*Full Length Research Paper*

# Perceptions of teacher candidates about social network usage levels in Turkey

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This study was conducted to determine the perceptions of the teacher candidates in educational faculties in Turkey about social network usage levels in today's globalizing world. The study was performed with 4 separate study groups. The first study group consisted of 657 teacher candidates, the second study group consisted of 364 teacher candidates, the third study group consisted of 121 teacher candidates, and the fourth study group consisted of 676 teacher candidates. This study, designed based on the Scanning Model, is a descriptive study. It is revealed in the study that the teacher candidates in Turkey think that they are different from each other in the use of social networks. Their perceptions are given in a scale, 'The perceptions scale of the teacher candidates about social networks'.

**Key words:** Teacher candidates, social networks, communication technology.

## INTRODUCTION

The concept of social network was first used by Barnes in 1954 who saw it as the relations a person has with other people around. According to Barnes, social networks consist of individuals that are psychologically important for people who interact with them (Aksut et al., 2011).

Today, on the other hand, we can describe social networks as a series of applications that group information exchange online, increase social connections and shared area for cooperation and group interaction (Boyd and Ellison, 2007).

According to another definition, social networks are the software that facilitates mutual interaction among individuals and groups, facilitates social feedback, and supports the formation of social relations. In addition, Boyd (2003) expresses that social networks support personal desires of individuals, include them in the process, and become the desire of the group in order to have personal aims (Bilen et al., 2014).

In this globalizing world, developments in information and communication technologies and improvements in the infrastructure of the Internet created structural transformations in the online world. At first, there were webpages on which the users could not assess the contents and were passive. However, with time and as technology advanced, new webpages on which the users could form the contents and which provided bilateral interaction were developed (O'Reilly, 2007).

Before 2004, the web technologies that did not allow interaction and only allowed single-sided communication were called Web 1.0. After 2004, the pages that were used to create webpages that allowed bilateral interaction were developed and were called Web 2.0 (Levy, 2009).

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Web 2.0 is the technology in which internet users can create contents and establish communications with each other (O'Reilly, 2007; Albion, 2008). The web services that are created by using Web 2.0 technology are called Social Media (Duggan et al., 2015). Blogs, social networks, photograph/document sharing sites, video sharing sites, RSS and social innuendo sites may be given as examples for social media sites (Duggan et al., 2015; Onat and Alikılıc, 2012).

Social networks differ from other social media sites in that they allow creating a profile page and establishing communications over this profile for their users (Rigby, 2008; Dube, 2016). Boyd and Ellison (2007) defined social network sites as web-based services in which the users are listed and there is sharing among these users on the system that has certain limits; and the user information is open or close according to the permission of the user. Facebook, Twitter, Instagram, and Whatsapp may be given as examples of commonly-used social networks.

Social networks are used widely both in the world and in Turkey (Tuik, 2016). Turkey is at the top levels in the usage rates of social networks in the whole world. The number of active social network accounts was around 42 million in 2015 in Turkey. 96% of the young people between the ages of 1 to 29 are using social networks in Turkey. The most frequently used social network site is Facebook with a rate of 89%, followed by Instagram and Twitter (Dijitalajanslar, 2016).

Turkey ranks fifth in the whole world in terms of spending time in social networks; and with this value, it is higher than the average value of the whole Europe (95.7%). The most frequently used social networks are Facebook and Twitter, and they are widespread among university students. The number of the members of Facebook is around 717 million, and Turkey is on the 5th row with 30 million members in the whole world. As the number of the users of Twitter in Turkey moves closer to 5 million, the number of Turks using Linkedin is about 630.000. The use of other social networks is increasing at a fast pace in Turkey, which is the 2nd country in Europe that watch online videos (Youtube, Vimeo, Dailymotion) (Tektas, 2014).

It is possible to claim that the use of social networks has both positive and negative influences on the society that sustains their existence in the world today. As a matter of fact, the intense use of social networks influences the social lives, psychological characteristics and educational properties of students (Hazar, 2011; Castells, 2012). Using social networks in a frequent manner sometimes may reach the level of addiction among young people (Babacan, 2016; Chan et al., 2015). For this reason, young people are isolated from the external world, and their academic success levels are influenced negatively (Samaha and Havi, 2016; Iskender and Akin, 2010; Cagan et al., 2014).

Apart from the negative influences of social networks mentioned ealier, they also have some positive influences. To illustrate, social networks provide a medium for users to express their emotions and ideas in a free manner (Dahlgren 2009; Tufekci and Wilson, 2012). This situation enables users to express themselves and ensure that they acquire information on different attitudes and ideas in various situations (Tufekci and Wilson, 2012).

Social networks enable users to interact with different individuals whose ideas they may benefit from, and increase their social capitals by meeting new people (Fenton and Barassi, 2011). We can claim that using social networks influences educational environment in many aspects. Social networks enable students to establish communications about their lessons via communities created in social networks with their friends and teachers, and share information and documents about their lessons (Veletsianos, 2012; Odabası et al., 2012; Laird, 2014; Tiryakicioglu and Erzurum, 2011).

This situation supports that students share informal learning activities according to their learning desires and needs (Ozdamlı, 2013; Mitchel, 2012; Stevenson and Lui, 2010). The forming of groups or lists in social networks enables students to establish communications with specialist people that have different information in various fields in many different learning communities (Lepi, 2014; Tinmaz, 2011). The learning communities in social networks facilitate the application of many different educational methods and techniques like discussion, cooperative learning and peer teaching (Hueng and Yuen, 2010).

Social networks develop the critical thinking and problem solving skills of students, and provide them with an active learning environment (Laird, 2014; Munoz and Towner, 2009). Social networks also facilitate the establishing of communications with academicians for students, and also increase their interactions (Ozmen et al., 2011).

## METHODOLOGY

This study is a descriptive study in which the Scanning Model is used. The scanning models are used in studies which aim to determine the ideas, attitudes, inclinations and similar charac-teristics of a group (Creswell, 2013). The Causal-Comparative Design was used in the study to determine whether the perceptions of the teacher candidates about social networks vary at a statistically significant level according to their gender and grades. In Causal-Comparative Design, the issue of whether the sub-groups of the independent variables (female-male; village-county-city, etc.) show difference at a significant level from each other based on the dependent variables is examined (Cohen et al., 2013).

### The study group

This study was conducted with four different study groups. The first,

second and third groups were used to know the validity and reliability of the study, "The Perceptions Scale of the Teacher Candidates about Social Networks". The fourth study group was used to determine whether the perceptions of the teacher candidates about social networks varied at a statistically significant level according to gender and grade variables.

**The first study group**

This study group consisted of 657 students, who were studying at Marmara University Atatürk Faculty of Education in 2015 to 2016 academic year. The data obtained from this group were used in the Explanatory Factor Analysis of the scale used in the scope of the study, and in determining the Cronbach Internal Consistency Coefficient. When the forms that were returned by the students were examined, it was observed that some forms were incomplete, and these forms were eliminated. The remaining 621 forms were used in the analyses. It was determined that 342 students of this study group were females (55%) and 279 were males (45%); 131 were 1st graders (21%), 165 were 2nd graders (26%), 154 were 3rd graders (25%), and 171 were 4th graders (28%).

**The second study group**

This study group consisted of 364 students who were studying at Dicle University, Ziya Gokalp Faculty of Education in 2015 to 2016 academic year. The data obtained from this study group were used in determining the Confirmatory Factor Analysis results of the scale used in the study. When the forms that were returned by the students were examined it was observed that some forms were incomplete, and these forms were eliminated. The remaining 334 forms were used in the analyses. 161 students of this study group were females (48%) and 173 were males (52%); 92 were 1st graders (27%), 84 were 2nd graders (%25), 88 were 3rd graders (26%) and 70 were 4th graders (22%).

**Third study group**

This study group consisted of 121 students who were studying at Inönü University, Faculty of Education in 2015 to 2016 Academic year. The data obtained from this group were used in determining the test-retest reliability results of the scale used in the study. It was determined that 65 students of this study group were females (54%) and 56 were males (46%); 61 were 2nd graders (50%) and 60 were 3rd graders (50%).

**Forth study group**

This study group consisted of 676 students who were studying at Inönü University, Faculty of Education in 2015 to 2016 Academic year. The data obtained from this group was used in determining whether the perceptions of the teacher candidates about social networks varied significantly according to gender and grade variables. When the forms that were returned by the students were examined, it was observed that some forms were incomplete, and these forms were eliminated. The remaining 635 forms were used in analyses. It was determined that 399 students of this study group were females (61.5%) and 250 were males (38.5%); 188 were 1st graders (29%), 181 were 2nd graders (27,9%), 181 were 3rd graders (27,9%) and 99 were 4th graders (15,2%).

**Data collection tool**

"The Perceptions Scale of the Teacher Candidates about Social Networks" was used in the study. When the scale was developed, the literature was scanned, and an "Item Pool" consisting of 43 items was created (references will be made to … scales).

For 43 items, specialist viewpoints were received from 8 academicians, who were working at Marmara University, Dicle University, and Inönü University Educational Faculties, Social Sciences Departments and Educational Sciences Departments. After the viewpoints of the specialists were received, 3 items were eliminated, and the remaining 40 items were used. With these 40 items, the Explanatory Factor Analysis (EFA) was performed in order to determine the factor structure of the measurement scale.

After the EFA, the items that had irrelevant dimensions, the items whose factor load values were below ".30", and the items that had higher load values in more than one dimension (Buyukozturk, 2010) were eliminated, and the remaining 22 items, which constituted the 4 dimensions, were used to create the scale (Appendix 1).

It was observed that the factor loads of the items of the scale varied between "0.439" and "0.801"; and the 22 items in the scale explained 50.095% of the total variance, and the Cronbach's Alpha Internal Consistency coefficient of the scale was .80 for the Educational Benefit Dimension; 0.75 for the communication dimension; 0.75 for the Weak Sides Dimension; and 0.72 for the time dimension. In giving points to the scale, the 5-Point Likert Scale was used varying from "I definitely disagree" to "I definitely agree".

The structure obtained after the Explanatory Factor Analysis was tested by using Confirmatory Factor Analysis (CFA). The Goodness of Fit values of the Confirmatory Factor Analysis are as follows: $X^2$= 278.96;   sd=202;   $X^2$/sd=1st380;   GFI=0.94;   AGFI=0.91; NNFI/TLI=0.97; IFI=0.98; CFI= 0.98; RMSEA=0.035; RMR=0.060; SRMR=0.056. When the values obtained after the Confirmatory Factor Analysis were evaluated in the light of the criteria used in the literature, it is possible to claim that the scale is acceptable and has a good Goodness of Fit value (Byrne, 2010; Cokluk et al., 2010; Kline, 2010; Secer, 2013; Simsek, 2007; Tabachnick and Fidell, 2007).

In order to determine the consistency of the scale with time, the scale was applied to the students in the 3rd study group with an interval of 18 days. The correlational coefficients obtained in the application for the educational benefit, communication, weak sides and time dimensions were: "0.88", "0.91", "0.84" and "0.87", respectively. When the correlational coefficients are evaluated, we can claim that the scale is consistent with time.

**The analysis of the data**

It was checked in the study before the data were analyzed whether there were mistakes in entering the data or not, and the mistakes were corrected. The Extreme Value check was performed in the dataset, and it was determined that there was no Extreme Values. To determine whether the dataset showed normal distribution or not, the Skewness and Kurtosis values were used. The varying of the Skewness And Kurtosis values as "∓1.00" (Cokluk et al., 2010) is the proof for the dataset showing normal distribution. In the analysis it was determined that this value varied between +0.654 and -0.874. In determining whether the perceptions of the teacher candidates about social networks varied significantly according to the gender variable or not, the t-test was used; and in determining where these values varied according to the grades variable, the One-Way Variance Analysis (ANOVA) was used.

**FINDINGS**

The findings on determining the perceptions of the

**Table 1.** The analysis of the weak sides dimension of the perceptions of the teacher candidates on social networks according to the gender variable.

| The scale | Dimension | Gender | N | $\overline{X}$ | S | t | P |
|---|---|---|---|---|---|---|---|
| Perception on social networks | Weak sides | Female | 399 | 27.7494 | 5.30737 | -0.417 | 0.67 |

**Table 2.** The analysis of the perceptions of the Teacher candidates on communication dimension of the social networks according to gender variable.

| The scale | Dimension | Gender | N | $\overline{X}$ | S | T | P |
|---|---|---|---|---|---|---|---|
| Perception on social networks | Communication | Female | 399 | 21.6566 | 3.73425 | 0.118 | 0.90 |
| | | Male | 250 | 21.6200 | 4.04240 | | |

**Table 3.** The analysis of the perceptions of the teacher candidates on educational benefit dimension of the social networks according to gender variable.

| The scale | Dimension | Gender | N | $\overline{X}$ | S | t | P |
|---|---|---|---|---|---|---|---|
| Perception on social networks | Educational benefit | Female | 399 | 16.2055 | 3.38900 | - 0.802 | .42 |
| | | Male | 250 | 16.4240 | 3.35638 | | |

university students about using social networks is presented in Table 1. As it is observed in Table 1, the weak sides dimension of the perceptions of the teacher candidates about social networks did not vary statistically according to gender variable (p>0.05). In other words, the perceptions of the female ($\overline{X}$ =27.74) and male students ($\overline{X}$ =27.92) on the weak sides of the social networks are similar.

As observed in Table 2, the perceptions of the teacher candidates on communication dimension of the social networks did not vary statistically according to the gender variable (P>0.05). In other words, the communication dimension perceptions of the female and ($\overline{X}$ =21.65) and male ($\overline{X}$ =21.62) students about social networks are similar.

As observed in Table 3, the educational benefit dimension of the teacher candidates about the perceptions of social networks did not vary statistically according to gender variable (P>0.05). In other words, it was determined that the educational benefit dimension perceptions of the female ($\overline{X}$ =16.20) and male ($\overline{X}$ =16.42) students about social networks did not vary significantly.

As it is observed in Table 4, the Social Networks Perceptions of the teacher candidates on time dimension according to gender variable did not vary statistically

(P<0.05). In other words, the arithmetic average of the female teacher candidates' time dimension points ($\overline{X}$ =11.96) is higher than the male students' arithmetic average ($\overline{X}$ =11.32), and show significant difference (t (647)=2nd901, p<0.05).

As it is observed in Table 5, teacher candidates' Social Networks Perceptions time dimensions showed statistically significant difference according to grade variable (F(3-645)=3.165, p<.05). The groups were compared with each other in order to determine among which groups this difference was. Upon comparison, it was observed that the 4th grade teacher candidates ($\overline{X}$ =27.81) perceived the weak sides of the social networks more than the 3rd grade teacher candidates ($\overline{X}$ =27.17).

As it is observed in Table 6, the teacher candidates' social networks perceptions communication dimension showed statistically significant difference in terms of grade variable (F(3-645)=3.743, p<0.05). The groups were compared with each other in order to determine among which groups this difference was. Upon comparison, it was observed that the 1st grade teacher candidates ($\overline{X}$ =22.37) stated that social networks affected communication in a positive manner more than the 4th grade teacher candidates (=20.92).

As it is observed in Table 7, teacher candidates' social network perceptions educational benefit dimension did

**Table 4.** The Analysis of the perceptions of the teacher candidates on time dimension of the social networks according to gender variable.

| The scale | Dimension | Gender | N | $\overline{X}$ | S | t | P |
|---|---|---|---|---|---|---|---|
| Perception on social networks | Educational benefit | Female | 399 | 11.9603 | 2.61493 | 2.901 | 0.00 |
| | | Male | 250 | 11.3209 | 2.91114 | | |

**Table 5.** The analysis of the perceptions of the teacher candidates on time dimension of the social networks according to grades variable.

| Scale | Dimension | Grade | N | $\overline{X}$ | S | Sd | F | p | Difference (Scheffe) |
|---|---|---|---|---|---|---|---|---|---|
| Perception on social networks | Weak sides | 1st grade | 188 | 27.46 | 5.34 | 3 | | 0.02 | C-D |
| | | 2nd grade | 181 | 27.53 | 5.41 | 645 | | - | - |
| | | 3rd grade | 181 | 28.82 | 5.47 | 648 | 3.165 | - | - |
| | | 4th grade | 99 | 27.17 | 4.48 | - | | - | - |
| | | Total | 649 | 27.81 | 5.30 | - | | - | - |

**Table 6.** The analysis of the perceptions of the teacher candidates on communication dimension of the social networks according to the grades variable.

| Scale | Dimension | Grade | N | $\overline{X}$ | S | Sd | F | P | Difference (Scheffe) |
|---|---|---|---|---|---|---|---|---|---|
| Perception on social networks | Communication | 1st grade | 188 | 22.37 | 3.85 | 3 | | 0.01 | A-D |
| | | 2nd grade | 181 | 21.44 | 4.12 | 645 | | | |
| | | 3rd grade | 181 | 21.46 | 3.89 | 648 | 3.743 | | |
| | | 4th grade | 99 | 20.92 | 2.98 | | | | |
| | | Total | 649 | 21.64 | 3.85 | | | | |

**Table 7.** The analysis of the perceptions of the teacher candidates on educational benefit dimension of the social networks according to the grade variable.

| Scale | Dimension | Grade | N | $\overline{X}$ | S | Sd | F | p | Difference (Scheffe) |
|---|---|---|---|---|---|---|---|---|---|
| Perception on social networks | Educational benefit | 1st grade | 188 | 16.37 | 3.86 | 3 | | 0.95 | - |
| | | 2nd grade | 181 | 16.31 | 3.37 | 645 | | - | - |
| | | 3rd grade | 181 | 16.25 | 3.19 | 648 | 0.109 | - | - |
| | | 4th grade | 99 | 16.14 | 2.66 | - | | - | - |
| | | Total | 649 | 16.28 | 3.37 | - | | - | - |

not show statistically significant difference in terms of grade variable (P>0.05). In other words, teacher candidates think that social networks are educationally beneficial no matter which grade they are studying in.

As it is observed in Table 8, the teacher candidates' social networks perception time dimension showed a statistically significant difference in terms of grades (F(3-645)=16.626 p<.05). The groups were compared with each other in order to determine among which groups this difference was. Upon comparison, it was observed that the 1st grade teacher candidates ($\overline{X}$=12.12) stated more than the 4th grade teacher candidates ($\overline{X}$=10.35) that social networks influenced time; and 3rd grade teacher candidates ($\overline{X}$=12.46) stated more than the 4th

**Table 8.** The analysis of the perceptions of the teacher candidates on time dimension of the social networks according to the grade variable.

| The scale | Dimension | Grade | N | $\overline{X}$ | S | Sd | F | p | Difference (Scheffe) |
|---|---|---|---|---|---|---|---|---|---|
| Perception on social networks | Time | 1st grade | 188 | 12.12 | 2.57 | 3 | | .00 | A-D |
| | | 2nd grade | 181 | 11.27 | 2.78 | 645 | | - | C-D |
| | | 3rd grade | 181 | 12.46 | 2.32 | 648 | 16.626 | - | - |
| | | 4th grade | 99 | 10.35 | 3.08 | - | | - | - |
| | | Total | 649 | 11.71 | 2.74 | - | | - | - |

grade teacher candidates ($\overline{X}$=10.35) that social networks influenced time.

## RESULTS AND DISCUSSION

Social networks are used commonly within the society. This common usage has influences on individuals and society. Determining the perceptions of social network users about these networks will be beneficial in solving the problems stemming from the use of social networks, and in bringing deductions for the purpose of ensuring that social networks are used in a more efficient and productive manner.

When the relevant literature was examined, no measurement scales conducted to measure the perceptions of the users on Social Networks were observed. The measurement tools that have been developed so far have focused generally on the attitudes towards Social Networks (Karakus and Varol, 2012; Otrar and Argın, 2015), usage motivations, usage aims (Bonds-Raacke and Raacke, 2010; Usluel et al., 2014; Jenkins-Guarnieri et al., 2013) addiction or usage intensity (Ellison et al., 2007; Turkyilmaz, 2015; Andreassen et al., 2012) or educational usage (Mazman, 2009; Kuzu, 2014).

In this study, a valid and reliable measurement tool intended to measure the perceptions of university students about Social Networks has been developed, and the students' perceptions were determined according to some variables. In the development stage of the scale, an "Item Pool" was created as a result of the literature scan and in the light of the interviews with the students. The viewpoints of 8 specialists were received in terms of coverage and face validity, and the Scale Form was formed. As a result of the structural validity analyses, a 4-Factor Model consisting of total 22 items was obtained.

In this 4-Factor Model, the first dimension consisted of 8 items that measured the perceptions of the students on the weak sides of social networks; the second dimension consisted of 6 items that measured the perceptions of the students on the influence of Social Networks on communication; the third dimension consisted of 5 items that measured the perceptions of the students on the influence of Social Networks on educational benefit; and the fourth dimension consisted of 3 items that measured the perceptions of the students on the influence of Social Networks on time management.

According to the Factor Analysis made, it was found out that this model explained 50,095% of the Total Variance. The Goodness of Fit values of the Confirmatory Factor Analysis are as follows: $X^2$= 278.96, sd=202, $X^2$/sd=1st380, GFI=0.94, AGFI=0.91, NNFI/TLI=0.97, IFI=0.98, CFI= 0.98, RMSEA=0.035, RMR=0.060, SRMR=0.056. When the values obtained as a result of the Confirmatory Factor Analysis are evaluated in terms of the criteria used in the literature it may be claimed that these values are acceptable and have a good Goodness of Fit value (Byrne, 2010; Cokluk et al., 2010; Kline, 2010; Secer, 2013; Simsek, 2007; Tabachnick and Fidell, 2007).

The Cronbach's Alpha Internal Consistency Coefficients of the scale were computed as 0.80 for the educational benefit dimension; .75 for the communication dimension; .74 for weak sides dimension; and .72 for the time dimension. The arithmetic averages of the answers given to the weak sides factor ($\overline{X}$=27.81) may be concluded to be at medium level when the highest possible score in 40.00 points is considered. The students' weak sides factor points being over the average value makes us conclude that the students have the perception that Social Networks influence social and face-to-face communication skills in a negative manner. When the fact that the highest points that may be received is 30.00 is considered, the arithmetic average of the answers given to the Communication Dimension ($\overline{X}$=21.64) is over average.

Usluel et al. (2014) and Mazman (2009) conducted studies found that Social Networks were used for the purpose of communication at the highest level. When it is considered that the highest point that may be received is 25.00, the arithmetic average of the answers given to the educational benefit factor may be considered as being at an average value.

Sabimbona (2013) conducted a study and concluded

that university students perceived Social Networks as an educational and beneficial tool. Kokoc and Karal (2010) conducted a study and found that students used Social Networks for educational purposes at an average level. When the fact that the highest point that may be received is 15.00, it may be considered that the average values of the answers given to the time factor are over the main average. This situation may cause us think that students have a perception claiming that Social Networks are harmful in that they cause addiction and also harmful in using time in an efficient and productive manner. Similarly, Argin (2013) and

Karakus and Varol (2013) conducted a study and found that students had the consideration that Social Networks influenced time management in a negative manner and caused addiction. It was observed that the points received form the weak sides factor did not differ according to Gender variable. Both female and male students have values that are close to each other in terms of the arithmetic averages of the answers given to the weak sides factor. No significant difference was determined between the points received from the communication factor according to gender variable. The points received from the educational benefit factor did not vary significantly according to gender variable. The points received from the time factor differentiated at a significant level according to gender variable ($t(647)=2.901$, $p<.05$).

Argın (2013) and Uysal (2013) conducted a study on students and found that the attitudes towards social networks did not vary according to gender. It was observed that the average values of the female students were higher at a significant level when compared with the average values of the male students. The average values of the male students being lower may be interpreted as their conscious levels being lower on using Social Networks. Females having more addiction to social networks than males may be a reason for this outcome (Andreassen et al., 2012).

Similarly, in a study conducted by Akdağ et al. (2014), it was found that the addiction levels of the male students were higher than the female students. Alican and Saban (2013) conducted a study and found that male students had more positive attitudes towards Social Networks.

Significant difference was found between the points received from the weak sides dimension according to Grade Variable ($F(3-645)=3.165$, $p<0.05$) between the 3rd and 4th Grades. The averages of the answers of the $3^{rd}$ Graders given to this factor were observed to be significantly higher than the 4th Graders. A significant difference was determined between the points received from the communication factor according to grade variable ($F(3-645)=3.743$ $p<.05$). The communication factor points of the $1^{st}$ Graders were higher than those of the $4^{th}$ Graders at a significant level.

Uysal (2013) conducted a study on vocational high school students and found that the communication

dimension average points of the 12th Grade students were higher than the other grades. No significant difference was determined between the points received from the Educational Benefit Factor according to Grade variable. Similarly, Kuzu (2014) conducted a study and found that the viewpoints of the students on using Social Networks for educational purposes did not vary according to Grades. The points received from the time factor differ at a significant level according to Grade variable ($F(3-645)=16,626$ $p<.05$). The points of the 4th Grade students received from the Time Factor are significantly lower than those of the $1^{st}$ Grade and $3^{rd}$ Grade students.

Based on the results obtained in the study, although trainings are provided for the students on using Social Networks in an efficient and productive manner because the students have perceptions claiming that Social Networks cause addiction and they influence time management in a negative manner, the Educational Benefit Factor points are lower than the points of the other factors. For this reason, trainings may be organized for the students and academicians on how to use Social Networks for educational purposes.

## CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

## REFERENCES

Akdağ M, Şahan-Yılmaz B, Özhan U, İsmail ŞAN (2014). Üniversite Öğrencilerinin İnternet Bağımlılıklarının Çeşitli Değişkenler Açısından İncelenmesi (İnönü Üniversitesi Örneği). İnönü Üniversitesi, Eğitim Fakültesi Dergisi, 15(1).

Aksut M, Ateş S, Balaban S (2011) Lise öğrencilerinin sosyal paylaşım sitelerine ilişkin tutumları" XVI. Türkiye'de İnternet Konferansı, 30 Kasım-2 Aralık, 2011, Ege Üniversitesi Mühendislik Fakültesi Bilgisayar Mühendisliği Bölümü, Bornova, İzmir.

Albion PR (2008) Web 2nd0 in teacher education:two imperatives for action. Comput. Schools, 25(3-4):181-198.

Alican C, Saban A (2013). Ortaokul ve lisede öğrencim gören öğrencilerin sosyal medya kullanımına ilişkin tutumları: Ürgüp Örneği. Sosyal Bilimler Enstitüsü Dergisi, 35(2):1-14.

Andreassen CS, Torsheim T, Brunborg GS, Pallesen S (2012). Development of a Facebook addiction scale 1, 2. Psychological reports, 110(2):501-517.

Babacan ME (2016). The relationship of social media usage areas and addiction. Addicta: Turk. J. Addictions, 3:22-30.

Bilen K, Ercan O, Gülmez T (2014). Sosyal ağların kullanım amacı ve benimsenme süreci; Kahramanmaraş Sütçü İmam Üniversitesi örneği. Eğitim ve Öğretim Araştırmaları Dergisi, 3(1):115-123rd

Bonds-Raacke J, Raacke J (2010). MySpace and Facebook: Identifying Dimensions of Uses and Gratifications for Friend Networking Sites. Individual Differences Res. 8(1):27-33rd http://www.idr-journal.com.

Boyd DM, Ellison NB (2007). Social network sites: Definition, history and scholarship. J. Comput. Mediated Communication, 13(1).

Byrne BM (2010). Structural equation modeling with AMOS: Basic concepts, applications, and programming. New York: Routledge.

Cagan Ö, Ünsal A, Çelik N (2014). Evaluation of College Students' the Level of Addiction to Cellular Phone and Investigation on the Relationship between the Addiction and the Level of Depression. Procedia-Soc. Behav. Sci. 114:831-839.

Chan TK, Cheung CM, Lee ZW, Neben T (2015). Why Do I Keep Checking My Facebook? The Role of Urge in the Excessive Use of Social Networking Sites. In System Sciences (HICSS), 2015 48th Hawaii International Conference on. IEEE. pp. 314-323.

Cohen L, Manion L, Morrison K (2013). Research methods in education (Sixth ed.) New York: Routledge

Cokluk Ö, Sekercioglu G, Buyukozturk Ş (2010). Sosyal Bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları. Ankara: Pegem Akademi.

Creswell JW (2013). Research design: Qualitative, quantitative, and mixed methods approaches. California: Sage publications.

Dahlgren P (2009) Media and Political Engagement: Citizens, Communication, and Democracy, Cambridge University Press, Cambridge.

Dijitalajanslar (2016) 08.06.2016 tarihinde http://www.dijitalajanslar.com/internet-ve-sosyal-medya-kullanici-istatistikleri-2016/ accessed from

Dube R (2016) "Characteristics of Social Networks",http://socialnetworking.lovetoknow.com/Char acteristics_of_Social_ adresinden 08.06.2016 reached on.

Duggan M, Ellison NB, Lampe C, Lenhart A, Madden M (2015). Social media update 2014th Pew Research Center, 19.

Ellison N, Steinfield C, Lampe C (2007). The benefits of facebook ''friends'': Exploring the relationship between college students' use of online social networks and social capital. J. Computer-Mediated Communication, 12(4):1143-1168.

Fenton N, Barassi V (2011). Alternative media and social networking sites: The politics of individuation and political participation. The Communication Review, 14:179–196. http://dx.doi.org/10.1080/10714421st2011st597245.

Hueng TH, Yuen CS (2010). Educational use of social networking technology in higher education. Teaching in Higher Educ. 15(6):703-714.

Iskender M, Akin A (2010). Social self-efficacy, academic locus of control, and internet addiction. Comput. Educ. 54(4):1101-1106.

Jenkins-Guarnieri MA, Wright SL, Johnson B (2013). Development and Validation of a Social Media Use Integration Scale." Psychol. Popular Media Culture 2(1):38-50.

Karakus S, Varol A (2012). Bilgisayar Ve Öğretim Teknolojileri Eğitimi (Böte) Bölümü Öğrencilerinin Sosyal Ağ Kullanım Profillerinin Belirlenmesi. Akademik Bilişim Konferansı, 1-3 Şubat 2013, Uşak University, Uşak.

Kline RB (2010). Principles and practice of structural equation modeling (3. ed.). New York. USA: Guilford Press.

Kuzu EB (2014). Bilişim Teknolojileri Öğretmen Adayları Arasında Çevrimiçi Sosyal Ağların Öğretim Amaçlı Kullanımı. Yayınlanmamış doktora tezi. Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü.

Laird T (2014). Using social media in education for classroom teaching, student learning, and educator professional development. A Project Submitted To The Faculty Of Education In Conformity With The Requirements For The Degree Of Master Of Education, Queen's University Kingston, Ontario, Canada.

Lepi (2014). 10 ways to use Instagram in your classroom. www.edudemic.com sitesiniden 10.06.2016 reached on.

Levy M (2009). Technologies in Use for Second Language Learning, The Modern Language J. 93(1):769-782nd DOI: 10.1111/j.1540-4781st2009.00972ndx

Mazman SG (2009). Sosyal Ağların benimsenme süreci ve eğitsel bağlamda kullanımı. Yayınlanmamış Yüksek Lisans Tezi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Ankara.

Munoz C, Towner T (2009). Opening Facebook: How to use Facebook in the college classroom. In Society for information technology & teacher education international conference (Vol. 2009, 1: 2623-2627).

O'Reilly T (2007). What Is Web 2nd0: Design Patterns and Business Models for the Next Generation of Software, Communıcatıons Strategıes, 65(1):17.

Odabası HF, Mısırlı Ö, Günüç S, Timar ZŞ, Ersoy M, Seçil SOM, Osman EROL (2012). Eğitim için yeni bir ortam: Twitter. Anadolu J. Educ. Sci. Int. 2(1).

Onat F, Alikılıç ÖA (2012). "Sosyal Ağ Sitelerinin Reklam Ve Halkla İlişkiler Ortamları Olarak Değerlendirilmesi", Journal of Yaşar University, 3(9):1111-1143rd.

Otrar M, Argın FS (2015). Students Sosyal Medyaya İlişkin Tutumlarını Belirlemeye Yönelik bir Ölçek Geliştirme Çalışması. Eğitim ve Öğretim Araştırmaları Dergisi, 4(1):391-403rd.

Ozdamlı F (2013). Effectiveness of Cloud Systems and Social Networks in Improving Self-directed Learning Abilities and Developing Positive Seamless Learning Perceptions. J. UCS, 19(5):602-618.

Ozmen F, Aküzüm C, Sünkür M, Baysal N (2011). Sosyal ağ sitelerinin eğitsel ortamlardaki işlevselliği. In 6th International Advanced Technologies Symposium (IATS'11) pp. 16-18.

Rigby B (2008). "Mobilizing Generation 2nd0 A Practical Guide to Using Web 2nd0 Technologies to Recruit, Organize, and Engage Youth", Jossey-Bass, San Fransizco, USA.

Samaha M, Hawi NS (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. Comput. Hum. Behavior 57:321-325.

Secer İ (2013). SPSS ve LISREL ile pratik veri analizi (1st baskı). Ankara: Anı Yayıncılık.

Simsek ÖF (2007). Yapısal eşitlik modellemesine giriş temel ilkeler ve LISREL uygulamaları. Ankara: Ekinoks Yayıncılık.

Stevenson MP, Liu M (2010). Learning a language with Web 2nd0: Exploring the use of social networking features of foreign language learning websites. Calico J. 27(2):233-259.

Tabachnick BG, Fidell LS (2007). Using multivariate statistics. Boston: Pearson Education Inc.

Tektas N (2014). Üniversite Öğrencilerinin Sosyal Ağları Kullanımlarına Yönelik Bir Araştırma, Tarih Okulu Dergisi (TOD), Sayı XVII, ss. 851-870.

Tinmaz H (2011). Utilization of social networking websites in education: a case of Facebook. Unpublished doctoral dissertation. Middle East Technical University, Ankara:

Tiryakicioglu F, Erzurum F (2011). Use of social networks as an education tool. Contemporary Educ. Technol. 2(2):135-150.

Tufekci Z, Wilson C (2012). Social media and the decision to participate in political protest: Observations from Tahrir Square. J. Communication, 62(2):363-379.http://dx.doi.org/10.1111/j.1460-2466.2012nd01629.x

Tuik (2016). 08.06.2016 tarihinden http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18660 accessed from.

Turkyılmaz M (2015). Facebook Bağımlılık Ölçeğinin Türkçeleştirilmesi ve Facebook Bağımlılığının Okuma Becerilerine Etkisi. J. Acad. Soc. Sci. Stud. 36:265-280.

Usluel YK, Demir Ö, Çınar M (2014). Sosyal Ağların Kullanım Amaçları Ölçeği. Eğitim Teknolojileri Araştırma Dergisi 5(2):1-18.

Uysal Ş (2013). Meslek Lisesi Öğrencilerinin Sosyal Medya Kullanım Amaçları ile Eğitsel Sosyal Medya Kullanımlarının Değerlendirilmesi, Yüksek Lisans Tezi. Bahçeşehir Üniversitesi, Fen Bilimleri Enstitüsü, İstanbul.

Veletsianos G (2012). Higher education scholars' participation and practices on Twitter. J. Comput. Assisted Learn. 28(4):336-349.

**Appendix 1.** Explanatory factor analysis results (The dimensions, factor loads and common factor variances of the items in the perceptions scale of the teacher candidates on social networks).

| Items | Dimensions | | | | Common factor variance |
| --- | --- | --- | --- | --- | --- |
| | Weak sides | Communication factor | Educational benefit | Time | |
| M28 | **0.733** | - | - | - | 0.447 |
| M17 | 0.711 | - | - | - | 0.524 |
| M29-Social networks hinder the development of the empathy skills of a person | 0.671 | | - | - | 0.596 |
| M20 | 0.607 | - | - | - | 0.607 |
| M21-Social networks hide truths and give missing information | 0.580 | - | - | - | 0.593 |
| M24 | 0.572 | - | - | - | 0.508 |
| M16 | 0.552 | - | - | - | 0.501 |
| M30 | 0.476 | - | - | - | 0.495 |
| M6-Social networks improve the communication skills of people | - | 0.694 | - | - | 0.501 |
| M2 | - | 0.685 | - | - | 0.495 |
| M7 | - | 0.647 | - | - | 0.546 |
| M1-Social networks play roles in interpersonal interactions | - | 0.641 | - | - | 0.537 |
| M13 | - | 0.592 | - | - | 0.477 |
| M12 | - | 0.584 | - | - | 0.443 |
| M8-Social networks provide active learning environment | - | - | 0.439 | | 0.404 |
| M4 | - | - | 0.736 | | 0.397 |
| M3-Social network is a suitable tool for educational purposes amaçlı kullanım için uygun bir araçtır | - | - | 0.732 | | 0.409 |
| M35 | - | - | 0.626 | | 0.413 |
| M5 | - | - | 0.622 | | 0.480 |
| M33-Social networks create addiction by preventing other possible activities of people | - | - | **-** | 0.801 | 0.620 |
| M34 | - | - | **-** | 0.727 | 0.713 |
| M32 | - | - | **-** | 0.710 | 0.557 |
| Eigenvalue | 1.569 | 1.419 | 1.062 | 0,958 | - |
| Explained total variance (50.095%) | 15.69 | 14th19 | 10.62 | 9.58 | - |
| Cronbach alpha | 0.75 | 0.75 | 0.80 | 0.72 | - |
| Cronbach alpha (For the whole scale) | | 0.75 | | | - |