



University Students' Privacy Concerns Towards Social Media Platforms: Whatsapp Contract Change

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Abstract

The recent Covid-19 outbreak has profoundly altered our lives. We have begun to communicate more frequently online than ever before. As a result, social media and social messengers have begun to play an increasingly important role in our everyday lives. Facebook, Twitter, Instagram, Youtube, Whatsapp, and Telegram are some of the most widely utilized social media platforms. Whatsapp announced a change to its data privacy policy for end users in Turkey in January 2021. This shift has raised global awareness and concern about data privacy and security. This study will look at whether this change caused consumers to switch to other apps like Telegram or Signal as a result of the change. It will also look into whether there is a gender difference in how people use social media applications. For data collection, the study employs the survey method. A total of 489 students from eight different universities responded to the poll. Frequency analysis was used to analyze the data from this study. As a result, it was found out that majority of the users continued to use Whatsapp. In addition, it can be stated that participants do not have enough awareness on issues such as security of personal data and privacy. This study differs from others in the literature in that it focuses specifically on the Whatsapp contract modification and users' reactions to the contract change.

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1 Introduction

The rapid development of technology in the past few years and the expansion of internet over the world increased the usage of internet dramatically. Especially, with the recent Covid-19 pandemic, the daily operations and activities moved to internet. People have the opportunity to send and receive information anywhere with the help of internet [1]. As a result, more data started to be generated globally. Individuals did not use the internet only to perform some operations that would facilitate their daily work such as online shopping, banking and e-government services. At the same time, they started to use it for more fun and having a pleasant time. Moreover, at the point we have reached, serious time has started to be spent in these environments called social media or social messengers [2].

Social media or social messengers does not only provide communication between users, but also are used in many areas such as playing games, obtaining information and searching. All of these increase the interest in these platforms because people can access many different applications by having social networks [3]. Facebook, Twitter, Instagram, Youtube, Whatsapp and Telegram are among the most popular social applications that have been used worldwide. Every year new social applications stated to become popular especially among youth. For example; TikTok and ClubHouse are newer applications which became popular during the pandemic period, 2020. The main reason why social applications are being used widely is that via these social networks, users have the opportunity to create their own pages [4]. Through these networks, users can see their age, place of residence, interests, etc. Besides, they can communicate with each other by uploading and sharing photos and videos [5]. In addition, many activities carried out on social networks reach large audiences [6].

Due to the development of social platforms and the activities of users on these platforms, some negative situations such as the sale or theft of user data have started to occur. Governments have imposed various responsibilities on social platform owners and users such as the confidentiality of data. The data is personal information that identifies the person and should not be shared. Therefore, when we look at the data privacy policies of countries, various laws have been

enacted not only today but also in the past [7]. One of these laws in Turkey is "Law on the Protection of Personal Data" which protects data privacy in the electronic sense and prepared by the standards of data privacy laws in Europe. This law is adopted on 24.03.2016 and is known as "KVKK" in Turkey.

The content that a user produces and consumes on social media, and his perspective, tastes and purchasing habits can be easily revealed by data analysis. These qualifications are data that should be kept confidential. However, almost all social media platforms can process users' data legally. For example, if a user wants to be a member of Facebook, they have to approve the company's confidentiality agreement after filling certain personal information fields. If not approved, the user cannot use the service. When the user agreement is examined, it is seen that the user collects and processes all the data he / she has viewed in the media platform, as well as the device information, regardless of the user. Since it is known that there are millions of Facebook users, it can be said that the company has very valuable data. More importantly, these data may be used for different purposes [7].

In January 2021, Whatsapp, a company of Facebook, announced a change in its data privacy policy for the end users located in Turkey. It showed this change as a pop-up when you open the application and asked you to approve it until February 8, 2021 in order to keep using the application. The last regulation removes the previous statement saying "You may choose not to share your WhatsApp account information with Facebook in order to improve your experience with Facebook ads and products," implying that data sharing is now mandatory. In fact, this regulation consists of the transition of a data sharing policy that was actually realized in 2016 to the usage specifications in line with the legal regulations. The fact that this actual situation came to the agenda with the written declaration in the user agreement has created a great global awareness on data privacy and security. In Turkey, as a reaction to this policy change, many people downloaded Telegram and Signal applications which are competitors of Whatsapp. Then, Whatsapp announced that it postponed the approval of this policy change to May due to the growing reactions of the end users. Dulger [8] analyzed this change from a legal perspective and explained why this new contract change is against "KVKK". Akgun et. al. [9] uses

content analysis technique to determine the direction of user comments and movements after the WhatsApp privacy agreement decision of users between January 4-15, 2021.

In this study, the social media and social messenger application usage of university students will be examined and their reaction to Whatsapp's policy change will be questioned. As a result, their choices of using Whatsapp and whether they will switch to other applications or not will be researched. This study differentiates from other studies by searching the perspectives of the users towards Whatsapp contract change. The study also aims to understand the consciousness level of participants on issues such as security of personal data and privacy. Moreover, the literature in Turkey is lacking a study made with both social messengers and social media at the same time. This study aims to fill this gap.

2 Literature Review

In this section, other studies performed based on social application usage and preferences will be analyzed. Studies based on Turkey and worldwide will be discussed because every country's social media usages can be different than each other.

According to a research conducted by Hazar [10] on 248 people at Gazi University, it is concluded that 47.2 percent of the participants, that is approximately half of them, use social media to get the most information, followed by communication with 23 percent. In a study conducted by Aydin [11] to determine the internet and social media usage of Anadolu University distance education students; it was concluded that 65 percent of the participants used social media to communicate with their friends. This was followed by those who used it to gain new knowledge and to conduct research. Vural and Bat [12] conducted a study on 319 students studying at Ege University, faculty of communication. As a result of this research on social media use, it was determined that 31 percent of the participants used social media to spend time, 18.5 percent to chat online, and 13.2 percent to update their profile. In the study conducted by Kucukali [13] on 215 university students studying at Atatürk University in Erzurum, it has been concluded that the majority of the participants use social media for fun and relaxation. It was understood that the participants who responded the survey mostly used Facebook among other social networks.

In the study conducted by Tektas [3] on 221 university students at Marmara University Technical Sciences Vocational School, it was found that female students spend more time on social networking sites than male students. A similar result was found out by a study made by İnce and Kocak in 2017. It was concluded that the duration of social media use of women in a session was higher than that of men. Also, the average duration of social media uses of university students participating in the study was 47.41 minutes daily. In the study conducted by Balci et al. [14] on 440 students who continue their education at Selcuk University, social networks are among the most visited websites by university students. According to the research made by Goncu [15] with Generation Y, uses and satisfaction for WhatsApp have been identified as the following categories; socialization (social interaction), being free, practicality, multimedia (convergence), professional needs (professional) and entertainment. Finally, Yazici [16] made a research on university students' Whatsapp usage in 2015.

Considering the studies done worldwide and especially, focusing on studies related to social messengers, researchers also found out the negative aspects of them. For example, Yeoboah and Ewur [17] proved that the usage of WhatsApp has impacted negatively on the performance of students in Ghana. The findings of the study state that WhatsApp usage has led to lack of concentration during lectures, consumes study time, distracts students from completing their assignments and mostly affects their spellings and grammatical formation of sentences. The study made by Sharma and Shukla [18], also revealed that Whatsapp has adverse impact on the life style and culture of youth especially in their communications. It affects their grammar and formation of sentences in addition spoils their spelling skills. They may get misleading information or gossips that are not true and even become totally dependent on this to get information about around the world. Another study related to smartphone application usage amongst students at a South African University performed in 2012 proved that students remain online for 16 hours a day and spends an average of 5 hours per day on their smart phones interacting with others through social networking applications [19]. According to a survey performed by Tata Consultancy Services in India in 2013 with 17,500

high school students across 14 Indian cities, youth prefer to communicate through social networking tools and building virtual communities aided by affordable bandwidth and smart devices. The survey proved that almost 70% of the students possess smart phones and have started utilizing the full potential of smart phones [20].

3 Methods

The data of this study were collected by a survey which was conducted to students studying in undergraduate programs on January 2021. The survey was distributed electronically via a link sent to the students. Random sampling was used to select the participants. A total of 490 students filled out the survey studying in 8 different universities. Survey questions include the use of WhatsApp, Facebook, Instagram and Twitter social applications. Also, it has been questioned whether alternatives to Whatsapp such as Telegram, Signal or Bip applications will be considered or not. Moreover, analysis was made on whether students are generally concerned about the processing of personal data and privacy violations on social media platforms and social messengers. Then, the data collected as a result of this survey was evaluated using frequency analysis method.

In the analysis, it was studied whether there is a gender difference in the use of these applications. It was also searched whether there is a difference according to majors such as if being an Engineering student makes any difference or not.

4 Findings

Frequency analysis is used to analyze the data in this study. The distribution of the students participating in the study by gender and the university where they study is shown in Table 1. According to Table 1, 179 of the students are male (36.61%) and 310 of them are female (63.39%). A total of 489 students participated in the research. Most of the participating students study at Gaziantep Islamic Science and Technology University (36.20%) and the least at Beykoz University (4.7%).

Table 1. Distribution of Students According to Gender and University

Variable	Category	Frequency (f)	Percent (%)
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Gender	Male	179	36.61
	Female	310	63.39
University	Beykoz University	23	4.7
	Gaziantep University	26	5.32
	Gaziantep Islam Science and Technology University	177	36.20
	Hatay Mustafa Kemal University	67	13.70
	Istanbul University	42	8.59
	Kilis 7 Aralık University	39	7.98
	Maltepe University	85	17.38
	Marmara University	30	6.13
Total		489	100

The answers given to the questions about the daily social media usage period of the students are presented in Table 2. According to Table 2, it is seen that 83% of the students never use Facebook. The proportion of women who do not use Facebook (92.58%) is more than men (66.48%). On the other hand, it is understood that the majority of students (85%) use Instagram.

Almost a quarter (26.58%) of all students stated that they use Instagram for up to 1 hour a day, while more than half (60%) use Instagram for more than an hour a day. Twitter usage rate is 45% for all students. On the other hand, WhatsApp usage rate has the highest rate with 99.39%. Most of the students (78.5%) stated that they use WhatsApp for more than an hour a day. Students who use WhatsApp between 1 and 3 hours a day make up about a third of all students.

Table 2. Students' Daily Social Media Usage Times

Variable	Category	Male (f)	Male (%)	Female (f)	Female (%)	Total	Percent
Daily Facebook Usage Time	Up to 1 hour	46	25.70	21	6.77	67	13.70
	1-3 hours	12	6.70	1	0.32	13	2.66
	4-6 hours	1	0.56	1	0.32	2	0.41
	7 hours and more	1	0.56		0.00	1	0.20
	I never use it.	119	66.48	287	92.58	406	83.03
Daily Instagram Usage Time	Up to 1 hour	62	34.64	68	21.94	130	26.58
	1-3 hours	66	36.87	131	42.26	197	40.29
	4-6 hours	20	11.17	52	16.77	72	14.72
	7 hours and more	8	4.47	10	3.23	18	3.68
	I never use it.	23	12.85	49	15.81	72	14.72
Daily Twitter Usage Time	Up to 1 hour	47	26.26	76	24.52	123	25.15
	1-3 hours	25	13.97	40	12.90	65	13.29
	4-6 hours	9	5.03	15	4.84	24	4.91
	7 hours and more	3	1.68	4	1.29	7	1.43
	I never use it.	95	53.07	175	56.45	270	55.21
Daily WhatsApp Usage Time	Up to 1 hour	53	29.61	49	15.81	102	20.86
	1-3 hours	60	33.52	102	32.90	162	33.13
	4-6 hours	36	20.11	91	29.35	127	25.97
	7 hours and more	28	15.64	67	21.61	95	19.43
	I never use it.	2	1.12	1	0.32	3	0.61

The answers obtained from the questions asked in order to determine the level of anxiety of the students toward the social media platforms which process the personal data of the users and sometime violate their privacy are presented in Table 3. In this context, the anxiety levels of the students were calculated for each social media platform by scaling the responses such as "Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree" between 1-5. Women using Facebook (3.92)

are more concerned than men (3.51) about the processing of personal data and breach of privacy. The same is true for the use of Instagram. Although men take an indecisive attitude in the processing of personal data and violation of privacy (3,34), it can be said that women are more concerned about this issue (3,79). It is seen that the WhatsApp application causes more anxiety (4.05) in users compared to the others.

Table 3. Students' Concern about Personal Data Processing and Privacy Violation

Variable	Category	Male (f)	Anxiety	Female (f)	Anxiety	Total	Anxiety
Facebook	Strongly Disagree	29		24		53	
	Disagree	12		27		39	
	Undecided	33	3.51	40	3.92	73	3,77
	Agree	48		76		124	
	Strongly Agree	57		143		200	
Instagram	Strongly Disagree	24		10		34	
	Disagree	20		29		49	
	Undecided	28	3.50	40	3.99	68	3,81
	Agree	55		105		160	
	Strongly Agree	52		126		178	
Twitter	Strongly Disagree	27		22		49	
	Disagree	23		31		54	
	Undecided	37	3.34	62	3.79	99	3,62
	Agree	45		70		115	
	Strongly Agree	47		125		172	
WhatsApp	Strongly Disagree	23		14		37	
	Disagree	13		17		30	
	Undecided	22	3.74	28	4.23	50	4,05
	Agree	50		75		125	
	Strongly Agree	71		176		247	

After the WhatsApp application changes its contract with the end users regarding the processing of personal data, the answers given to the question asked to determine whether the students deleted the application or not are shown in Figure 1. In Figure 1, it can be seen that 408 students did not delete the application, and 81 students deleted the application. 83.43% of the students continued to use the WhatsApp application despite the contract change.

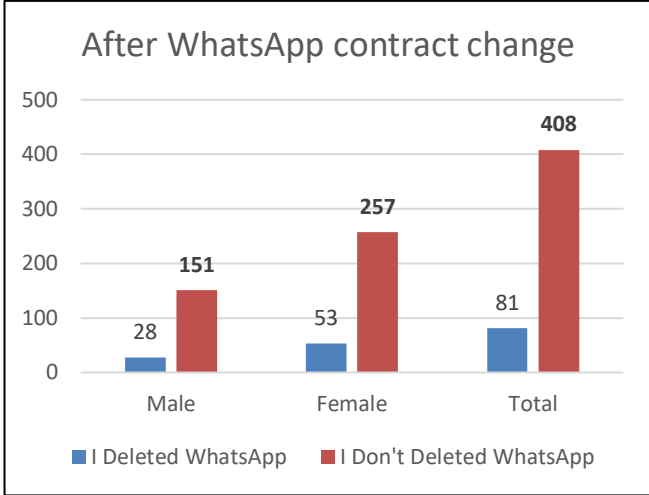


Figure 1. WhatsApp Usage Status After Contract Modification

After the WhatsApp contract change decision, users can specify more than one option about which platform they want to switch to, and the graph consisting of the answers given to the question is presented in Figure 2. 48% of the students stated that they preferred Telegram, 23% Bip and 18% Signal. 6% of the students stated that they do not want to switch to any application, while 5% stated that they preferred other applications (Skype, Discord, Dedi, Sms, Line, msn, WeChat, Domestic Productions).

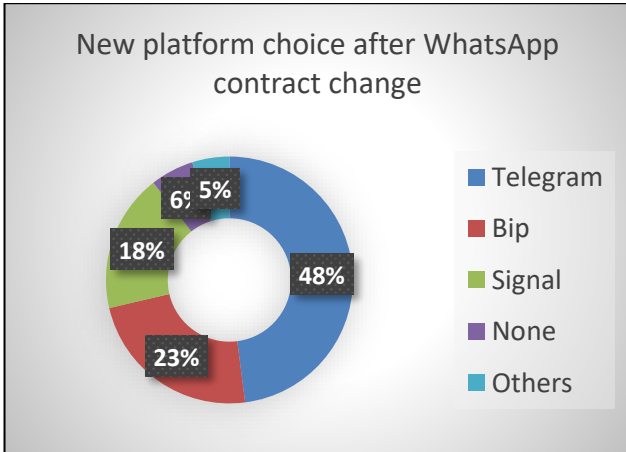


Figure 2. Platforms Preferred by Users After WhatsApp Contract Modification

5 Results

In the study conducted to determine the social media usage preferences of university students and their reactions against the WhatsApp contract change, the students mostly used WhatsApp and Instagram, and Twitter the least. This is in parallel with the studies [15] and [16] in which participants prefer Whatsapp the most for their social

communication needs. However, from our study it was understood that the majority of the students did not use Facebook. This result is different than Kucukali's [13] study made in 2015 in which majority of the students use Facebook. According to this, it can be concluded that the trends in social media platforms have changed and Facebook lost its popularity over other platforms.

Although all three of Facebook, Instagram and WhatsApp applications belong to the same organization, it was observed that students were most concerned about the processing of personal data and privacy violations from the use of WhatsApp, followed by Instagram and Facebook. Even though all three platforms belong to the same organization, students' levels of anxiety towards the three platforms differ. The platform of least concern was Twitter.

While WhatsApp changed the contract, most of the users continued to use the application without deleting it. This situation demonstrates that students have serious habits towards this platform. At the point of transition to an alternative application, Telegram, Bip and Signal applications are the most prominent, respectively.

As a result of different reactions of university students to the applications, it can be stated that they do not have enough awareness on issues such as security of personal data and privacy. Through this study, it is aimed to gain a new perspective in the field of social media usage and preferences of students from the perspective of WhatsApp contract change. It is recommended that students as well as all internet and social media users undergo specific training on the security of personal data and privacy violations. In future studies, new studies can be carried out with different perspectives on the processing of personal data by social media platforms or violation of privacy.

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