DOI: 10.29345/futvis.102 Gelecek Vizyonlar Dergisi (fvj: Future Visions Journal) 3(4): 2019, 30-40

Social Capital and Social Media[1]

İsmail ACUN

Eskişehir Osmangazi Üniversitesi; iacun@ogu.edu.tr

Abstract

The aim of the study is to investigate university students' the level of social capital and the factors affecting their social capital accumulation. University students' level of social capital (online and offline) is both affected by and happens through social media due to the rapid developments in mobile technologies. The data for this article is drawn from a larger research TUBITAK supported project. The project employed both quantitative and qualitative research methods. Some of the quantitative data was used for this article. There were 2., 3. and 4. grade students of 12 different Turkish state universities located in different parts of Turkey. The total number of the students involved in the study was 2253. The data was gathered by a demographic data collection form and seven other scales developed for the project mentioned above. The scales were Likert type. Their reliability and dimensions are explained in detail in method section of the study. The data was subjected to stepwise regression analysis. The analysis of the data shows that; the university students' bonding social capital level is higher than their bridging social capital level.

Key Words: Social capital, Social media, University students.

Sosyal Sermaye ve Sosyal Medya

Özet

Çalışmanın amacı, üniversite öğrencilerinin sosyal sermaye seviyelerini ve sosyal sermaye birikimlerini etkileyen faktörleri incelemektir. Üniversite öğrencilerinin sosyal sermaye seviyesi (çevrimiçi ve çevrimdışı), mobil teknolojilerdeki hızlı gelişmeler nedeniyle sosyal medyadan etkilenir ve bunlardan kaynaklanır. Bu çalışmanın verileri, TÜBİTAK destekli daha kapsamlı bir projenin verilerinin bir kısmından oluşmaktadır. Projede hem nicel hem de nitel araştırma yöntemleri kullanılmıştır. Bu makalede nicel verilerin bir kısmı kullanılmıştır. Çalışma evrenini, Türkiye'nin farklı bölgelerinde bulunan 12 farklı Türk devlet üniversitesinin 2., 3. ve 4. sınıf öğrencileri oluşturmuştur. Çalışma grubu öğrencilerinin toplam sayısı 2253'tür. Veriler demografik veri toplama formu ve yukarıda belirtilen proje için geliştirilen yedi farklı ölçme aracı yoluyla toplanmıştır. Ölçme araçları Likert tipindedir. Ölçme araçlarının güvenilirliği ve boyutları çalışmanın yöntem bölümünde ayrıntılı olarak açıklanmıştır. Veriler adım adım regresyon analizine tabi tutulmuştur. Verilerin analizi şunu göstermektedir; Üniversite öğrencilerinin kaynaştırıcı sosyal sermaye birikimleri bağlayıcı sosyal sermaye birikimlerinden yüksektir.

Anahtar Kelimeler: Sosyal sermaye, Sosyal medya, Üniversite öğrencileri.

1 Introduction

Humans live collectively in order to sustain their generations, to improve their quality of life, to minimize the dangers from outside and to benefit from their knowledge and skills since ancient times. Human beings, as a social entity, needs order and discipline in order to continue living together. These needs have led to the emergence of the rules of law that provide social order. Lawful rules are a system that includes concepts such as rights, equality and justice. Democracy is the mode of administration in which these concepts are put into practice at the highest level and which is mostly accepted by today's societies. Democratic governance is seen as a system that provides the highest participation of each individual to the administration, meets the expectation of having a say in the administration.

Revolutionary technological developments, globalization and the changing social structures, which characterized the last century, affect the lives of individuals. It is important for the individual to be able to understand the social problems and society, to recognize and respect the differences, to look at and evaluate the events with different perspectives and to actively participate in the society in which s/he is a member (Pamuk & Alabas, 2016). In this context, social capital accumulation of individuals is among the most important indicators of the healthy functioning of the democratic order.

While the individual is obliged to carry out his / her own responsibilities, he / she assumes the role of her own in line with the social settings. It helps the smooth functioning of the social mechanism. In this sense, the individual is expected to behave to contribute to the society as expected from general public and rule of law. University life is an important process that shapes the decisions of individuals in the rest of their lives, their reactions to events, in other words, their perspectives on life. In this process, as a university student, their participation in democracy and civil society which provides the functioning of the democratic system is an important field of research.

1.1 Social Capital: Bonding and Bridging

Since a human being is a social being, he / she is in a relationship with each other and acts according to the social structure in which he / she lives. People need to assume in various roles in society. They form social networks as a natural consequence of these collaborations. Thanks to these networks, they accumulate social capital which they can then use. Depending on the nature of relationships and networks, the accumulation of social capital is of two types: bonding social capital and bridging social capital (Paxton, 2002). Such capital accumulations can be regarded as an indicator of the democratization level of a society. Because, in a

[1] The data for the study is drawn for the data collected for a TUBITAK Project numbered 114K190. I am grateful for TUBITAK and the scholars who was involved in certain parts of the project.

deliberative way, individuals take initiative and take responsibility for the social and environmental issues needed for society to function (van Deth, 2010). Since social capital can be summarized as open source or benefits for individuals through their relations to individuals, voluntary work in the social field is expected to contribute directly to them (Coleman, 1988; Putnam, 2000; Lin, 2005).

Bonding social capital arises from close relationships. The individual forms a natural network between his / her family, close relatives and acquaintances. Individuals participating in this network know each other directly and closely. Bonding social capital happens in warmer and sincerer relationships, and therefore it is a strong form of capital. The places where this type of capital occurs are the closed community type of social structures (Zmerli, 2010). Bonding social capital appears to be a positive type of capital as it is included in social capital theory. However, when such groups are examined, these groups have closed, isolating group members against other individuals or groups. This shows that they may be organized in a way that could harm the structure of a democratic society (Zmerli, 2010). The bonding social capital dimension may not be desirable for some societies as it opens the door to closed social organizations. Therefore, the desired social capital is bridging social capital for a democratic society structure (Lin, 2005).

Bridging social capital, on the other hand, takes place between individuals and groups that are distant but shares common values and interests, who may not know one another personally. Such capital arises from relationships based on general trust (Antoci, Bonelli, Pagliery, Reggiani & Sabatini, 2019). The individual creates networks with people and groups belonging to any part of the society. Through these networks, people conduct voluntary, social, political and environmental activities with other individuals (Lin, 2005; Son, Lee, Cho & Kim, 2016). Relationships based on weak social ties actually create very strong bridging social capital (Gravenattor, 1973). Thus, individuals participate in social life to provide voluntary services for the general benefit of society and humanity (Dalton, 2008; Herzog & Yang, 2018). Trust is important in terms of social capital as it enables the formation of voluntary participation networks. Thus, the benefit that an individual cannot realize by him/herself is achieved through the bridging social capital created by the society.

In the periods when information technologies were not used very effectively, both bonding and bridging social capital had a social equivalent. These two types of social capital are still in the social sphere. However, it is necessary to look at the formation of the two types of capital in online environments due to the power of the social media and especially the impact of social media on social life.

1.2 Social Media and On-line Social Capital

The perception of trust created by one's interpretation of events and phenomena around him is important when he has the first-hand data. The individual's confidence in his / her immediate environment is based on his / her primary life experiences. His/her perception of other issues is based on the information presented to him/her through the media. In this case, the reliability of information, ownership of media, the relationship between media and politics, media literacy and the sources of information that the individual refers to become important factors. Therefore, individuals' accumulation of social capital through new means is also shaped through social media. Thus, a new concept of social capital 'online social capital' is formed (Williams, 2006).

Social media provides a new personal and permanent address for individuals. This allows for the creation of connections for individuals without restriction in the context of spatial, temporal and social distance. And, it provides the ability to do so again and again. It also includes successful practices in bringing together individuals and groups that can be interrelated in the care of individuals of various interests. Thus, social media becomes a functional tool for developing close relationships (Steinfield, Ellison, & Lampe, 2008; Goh, Xin & Jin, 2019; Ma & Leung, 2019). In this context, individuals who share common values and ideas develop their social capital through social media (Quinn, 2016). Individuals can create new social capital "online social capital" on social media while increasing current real-life social capital accumulation (Quinn, 2016). Shin and Choi (2016)'s research examined social capital as a mediating variable in the relationship between civil democratic participation and social media (Skoric, Zhu, Goh, & Pang, 2016). It shows that social media has an effect on social capital. The on-line social capital is as real and powerful as it can get.

Thus, the study aims to investigate the Turkish university students' level of off-line and on-line social capital and the factors affecting it.

2 Method

2.1 Research design and subjects of the study

The study employed a quantitative research approach. To collect data from a wide and varied sample, several scales were used in line with quantitative approach.

The data was collected from 2253 students studying arts and letters faculties in 12 state universities in Turkey. Social capital takes time to accumulate, thus the first grade students were not included in the study. The rest of the students studying at the several departments of the letters faculty were estimated between 130000. It was aimed at determining the sample for the research with 95% confidence level and +2 and -2 confidence interval. It was calculated that 2357 students should be selected for the sample (Surveysytems, 2016).

A stratified sampling method was tried to be employed for the study. However, it was not achieved because of lack of legal permissions. The researchers chose to collect data from as many students as possible from the 12 universities. One should note that 'sample of the study' does not reflect the intended representation of the population under investigation. Therefore, the results cannot be generalized.

The expressions of the worldview in the research are conceptualizations obtained from the pilot study during the development of the measurement tool. In the pilot study, students were asked to write down their political views. The students used concepts such as idealistic, liberal and Marxist as well as religious, Muslim and atheist concepts. Therefore, the term 'world views' was adopted by the researchers in this study. Where the student chose the Kemalist option, s/he marked the nationalist option and / or wrote the nationalist option to the other option. Therefore, groupings of world views were carried out by researchers on the basis of students' choices.

2.2 Data Gathering Tools

In order to gather data several research tools were employed for the study. Demographic data collection tool included many items to create socio-economic status index. It also included grand point average of students, gender, membership to any NGOs based in or out of university campus, political views of the students, type of social media use and frequency of social media use. Six other data gathering tools developed for the study were subjected to the same following procedure. A pool of items were developed for each scale drawn from the literature. Then, validity check procedures were completed by utilizing expert opinions for each scales. A pilot study was carried out for all of the scales for both validity and reliability. In order to test whether the scales are suited for factor analysis Kaiser-Meyer-Olkin test was run. Cronbach's Alpha was used to test the scales' reliability.

Purposes of social media use scale (KMO= .77, p<.001; .80 Cronbach's Alpha; total variance explained = 62%): The factor analysis shows that the instrument contains 12 items and four sub factors. Those factors are named as 'entertainment' and 'killing time', 'keep in touch with politics and political groups', 'research and networking'.

Online bridging social capital (KMO= .91, p<.001; total variance explained 69.97%): The factor analysis shows that the instrument contains eleven items and three sub factors. The factors named as 'the capacity to contact with persons and groups', 'the ability to connect with persons and groups' and 'the belief that the people are connected to each other reciprocally'.

Online bonding social capital (KMO= .93, p<.001; .93 Cronbach's Alpha; total variance explained 69.50%): The factor analysis shows that the instrument contains eleven items and two sub factors. The factors named as 'the bonding social capital effect of environment to the person' and 'the bonding social capital effect of the person to the environment'.

The trust in democratic institutions (KMO= .94, p<.001; .95 Cronbach's Alpha; total variance explained 74.25%): The factor analysis shows that the instrument contains 27 items and five sub factors. The factors are; 'the trust in judiciary', 'media', 'politics', 'NGOs' and 'law enforcement agencies'.

Self-esteem scale (KMO= .84, p<.001; .80 Cronbach's Alpha; total variance explained = 56%): The factor analysis shows that the instrument contains five items and one factor.

Trust (KMO= .75 p<.001; .88 Cronbach's Alpha; total variance explained 74%): The factor analysis shows that the instrument contains four items and one factor.

Satisfaction with life (KMO= .87 p<.001; .87 Cronbach's Alpha; total variance explained 66%): The factor analysis shows that the instrument contains five items and one factor.

2.3 Analysis

Stepwise regression techniques were used to explain variance in students' level of social capital accumulation. To explain variances in each dimension of bonding and bridging social capital, 19 variables were entered into the model as independent variables. Variances accounted for by the remaining independent variables are explained.

3 Results

There are two types of social capital; bridging and bonding (Putnam, 2000). Recent developments in online communication systems created attention from the researchers whether there is social capital accumulation in online platforms (Williams, 2006). The below paragraphs present the findings from online social capital measurement scale.

3.1 Offline/Online bonding social capital

The descriptive statistics are given in Table 1. As can be seen from the table below, offline social capital of university students' in both dimensions are higher than their online social capital level.

Table 1. Bonding social capital

	$\bar{x}$	SS
Online peripheral bonding social capital to the person	2.79	2.46
Online bonding social capital from person to the periphery	3.51	2.39
Offline peripheral bonding social capital to the person	6.24	1.97
Offline bonding social capital from person to the periphery	6.87	1.58

In the regression analysis carried out to explain the online bonding social capital to the university students are exposed to over the social media (Table 2). The variables that are not important in stepwise regression model were removed. The remaining variables (Gender, Life Satisfaction, Community Variety Number, Media trust, where the family lives, the use of instagram) explains 12.4% of the total online peripheral bonding social capital to the person (R = .352, R2 = .12, p <.01).

Table 2. The regression model to explain online peripheral bonding social capital to the person

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.27[a]	.07	.07	2.38	.07	125.52	.000[1]
2	.30[b]	.09	.09	2.35	.02	82.07	.000[2]
3	.33[c]	.11	.11	2.33	.02	67.55	.000[3]
4	.34[d]	.11	.11	2.32	.01	53.24	.000[4]
5	.35[e]	.12	.12	2.32	.01	44.42	.000[5]
6	.35[f]	.12	.12	2.32	.00	37.90	.000[6]
7	.35[g]	.12	.12	2.31	.00	33.31	.000[7]

In Table 3, the effect size of the variables that explain the bonding social capital effect of the periphery to the person over the social media are given. The highest contribution in explaining the online peripheral bonding social capital to the person belongs to the use of social media in creation network which explains singly 7% of the variance among all other independent variables (B =

.272, p <.01). The variables such as gender, life satisfaction, number of community varieties, trust in the media, place of residence of family, Instagram use also have significant effects.

Table 3. Online peripheral bonding social capital to the person

Variables	B	SE B	β	t	p
Constant	.14	.32		.45	.652
Using social media for networking	.27	.03	.22	9.24	.000
Gender	.83	.13	.16	6.60	.000
Satisfaction with life	.14	.03	.13	5.40	.000
Number of membership to NGOs	.14	.05	.07	3.05	.002
Trust in media	.01	.00	.07	2.95	.003
Place of residence of the family	-.14	.06	-.05	-2.32	.020
Use of Instagram	.11	.05	.05	2.28	.023

In Table 4, the effect size of the variables that explain the person's bonding social capital effect to the periphery over social media are given. The variables that are important in explaining the online person's bonding social capital to the periphery are 8 variables. Those 7 variables altogether increment into explaining %13 of the total variance in explaining the person's bonding social capital effect on the periphery (R= .35, R2= .13, p<.01).

Table 4. The regression model to explain person's online bonding social capital on the periphery

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.26[a]	.07	.07	2.29	.07	118.32	.000[1]
2	.31[b]	.10	.10	2.25	.03	89.42	.000[2]
3	.33[c]	.11	.11	2.24	.01	66.47	.000[3]
4	.34[d]	.11	.11	2.23	.01	52.84	.000[4]
5	.34[e]	.12	.11	2.23	.00	43.58	.000[5]
6	.35[f]	.12	.12	2.23	.00	37.47	.000[6]
7	.35[g]	.12	.12	2.22	.00	32.87	.000[7]
8	.35[h]	.13	.12	2.22	.00	29.37	.000[8]

In Table 5, the effect size of the variables that explain the person's bonding social capital effect to the periphery over social media are given. The highest contribution in explaining the person's bonding social capital effect to the periphery over social media belongs to the use of social media in creation network which explains 6.7 % of the variance among all other independent variables (B= .20, p<.01). The variables such as gender, satisfaction with life, using social media for entertainment and killing time, trust in politics, using social media to learn about politics and political issues, satisfaction with life, number of siblings, frequency of social media use (hour, per day) also have significant effects (Table 5).

Table 5. The regression analysis of person's online bonding social capital on the periphery

Variables	B	SE B	β	t	p
Constant	.01	.28		.04	.967
Using social media for networking	.20	.03	.17	6.03	.000
Gender	.98	.12	.19	8.12	.000
Using social media for entertainment and killing	.12	.03	.10	3.55	.000
Trust in politics	.01	.00	.06	2.48	.013
Using social media to learn about politics and	.05	.02	.06	2.43	.015
Satisfaction with life	.07	.03	.06	2.66	.008
Number of siblings	.11	.05	.06	2.40	.016
Frequency of social media use (hour, per day)	.04	.02	.05	2.10	.04

In Table 6, the effect size of the variables that explain the periphery's offline bonding social capital effect to the person are given. The variables that are important in explaining the periphery's offline bonding social capital effect to the person are the 9 variables below. Those variables altogether increment into explaining %19.4 of the total variance in explaining the periphery's offline bonding social capital effect to the person (R= .44, R^2=.19 p<.01).

Table 6. The regression model to explain the periphery's offline bonding social capital effect to the person

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.35	.12	.12	1.86	.12	235.89	.000[1]
2	.38	.15	.15	1.83	.03	149.60	.000[2]
3	.41	.17	.17	1.80	.02	117.03	.000[3]
4	.42	.18	.18	1.79	.02	94.36	.000[4]
5	.43	.19	.18	1.79	.00	78.30	.000[5]
6	.43	.19	.18	1.79	.00	66.52	.000[6]
7	.44	.19	.19	1.78	.00	57.72	.000[7]
8	.44	.19	.19	1.78	.00	51.40	.000[8]
9	.44	.19	.19	1.78	.00	46.23	.000[9]

In Table 7, the effect size of the variables that explain the periphery's offline bonding social capital effect to the person are given. The highest contribution in explaining the periphery's offline bonding social capital effect to the person belongs to the

person's satisfaction with life which explains 11.9 % of the variance among all other independent variables (B= .24, p<.01). The variables such as satisfaction with life, variety in being member in NGOs, self-esteem, trust in NGOs, father's education level, no participation in NGOs, Nationalist, Socialist/Marxist, positive tendency to trust in good nature of humans also have significant effects (Table 7).

Table 7. The variables that explain the periphery's offline bonding social capital effect to the person

Variables	B	SE B	β	t	p
Constant	3.22	.22		14.54	.000
Satisfaction with life	.24	.02	.27	11.20	.000
Variety in being member in NGOs	.13	.05	.09	2.65	.008
Self-esteem	.18	.03	.16	6.66	.000
Trust in NGOs	.01	.00	.10	4.76	.000
Father's education level	.13	.04	.07	3.39	.001
No participation in NGOs	-.33	.13	-.08	-2.63	.009
Nationalist	.28	.11	.06	2.49	.013
Socialist/Marxist	.33	.13	.06	2.56	.011
Positive tendency to trust in good nature of humans	.04	.02	.04	2.04	.042

In Table 8, the effect size of the variables that explain the person's offline bonding social capital effect to periphery are given. The variables that are important in explaining the person's offline bonding social capital effect to periphery are the 11 variables below. Those variables altogether increment into explaining %13 of the total variance in explaining the person's offline bonding social capital effect to periphery (R= .36, R^2=.13 p<.01).

Table 8. The regression model to explain the person's offline bonding social capital effect to periphery

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.25[a]	.06	.06	1.54	.06	111.31	.000[1]
2	.29[b]	.09	.08	1.52	.03	80.37	.000[2]
3	.32[c]	.10	.10	1.50	.02	64.87	.000[3]
4	.33[d]	.11	.10	1.50	.01	51.76	.000[4]
5	.33[e]	.11	.11	1.50	.00	42.92	.000[5]
6	.34[f]	.11	.11	1.49	.00	36.89	.000[6]
7	.34[g]	.12	.11	1.49	.00	32.58	.000[7]
8	.35[h]	.12	.12	1.49	.00	29.33	.000[8]
9	.35[i]	.12	.12	1.49	.00	26.77	.000[9]
10	.35[j]	.13	.12	1.49	.00	24.66	.000[10]
11	.36[k]	.13	.12	1.49	.00	22.88	.000[11]

In Table 9, the effect size of the variables that explain the person's offline bonding social capital effect to periphery are given. The highest contribution in explaining the person's offline bonding social capital effect to periphery belongs to the person's self-esteem which explains 6 % of the variance among all other independent variables (B= .18, p<.01). The variables such as trust in NGOs, satisfaction with life, anarchist, variety in NGO membership, trust in media, trust in law enforcement agencies, grade point average (GPA), gender, father's monthly income, Socialist/Marxist also have significant effects (Table 9).

Table 9. The variable that explain the variance in the person's offline bonding social capital

Variables	B	SE B	β	t	p
Constant	5.56	.23		24.62	.000
Self-esteem	.16	.02	.18	7.25	.000
Trust in NGOs	.01	.00	.15	5.26	.000
Satisfaction with life	.10	.02	.14	5.46	.000
Anarchist	-.83	.30	-.06	-2.73	.006
Variety in NGO membership	.08	.03	.07	2.90	.004
Trust in media	-.01	.00	-.08	-2.79	.005
Trust in law enforcement agencies	.00	.00	.09	3.30	.001
GPA	-.10	.04	-.06	-2.54	.011
Gender	-.20	.07	-.06	-2.47	.014
Father's monthly income	-.07	.03	-.05	-2.20	.028
Socialist/Marxist	.24	.11	.05	2.13	.033

3.2 Offline/Online bridging social capital

The section below is about the finding about the offline and online bridging social capital. The descriptive statistics about the university students' offline and online bridging social capital is given in Table 10.

Table 10. Offline/Online bridging social capital

	$\bar{X}$	ss
The capacity to connect with others offline	6.30	1.91
The connection with distant groups offline	4.80	2.12
The belief in connecting other groups offline	5.81	2.24
The capacity to connect with others online	4.38	2.51
The connection with distant groups online	4.32	2.35
The belief in connecting other groups online	4.02	2.63

In Table 11, the effect size of the variables that explain the students' capacity to connect with others online are given. The variables that are important in explaining the students' capacity to connect with others offline are the 9 variables below. Those variables altogether increment into explaining %19.9 of the total variance in explaining the students' capacity to connect with others offline (R=.45, R^2: .20, p<.01).

Table 11. The regression model to explain capacity to connect with others online

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.37[a]	.13	.13	2.32	.13	255.10	.000[1]
2	.39[b]	.15	.15	2.30	.02	145.00	.000[2]
3	.41[c]	.17	.16	2.28	.02	108.79	.000[3]
4	.42[d]	.17	.17	2.27	.01	86.42	.000[4]
5	.43[e]	.18	.18	2.26	.01	72.66	.000[5]
6	.43[f]	.19	.19	2.25	.01	63.52	.000[6]
7	.44[g]	.19	.19	2.24	.01	56.13	.000[7]
8	.44[h]	.20	.19	2.24	.00	50.08	.000[8]
9	.45[i]	.20	.19	2.23	.00	45.17	.000[9]

In Table 12, the effect size of the variables that explain the students' capacity to connect with others online are given. The highest contribution in explaining the students' capacity to connect with others online belongs to using social media for networking which explains 13% of the variance among all other independent variables (B= .28, p<.01). The variables such as using social media for entertainment and killing time, variety in NGO membership, using social media to learn about politics and political groups, self-esteem, gender, twitter usage, the tendency in trusting the good nature of humans, membership to the NGOs not related to the university also have significant effects (Table 12).

Table 12. The variables that explain the students' capacity to connect with others online

Variables	B	SE B	β	t	p
Constant	.47	.30		1.56	.119
Using social media for networking	.28	.03	.22	8.49	.000
Using social media for entertainment and killing time	.16	.03	.13	5.12	.000
Variety in NGO membership	.17	.05	.09	3.53	.000
Using social media to learn about politics and political	.08	.02	.09	3.59	.000
Self-esteem	.13	.03	.09	4.11	.000
Gender	.44	.12	.08	3.62	.000
Twitter usage	.19	.06	.08	3.27	.001
The tendency in trusting the good nature of humans	.05	.02	.05	2.43	.015
Membership to the NGOs not related to the	.327	.147	.05	2.23	.026

In Table 13, the effect size of the variables that explain the students' connection with distant groups online are given. The variables that are important in explaining the students' the connection with distant groups online are the 12 variables below. Those variables altogether increment into explaining %17 of the total variance in explaining the students' capacity to connect with others offline (R=.42, R^2= .17, p<.01).

Table 13. The regression model to explain the students' connection with distant groups online

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.30[a]	.09	.09	2.21	.09	163.14	.000[1]
2	.36[b]	.13	.13	2.17	.04	118.32	.000[2]
3	.38[c]	.14	.14	2.15	.02	90.59	.000[3]
4	.39[d]	.15	.15	2.14	.01	72.08	.000[4]
5	.39[e]	.15	.15	2.14	.00	59.67	.000[5]
6	.40[f]	.16	.16	2.13	.00	51.17	.000[6]
7	.40[g]	.16	.16	2.13	.00	45.03	.000[7]
8	.41[h]	.16	.16	2.13	.00	40.08	.000[8]
9	.41[i]	.17	.16	2.12	.00	36.37	.000[9]
10	.41[j]	.17	.16	2.12	.00	33.30	.000[10]
11	.41[k]	.17	.17	2.12	.00	30.73	.000[11]
12	.42[l]	.17	.17	2.12	.00	28.54	.000[12]

In Table 14, the effect size of the variables that explain the students' the connection with distant groups online are given. The highest contribution in explaining the students' connection with distant groups online belongs to using social media for using social media to learn about politics and political groups which explains 9% of the variance among all other independent variables (B= .18, p<.01). The variables such as using social media for networking, gender, variety in NGO membership, apolitical, using blog, ultra-nationalist (ülkücü), Socialist/Marxist, satisfaction with life, taking part in political groups, the tendency in trusting the good nature of humans, membership to the NGOs not related to the university also have significant effects (Table 14).

Table 14. The variables that explain connection with distant groups online

Variables	B	SE B	β	t	p
Constant	1.54	.22		6.92	.000
Using social media to learn about politics and political	.18	.02	.22	8.41	.000
Using social media for networking	.20	.03	.17	6.80	.000
Gender	.68	.12	.13	5.81	.000
Variety in NGO membership	.15	.05	.08	3.16	.002
Apolitical	.67	.23	.07	2.92	.004
Using blog	.22	.09	.06	2.57	.010
Ultra-nationalist (Ülkücü)	-.49	.22	-.05	-2.24	.026
Socialist/Marxist	.45	.16	.07	2.82	.005
Satisfaction with life	.05	.02	.05	2.16	.031
Taking part in political groups	-.47	.19	-.07	-2.54	.011
The tendency in trusting the good nature of humans	.04	.021	.05	1.99	.05
Membership to the NGOs not related to the university	.28	.14	.05	1.97	.05

In Table 15, the effect size of the variables that explain the students' belief in connecting other groups online are given. The variables that are important in explaining the students' belief in connecting other groups online are the 7 variables below. Those variables altogether increment into explaining %18 of the total variance in explaining the students' belief in connecting other groups online (R=.43, R^2= .18, p<.01).

Table 15. The regression model to explain students' belief in connecting other groups online

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.35[a]	.12	.12	2.45	.12	233.57	.000[1]
2	.38[b]	.15	.14	2.42	.02	139.69	.000[2]
3	.40[c]	.16	.16	2.40	.02	104.94	.000[3]
4	.41[d]	.17	.17	2.39	.01	83.09	.000[4]
5	.42[e]	.18	.17	2.38	.01	69.32	.000[5]
6	.42[f]	.19	.18	2.37	.00	59.28	.000[6]
7	.43[g]	.18	.18	2.37	.00	51.63	.000[7]

In Table 16, the effect size of the variables that explain the students' belief in connecting other groups online are given. The highest contribution in explaining the students' belief in connecting other groups online belongs to using social media for networking which explains 12% of the variance among all other independent variables (B= .30, p<.01). The variables such as using social media for entertainment and killing time, trust in NGOs, using social media to learn about politics and political groups, the tendency in trusting the good nature of humans, taking part in sports groups and satisfaction with life also have significant effects (Table 16).

Table 16. The variables that explain students' belief in connecting with other groups

Variables	B	SE B	β	t	p
Constant	.74	.22		3.34	.001
Using social media for networking	.30	.03	.23	8.78	.000
Using social media for entertainment and killing time	.20	.03	.15	5.92	.000
Trust in NGOs	.01	.00	.10	4.46	.000
Using social media to learn about politics and political groups	.10	.02	.11	4.32	.000
The tendency in trusting the good nature of humans	.08	.02	.07	3.22	.001
Taking part in sports groups	.40	.15	.06	2.72	.007
Satisfaction with life	.06	.03	.05	2.21	.027

In Table 17, the effect size of the variables that explain the students' capacity to connect with others offline are given. The variables that are important in explaining the students' capacity to connect with others offline are the 10 variables below. Those variables altogether increment into explaining %20 of the total variance in explaining the students' capacity to connect with others offline (R=.45, R^2= .20, p<.01).

Table 17. The regression model to explain students' capacity to connect with others offline

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.33[a]	.11	.11	1.81	.11	206.87	.000[1]
2	.39[b]	.16	.15	1.76	.05	155.46	.000[2]
3	.41[c]	.17	.17	1.74	.02	116.93	.000[3]
4	.43[d]	.18	.18	1.73	.01	93.81	.000[4]
5	.43[e]	.19	.19	1.73	.01	78.21	.000[5]
6	.44[f]	.19	.19	1.72	.00	66.77	.000[6]
7	.44[g]	.19	.19	1.72	.00	58.45	.000[7]
8	.44[h]	.20	.19	1.72	.00	52.05	.000[8]
9	.45[i]	.20	.20	1.71	.00	47.10	.000[9]
10	.45[j]	.20	.20	1.71	.00	42.98	.000[10]

In Table 18, the effect size of the variables that explain the students' capacity to connect with others offline are given. The highest contribution in explaining the students' capacity to connect with others offline belongs to self-esteem which explains 11% of the variance among all other independent variables (B= .27, p<.01). The variables such as not taking part in any groups, satisfaction with life, trust in NGOs, variety of the membership in NGOs, mother's level of education, membership to the NGOs not related to the university, anarchist, apolitical and twitter usage also have significant effects (Table 18).

Table 18. The variables that explain students' capacity to connect with others offline

Variables	B	SE B	β	t	p
Constant	3.83	.20		18.77	.000
Self-esteem	.29	.03	.27	11.23	.000
Not taking part in any groups	-.49	.12	-.12	-3.91	.000
Satisfaction with life	.11	.02	.13	5.42	.000
trust in NGOs	.01	.00	.08	3.72	.000
variety of the membership in NGOs	.14	.05	.09	2.83	.005
Mother's level of education	-.12	.04	-.07	-3.08	.002
Membership to the NGOs not related to the university	.29	.11	.06	2.68	.008
Anarchist	-.91	.35	-.06	-2.64	.008
Apolitical	-.45	.18	-.06	-2.53	.011
Twitter usage	.09	.04	.05	2.22	.027

In Table 19, the effect size of the variables that explain the students' connection with distant groups offline are given. The variables that are important in explaining the students' connection with distant groups offline are the 9 variables below. Those variables altogether increment into explaining %9 of the total variance in explaining the students' connection with distant groups offline (R=.31, R^2= .09, p<.01).

Table 19. The regression model to explain students' connection with distant groups offline

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.18[a]	.03	.03	2.06	.03	56.62	.000[1]
2	.23[b]	.05	.05	2.04	.02	47.31	.000[2]
3	.25[c]	.06	.06	2.03	.01	37.01	.000[3]
4	.26[d]	.07	.07	2.03	.01	31.20	.000[4]
5	.28[e]	.08	.07	2.02	.01	27.64	.000[5]
6	.29[f]	.08	.08	2.02	.01	24.87	.000[6]
7	.30[g]	.09	.08	2.01	.01	23.00	.000[7]
8	.30[h]	.09	.09	2.00	.01	21.37	.000[8]
9	.31[i]	.09	.09	2.00	.00	19.46	.000[9]

In Table 20, the effect size of the variables that explain the students' connection with distant groups offline are given. The highest contribution in explaining the students' connection with distant groups offline belongs to variety in membership in NGOs which explains 3.2 % of the variance among all other independent variables (B= .24, p<.01). The variables such as self-esteem, satisfaction with life, Socialist/Marxist, gender, number of siblings, Forum usage, trust in NGOs and anarchist also have significant effects (Table 20).

Table 20. The variables that explain students' connection with distant groups offline

Variables	B	SE B	β	t	p
Constant	2.17	.26		8.40	.000
Variety in membership in NGOs	.24	.04	.14	6.01	.000
Self-esteem	.11	.03	.10	3.79	.000
Satisfaction with life	.11	.02	.11	4.47	.000
Socialist/Marxist	.49	.14	.08	3.46	.001
Gender	.37	.11	.08	3.41	.001
Number of siblings	.14	.04	.08	3.40	.001
Forum usage	.27	.08	.09	3.61	.000
Trust in NGOs	.01	.00	.07	2.93	.003
Anarchist	-.80	.41	-.05	-1.97	.049

In Table 21, the effect size of the variables that explain the students' beliefs in to connect with others offline are given. The variables that are important in explaining the students' beliefs in to connect with others offline are the 10 variables below. Those variables altogether increment into explaining 12.4 % of the total variance in explaining the students' beliefs in to connect with others offline (R= .35, R^2= .12, p<.01).

Table 21. The regression model to explain students' beliefs in to connect with others offline

Model	R	R^2	Adjusted R^2	Std. Err.	R^2 Change	F	p
1	.21[a]	.05	.04	2.17	.05	79.70	.000[1]
2	.27[b]	.07	.07	2.14	.03	67.80	.000[2]
3	.30[c]	.09	.09	2.12	.02	57.26	.000[3]
4	.32[d]	.10	.10	2.11	.01	48.17	.000[4]
5	.33[e]	.11	.11	2.10	.01	41.00	.000[5]
6	.34[f]	.11	.11	2.10	.01	36.08	.000[6]
7	.34[g]	.12	.11	2.09	.00	31.95	.000[7]
8	.35[h]	.12	.12	2.09	.00	28.72	.000[8]
9	.35[i]	.12	.12	2.09	.00	26.03	.000[9]
10	.35[j]	.12	.12	2.09	.00	23.89	.000[10]

In Table 22, the effect size of the variables that explain the students' beliefs in to connect with others offline are given. The highest contribution in explaining the students' beliefs in to connect with others offline belongs to trust in NGOs which explains 4.5 % of the variance among all other independent variables (B= .02, p<.01). The variables such as self-esteem, not taking part in any group, satisfaction with life, WhatsApp usage, number of siblings, taking part in entertainment groups, Apolitical, membership in NGOs not connected to the university and anarchist also have significant effects (Table 22).

Table 22. The variables that explain students' belief in to connect with others offline

Variables	B	SE B	β	t	p
Constant	3.30	.24		13.56	.000
Trust in NGOs	.02	.00	.17	7.20	.000
Self-esteem	.14	.03	.11	4.53	.000
Not taking part in any group	-.41	.12	-.09	-3.51	.000
Satisfaction with life	.11	.03	.11	4.55	.000
WhatsApp usage	.13	.04	.08	3.53	.000
Number of siblings	.14	.04	.07	3.17	.002
Taking part in entertainment groups	.39	.16	.06	2.48	.013
Apolitical	-.52	.22	-.06	-2.39	.017
Membership in NGOs not connected to the university	.27	.13	.05	2.07	.039
Anarchist	-.89	.43	-.05	-2.06	.040

4 Discussion and Conclusion

The social capital accumulation of university students realized offline and online, is collected by means of the measuring instruments in this research. Bonding social capital scale was composed of two dimensions in both online and offline. The bridging social capital was composed of three dimension in both online and offline. According to the findings, offline social capital accumulation of university students was higher in all dimensions than their online social capital. This is to be expected for social structures where traditional social structures have not yet been fully resolved by modernity. The fact that offline bonding social capital is higher than offline bridging social capital supports this situation. It is seen that the average online bonding social capital accumulation of university students is very low. In the 9-point Likert scale, the bonding social capital contribution of the environment to the person via social media has the lowest average. According to this finding, it is clear that social capital accumulations over social media are very low among university students. Therefore, the point to look at is the findings of students' offline bonding social capital dimensions. The mean values of the two dimensions of offline social capital are close to each other and the scale of 9 has a value above the mean.

This is a sign of bonding social capital accumulation, which means that students get more individual benefits from close relationships, despite their low average in membership and participation in non-governmental organizations. This is not unexpected in social structures where modernity does not infiltrate social structures where individuals are fed more in communities with close circles, relatives and strong community ties.

In the regression analysis to explain the observed variance in offline bonding social capital accumulation, it is understood that the most important variables for both dimensions are self-esteem and life satisfaction of individuals. This finding is another indication that bonding social capital is also related to personal and close environment among students. Variables such as NGO membership and club involvement are either not effective in explaining variation or have low impact coefficients. Therefore, it is valid that there is a structure different from the existing social capital unit in the societies where open society and inter-group relations and cooperation is intense.

Bridging social capital is the dimension that protects the social structure of the society and contributes to the elimination of problems through civil and intergroup cooperation (Herzog & Yang, 2018; Glanville, Paxton & Wang, 2016; Cox *et all*, 2019). When the findings obtained from the data collected from bridging social capital measurement tools, which are composed of three dimensions, each offline and online, it is clear that the presence of offline bridging social capital is higher than that of social media. The highest value belongs to the so-called capacity to connect with offline relationships. The second-high average still belongs to the dimension of the belief to be connected. All of the remaining 4 dimensions have a value of mean. Accordingly, the university

students' online bridging social capital accumulation is also very low. This finding also is a confirmation of comments on social capital. In addition, the dimension of connection with distant and different groups of offline bridging social capital is the most important indicator of strong social capital (Newton, 2001). The university students' mean value is about half of the maximum value that can be obtained in the dimension of connection and cooperation. This also confirmation of low level of bridging social capital among the members of a society that lack of intuitional NGO cooperation and voluntary work. In this kind of societies, people tend to help out their close friends and family members. Repeatedly, the above comments on the bonding social capital and social structure in the context of Turkish students are confirmed.

When the regression analysis of the variables predicting the variation observed in bridging social capital is analyzed, it is seen that the most important variables are self-esteem, the number of club varieties in which they participate in activities, and trust in NGOs. The self-esteem variable is a common and dominant variable of both bonding and bridging social capital accumulations. As the self-esteem of individuals increases, the level of being active in political, educational and environmental issues increases both in closed, small and private groups as well as in collaborative, large and different groups.

Moreover, just as in the explanations of social capital theory for indicators of bridging social capital (Pattie, Seyd & Whiteley, 2003; Chen, R., Sharma & Rao, 2019), university students participate in activities for bridging social capital accumulations as long as different and diverse groups tend to collaborate.

To conclude;

The use of social media constitutes an important part of this research, as it provides a wide range of useful tools to facilitate collaboration, information sharing and interaction. According to the findings, although social capital through social media is almost non-existent, it is seen that the most important variables affecting the existing are belief and networking activities through social media. This means that; individuals strive to be effective in social, political, educational and environmental issues as long as they believe and use social media tools effectively.

5 References

Antoci, A., Bonelli, L., Paglieri, F., Reggiani, T. & Sabatini, F. (2019). Civility and trust in social media. *Journal of Economic Behavior and Organization*, *160*, 83–99.

Chen, R., Sharma, S.K. & Rao, H. R. (2019). Members' site use continuance on Facebook: Examining the role of relational capital. *Decision Support Systems, 90*, 86–98.

Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, 95-120.

Cox, J., Oh, E. Y., Simmons, B., Graham, G. Greenhill, A., Lintott, C., Master, K. & Meriton, R. (2019). Getting connected: An empirical investigation of the relationship between social capital and philanthropy among online volunteers. *Nonprofit and Voluntary Sector Quarterly, 48*(2), 151–173.

Dalton, R. J. (2008). Citizenship norms and the expansion of political participation. *Political Studies, 56*, 76-98.

Glanville, J. L., Paxton, P., & Wang, Y. (2016). Social capital and generosity: A multilevel analysis. *Nonprofit and Voluntary Sector Quarterly, 45*, 526-547.

Herzog, P. S., & Yang, S. (2018). Social networks and charitable giving: Trusting, doing, asking, and alter primacy. *Nonprofit and Voluntary Sector Quarterly, 47*, 376-394.

Lin, N. (2005). A network theory of social capital. D. Castiglione, J. van Deth & G. Wolleb (eds). *Handbook on social capital*. Oxford: Oxford University Press.

Ma, S. Q & Leung, L. (2019). The impacts of personality traits, use intensity and features use of LinkedIn on bridging social capital. *Applied Research Quarterly Life, 14*, 1059-1078.

Newton, K. (2001). Trust, social capital, civil society, and democracy. *International Political Science Review, 22*(2), 201–214.

Pamuk, A. & Alabaş, R. (2016). Vatandaşlık ve sosyal bilgiler. D. Dilek (ed.) *Sosyal bilgiler eğitimi* (pp. 333-350). Ankara: PegemA

Pattie, C., Seyd, P. & Whiteley, P. (2003). Citizenship and civic engagement: Attitudes and behaviour in Britain. *Political Studies, 51*, 443-468.

Paxton, P. (2002). Social capital and democracy: An interdependent relationship. *American Sociological Review, 67*, 254-277.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.

Quinn, K. (2016). Contextual social capital: Linking the contexts of social media use to its outcomes. *Information, Communication & Society, 19*(5), 582-600.

Shin, Dong-Hee & Choi, Doo-Hun (2017). A dialectic perspective on the interactive relationship between social media and civic participation: the moderating role of social capital. *Information, Communication & Society, 20*(2), 151-166.

Skoric, M. M., Zhu, Q., Goh, D., & Pang, N. (2016). Social media and citizen engagement: A meta-analytic review. *New Media & Society, 18*, 1817-1839.

Smith, A. (2013). *Civic engagement in the digital age*. Pew Research Center, 25.

Son, J. E., Lee, S. H., Cho, E. Y., & Kim, H. W. (2016). Examining online citizenship behaviours in social network sites: A social capital perspective. Behaviour & Information Technology, *35*, 730-747.

Steinfield, C., Ellison, N., & Lampe, C. (2008). Social captial, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology, 29*(6), 434-445.

Surveysystems (2016). Sample size calculator. On-line at: https://www.surveysystem.com/sscalc.htm

Goh, T. T., Xin, Z. & Jin, D. (2019) Habit formation in social media consumption: a case of political engagement. *Behaviour & Information Technology, 38*(3), 273-288.

van Deth, J. W. (2010). Participation in voluntary associations: Dark shades in a sunny World?. *American Behavioral Scientist, 53* (5), 640-656.

Williams, D. (2006). On and off the 'net': Scales for social capital in an online era. *Journal of Computer-Mediated Communication, 11*(2), 593-628.

Zmerli, S. (2010). Social capital and norms of citizenship: An ambiguous relationship? *American Behavioural Scientist, 53*(5), 657-676.