

CHAPTER 15

DIGITAL ACTIVISM IN THE CONTEXT OF SOCIAL MOVEMENTS: THE CASE OF CHANGE.ORG

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DOI: 10.26650/B/SS07.2021.002.15

ABSTRACT

With today's widespread Internet use and the considerable potential of Web 3.0 technology, social movements are not only becoming more prominent but are also significantly affecting greater masses. Indeed, social movements' most important political feature is their pro-democratic nature and their emergence in oppressive political environments. Led by various vested interests, social movements represent certain interconnected historical sequences of political interactions and practices. In the transforming post-Internet world, however, physical social movements have been replaced by virtual environments. In contrast to new social movements (from the late 20th to the early 21st century), virtual environments do not become specific struggles organized around partial demands and thus do not allow themselves to be easily absorbed by institutional systems. One of the most important characteristics of the city square movements is that, unlike old and new social movements, they can express a wide range of social demands and mobilize highly heterogeneous masses. Thus, as digital activism increases, the latest social movements are occurring in the virtual world. Social movement theory, as a basic substructure of activism, is the interdisciplinary study of social sciences that attempts to explain why and how social mobility occurs and its potential social, cultural, and political consequences. Types of activist movements conducted in the digital environment are encompassed by the concept of digital activism, which currently uses the major tools of online petitions and signature campaigns, social networks, blogs and microblogs, mobile phones, WhatsApp-like applications, and proxy servers. In this study, digital signature campaigns, one of the most used strategies of digital activism, are discussed in the case of change.org, and a quantitative survey is used to determine how digital activism has evolved through signature campaigns and to discuss how digital signature campaigns affect facts and events.

Keywords: Web 3.0, social movement, digital activism, digital signature campaign, internet

1. Introduction

Rapid technological development has led to huge changes in social life. Indeed, as the new order of technology penetrates more and more aspects of life, it also causes great transformations in sociological life. The main factor in digital change, of course, has been the Internet. Additionally, speed, one of the most important globalization concepts, has its own place in the latest social system. At the same time, speed has enabled information exchange and formed the basis for social movements to spread broadly over the Internet and through social media.

With development of Internet technology, personalized information and individualization have gained more and more importance. As Internet-based technological tools spread over time, traditional media platforms moved to virtual space. The new world order, led by 40 years of technological developments, drastically changed old practices and habits. Traditional mass media tools—newspapers, television, and magazines—have also been affected by this change. According to Evans (2008, p. 35), this rapid technological change has irreversibly transformed all types of communication, marketing dynamics, and lifestyles.

Processing information, transmitting it through a medium, and offering it to a final consumer has exposed people to massive information flow, an avalanche in which they have often become lost while attempting to distinguish correct information and faded into loneliness and vulnerability. Simultaneously, this massive and constant flow has transformed information into a different dimension, pulled it away from reality and fictionalized it during the production process. Or, according to Baudrillard (2005), information has become a “hyperreality” and a consumable commodity.

Screen addiction has emerged with people’s extensive use of smartphones and tablets, and individuals have begun to live their lives in a virtual environment that includes the digital activism concept. Social movements have spread through digital media in Turkey and around the world to gather a wider audience in a shorter time, execute effective, low-cost campaigns, and avoid mainstream media’s repression and censorship. These recently widespread strategies have helped move activism to the virtual environment and paved the way for a number of websites operating in this field. In the social movement context, therefore, this study attempts to elucidate digital activism through the case of *change.org*. by using a quantitative survey to examine websites’ roles in digital activism.

2. Social Movements and Sociological Transformation

Considering the virtual world only as a source of entertainment, news, and information would be in error. Internet technology that brings the masses together and enables content sharing is at the center of society. Therefore, it is of great importance in social activism because individuals can create a common consciousness and interact continually within the virtual environment. Today, social movements spread through the Internet can affect individuals of all ages, thus creating a certain sociological transformation. Too, the Internet, with its highly influential and ubiquitous power, has become a source of disinformation. Before examining the Internet, however, we should clarify the meaning of “social movement.”

2.1. Scope of Social Movements

Usually having broad scope, social movements have been examined in detail in every historical period. They are mostly country dependent, but some spread worldwide. According to Moyer’s work, social movements are nonviolent actions against unjust public policies and conditions, which draw strength from “the people,” who struggle for change against governing powers. Social movements consist of mass struggles that might require many years to solve social problems and rebuild social values. The desire for positive change in existing conditions and in society’s common interest is regarded as a basic element of social movements (Moyer, 2001, p. 17). According to Moyer, change is the *sine qua non* of social movements.

Moreover, Tilly states that social movements emerged in the late 1700s as a form of action parallel to increased English and American democratic representation. In that context, social movements are generally considered as integrated into and unique to democratic societies. However, social movements are not specific only to democratic societies; they also occur in both democratizing and authoritarian societies (Christiansen, 2011, p. 4).

Additionally, researchers hold other, different opinions about social movements. One view argues that social movements do not always aim at change, and, due to their structure, cannot actually effect change. According to Şentürk (2006, p. 39), instead of expending effort toward change, some social movements aim only to attract public attention and raise awareness: for instance, ecology, women’s rights, world peace, and homosexual movements. Each aims to attract the masses’ attention to deficiencies and problems in its respective area. Such movements do not recommend alternative systems, nor do they act to eliminate the existing order. In other words, to improve the current situation, some social movements aim to make problems visible to society and point toward partial transformation.

The decades during and after the 1960s showcased profound and dramatic worldwide transformation through social movements. Civil rights, freedom of expression, and student movements during the late 1960s and early 1970s; women's rights, peace, and environment/ecology movements in the 1970s; nuclear disarmament movements during the 1980s—all have been regarded as indicators of radical transformation. These social movements, with various goals and actors against problems and crises caused by spreading and deepening modernity, have been conceptualized as “new social movements.” In the 1970s and 1980s, environmental, women's rights, peace, and human rights movements and, in the 1990s and 2000s, the global justice movement emerged and spread one after another.

However, changes in the social arena have altered reasons for social movements: their nature, their participants' characteristics, goals, and modes of action. Innovative social movements have centered mainly around identity-based approaches, while their issues have diversified and have appeared, at first, other than class-based. Along with the latest social movements—characterized by increased middle-class participation, decreased need for power to accomplish goals, by targeting change in a cultural field, and by identity issues—innovations have also occurred in social movement theories (Topal Demiroğlu, 2014, pp. 134–135).

2.2. Overview of New Social Movements

Social movements are an effort to resolve the difficulties and reduce tensions encountered in a particular subject. In this respect, social movements have taken place at every place where there is human existence, living within a social organization. Hence, social movements are considered to be a historical phenomenon rather than a union action or a community organization specific to modern period. It is accepted that the social movements have affected by the social changes and transformations led by the modern period and they have gradually changed form. Experiencing various transformations after new developments, social movements had different dynamics as a result.

Although social movements began to be discussed in the middle of the 18th and 19th centuries, they took their place in social sciences literature in the 19th century. Following the developments in sociology discipline in the middle of the 19th century, social movement studies gained importance and sociologists had an increasing interest in the field. Many studies have been carried out later on about the causes, effects and socio-political contexts of social movements. While in the beginning, social movements were explained in terms of socio-psychological reasons using the “mass” concept, the emphasis was later placed on the

conscious and organizational structure of the movements (Çetinkaya, 2015, p. 28).

Kendall (2008) examined major features of social movements in detail and focused on three criteria. Accordingly, social movements offer opportunities for those who are excluded from the society to make their voices heard. In other words, those who do not have power in mainstream politics can get involved in and get the chance to express themselves. Social movements are more developed in industrialized societies compared to non-industrialized ones. Traditional beliefs and patterns of behavior in undeveloped societies prevent a mass movement. Many social movements survive with voluntary support, since they are, although organized, not institutionalized.

Social movements reach their peak with the integration of the social media that enable individuals come together to meet a common target. The most important of these events have been the Arab Spring. The revolts started with an unemployed university graduate setting himself on fire in Tunisia in 2011 and had a tremendous impact in all the Middle East geography. This uprising event has a great importance in terms of understanding the social dimensions of social media. During the riots that began in Tunisia and Egypt and spread to almost all Arab countries, Facebook and Twitter soon reached millions of new users in these regions. In Egypt, for example, the number of Facebook users increased from 5.5 million to 8.5 million within only 6 months, while in Libya, 600,000 new users became active on Twitter in the course of Arab Spring (Babacan, Haşlak & Hira, 2011, p. 79).

Social movements have many parallels with the features of the periods they grow, in terms of their forms of organization, the subjects they prioritize and their main characteristics. Societies defined as industrial and post-industrial (modern / postmodern) have their own structural differences. Although such conceptualizations are controversial among sociologists, it is agreed that the two social structures have a variety of differences, leading to variations in production, consumption, management and organization (Hira, 2016, pp. 148-149). In view of these claims, the new social movement theorists state that the classical Marxism is based on anti-system movements, that precedes purely economic contradictions, and that the form of solution it offers proposes a fundamental change of the political structure in a revolutionary way to remedy the situation and is insufficient to explain the new situation, and they point that the identity-based new movements have a character shaped by difference and otherness.

The use of social media has been a great determinant of social events increased especially in the 2000s. Consider the dismissal of President of the Philippines, Joseph Estrada, as a good example of how the new communication tools are regarded by political powers. During

Estrada's trial, admission of evidence was blocked and the trial was abandoned. The result was a mass rally of outraged Philippine citizens. The importance of this rally was that there were mainly mobile phones and text messages through which the rally was organized and the communication was established. In the end, the reaction from the people caused the legislators to consider the evidence and Estrada was overthrown. He blamed the text messaging-generation for his fall (Shirky, 2011, p. 29).

'Occupy Wall Street' movement, started in New York on September 17, 2011, spread all over the world from Manhattan -known as the heart of global capitalism-. The movement, supported on a global scale with 100 cities in the US, has emerged as a struggle against Wall Street, as it is believed to cause the economic collapse, and against the destructive power of large banks and multinational companies on democracy. Inspired by the Arab Spring revolts in Egypt and Tunisia, 'Occupy Wall Street' movement aimed to uncover how the richest 1% write the rules of the global economy.

The occupation actions around the world are organized using a collective decision-making tool that is based on a non-binding consensus known as the people's assembly (Calhoun, 2013). It is possible to say that new social movements are spreading every day through social media.

3. Digital Activism in the Context of Web 3.0

Web 3.0 technology, realized after the participatory and sharing content of Web 2.0, aims to enable users reach the information they need, using the existing internet infrastructure, more easily and quickly over today's millions of web sites created worldwide. Web 3.0 is more comprehensive than other versions.

3.1. The Web 3.0 Concept

Web 3.0 -called the new generation web- proposes a vision to carry the web page contents to a new level where they can be interpreted using ontologies. The semantic web is based on making computers carry out the job of searching and organizing the services individuals or organizations need. It provides access not only to content but also to services on the web (Berners-Lee, 2001).

Web 3.0 or Semantic Web is an application that aims to collect the information around the world on a single platform and enable the associated processes to be managed automatically by the computers over the web. Web 3.0 requires all the information and data on the web to

be associated with descriptions. In other words, it is aimed that content and keywords (meta-data) are intertwined in the new web technology (Yağcı, 2011, p. 140).

Web 3.0 is fully online and is based on semantic relationality of data in digital environment. Web 3.0 is expressed as the era of gathering and aggregating. The data collected by semantic web technology is used by the users and transformed to be interpreted by the computers as well. Web 3.0, or semantic web technology, enable various methods for the individuals to access any data they are interested in. The most important difference here is the linked data. As the technology advanced rapidly, data gained further value. The data is required to be classified and associated with each other in parallel with its increased value (Yengin, 2015, p. 49-50).

It is particularly important that Web 3.0 has a personalized structure today. The system holds your past search experience, together with the synthesis of the meta-data it has it returns you the right-most result in a short time (Yağcı, 2011, p.141). It evaluates millions of different results and returns the most ideal one.

Web 3.0 technology and the high level of personalization it offered gives the user an advanced internet experience. As one visits a news site, for instance, the website identifies the user and retrieves his/her preferences to present the news he/she will be interested in. Similarly, daily weather reports of his/her current location are reported automatically. Especially, the artificial intelligence embedded in Web 3.0 technology knows the content that would be useful for the user while using a search engine and creates personalized orderings of the search results. This shows that the control over the internet is passed from the human hand to software.

Web 3.0 is not expected to bring an additional burden to user. It is expected rather to reduce the workload searching for information and to save time. The greatest development aimed by Web 3.0 is the possibility of the users to use their native language while communicating with the computer. Computers present the most appropriate results for a search query, customized for every single user (Odabaşı, Çetinkaya & Şahin, 2009).

3.2. Digital Activism

Development of information and communication technologies made the Internet an important part of the daily life and digital media has begun to create a transformation in society. This transformation has begun to rapidly change the way the concept of activism is applied and perceived (Mustvairo, 2016, p.10). Social trends of today are formed through the

digital space. Expressions related to these social trends are also organized over digital areas. It is defined as digital activism to participate in informal actions over the Internet or to support a political or social event. Joining a campaign group on a social media website, retweeting, creating a hashtag, and signing an online petition are all examples of digital activism.

New social movements try to create public opinion instead of reaching directly to the governing power or to classes in power over a bureaucratic system. At this point, public opinion is regarded as a mechanism of public pressure (Lelandais, 2009, p. 68-69).

Digital activism can be expressed as a result of developments in digital technologies and new communication technologies. Social movements have existed throughout the history and often had a characteristic that leads to transformation of the social structure. An independent autonomous communication process, free from control of corporate power, has enabled acceleration of the social movements. Digital activism is defined as planned actions of individuals or groups, which exploit the rapid spreading capacity of network structures and information technologies, aiming mainly to strongly shape the public opinion while having the capability to grow independent from centrality, as either a support of or a reaction against social and political events or subjects like freedom of expression, human rights and environmental issues. It is also referred as 'Internet activism', 'e-activism' or 'cyber activism' (Kırık and Özcan 2014, p. 65-66).

The term digital activism is technically appropriate since it includes activism activities carried out primarily through social media, cell phones and internet-based applications, all of which are new communication technologies that work with a digital code. According to Karatzogianni (2015, p. 1), digital activism is any kind of activity that is carried over digital networks and serves a particular purpose such as political participation or organization of protests. Over time, digital activism is integrated into traditional activism (street activism) and is not completely independent of it. According to Ricketts (2012, p. 186), on the other hand, digital activism is an effort by activists to exploit the power of digital networks in every possible way.

There are positive approaches to the use of the Internet as a means of resistance against the dominant powers. Castells advocates for internet-based actions. He states that this way of acting gives beneficial results. Aydoğan says that a new public space, an 'opposite public space', is formed by the expressions and statements over the Internet. Thus, he describes the public space of Castells as 'the opposite public space'. Earl and Kimport (2011, p.21-22) are skeptical about the fact that people in the virtual environment can choose sex, race and social

status different than what they actually are, and that they can create a new social identity. Users can prefer a different profile than their real identity since it is a virtual account. It is thought that sometimes they exhibit destructive and harmful behaviors as they take comfort from being anonymous.

Together with digital technologies, it is seen that activism has begun to gain a new set of features and expanded its scope. Internet environments directly affect the public and the media. Therefore, it also affects politicians and laws. Since activists often try to influence laws, rulers and other power holders to change, it can be said that successful, convincing and effective digital activism can directly reach target groups. For this reason, activists from all over the world carrying out social movements started to use this new source. Even an action in the physical world can no more be thought of being independent of the Internet. Boycott calls and signature campaigns over the Internet, bulk e-petition submissions, virtual protests, crashing or hacktivism are now possible online actions (Tani, 2018, p. 51-52).

Two important events in the world are considered as the first examples of digital activism and they raised awareness about the term both in the literature and in society. The first of these is the activism event against the Ministerial Conference of World Trade Organization, held in Seattle, USA in 1999. The action is important as it was the first time that internet and mobile phones was used effectively and as it showed how powerful digital tools are (Sert, 2016, p. 34). A large group of activists argued that large companies and powerful states harmed undeveloped countries and small businesses, and they organized long-lasting demonstrations filling the streets of Seattle. The demonstrations of this activist mass against globalization could not find enough space in the mainstream media and the public was not sufficiently informed about the developments (Scholz, 2010, p. 23).

One of the most important actions in the historical development of digital activism is the revolution in the Philippines in 2000, which is regarded as the first example of mobile activism in history. It is important in terms of the time it emerged and the form it had. The President of the Philippines, Joseph Estrada, was accused of corruption and electoral fraud in 2000. However, TV news announced Estrada was found innocent by the senate and was absolved of the crime, leading to the reaction of millions of people against Estrada. A large mass of people who wanted to overthrow the president began to send messages to each other, protesting and mocking the president. In fact, this led people to realize that there was a large number of people who were uncomfortable with the situation, and they started to motivate each other to gather for protests. At that time, there were merely 11 million telephone subscribers in the 78 million-country, and the internet penetration rate was only 1%. The

activists, realizing that the most suitable media for organizing are the mobile phones, began to send location messages to indicate assembly areas, and other slogans and riot messages. According to data from Smart Communications, one of the telecommunications companies in the Philippines, 70 million text messages were posted on a single day. 91,000 people attended the online signature campaign (Cullum, 2010, p. 61-62; Earl and Kimport, 2011, p. 25; Rizzo, 2008, p.136; Wong, 2001, p. 381).

Activists from all sections, from the most powerful lobbyists in America to opposition groups in China, are aware of the power the Internet possesses. The use of digital media can be fruitful in many areas such as gaining support for a campaign, raising awareness on social issues, and creating and collecting funds (Wong, 2001, p. 381; Gurak, 2014, p. 7).

People and organizations that organize environmentalist movements – one of the new social movements – do not directly present their change demands to state institutions, instead they create masses who are aware of the purpose of the movement and take action, forming a social movement as a result. Therefore, the field of struggle for new social movements is not the political field primarily, but the civil society (Vahabzadeh, 2003, p. 10).

The new media is supportive of the social movements in organizing various actions and is the main source for such activities. Some events are held only through online channels. These include piracy, viruses and worms, virtual sit-ins, cultural jamming websites, protest websites, alternative media sites, e-mail bombs and online signature campaigns (Kalafatoğlu, 2015, p. 317).

3.3. Digital Signature Campaigns

Online actions have emerged as the philosophical background of real-life activism and direct actions have been transferred to the virtual world. Signature campaigns can be considered within this concept, and they constitute a form of digital activism. They can be carried out against state organs, institutional authorities or against various companies (Kalafatoğlu, 2015, p.312). Digital signature campaigns play an important role in creating a social platform. It is a social phenomenon that individuals can freely share their feelings and thoughts and support signature campaigns without knowing each other and through organizing a community (crowdsourcing) to make common cause with other supporters (Tezcan, 2017, p. 47).

Digital signature campaigns are carrying the signature campaigns or petitions -the conventional activism tools- to the virtual platform either through activists' own web sites or using the potential of the social media to shape public opinion. These campaigns, organized

in digital environment or transferred from the real medium to the virtual one, are important factors for digital activists to organize digitally to voice social problems, to struggle to achieve their purposes and to develop common reactions. The effective use of such sites is important in digital activism for individuals and communities to share opinions and find supporters (Yılmaz, Dündar & Oskay, 2015, p. 490).

The study by Della Porta, Andretta, Mosca and Reiter (2006) on global justice activists reveals that digital signature campaigns are the most frequently used type of action. Signature campaigns in many countries are a means for citizens to express their feelings about an issue concerning them. New types of applications have emerged in signature campaigns as a result of the widespread use of the Internet and information technologies all over the world. Digital signature campaigns are part of a wider range of mobilization provided by the Internet. Today, citizens have more tools to interact with institutions and to have a voice in decision-making processes. Many national institutions in Europe, for example, provide the citizens with opportunities to participate in digital signature campaigns. The Scottish Parliament is the first in Europe to allow digital signature campaigns. After the trial period, they officially launched their signature campaign site in 2004 (epetitions.scottish.parliament.uk). Collecting online signatures can be effective not only on national borders, but also on governments and administrative bodies at international level. International signature collecting campaigns create mobilization and enable announcement of any violations of human rights or death penalties to the whole world, thus suppressing governments (Della Porta et al. 2006; Mosca & Santucci 2009, p. 121-122).

4. Materials and Methods

4.1. About the Research

In this section, the subject and the purpose of the research are stated, the hypotheses, the universe and the sample are presented, the data collection tools and the statistical analysis are given in detail and lastly the findings are reported.

4.1.1. Purpose of the Research

It is aimed to examine digital activism through the case of *change.org* in the context of social movements.

4.1.2. Hypotheses

The following hypotheses are put forward to be tested in this research:

Hypothesis 1: Answers to the question “How much do you know about online signature campaigns?” vary depending on demographic characteristics.

Hypothesis 2: Answers to the question “How many times did you participate in online signature campaigns?” vary depending on demographic characteristics.

Hypothesis 3: Answers to the question “Why do you participate in online signature campaigns?” vary depending on demographic characteristics.

Hypothesis 4: Scores on effectiveness of Change.Org vary depending on gender.

Hypothesis 5: Scores on effectiveness of Change.Org vary depending on age.

Hypothesis 6: Scores on effectiveness of Change.Org vary depending on educational level.

4.1.3. The Population and the Sample

According to the 2019 report by We Are Social, there are a total of 52 million social media users in Turkey (<https://wearesocial.com/global-digital-report-2019>). The sample used in this study was consisted of 407 social media users selected by stratified random sampling method.

4.1.4. Data Collection Tools

The questionnaire technique was used to collect data. The survey consists of 2 sections. Measurement tools used in the questionnaire are explained in the following subsections.

4.1.4.1. Questions about Personal Characteristics

These consist of questions including age, gender, educational level and opinions about online signature campaigns.

4.1.4.2. Questions about change.org

These consist of 6 questions about opinions on change.org.

4.1.5. Data Analysis

For statistical analysis, the NCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) program was used. While examining the research data, descriptive statistics such

as the mean, standard deviation, median, frequency, ratio, minimum and the maximum were collected. Pearson Chi-Square Test was used for the analysis of the qualitative data. The significance levels of $p < 0.01$ and $p < 0.05$ were considered in the analyses.

4.2. Findings and Discussion

4.2.1. Findings about basic and demographic characteristics

| | | <i>N</i> | % |
|---------------|---------------|----------|------|
| Gender | Male | 213 | 52.3 |
| | Female | 194 | 47.7 |

| | | <i>N</i> | % |
|------------|---------------------------|----------|------|
| Age | 18-24 years | 256 | 62.9 |
| | 25-32 years | 96 | 23.6 |
| | 33 years and older | 55 | 13.5 |

| | | <i>N</i> | % |
|--------------------------|------------------------------|----------|------|
| Educational Level | Undergraduate student | 313 | 76.9 |
| | Graduate student | 74 | 18.2 |
| | High school student | 20 | 4.9 |

| | | <i>N</i> | % |
|--|-------------------------|----------|------|
| How many hours do you spend on the Internet in a day? | 1-2 hours | 107 | 26.3 |
| | 3-4 hours | 199 | 48.9 |
| | 5-6 hours | 67 | 16.5 |
| | 7 hours and more | 34 | 8.4 |

| | | n | % |
|--|---|-----|------|
| Do you think online signature campaigns are successful and achieve their purpose? | Yes | 58 | 14.3 |
| | No | 108 | 26.5 |
| | Partially | 241 | 59.2 |
| How much do you know about online signature campaigns? | I heard about | 55 | 13.5 |
| | I heard about and participated in | 269 | 66.1 |
| | I heard about but not participated in | 68 | 16.7 |
| | I have not participated in | 15 | 3.7 |
| Why do you participate in online signature campaigns? | To keep up-to-date | 49 | 12.0 |
| | I have never participated in | 12 | 2.9 |
| | To be informed about the topic | 36 | 8.8 |
| | To contribute to solution of the problem | 310 | 76.2 |
| How many times did you participate in online signature campaigns? | 1-2 times | 149 | 36.6 |
| | 3-4 times | 80 | 19.7 |
| | 5-6 times | 41 | 10.1 |
| | 7 times and more | 66 | 16.2 |
| | I have never participated in | 71 | 17.4 |

The distribution of the respondents' opinions about online signature campaigns are given in Table 5.

| | 1 – Not at all Effective | | 2 | | 3 | | 4 | | 5 – Extremely Effective | |
|---|---------------------------------|------|----------|------|----------|------|----------|------|--------------------------------|------|
| | n | % | n | % | n | % | n | % | n | % |
| <i>In bringing together people with similar ideas</i> | 11 | 2.7 | 102 | 25.1 | 144 | 35.4 | 93 | 22.9 | 57 | 14.0 |
| <i>In highlighting a certain problem</i> | 9 | 2.2 | 64 | 15.7 | 144 | 35.4 | 115 | 28.3 | 75 | 18.4 |
| <i>In supporting street protests</i> | 50 | 12.3 | 158 | 38.8 | 114 | 28.0 | 72 | 17.7 | 13 | 3.2 |
| <i>In gaining national support for protests</i> | 20 | 4.9 | 124 | 30.5 | 151 | 37.1 | 97 | 23.8 | 15 | 3.7 |
| <i>In initiating social or political change</i> | 52 | 12.8 | 146 | 35.9 | 135 | 33.2 | 58 | 14.3 | 16 | 3.9 |
| <i>In gaining international support for protests</i> | 66 | 16.2 | 135 | 33.2 | 119 | 29.2 | 66 | 16.2 | 21 | 5.2 |

The distribution of the respondents' opinions about change.org are given in Table 6.

Relationship between demographic characteristics and answers to the question “How much do you know about online signature campaigns?”

Hypothesis 1: Answers to the question “How much do you know about online signature campaigns?” vary depending on demographic characteristics.

The hypothesis was tested using Pearson Chi-Square Test.

| | | <i>How much do you know about online signature campaigns?</i> | | | | | | | | |
|--|------------------------------|---|----------|--|----------|--|----------|-----------------------------------|----------|----------------|
| | | <i>I heard about</i> | | <i>I heard about and participated in</i> | | <i>I heard about but not participated in</i> | | <i>I have not participated in</i> | | |
| | | <i>n</i> | <i>%</i> | <i>n</i> | <i>%</i> | <i>N</i> | <i>%</i> | <i>n</i> | <i>%</i> | |
| <i>Age</i> | <i>18-24 years</i> | 31 | 12.11 | 191 | 74.61 | 30 | 11.72 | 4 | 1.56 | 0.001** |
| | <i>25-32 years</i> | 7 | 7.29 | 58 | 60.42 | 23 | 23.96 | 8 | 8.33 | |
| | <i>33 years and older</i> | 17 | 30.91 | 20 | 36.36 | 15 | 27.27 | 3 | 5.45 | |
| <i>Educational level</i> | <i>Undergraduate student</i> | 32 | 10.22 | 230 | 73.48 | 44 | 14.06 | 7 | 2.24 | 0.001** |
| | <i>Graduate student</i> | 23 | 31.08 | 26 | 35.14 | 21 | 28.38 | 4 | 5.41 | |
| | <i>High school student</i> | - | - | 13 | 65.00 | 3 | 15.00 | 4 | 20.00 | |
| <i>Gender</i> | <i>Male</i> | 26 | 12.21 | 137 | 64.32 | 44 | 20.66 | 6 | 2.82 | 0.427 |
| | <i>Female</i> | 29 | 14.95 | 132 | 68.04 | 24 | 12.37 | 9 | 4.64 | |
| <i>Daily hours spent on the Internet</i> | <i>1-2 hours</i> | 11 | 10.28 | 77 | 71.96 | 17 | 15.89 | 2 | 1.87 | 0.001** |
| | <i>3-4 hours</i> | 27 | 13.57 | 133 | 66.83 | 26 | 13.07 | 13 | 6.53 | |
| | <i>5-6 hours</i> | 17 | 25.37 | 33 | 49.25 | 17 | 25.37 | - | - | |
| | <i>7 hours and more</i> | - | - | 26 | 76.47 | 8 | 23.53 | - | - | |

The answers to the question “How much do you know about online signature campaigns?” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of the answer “I heard about and participated in” were higher among respondents aged 18-24 years compared to older age groups.

The answers were statistically different also among respondents with various educational levels ($p=0.001$; $p<0.01$). The ratio of the answer “I heard about and participated in” were higher among high school and undergraduate students compared to graduate students.

The answers were statistically different also among males and females ($p>0.05$).

Again, participants with differing daily hours spent on the Internet had statistically different answers for the question ($p=0.001$; $p<0.01$). The ratio of the answer “I heard about and participated in” were higher among who spend 7 hours and more compared to other groups with lower daily hours.

Relationship between demographic characteristics and answers to the question “How many times did you participate in online signature campaigns?”

Hypothesis 2: Answers to the question “How many times did you participate in online signature campaigns?” vary depending on demographic characteristics.

The hypothesis was tested using Pearson Chi-Square Test.

Table 8. Number (n) and proportion (%) of answers to “How many times did you participate in online signature campaigns?”, by demographics

| | | <i>How many times did you participate in online signature campaigns?</i> | | | | | | | | | | |
|--|------------------------------|--|----------|------------------|----------|------------------|----------|-------------------------|----------|-------------------------------------|----------|----------------|
| | | <i>1-2 times</i> | | <i>3-4 times</i> | | <i>5-6 times</i> | | <i>7 times and more</i> | | <i>I have never participated in</i> | | |
| | | <i>n</i> | <i>%</i> | <i>n</i> | <i>%</i> | <i>n</i> | <i>%</i> | <i>n</i> | <i>%</i> | <i>n</i> | <i>%</i> | |
| <i>Age</i> | <i>18-24 years</i> | 89 | 34.8 | 65 | 25.4 | 22 | 8.6 | 50 | 19.5 | 30 | 11.7 | 0.001** |
| | <i>25-32 years</i> | 33 | 34.4 | 13 | 13.5 | 17 | 17.7 | 11 | 11.5 | 22 | 22.9 | |
| | <i>33 years and older</i> | 27 | 49.1 | 2 | 3.6 | 2 | 3.6 | 5 | 9.1 | 19 | 34.5 | |
| <i>Educational level</i> | <i>Undergraduate student</i> | 110 | 35.1 | 72 | 23.0 | 32 | 10.2 | 59 | 18.8 | 40 | 12.8 | 0.001** |
| | <i>Graduate student</i> | 29 | 39.2 | 8 | 10.8 | 9 | 12.2 | 4 | 5.4 | 24 | 32.4 | |
| | <i>High school student</i> | 10 | 50.0 | 0 | 0.0 | 0 | 0.0 | 3 | 15.0 | 7 | 35.0 | |
| <i>Gender</i> | <i>Male</i> | 84 | 39.4 | 41 | 19.2 | 23 | 10.8 | 28 | 13.1 | 37 | 17.4 | 0.427 |
| | <i>Female</i> | 65 | 33.5 | 39 | 20.1 | 18 | 9.3 | 38 | 19.6 | 34 | 17.5 | |
| <i>Daily hours spent on the Internet</i> | <i>1-2 hours</i> | 49 | 45.8 | 15 | 14.0 | 11 | 10.3 | 16 | 15.0 | 16 | 15.0 | 0.001** |
| | <i>3-4 hours</i> | 70 | 35.2 | 50 | 25.1 | 14 | 7.0 | 38 | 19.1 | 27 | 13.6 | |
| | <i>5-6 hours</i> | 13 | 19.4 | 13 | 19.4 | 12 | 17.9 | 4 | 6.0 | 25 | 37.3 | |
| | <i>7 hours and more</i> | 17 | 50.0 | 2 | 5.9 | 4 | 11.8 | 8 | 23.5 | 3 | 8.8 | |

The answers to the question “How many times did you participate in online signature campaigns?” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of 7 times and more participation were higher among respondents aged 18-24 years compared to older age groups.

The answers were statistically different also among respondents with various educational levels ($p=0.001$; $p<0.01$). The ratio of 7 times and more participation were higher among high school and undergraduate students compared to graduate students.

The answers were statistically different also among males and females ($p>0.05$).

Again, respondents with differing daily hours spent on the Internet had statistically different answers for the question ($p=0.001$; $p<0.01$). The ratio of 7 times and more participation were higher among who spend 7 hours and more compared to other groups with lower daily hours.

Relationship between demographic characteristics and answers to the question “Why do you participate in online signature campaigns?”

Hypothesis 3: Answers to the question “Why do you participate in online signature campaigns?” vary depending on demographic characteristics.

The hypothesis was tested using Pearson Chi-Square Test.

Table 9. Number (n) and proportion (%) of answers to “Why do you participate in online signature campaigns?”, by demographics

| | | <i>Why do you participate in online signature campaigns?</i> | | | | | | | | |
|--|------------------------------|--|----------|---|----------|---------------------------------------|----------|-------------------------------------|----------|----------------|
| | | <i>To keep up-to-date</i> | | <i>To contribute to solution of the problem</i> | | <i>To be informed about the topic</i> | | <i>I have never participated in</i> | | |
| | | <i>n</i> | <i>%</i> | <i>n</i> | <i>%</i> | <i>N</i> | <i>%</i> | <i>n</i> | <i>%</i> | |
| <i>Age</i> | <i>18-24 years</i> | 25 | 9.8 | 204 | 79.7 | 19 | 7.4 | 8 | 3.1 | 0.001** |
| | <i>25-32 years</i> | 7 | 7.3 | 75 | 78.1 | 14 | 14.6 | 0 | 0.0 | |
| | <i>33 years and older</i> | 17 | 30.9 | 31 | 56.4 | 3 | 5.5 | 4 | 7.3 | |
| <i>Educational level</i> | <i>Undergraduate student</i> | 32 | 10.2 | 248 | 79.2 | 25 | 8.0 | 8 | 2.6 | 0.005** |
| | <i>Graduate student</i> | 11 | 14.9 | 53 | 71.6 | 6 | 8.1 | 4 | 5.4 | |
| | <i>High school student</i> | 6 | 30.0 | 9 | 45.0 | 5 | 25.0 | 0 | 0.0 | |
| <i>Gender</i> | <i>Male</i> | 38 | 17.8 | 143 | 67.1 | 20 | 9.4 | 12 | 5.6 | 0.001** |
| | <i>Female</i> | 11 | 5.7 | 167 | 86.1 | 16 | 8.2 | 0 | 0.0 | |
| <i>Daily hours spent on the Internet</i> | <i>1-2 hours</i> | 15 | 14.0 | 71 | 66.4 | 17 | 15.9 | 4 | 3.7 | 0.001** |
| | <i>3-4 hours</i> | 14 | 7.0 | 168 | 84.4 | 13 | 6.5 | 4 | 2.0 | |
| | <i>5-6 hours</i> | 5 | 7.5 | 54 | 80.6 | 4 | 6.0 | 4 | 6.0 | |
| | <i>7 hours and more</i> | 15 | 44.1 | 17 | 50.0 | 2 | 5.9 | 0 | 0.0 | |

The answers to the question “Why do you participate in online signature campaigns?” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of those who aim to contribute to solution of the problem was higher among respondents aged 18-24 years compared to older age groups.

The answers were statistically different also among various educational levels ($p=0.001$; $p<0.01$). The ratio of those who aim to contribute to solution of the problem was higher among undergraduate and graduate students compared to high school students.

The answers were statistically different also among males and females ($p=0.001$; $p<0.01$). The ratio of females who aim to contribute to solution of the problem was higher compared to males.

Again, participants with differing daily hours spent on the Internet had statistically different answers for the question ($p=0.001$; $p<0.01$). The ratio of who aim to contribute to solution of the problem were higher among who spend 3-4 hours compared to other groups with lower or higher daily hours.

Relationship between gender and scores on effectiveness of Change.Org

Hypothesis 4: Scores on effectiveness of Change.Org vary depending on gender.

The hypothesis was tested using Pearson Chi-Square Test.

| | | <i>Gender</i> | | | | |
|---|---------------------------------|---------------|----------|---------------|----------|----------------|
| | | <i>Male</i> | | <i>Female</i> | | |
| | | <i>n</i> | <i>%</i> | <i>N</i> | <i>%</i> | |
| <i>In bringing together people with similar ideas</i> | <i>1 - Not at all effective</i> | 4 | 1.9 | 7 | 3.6 | 0.558 |
| | <i>2</i> | 58 | 27.2 | 44 | 22.7 | |
| | <i>3</i> | 70 | 32.9 | 74 | 38.1 | |
| | <i>4</i> | 51 | 23.9 | 42 | 21.6 | |
| | <i>5 - Extremely Effective</i> | 30 | 14.1 | 27 | 13.9 | |
| <i>In highlighting a certain problem</i> | <i>1 - Not at all effective</i> | 9 | 4.2 | 0 | 0.0 | 0.001** |
| | <i>2</i> | 33 | 15.5 | 31 | 16.0 | |
| | <i>3</i> | 58 | 27.2 | 86 | 44.3 | |
| | <i>4</i> | 74 | 34.7 | 41 | 21.1 | |
| | <i>5 - Extremely Effective</i> | 39 | 18.3 | 36 | 18.6 | |

| | | | | | | |
|--|---------------------------------|----|------|----|------|----------------|
| <i>In supporting street protests</i> | <i>1 - Not at all effective</i> | 18 | 8.5 | 32 | 16.5 | 0.001** |
| | <i>2</i> | 83 | 39.0 | 75 | 38.7 | |
| | <i>3</i> | 53 | 24.9 | 61 | 31.4 | |
| | <i>4</i> | 54 | 25.4 | 18 | 9.3 | |
| | <i>5 - Extremely Effective</i> | 5 | 2.3 | 8 | 4.1 | |
| <i>In gaining national support for protests</i> | <i>1 - Not at all effective</i> | 7 | 3.3 | 13 | 6.7 | 0.257 |
| | <i>2</i> | 62 | 29.1 | 62 | 32.0 | |
| | <i>3</i> | 81 | 38.0 | 70 | 36.1 | |
| | <i>4</i> | 57 | 26.8 | 40 | 20.6 | |
| | <i>5 - Extremely Effective</i> | 6 | 2.8 | 9 | 4.6 | |
| <i>In initiating social or political change</i> | <i>1 - Not at all effective</i> | 31 | 14.6 | 21 | 10.8 | 0.038* |
| | <i>2</i> | 76 | 35.7 | 70 | 36.1 | |
| | <i>3</i> | 60 | 28.2 | 75 | 38.7 | |
| | <i>4</i> | 39 | 18.3 | 19 | 9.8 | |
| | <i>5 - Extremely Effective</i> | 7 | 3.3 | 9 | 4.6 | |
| <i>In gaining international support for protests</i> | <i>1 - Not at all effective</i> | 40 | 18.8 | 26 | 13.4 | 0.519 |
| | <i>2</i> | 66 | 31.0 | 69 | 35.6 | |
| | <i>3</i> | 63 | 29.6 | 56 | 28.9 | |
| | <i>4</i> | 35 | 16.4 | 31 | 16.0 | |
| | <i>5 - Extremely Effective</i> | 9 | 4.2 | 12 | 6.2 | |

Scores on effectiveness of Change.Org “in bringing together people with similar ideas”, “in gaining national support for protests” and “in gaining international support for protests” were statistically different among males and females ($p>0.05$).

The ratio of males who think Change.Org to be *effective* “in highlighting a certain problem” was higher than that of females. The higher ratio of males was found statistically significant ($p=0.001$; $p<0.01$).

The ratio of males who think Change.Org to be *effective* “in supporting street protests” was higher than that of females. The higher ratio of males was found statistically significant ($p=0.001$; $p<0.01$).

Again, the ratio of males who think Change.Org to be *effective* “in initiating social or political change” was higher than that of females. The higher ratio of males was found statistically significant ($p=0.028$; $p<0.05$).

Relationship between age and scores on effectiveness of Change.Org

Hypothesis 5: Scores on effectiveness of Change.Org vary depending on age

The hypothesis was tested using Pearson Chi-Square Test.

| | | <i>Age</i> | | | | | | |
|---|---------------------------------|--------------------|----------|--------------------|----------|---------------------------|----------|----------------|
| | | <i>18-24 years</i> | | <i>25-32 years</i> | | <i>33 years and older</i> | | |
| | | <i>n</i> | <i>%</i> | <i>N</i> | <i>%</i> | <i>n</i> | <i>%</i> | |
| <i>In bringing together people with similar ideas</i> | <i>1 - Not at all effective</i> | 2 | 0.8 | 2 | 2.1 | 7 | 12.7 | <i>0.001**</i> |
| | <i>2</i> | 58 | 22.7 | 15 | 15.6 | 29 | 52.7 | |
| | <i>3</i> | 100 | 39.1 | 39 | 40.6 | 5 | 9.1 | |
| | <i>4</i> | 59 | 23.0 | 27 | 28.1 | 7 | 12.7 | |
| | <i>5 - Extremely Effective</i> | 37 | 14.5 | 13 | 13.5 | 7 | 12.7 | |
| <i>In highlighting a certain problem</i> | <i>1 - Not at all effective</i> | 9 | 3.5 | 0 | 0.0 | 0 | 0.0 | <i>0.001**</i> |
| | <i>2</i> | 34 | 13.3 | 6 | 6.3 | 24 | 43.6 | |
| | <i>3</i> | 97 | 37.9 | 33 | 34.4 | 14 | 25.5 | |
| | <i>4</i> | 80 | 31.3 | 26 | 27.1 | 9 | 16.4 | |
| | <i>5 - Extremely Effective</i> | 36 | 14.1 | 31 | 32.3 | 8 | 14.5 | |
| <i>In supporting street protests</i> | <i>1 - Not at all effective</i> | 19 | 7.4 | 22 | 22.9 | 9 | 16.4 | <i>0.001**</i> |
| | <i>2</i> | 106 | 41.4 | 30 | 31.3 | 22 | 40.0 | |
| | <i>3</i> | 80 | 31.3 | 17 | 17.7 | 17 | 30.9 | |
| | <i>4</i> | 38 | 14.8 | 27 | 28.1 | 7 | 12.7 | |
| | <i>5 - Extremely Effective</i> | 13 | 5.1 | 0 | 0.0 | 0 | 0.0 | |
| <i>In gaining national support for protests</i> | <i>1 - Not at all effective</i> | 9 | 3.5 | 7 | 7.3 | 4 | 7.3 | <i>0.006**</i> |
| | <i>2</i> | 81 | 31.6 | 23 | 24.0 | 20 | 36.4 | |
| | <i>3</i> | 94 | 36.7 | 38 | 39.6 | 19 | 34.5 | |
| | <i>4</i> | 63 | 24.6 | 28 | 29.2 | 6 | 10.9 | |
| | <i>5 - Extremely Effective</i> | 9 | 3.5 | 0 | 0.0 | 6 | 10.9 | |
| <i>In initiating social or political change</i> | <i>1 - Not at all effective</i> | 34 | 13.3 | 14 | 14.6 | 4 | 7.3 | <i>0.001**</i> |
| | <i>2</i> | 88 | 34.4 | 31 | 32.3 | 27 | 49.1 | |
| | <i>3</i> | 98 | 38.3 | 22 | 22.9 | 15 | 27.3 | |
| | <i>4</i> | 27 | 10.5 | 27 | 28.1 | 4 | 7.3 | |
| | <i>5 - Extremely Effective</i> | 9 | 3.5 | 2 | 2.1 | 5 | 9.1 | |
| <i>In gaining international support for protests</i> | <i>1 - Not at all effective</i> | 48 | 18.8 | 13 | 13.5 | 5 | 9.1 | <i>0.013**</i> |
| | <i>2</i> | 79 | 30.9 | 32 | 33.3 | 24 | 43.6 | |
| | <i>3</i> | 82 | 32.0 | 25 | 26.0 | 12 | 21.8 | |
| | <i>4</i> | 30 | 11.7 | 24 | 25.0 | 12 | 21.8 | |
| | <i>5 - Extremely Effective</i> | 17 | 6.6 | 2 | 2.1 | 2 | 3.6 | |

Scores on effectiveness of Change.Org “in bringing together people with similar ideas” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of respondents among 18-24 years and 25-32 years who think Change.Org to be *effective* were higher compared to that of 33 years and older.

Scores on effectiveness of Change.Org “in highlighting a certain problem” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of respondents among 18-24 years and 25-32 years who think Change.Org to be *effective* were higher compared to that of 33 years and older.

Scores on effectiveness of Change.Org “in supporting street protests” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of respondents among 18-24 years and 25-32 years who think Change.Org to be *effective* were higher compared to that of 33 years and older.

Scores on effectiveness of Change.Org “in gaining national support for protests” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of respondents among 18-24 years and 25-32 years who think Change.Org to be *effective* were higher compared to that of 33 years and older.

Scores on effectiveness of Change.Org “in initiating social or political change” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of respondents among 18-24 years and 25-32 years who think Change.Org to be *effective* were higher compared to that of 33 years and older.

Scores on effectiveness of Change.Org “in gaining international support for protests” were statistically different among various age groups ($p=0.001$; $p<0.01$). The ratio of respondents among 18-24 years and 25-32 years who think Change.Org to be *effective* were higher compared to that of 33 years and older.

Relationship between educational level and scores on effectiveness of Change.Org

Hypothesis 6: Scores on effectiveness of Change.Org vary depending on educational level.

The hypothesis was tested using Pearson Chi-Square Test.

Table 12. Number (n) and proportion (%) of scores on effectiveness of Change.Org, by Educational Level

| | | <i>Educational Level</i> | | | | | | |
|---|---------------------------------|----------------------------|----------|------------------------------|----------|-------------------------|----------|----------------|
| | | <i>High school student</i> | | <i>Undergraduate student</i> | | <i>Graduate student</i> | | |
| | | <i>n</i> | <i>%</i> | <i>N</i> | <i>%</i> | <i>n</i> | <i>%</i> | |
| <i>In bringing together people with similar ideas</i> | <i>1 - Not at all effective</i> | 3 | 15.0 | 0 | 0.0 | 8 | 10.8 | 0.001** |
| | <i>2</i> | 11 | 55.0 | 71 | 22.7 | 20 | 27.0 | |
| | <i>3</i> | 3 | 15.0 | 126 | 40.3 | 15 | 20.3 | |
| | <i>4</i> | 3 | 15.0 | 70 | 22.4 | 20 | 27.0 | |
| | <i>5 - Extremely Effective</i> | 0 | 0.0 | 46 | 14.7 | 11 | 14.9 | |
| <i>In highlighting a certain problem</i> | <i>1 - Not at all effective</i> | 0 | 0.0 | 9 | 2.9 | 0 | 0.0 | 0.001** |
| | <i>2</i> | 7 | 35.0 | 37 | 11.8 | 20 | 27.0 | |
| | <i>3</i> | 7 | 35.0 | 116 | 37.1 | 21 | 28.4 | |
| | <i>4</i> | 6 | 30.0 | 94 | 30.0 | 15 | 20.3 | |
| | <i>5 - Extremely Effective</i> | 0 | 0.0 | 57 | 18.2 | 18 | 24.3 | |
| <i>In supporting street protests</i> | <i>1 - Not at all effective</i> | 0 | 0.0 | 32 | 10.2 | 18 | 24.3 | 0.001** |
| | <i>2</i> | 10 | 50.0 | 121 | 38.7 | 27 | 36.5 | |
| | <i>3</i> | 10 | 50.0 | 85 | 27.2 | 19 | 25.7 | |
| | <i>4</i> | 0 | 0.0 | 62 | 19.8 | 10 | 13.5 | |
| | <i>5 - Extremely Effective</i> | 0 | 0.0 | 13 | 4.2 | 0 | 0.0 | |
| <i>In gaining national support for protests</i> | <i>1 - Not at all effective</i> | 0 | 0.0 | 13 | 4.2 | 7 | 9.5 | 0.001** |
| | <i>2</i> | 7 | 35.0 | 90 | 28.8 | 27 | 36.5 | |
| | <i>3</i> | 10 | 50.0 | 123 | 39.3 | 18 | 24.3 | |
| | <i>4</i> | 3 | 15.0 | 78 | 24.9 | 16 | 21.6 | |
| | <i>5 - Extremely Effective</i> | 0 | 0.0 | 9 | 2.9 | 6 | 8.1 | |
| <i>In initiating social or political change</i> | <i>1 - Not at all effective</i> | 0 | 0.0 | 43 | 13.7 | 9 | 12.2 | 0.001** |
| | <i>2</i> | 17 | 85.0 | 98 | 31.3 | 31 | 41.9 | |
| | <i>3</i> | 0 | 0.0 | 118 | 37.7 | 17 | 23.0 | |
| | <i>4</i> | 0 | 0.0 | 43 | 13.7 | 15 | 20.3 | |
| | <i>5 - Extremely Effective</i> | 3 | 15.0 | 11 | 3.5 | 2 | 2.7 | |
| <i>In gaining international support for protests</i> | <i>1 - Not at all effective</i> | 3 | 15.0 | 54 | 17.3 | 9 | 12.2 | 0.001** |
| | <i>2</i> | 7 | 35.0 | 92 | 29.4 | 36 | 48.6 | |
| | <i>3</i> | 7 | 35.0 | 103 | 32.9 | 9 | 12.2 | |
| | <i>4</i> | 3 | 15.0 | 45 | 14.4 | 18 | 24.3 | |
| | <i>5 - Extremely Effective</i> | 0 | 0.0 | 19 | 6.1 | 2 | 2.7 | |

Scores on effectiveness of Change.Org “in bringing together people with similar ideas” were statistically different among respondents with various educational levels ($p=0.001$;

$p < 0.01$). The ratio among undergraduate and graduate students who think Change.Org to be *effective* were higher compared to that of high school students.

Scores on effectiveness of Change.Org “in supporting street protests” were statistically different among respondents with various educational levels ($p = 0.001$; $p < 0.01$). The ratio among undergraduate and graduate students who think Change.Org to be *effective* were higher compared to that of high school students.

Scores on effectiveness of Change.Org “in gaining national support for protests” were statistically different among respondents with various educational levels ($p = 0.001$; $p < 0.01$). The ratio among undergraduate and graduate students who think Change.Org to be *effective* were higher compared to that of high school students.

Scores on effectiveness of Change.Org “in initiating social or political change” were statistically different among respondents with various educational levels ($p = 0.001$; $p < 0.01$). The ratio among undergraduate and graduate students who think Change.Org to be *effective* were higher compared to that of high school students.

Scores on effectiveness of Change.Org “in gaining international support for protests” were statistically different among respondents with various educational levels ($p = 0.001$; $p < 0.01$). The ratio among undergraduate and graduate students who think Change.Org to be *effective* were higher compared to that of high school students.

| Table 13. Hypothesis Tests Results | |
|---|---------------|
| <i>Hypothesis</i> | <i>Result</i> |
| Hypothesis 1: Answers to the question “How much do you know about online signature campaigns?” vary depending on demographic characteristics. | <i>Accept</i> |
| Hypothesis 2: Answers to the question “How many times did you participate in online signature campaigns?” vary depending on demographic characteristics. | <i>Accept</i> |
| Hypothesis 3: Answers to the question “Why do you participate in online signature campaigns?” vary depending on demographic characteristics. | <i>Accept</i> |
| Hypothesis 4: Scores on effectiveness of Change.Org vary depending on gender. | <i>Accept</i> |
| Hypothesis 5: Scores on effectiveness of Change.Org vary depending on age. | <i>Accept</i> |
| Hypothesis 6: Scores on effectiveness of Change.Org vary depending on educational level. | <i>Accept</i> |

5. Conclusion

Mass media technologies not only affect the masses, but have also become a medium for mass movements. Just as the society expressed its mass reactions and political thoughts in the squares, they have also become able to discuss in virtual media thanks to developing

internet technologies. While the voices of homogeneous communities in physical squares are loud, in virtual squares, on the other hand, all segments of society can voice their sounds in a heterogeneous manner and present their demands.

People, getting increasingly lonely with individualization, transferred their social life to digital environment. In this period of smart phones, tablets and other technological devices becoming vital parts of our lives, people make their presence felt as much as they show popularity in social sharing applications. Such that activism movements and social reactions that once took place only in physical squares have also got their share of digitalization. Indeed, the concept of digital activism emerged and social movements were able to reach and influence masses and made their voice heard in a shorter time. Those denied and ignored by the society and the government were able to interact through digital activism, without pressure and censorship.

Social movements provide the necessary environment to make their voices heard for those who are left out and those who are marginalized. Those who want change, want to make their voice heard, who are not satisfied or want to say that I am here and who do not have enough power can express themselves thanks to social movements. Digitalization, on the other hand, paved the way for individuals to find their intellectual groups and make their voices heard without time and space boundaries or other limitations. Before digitalization, the conditions of social movements must existed, with digitalization, however, instant reactions can now be taken.

While Web 2.0 turns the user into a participant and a content creator, Web 3.0 enables all the available information to be controlled from a single platform. Web 3.0 is able to provide users with personalized data by collecting, combining and associating data with each other. Web 3.0 provides an advanced internet experience; returning the most relevant result through evaluating millions of different results and taking into account the search history of the user.

Digital activism is the ability of new social movements to create public opinion on their requests by making use of the rapidly advancing internet technologies. The public pressure created over the internet affects the media and the government, hence takes role in drafting laws.

The formation of a civil society that will support the actions will then activate the relevant places if enough plural voice is formed. Thus, online activities that will bring civil society together are carried out frequently and easily. Such activities include tools such as piracy, digital virus and worm generation, virtual sit-ins, cultural defeat websites, protest websites,

alternative media sites, email bombardment and online signature campaigns.

Today, petitions, one of the conventional activism tools, are frequently turning into digital petition drives via the internet, and individuals can easily express their feelings, thoughts and wishes in the face of problems that concern them. In this study, the change.org website, an example of digital activism in the context of social movements, was examined and findings were presented.

Individuals' levels of knowledge about petitions drawn up in virtual environments were evaluated based on their participation rates in petitions and reasons for participation with respect to age, gender and educational level demographics. Population of the study was consisted of social media users in Turkey, while a sample of 407 participants was recruited through stratified random sampling. Questionnaire technique was used to collect the data. NCCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) program was used for statistical analysis. In addition to descriptive statistics (Average, Standard Deviation, Median, Frequency, Ratio, Minimum, Maximum) to evaluate the data, Pearson Chi-Square test was used for the analysis of qualitative data. Significance was evaluated at $p < 0.01$ and $p < 0.05$ levels.

The gender distribution of the study was determined as 52.3% male and 47.7% female. 62.9% of the participants were between 18-24 years, 23.6% was between 25-32, and 13.5% was 33 years or older. The rate of undergraduate educational level was 76.9%, graduate level was 18.2%, and 4.9% of participants had high school as the educational level. Thus, while there was an equal distribution of male and female participants in the survey, the proportion of young people between the ages of 18-32 was high. In addition, the high rate of undergraduate and graduate participation shows that the participants had mainly high education levels.

It is found that the participants have low levels of belief in success of online petitions and in their goal-achievement nature. 14.3% of the participants were in favor of success of online petitions, while 59.2% of them agreed partially. The rate of those who disagreed was 26.5%.

The awareness about online petitions is observed at a high level, and it is found that the participants sign a petition with the purpose to contribute to solution of the problem. In addition, 82.6% of the participants signed petitions at least once.

Change.org, reaching 19.5 million users in Turkey as of May 2020, is continuing its activities with the motto of digital meeting point for those who want change against all kinds of problems. In 2019, 3 million people signed 28,176 petitions on the platform, which offers

users the opportunity to start online petitions in order to make some changes and create awareness. Citizens who wish to express their needs in the course of Covid-19 outbreak, which affected all the world and Turkey as well since March 2020, launched above 1200 online petitions over Change-org website. More than 1 million users signed the petitions, which assume an important role in submitting requests to authorities.

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