, 2017: 3).

Online platforms are used by billions of people every day to express themselves and to comment, discuss, criticize, search, create content, share opinions and content (Jorgensen, 2018: 244). Through social media, people can express their thoughts about any event by writing, speaking, and discussing. Also, people can share information, images as well as videos on these platforms. They can search and apply for a job via the Internet, that is, individuals' actions in the real world have moved to the virtual environment (Vural & Bat, 2010: 3351). The possible negative effects of these transactions on human rights necessitate the more conscious use of ICT.

Regarding the literature, the studies on the subject have focused on the use, level of use, and purposes of ICT (Avcu & Gökdaş, 2012; Hakkari, Tüysüz & Atalar, 2016; Karasu, 2016; Yaylak & İnan, 2018). Besides, research has examined the effects of communication technologies such as social media, internet and mobile phones on rights (Karlıdağ, 2014; Şen & Şen, 2015; McPherson, 2015; Khandagale, 2016; Karppinen, 2017; Dülger, 2018; Jorgensen, 2018; Serin, 2019; Çobansoy, 2020; Akince, 2021). This study is significant because no study presents the views of teacher candidates on human rights affected by information and communication technologies. Besides, the findings of this research are important in terms of providing information on the measures to be taken to raise awareness of the rights and freedoms that individuals have in the digital environment, what rights violations they may experience because of using ICT, and what the defense mechanisms to apply in case of violation are. It is thought that the findings will contribute to the research to be conducted to reveal the relationship between technology and rights.

2. METHOD

This qualitative research adopted the phenomenology design. Malterud (2001) advocates that qualitative research aims to present different perspectives for explaining entities or events, defining the relationships between events, and helping to understand individual and social problems (as cited in Kıncal, 2015: 59). Phenomenological research is a qualitative research design that aims to reveal individuals' perceptions and experiences about a certain subject. This type of research is inductive descriptive research in which defining the meaning of the expression of lived experiences is prioritized (Ersoy, 2019: 84).

2.1 Data Collection Tools

Data were collected through teacher candidates' compositions in which they wrote their feelings and thoughts on a particular subject. Therefore, teacher candidates were given a topic titled "The Effect of Information and Communication Technologies usage on Human Rights and Freedoms" and they were asked to write an essay describing their positive or negative thoughts about the use of ICT on human rights and freedoms. They were given enough time without any interventions so that they could write their thoughts on the subject in a free and creative way. The submitted compositions were coded as ST1, ST2, S3…

2.2 Study Group

Convenience sampling was adopted to recruit volunteer 100 teacher candidates studying in different departments in the Faculty of Education, Yozgat Bozok University, studying the "Human Rights and Democracy Course," which is one of the general culture elective courses. Convenience sampling enables the researcher to choose a convenient sample from the target population (Baltacı, 2018: 259). Table 1 informs about their gender and the departments they are studying.

Table 1: Distribution of participants in terms of gender and the departments they are studying

Gender	N	%
Female	60	60
Male	40	40
Departments they are studying	N	%
Guidance and Psychological Counseling	25	25
Primary School Teaching	20	20
Preschool Education	25	25
Turkish Language Teaching	10	10
Elementary Mathematics Teaching	10	10
English Language Teaching	10	10
TOTAL	100	100

2.3 Data Analysis

Content analysis was used to analyze the data. Codes and themes were created based on the rights in the Universal Declaration of Human Rights, the fundamental rights and freedoms in the Constitution of the Republic of Turkey, and the rights and freedoms underlined by teacher candidates in their compositions. For reliability, the compositions were analyzed according to the themes created by a social studies teacher with a master's degree, based on the suggestion that another researcher's confirmation should be obtained during the data analysis process. The researcher and the social studies teacher discussed the "consensus" and "dissensus," and revisions were made in line with joint decisions. Intercoder reliability was found 89% using Miles and Huberman's (1994) formula. Findings were converted into quantitative form and presented in tables showing frequencies and percentages. A composition may contain expressions that fall into more than one category. To ensure the internal validity of the research, direct excerpts were given.

3. FINDINGS

This part presents both findings of content analysis in tables and participant's direct statements

Table 2: The positive effects of ICT use on rights and freedoms

Rights and Freedoms	f	%
Freedom to obtain and disseminate information	62	19
Freedom of communication	43	14
Right and duty of education	42	13
Right to congregate / right of organization	41	13
Right to legal remedies	39	12
Freedom of expression and dissemination of thought	36	11
Right to enter public services	20	6
Personal liberty and security	18	5
Right to health	9	3
Right to life	6	2
Property rights/ inviolability of the domicile	6	2
TOTAL	322	100

As is seen in Table 2, the rights and freedoms that are positively affected by the use of ICT are freedom to obtain and disseminate information (f=62, 19%), freedom of communication (f=43, 14%), right and duty of education (f=42). , 13%, right to congregate / right of organization (f=41, 13%), right to legal remedies (f=39, 12%), freedom of expression and dissemination of thought (f=36, 11%), right to enter public services (f =20, 6%), and personal liberty and security (f=18, 5%). In addition, right to health, right to life, and property rights/inviolability of the domicile were also emphasized by the participants. Here are some representative excerpts:

ST13:   *We can instantly access the information we want. We can find out how to defend our rights by searching the internet and TV. Thanks to our smartphones and tablets, we can see violations of rights in a very short time. Authorized institutions and organizations can intervene and control this situation in a short time. The effective use of technology enables people to react to injustices in a short time and to appreciate good developments.*

ST16:   *The use of smartphones, the Internet and social media helps spread everything more easily. Thanks to search engines, we can have information about our rights even if we do not study law. We are constantly informed about developments. We can condemn an attack on human rights anywhere in the world.*

ST19:   *It contributes to the rights to education by contributing to the mental development of children, improving their creativity and facilitating their educational activities. Personal safety is ensured by calling other people and institutions and asking for help when faced with an emergency via the Internet and telephone. It facilitates situations such as making an appointment at the hospital, internet banking, and utilizing e-government public services.*

ST41:   *Thanks to the developing technologies, people can easily make voice calls or video calls to communicate with each other. Besides, people can have much information about a subject easily and quickly through various*

information technologies. Cameras enable people to protect their rights such as property rights and inviolability of the domicile when thieves break into their homes. People are comfortable expressing their thoughts in various internet applications.

ST65:   *Information technologies also contribute to ensuring personal liberty and security. The KADES program is a good example, which was established by the Ministry of Internal Affairs. This application can be used by women and children during violence and abuse circumstances, and it enables people to push the notification button and enable the necessary units to take action. SABİM (Ministry of Health Communication Center) phone application provides easy access to all kinds of health-related services.*

Table 3: The negative effects of ICT use on rights and freedoms

Rights and Freedoms	f	%
Privacy of private life	83	38
Right to request the protection of his/her personal data	32	15
Personal liberty and security	30	14
Freedom of information and dissemination	18	8
Right to health	16	7
Prohibition of inhumane treatment	10	5
Protection of the family and children's rights	10	5
Freedom of expression and dissemination of thought	8	4
Prohibition of discrimination	8	4
TOTAL	215	100

When Table 3 is examined, the rights and freedoms that are negatively affected by the use of ICT are as follows: privacy of private life (f=83, 38%), right to request the protection of his/her personal data (f=32, 15%), personal liberty and security (f=30, 14%), freedom to obtain and disseminate information (f=18,%) 8), right to health (f = 16, 7%), prohibition of inhuman treatment (f = 10, 5%), protection of the family and children's rights (f = 10, 5%). Also, freedom of expression and dissemination of thought, and prohibition of discrimination are among the rights and freedoms negatively affected by the use of ICT. Some statements are below:

ST94:   *While using information technologies, people may encounter cyberbullying, be exposed to harassment, or suffer material and moral damages. Racism and belief discrimination can be made through social media and the internet. The privacy of private life can be violated, people can easily share and reproduce others' photos and videos by secretly taking them. While playing various games on the Internet, children may harm themselves to pass the stages in the game.*

ST76:   *Some people deviate from the freedom of thought and opinion by making hate speech and violent posts in the media, which negatively affects people psychologically. These hate speeches are also made directly against values such as language, religion, gender, race and culture. This shows that human rights can be easily violated in the digital medium. From another point of view, if the platforms we are a member of on the Internet do not have secure encryption, if the websites are not secure enough, they become easily accessible; thus, there becomes a decrease in privacy and online reliability.*

ST71:   *There is a lot of information on the internet, and it is not easy to know whether it is true or fake. Students can access a lot of information instantly, but unfortunately not every information they reach is correct, and they often receive and use this information without checking its accuracy. This takes away our right to access accurate information. Technological devices can cause addictions and physical ailments, which undermines people's right to health.*

ST25:   *As technology developed, it began to appeal to a broad audience. People are reluctant to express their thoughts in this broad audience. This is because people who express their thoughts through social media accounts can be subjected to social media lynching by others with opposing views. Also, their ideas may be viewed as contrary and subject to investigation. Therefore, people may hesitate to express their opinions freely. This situation negatively affects the freedom of thought and opinion.*

ST12:   *We can easily say that there is fake news, fabrications, and all kinds of information pollution in social media. Humor and humiliation are mixed on the internet and especially in social media. As a result of miscommunication, many incidents that violate human rights occur. Facial recognition systems, transferring identity information to digital media, or sharing identity information with third parties harm individuals' right to*

privacy. Information and communication technologies pollute our environment by constantly emitting radiation and take away our right to a healthy life.

Table 4: Suggestions to reduce the negative effect of ICT on rights and freedoms

Suggestions	f	%
ICT education	53	28
Human right education	33	17
Sanction/penalty	29	15
Personal precautions	24	12
Supervision and control	20	11
Legal regulation	17	9
Restriction	11	6
Media literacy education	3	2
TOTAL	190	100

According to Table 4, the suggestions of the participants to eliminate or minimize the negative effects of ICT on rights and freedoms are ICT education (f=53, 28%), human rights education (f=33, 17%), sanction/penalty (f=29, 15%), personal precautions (f=24, 12%), supervision and control (f=20, 11%), legal regulation (f=17, 9%), restriction (f=11, 6%), media literacy education (f=3, 2%). Here are some statements:

ST1: *Although access to Internet applications is unrestricted, it must be under supervision and control. Law of respect for users should be enacted. Legislation including new information technologies should be made.*

ST5: *First, people should be given detailed information about human rights and information technologies. The state should punish those who do not comply with the law of privacy so that people can learn from their mistakes and not do such things again.*

ST20: *Penalties can be made more severe in case of theft of personal information. Individuals should also take necessary security measures to prevent the theft of information. For example, they should choose their passwords in accordance with the secure password setting rules and change the password when necessary. ICT education should be given regularly to all age groups.*

ST23: *Necessary information and education can be provided to minimize the negative effects of ICT. Necessary penal actions may be applied to those who violate these rights.*

ST31: *Restrictions should be placed on social media and television channels that violate human rights, and I recommend that people be trained and conscious about the protection of these rights and the correct use of information technologies. In addition, laws on human rights violations of information technologies should be enacted.*

ST58: *To prevent such negative situations, informative seminars should be given to individuals about their digital rights and how these rights should be protected. Participating in these seminars should be compulsory. In addition, the necessary penalties should be given to people when these rights violations occur, and social media access should not be allowed.*

4, DISCUSSION AND CONCLUSION

Human rights and freedoms are vital for maintaining a dignified life. These rights are innate, inalienable, and universal. History is full of people's struggles for rights and freedom. Today, while developing technology makes daily life easier, it causes some changes regarding the living and defense of human rights and freedoms. The rights and freedoms affected by ICT should be examined. The positive effects of ICT should be strengthened, and measures should be taken to eliminate its negative effects. Accordingly, the findings of this study are as follows: Regarding the positive effects of ICT on rights and freedoms, participants first emphasized the freedom to obtain and disseminate information and freedom of communication. Thanks to the internet networks, communication that could take weeks or even months with the old methods can be achieved in seconds. Thanks to mobile phones and social platforms, time and space boundaries have disappeared in communication. Mobile phones and social platforms have removed the boundaries in communication, such as time and place. An individual can access a book in any library all around the world in a virtual environment whenever he/she wants. Information can be easily accessed through internet search engines. Communication technologies have important duties in the context of

preparing, disseminating and informing the public about news and information about human rights (Işık & Ata, 2021: 223). Thus, it can be said that ICT has a positive effect in terms of increasing the cognitive and affective competencies of individuals, especially regarding human rights, and positively affects the freedom of obtaining and disseminating information and freedom of communication.

Another positively affected one is the right and duty of education. Various studies support that the use of ICT in education contributes to effective learning. In Turkey, with the declaration of a pandemic in March 2020, distance education was applied. Instruction was given through applications such as EBA (Education Informatics Network), Zoom, and Google Meet. The aim was to ensure that all students in the country could benefit from the right and duty of education.

According to teacher candidates, the right to congregate / right of organization and the right to legal remedies are positively affected by the use of ICT. The positive effect of exercising right to information and communication directly affects the right to legal remedies and right of organization. Violations of rights in any part of the world can be heard in a short time, people can come together on various virtual platforms and act jointly to eliminate the violation, and they can enable the police and judicial bodies to act faster. As Atilla & Bodur Ün (2018: 795) state, thanks to information technologies, it has become easier to fight for rights together by forming local, national, and transnational communities with a common thought and consensus, rather than being together physically. ICT has become an indispensable part of human life in terms of developing a sense of us among users and contributing to a common consciousness in line with the determined targets (Karaçor, 2009: 128). ICT can serve multiple functions such as creating a network between associations and organizations fighting for human rights, organizing activities, warning about rights violations to mobilize activists and members, publishing newsletters, sending e-mails, and fundraising (Ugirashebuja, 2009: 5; Işık & Ata, 2021: 224).

Teacher candidates emphasized that freedom of thought and opinion was positively affected by ICT. Freedom of thought and opinion is one of the indispensable rights and freedoms included in various human rights documents and constitutions. In Articles 25 and 26 of the Constitution of the Republic of Turkey, "Everyone has the freedom of thought and opinion. No one can be compelled to express his thoughts and convictions for whatever reason and purpose, nor can they be condemned or blamed for their opinions. Everyone has the right to express and disseminate his/her thoughts and opinions by speech, in writing or pictures or through other media, individually or collectively." Individuals can freely use this right, except for the cases expressed in the constitution. ICT has also positively affected the freedom of expression and dissemination of thought. People can share texts, images, videos, watch the posts, comment on them, and criticize them wherever and whenever they want via social media (e.g., WhatsApp, Twitter, YouTube).

Lindroos (2003) advocates that the state has become more accessible to citizens thanks to ICT (as cited in Vural & Sabuncuoğlu, 2008: 13). E-government applications make it easier to access public services; thus, the dimensions of the citizen's relationship with the administration have also changed. As long as individuals have access to the Internet, they can access information and services whenever and wherever they want and services can be provided to individuals more easily and quickly through e-government (Kırışık & Özer, 2015: 202; Vural & Sabuncuoğlu, 2008: 13). Citizens can access the necessary information from the websites of government and private institutions, and they can submit their applications and complaints via e-mail and WhatsApp applications without the need to go to the institution. Thanks to digital applications, any doctor can access detailed information about individuals' health/disease history and provide a faster as well as more efficient health service (Bitirim Okmeydan, 2017: 365). The e-appointment system can be given as a good example of these applications. With this system, the sick citizens do not wait for a long time in the hospitals. In this context, teacher candidates underlined the right to enter public services and the right to health regarding the positive effects of ICT.

Teacher candidates also reported that ICT positively affected the freedom and security of the person and the right to live. Accelerated communication and ease of obtaining and sharing information also make it easier to prevent or catch criminals. The presence of cameras in homes, workplaces and streets can be seen as a factor reducing the tendency to crime. Thanks to emergency telephone lines such as 155, 156, 140, 148, security forces can be reached quickly in case of a security threat.

However, some rights and freedoms are negatively affected because of the use of ICT. Most teacher candidates pointed out the right to privacy and the right to protect his/her personal data as the most negatively affected rights are. This negative impact naturally affects personal liberty and security. Privacy of private life is placed near the top in the constitution and documents related to human rights. The scope of private life includes information such as physical characteristics, information about education/work, religion, thoughts and opinions on various subjects, family structure, family life and family characteristics (Kılınç, 2012: 1091). According to Bitirim Okmeydan (2017: 360), while sharing information without limitation of time and place contributes to the freedom of information and communication, it also creates problems in terms of personal security and privacy regarding the privacy of private life. People are asked to provide some information to create social media or e-mail accounts, download and use various applications on their mobile phones. Users may consider it a necessity to provide personal information in order not to be deprived of these services and avoid social exclusion (Karlıdağ, 2014: 103). According to Yüksel (2003: 185), the first source of threat to privacy is self-disclosure. The sharing that users make voluntarily on various platforms brings with it some potential problems such as the capturing, storing, manipulating and transferring personal accounts and therefore personal information to third parties (Işık & Ata, 2021: 238; Bitirim Okmeydan, 2017:362). Protection of personal information was initially seen as a part of the right to privacy, but with the adoption of the European Union Declaration of Fundamental Rights in 2009, data protection has become a separate fundamental right in Europe (Brunner, 2018: 233). The right to request the protection of his/her personal data is the right of the citizens to have a say in cases such as the capture, collection, processing or transfer of their personal information. No action can be taken on personal data without the knowledge and consent of the data owner (Dülger, 2018: 74).

According to teacher candidates, the freedom to obtain and disseminate information and the freedom of expression and dissemination of thought are both positively and negatively affected because of ICT use. This is because just like correct information, false information and news can also spread rapidly on the internet. The disappearance of the boundaries in mass information distribution due to the Internet and the fact that the virtual environment is an area where it is very difficult to control, information pollution arises, and it becomes difficult to distinguish what is real and what is false (Atilla & Bodur Ün, 2018: 804; Işık & Ata, 2021: 244; Semiz, 2019: 3).

Especially in recent years, the widespread use of mobile phones has caused some physical and mental disorders in terms of health. This situation was also emphasized by teacher candidates. The eyes, musculoskeletal system can be damaged as a result of long-term use of devices such as mobile phones, televisions and computers, and the emitted radiation can adversely affect the whole body. According to the results of the Survey on Information and Communication Technology Usage in Households conducted by TUIK, 80.5% of all individuals between the ages of 16-74 was found to use the internet regularly (almost every day or at least once a week) in the first three months of 2021. While distance education is the main reason for this increase, social media and games also cause mobile phone/internet addiction to become widespread.

Teacher candidates associated the prohibition of inhuman treatment and the prohibition of discrimination, which are thought to be among the rights that ICTs negatively affect, with their social media posts. The examples given regarding the negative impact on these rights were related to the racist activities in the world. Teacher candidates stated that during the use of freedom of thought and opinion provided by social media, some people made humiliating, discriminatory posts, comments, and lynching against religion, language and race. According to Işık & Ata (2021: 235), the increasing use of social media has brought with it some negativities that cannot be considered under the freedom of opinion. For example, sharing such as insults, slander, slander that may damage a person's honor and reputation on social media is against human rights and the law.

The new generation, called Generation Z and Generation Alpha, was born in technological environment and grows with technology. Babies learn to play on the phone almost before they learn to speak. Mothers use the phone as a tranquilizer so that their children do not cry. In such an environment, the impact of ICT on children's rights should also be questioned. Teacher candidates believe that ICT negatively affects the protection of the family and the rights of the child, which are included in the constitution. The use of technology causes a decrease in communication and interaction within the family, which brings child neglect. Parents who do not have media literacy proficiency cannot take the necessary precautions, which can make children vulnerable in the virtual

environment. Children's frequent participation in social media platforms, seeing and watching posts that are not suitable for their age and developmental characteristics can negatively affect their psycho-social, cognitive, sexual and physical development. This situation can lead to legal, moral and ethical violations. Besides, parents' sharing photos and images of their children is one of the most important problems encountered within the scope of violation of children's rights (Serin, 2019: 2).

One of the most important aims of scientific studies is to offer solutions for the welfare and happiness of society to eliminate the negative situations in human life. In this research, the teacher candidates' solution suggestions to eliminate or minimize the negative impact of ICT on rights and freedoms are ICT education, human rights education, sanction/ penalty, personal precautions, supervision and control, legal regulation, restriction, and media literacy education.

Teacher candidates mostly emphasized the importance of education such as ICT education, human rights education, and media literacy education. For being an effective member of the information society, individuals need to have ICT-related skills and competencies (Alaca & Yılmaz, 2016: 514). In the curriculum renewed in 2017, digital competency has been one of the eight key competencies targeted to be acquired by individuals. Integration of ICT into education is at the forefront of issues on education. During the pandemic process, the ability of all students, teachers and parents to use ICT has become questionable. To teach the correct and effective use of ICT and to prevent rights violations that may occur in social networks, individuals should be made aware of ICT use, media literacy, and human rights. Therefore, it can be said that elective courses such as life sciences and social studies courses, human rights, citizenship and democracy courses, information technologies and media literacy are important. Teacher candidates suggested that family education should be carried out within the scope of lifelong learning. Besides, they recommended personal precautions. Training can increase awareness about the importance of taking the necessary security measures during the use of ICT and what can happen in case of negligence. Based on the opinions of the participants, it can be said that the negative effects of rights and freedoms can be prevented by taking personal security measures such as not sharing personal information, using passwords, using an anti-virus program, being careful in using passwordless wi-fi, not using applications where personal information can be accessed while using public wi-fi.

According to teacher candidates, the most important responsibility in eliminating the negative impact of ICT use on rights and freedoms rests with the state. Participants argue that legal regulations regarding the use of ICT should be made, an effective and continuous audit should be carried out, and penal sanctions should be applied as a result of the supervision and control. Bringing human rights to the highest level is the primary duty of all states. States must prepare the necessary environment for the realization of these rights and for people to live truly equal, free and dignified (Yavuz, Duman & Karakaya, 2016: 62). In this context, two important laws have been enacted: law No. 5651 on Regulating Broadcasts on the Internet and Combating Crimes Committed Through These Broadcasts, adopted in 2007, and Law No. 6698 on the Protection of Personal Data, adopted in 2016. The Information Technologies and Communications Authority was established to ensure that everyone can benefit from new technologies, services and applications, and to protect them from the risks and threats that may arise against the rights and freedoms guaranteed by international agreements. This institution, which regulates and supervises the telecommunication sector in Turkey, was established in 2000 with the name of "Telecommunication Authority" with the law numbered 4502.

Based on the study findings, suggestions that can be made to improve the positive effects of ICTs and to eliminate their negative effects are as follows:
- The content and achievements of the human rights, citizenship and democracy course should be developed to include the relationship between ICT and human rights and freedoms.
- Media literacy courses should be given as a compulsory course, not as an elective.
- Cyber security education should be given to all citizens within the scope of lifelong learning.
- The awareness of individuals should be raised by preparing advertisements and public service announcements about the personal security measures to be taken during the use of ICT.

- To comply with ethical rules in social media and other virtual environments, the closure of the personal account for a certain period and the implementation of sanctions such as fines can contribute to a positive change in behavior.
- This study aimed to determine the rights and freedoms that ICT positively or negatively affect in line with the opinions of teacher candidates. Further studies may be conducted with different sample groups and to investigate the reasons for the effects on rights and freedoms.

References

Akince, B. (2021). Nesnelerin interneti, güvenlik ve gizlilik, insan hakları bağlamında bir değerlendirme. *International Journal of Social Inquiry, 14* (1), 53-80. DOI: 10.37093/ijsi.950466

Alaca, E. & Yılmaz, B. (2016). Bilgi ve iletişim teknolojilerinin kullanımı ve bilgi toplumuna dönüşüm: Türkiye'de durum. *Türk Kütüphaneciliği, 30* (3), 507-523. https://dergipark.org.tr/tr/pub/tk/issue/48653/618601

Atılgan, D. (2006). *İletişim teknolojileri çağında değişen bilgi hizmetleri*, 1. Uluslararası Bilgi Hizmetleri Sempozyumu: İletişim, İstanbul.

Atilla, H. & Bodur Ün, M. (2018). Ulusal ve ulusötesi toplumsal hareketler ve yeni bilgi ve iletişim teknolojileri . *Ankara Üniversitesi SBF Dergisi, 73* (3), 787-809. DOI: 10.1501/SBFder_0000002517

Avcu, D. Ü. & Gökdaş, Y. D. D. İ. (2012). İlköğretim ikinci kademe öğretmenlerinin bilgi ve iletişim teknolojilerine ilişkin kabul ve kullanım niyetleri. *Adnan Menderes Üniversitesi Eğitim Fakültesi Eğitim Bilimleri Dergisi, 3* (1), 42-59. https://dergipark.org.tr/en/pub/aduefebder/issue/33889/375236

Baltacı, A. (2018). Nitel araştırmalarda örnekleme yöntemleri ve örnek hacmi sorunsalı üzerine kavramsal bir inceleme. *Bitlis Eren Üniversitesi Sosyal Bilimler Dergisi, 7*(1), 231-274.

Bitirim Okmeydan, S. (2017). Yeni iletişim teknolojilerini sorgulamak: Etik, güvenlik ve mahremiyetin kesiştiği nokta. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi, 5*(1), 347-372. DOI: 10.19145/gumuscomm.273050

Brunner, L. (2018). Digital communications and the evolving right to privacy. Molly K. Land & Jay D. Aronson (Ed.) *New technologies for human rights law and practice* (s. 243-269). United Kingdom: Cambridge University Press. https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781316838952

Çobansoy, G. (2020). *İnsan hakları açısından kişisel verilerin korunması sorunu* (Yüksek Lisans Tezi), Maltepe Üniversitesi Lisansüstü Eğitim Enstitüsü, İstanbul.

Dülger, M. V. (2018). İnsan hakları ve temel hak ve özgürlükler bağlamında kişisel verilerin korunması. *İstanbul Medipol Üniversitesi Hukuk Fakültesi Dergisi, 5* (1), 71-144. https://dergipark.org.tr/en/pub/imuhfd/issue/54314/737027

Ersoy, F. (2019). Fenomenoloji. A. Saban ve A. Ersoy (Ed). *Eğitimde nitel araştırma desenleri* içinde (s. 81-134). Ankara: Anı Yayıncılık.

Hakkari, F., Tüysüz, C. & Atalar, T. (2016). Öğretmenlerin bilgisayar yeterlikleri ve öğretimde teknoloji kullanımına ilişkin algılarının çeşitli değişkenler bakımından incelenmesi. *Bayburt Eğitim Fakültesi Dergisi, 10* (2), 460-481. https://dergipark.org.tr/en/pub/befdergi/issue/17275/180478

Işık, T. & Ata, A. (2021). Yeni medya iletişim süreçleri bağlamında insan hakları. *Iğdır Üniversitesi Sosyal Bilimler Dergisi*, 27, 220-250. https://dergipark.org.tr/en/pub/igdirsosbilder/issue/64336/957147

Jorgensen, R. F. (2018). Human rights and private actors in the online domain. Molly K. Land & Jay D. Aronson (Ed.) New *technologies for human rights law and practice* (s. 243-269). United Kingdom: Cambridge University Press. https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781316838952

Khandagale, V.S. (2016). Information communication technologies and human rights in 21st century. https://www.researchgate.net/publication/303895075_Information_Communication_Technologies_and_Human_Rights_in_21st_Century

Karaçor, S. (2009). Yeni iletişim teknolojileri, siyasal katılım, demokrasi. *Yönetim ve Ekonomi Dergisi, 16* (2), 121-131 . https://dergipark.org.tr/en/pub/yonveek/issue/13691/165705

Karasu, M. (2016). Öğretmen adaylarının sosyal medya kullanım durumları ve medya okuryazarlık düzeyleri arasındaki ilişkinin incelenmesi. *Ege Eğitim Dergisi, 17*(2), 549-566.

Karlıdağ, S. (2014). Yeni iletişim teknolojileri ve mahremiyet: E-belediyeler kişisel bilgileri koruyor mu?. *Erciyes İletişim Dergisi, 3* (4), 102-120. DOI: 10.17680/akademia.v3i4.5000012420

Karppinen, K. (2017). Human rights and the digital. H. Tumber & S. Waisbord (Ed.).*This is a preprint of a chapter to be published in the Routledge Companion to Media and Human Rights.* https://www.routledge.com/The-Routledge-Companion-to-Media-and-HumanRights/Tumber-Waisbord/p/book/9781138665545

Kaya, M. B. (2020). İnsan hakları ekseninde internetin kontrolü ve hukuki sorumluluk rejimi. *Anayasa Yargısı, 37*(2), 159-203. https://dergipark.org.tr/en/pub/anayasayargisi/issue/59080/850345

Kılınç, D. (2012). Anayasal bir hak olarak kişisel verilerin korunması. *Ankara Üniversitesi Hukuk Fakültesi Dergisi,* 61, 1089-1172.

Kıncal, R. (2015). *Bilimsel araştırma yöntemleri* (4. Baskı). Ankara: Nobel Yayıncılık.

Kırışık, F. & Sezer, Ö.(2015). Bilgi ve iletişim teknolojilerinin kamu politikası oluşturma sürecindeki rolü. *Ekonomik   ve   Sosyal   Araştırmalar   Dergisi,   11*(2),   199-215. https://dergipark.org.tr/en/pub/esad/issue/38966/456089

McPherson, E. (2015). ICTs and human rights practice. https://www.repository.cam.ac.uk/handle/1810/251346

Pektaş, K. E. (2011). Belediye hizmetlerinde bilgi-iletişim teknolojilerinin kullanımı ve e-belediye uygulamalarındaki son gelişmeler: Bir literatür taraması. *Sosyal Bilimler Dergisi, 13*(1), 65-88.

Puddephatt, A. Horner, L. & Hawtın, D.(2010). Informatıon and communıcatıon technologıes and human rıghts. *DG   EXPO   Policy   Department.* https://www.europarl.europa.eu/meetdocs/2009_2014/documents/droi/dv/2_4_puddephattstudyv2_/2_4_pu ddephattstudyv2_en.pdf

Semiz, Ö. (2019). Dijital kültür, özgürlükler ve sınırları üzerine. https://teftis.ktb.gov.tr/Eklenti/62399,dijial-kultur-ozgurlukler-ve-sinirlari-uzerine-ozgur-se-.pdf?0

Serin, H. (2019). Sosyal medyada çocuk hakları ihlalleri: Ebeveynler ve öğretmenler farkında mı?. *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi Armağan Özel Sayısı,* 1005-1031. DOI: 10.17494/ogusbd.555107

Şen, A. F. & Şen, Y. F. (2015). Sosyal medya, iletişim hakkı ve ifade özgürlüğü üzerine bir değerlendirme. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 17 (2), 122-136.* https://dergipark.org.tr/en/pub/gaziuiibfd/issue/28307/300802

Türkiye İstatistik Kurumu [TUIK] (2021). *Hanehalkı bilişim teknolojileri (BT) kullanım araştırması.* https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-(BT)-Kullanim-Arastirmasi-2021-37437

Ugırashebuja, E. (2009). The Nexus between ICTs and human rights in Africa in Rwanda. https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/41474/129276.pdf

Vural, Z. B. A. & Bat, M. (2010). Yeni bir iletişim ortamı olarak sosyal medya: Ege Üniversitesi İletişim Fakültesine yönelik bir araştırma. *Yaşar Üniversitesi E-Dergisi, 5* (20), 3348-3382. https://dergipark.org.tr/tr/pub/jyasar/issue/19132/203023

Vural, Z. B. A. & Sabuncuoğlu, A.(2008). Bilgi iletişim teknolojileri ve ütopyan bakış açısı. *Selçuk İletişim, 5*(3) , 5-19. https://dergipark.org.tr/en/pub/josc/issue/19017/200679

Yavuz, N., Duman, T. & Karakaya, N. (2016). *İnsan Hakları ve Demokrasi: Vatandaşlık Bilgisi* (3. Baskı). Ankara: Pegem Akademi.

Yaylak, E. & İnan, S. (2018). Sosyal bilgiler öğretmenlerinin eğitimde sosyal medyayı kullanma düzeyleri. *Eğitim Kuram   ve   Uygulama   Araştırmaları   Dergisi,   4*(2),   62-87. https://dergipark.org.tr/en/pub/ekuad/issue/38280/448917

Yeşilorman, M. & Koç, F. (2016). Bilgi toplumunun teknolojik temelleri üzerine eleştirel bir bakış. *Fırat Üniversitesi Sosyal Bilimler Dergisi, 24* (1), 117-133. DOI: 10.18069/fusbed.72486

Yıldız, M. (2016). İnsan hakları. Z. Merey (Ed.). *Vatandaşlık bilgisi* içinde (s. 28-63). Ankara: Pegem Akademi.

Yüksel, M. (2003). Mahremiyet hakkı ve sosyo - tarihsel gelişimi. *Ankara Üniversitesi SBF Dergisi*, *58* (01). DOI: 10.1501/SBFder_0000001619