European Journal of Education Studies
ISSN: 2501 - 1111
ISSN-L: 2501 - 1111
Available on-line at: www.oapub.org/edu

doi: 10.5281/zenodo.580129 Volume 3 | Issue 6 | 2017

RELATIONSHIP BETWEEN SOCIAL NETWORKS ADOPTION AND SOCIAL INTELLIGENCE

Semseddin Gunduz[i]
Ahmet Kelesoglu Faculty of Education,
Necmettin Erbakan University,
42090, Meram Yeni Yol, Konya, Turkey

Abstract:
The purpose of this study was to set forth the relationship between the individuals' states to adopt social networks and social intelligence and analyze both concepts according to various variables. Research data were collected from 1145 social network users in the online media by using the Adoption of Social Network Scale and Social Intelligence Scale during the summer, 2015. Status of the participants to adopt social networks was medium, and their social intelligence states were at a high level. There was no relationship between the adoption of social networks and social intelligence states and the gender of the participants. Adoption of social networks and social intelligence levels of university graduates were significantly higher than primary school graduates. Social information process and social skill sub-dimensions located in the Social Intelligence Scale has a significant positive correlation with all sub-dimensions except social impact sub-dimension of Social Networks Adoption Scale (usefulness, ease of use, facilitating conditions, community identity). There is a significant positive relationship between the social network adoption levels of individuals and the level of social intelligence. Social intelligence in general, can explain the 2.25% of social network adoption situation.

Keywords: social network adoption, social intelligence, social network users

1. Introduction

With the emergence of the internet, foundations of a process of change which was also called the information age were laid. This process was not only for the transformation

[i] Correspondence: email semsedding@gmail.com

of the meaning and function of technology, but also the beginning of a new social base in the socio-cultural structure. Technology has also evolved at the level to offer multiple social interactions (Geczy et al, 2014). Reychav, Ndicu and Wu (2016), stated that social networks can contribute to individuals in the process of gaining knowledge. Portable information and communication devices such as smart phones and tablet computers in particular as a catalyst, local and traditional interactions between individuals left its place to a digital-based global interactions approach. One of the main actors in this transformation can be considered as a social network called Web 2.0-based medium.

Online social networks have great importance for the adoption of technology (Peng and Mu, 2011). It is possible to define social networks as web-based software that allows sharing information, documents, multimedia and interactions between individuals. Findings of the research conducted by "WeAreSocial (http://wearesocial.com) intended for use of digital technology in the world in 2015, reveals the point that social networks have arrived and important data for the digital conversion of societies. According to this report the number of users connected to the Internet worldwide is expressed as three billion people that make up 42% of the global population. 70% of those 3 billion users actively use social networks; and it is also reported that about 38 million of the users are in Turkey. In another striking data in the report revealed that the average internet use time of internet users in Turkey was around 5 hours, and 3 hours of it is spent for social network environments. The popularity of social networks has increased recently Putzkea, Fischbachb, Schodera and Gloor, 2014). Kabilan, Ahmad and Abidin (2010) reported that Facebook is the most popular online social network platform, Ozturk and Akgun (2012) reported that about 95% of university students using online social network sites use Facebook.

It can be said that the dependence or addiction of the human being to the social network environment so much stems from the need to socialize. There are many social networks that are designed for different purposes in the interactive web environment. Individuals participate these networks in accordance with their interests, skills and opportunities, they continues to be available in these networks in parallel with the feeling of pleasure and share. They enter into oriented actions to meet socializing needs in this environment. In this context, the social networks provide socializing opportunities for individuals in a virtual environment; these networks can be considered as an important reason for the widespread use of preferences (Dursun and Cuhadar, 2015).

Social networks use purposes are examined in many of the researches performed and tried to reveal the socio-psychological context of social networking. In the relevant literature it can be seen that one of the variables often emphasized on the use of social networks is social intelligence. A lot of research carried out on the social intelligence

suggest that this concept was first put forward by John Dewey and then by Thorndike at the beginning of 1900s. (Dogan, Totan and Sapmaz, 2009; Habib, Saleem and Mahmood, 2013; Hancer and Tanrisevdi, 2003; Ilhan and Cetin, 2014; Joseph and Lakshmi, 2010; Rahim, 2014; Rahim, Civelek and Liang, 2015). Habib Saleem and Mahmood (2013) defined the social intelligence as an ability to create binding and uniting behaviour that provide communication, empathy and harmony of an individual between other people. Joseph and Lakshmi (2010), indicates that social intelligence is one of the most important items for the success of an individual. Social intelligence is reported to have a multidimensional and complex structure, can provide an estimate of the success in the lives of many people by improving social interaction.

Dogan and Cetin (2009) in the early studies examined social intelligence to be in two dimensions; cognitive (understanding people) and behavioural (to handle people), and in later studies they emphasize that it has a multi-dimensional structure. Uzamaz (2000) describes social intelligence as a pioneer of social skill concept including communication, understanding and expressing feelings, coping with aggression, coping with stress, problem solving skills. Rahim (2014) sorts out the components of the social skill as a concept that underlies the concept of social intelligence to be comfortable among the people; equal skills to handle men, women and children; to interact with various people; to be able to negotiate better at reaching an agreement; building positive relationships and the ability to sustain. With another classification Marlowe (1986, cited by, Hancer and Tanrisevdi, 2003), concluded that social intelligence included five factors that include socialization attitudes, social skills, empathy skills, sensuality and social anxiety.

Various studies can be seen in the literature in order to reveal the factors influencing the adoption of social network users this environment. For example, Huang Hood and Yoo (2013) reveal that one of the reasons for the adoption of social networks is that users find these environments enjoyable. In another study Corrocher (2011) indicates that social network applications have a positive correlation with the level of education, on the other hand the age variable has a negative relationship for these applications. According to this study, two variables described as ease of use and convenience has a positive relationship for the adoption or the acceptance of social networks.

Bruque, Moyano and Eisenberg (2009) mentions a more powerful influence of social network adoption that allows information exchange between users on the network, and also reveals that individual demographic variables may affect the adaptation of the social network. Peng and Mu (2011) stated that some of the activities some social network users perform might affect other users.

Individuals within a society are in need of constant social interaction. According to Donohue (2015), the rapid technological and algorithmic developments have led to the emergence of a new form of the information society. Social media offers a new perspective to the social fabric in the interpersonal communication, as a distinct understanding from the traditional concept. Interaction between individuals has undergone a change surprisingly due to rapid changes in the Web 2.0 technology. A growing number of people express their personal experience using blog, forum, message board systems (Li, Chen, Liou and Lin, 2014). Although there are studies available to demonstrate the reasons for these requirements at an individual, social and technological base, there is no adequate research discussing the main concepts such as social intelligence, social skill and social interaction.

Kocak Usluel et al (2016) have pointed to the causes of social network adoption of different gender, age, language and culture groups quickly and identifying the factors affecting the adoption of social networks. Studies for understanding/explaining the use of social networks which have a common usage worldwide are required. In this context, variables that could be associated with adoption of social networks and social intelligence were examined and it is aimed to reveal the relationship between social networks adoption and social intelligence.

1.1 Objectives

The purpose of this study is to set forth the relationship between the individual states to adopt social networks and social intelligence and to analyze both concepts according to different variables. In the research carried out in the direction of this general purpose, the answers to the following questions were sought

1. What are the social network users' social network adoption status and social intelligence levels?
2. Do social network users' social network adoption states and their social intelligence levels change according to gender and education status?
3. Is there a significant relationship between social networks adoption and social intelligence levels of social network users?

2. Method

2.1 Research Model

This study examining the relationship between the adoption of social networks and levels of social intelligence is designed in the relational survey model.

2.2 Participants

Working group of the Research is consisted of a total of 1145 participants from different age groups using a social network (Facebook) actively. Characteristics of the participants are given in Table 1.

Table 1: Characteristics of the participants

Characteristics	Options	n	%
Gender	Female	616	53.8
	Male	529	46.2
Marital Status	Single	796	69.5
	Married	349	30.5
Daily average internet use time	Min. 2 hours	340	29.7
	2 – 5 hours	459	40.1
	Over 5 hours	346	30.2
Monthly Income	Min. 2000 TL	361	31.5
	2000 TL – 4000 TL	527	46.0
	Over 4000 TL	257	22.4
Education	Primary School	107	9.3
	High School – College	792	69.2
	Graduate / Postgraduate	246	21.5

2.3 Data Collection Tools

In this study, the data was collected by using "Personal Information Form", "Social Network Adoption Scale" and "Tromso Social Intelligence Scale". These tools were applied in an online environment in May and June, 2016.

Personal Information Form: It was used to obtain demographic data of the participants. Information about the gender, marital status, educational status, daily average internet use time and monthly income of participants was collected in this questionnaire form.

Social Network Adoption Scale: “The Social Network Adoption Scale” (SNAS) developed by Usluel and Mazman (2009) has five sub-dimensions. The Scale is consisted of a total of 21 items including 4 items in each of "Usefulness", "Ease of Use", "Social Impact" and "Community Identity" sub-dimensions and 5 items in the "Facilitating Factors" sub-dimension. The reliability coefficient of the 10-item Likert type Scale which can take values between "Disagree" and "Totally Agree" options is .90. The scoring of the scale can be based on total points or on factor bases using total / average scores. In this study, it was found that the reliability coefficient of sub-dimensions of the SNAS ranged from .80 and .94. The reliability coefficient of the whole scale is .93.

Tromso Social Intelligence Scale: The "Tromso Social Intelligence Scale" (SIS) which was developed by Silvera, Martinussen, and Dahl (2001) and whose validity and

reliability analysis of its Turkish version were conducted by Dogan and Cetin (2009) has got three sub-dimensions. The Scale is consisted of a total of 21 items including 8 items in the "Social information process" sub-dimension, 6 items in the "social skills" sub-dimension and 7 items in the "social awareness" sub-dimension. The reliability coefficient of the 5-item Likert type Scale which can take values between "Not appropriate" and "entirely appropriate" is .83. The highest total score is 105 points whereas the lowest is 21 points. High scores indicate high social intelligence. When scoring, some items are scheduled in reverse order. In this study, it was found that the reliability coefficient of sub-dimensions of the SIS ranged from .79 and .82. The reliability coefficient of the whole scale is .85.

2.4 Data Analysis

Data collected from online media are saved directly to the computer as a Microsoft Excel file. The data in this file are transferred to the IBM SPSS Statistics 21 program and began to be analyzed. Primarily Social Network Adoption states and Social Intelligence Levels of 1145 participants are determined in this research. The lowest score which can be obtained is subtracted from the highest score that can be obtained from the scale, and resulting values are divided into five assessment categories. Categories were created by adding the obtained number to the lowest point that can be received. The evaluation methods of both scales are shown in Table 2.

Table 2: SNAS and SIS Evaluation Scales

SNAS Score Range	SIS Score Range	Evaluation Result
1.00 – 2.80	1.00 – 1.80	Very Low
2.81 – 4.60	1.81 – 2.60	Low
4.61 – 6.40	2.61 – 3.40	Medium
6.41 – 8.20	3.41 – 4.20	High
8.21 – 10.00	4.21 – 5.00	Very High

Social network adoption levels and social intelligence levels change of the participants according to gender were analyzed by using independent Samples t-test. Participants' social network adoption and social intelligence levels changes according to the level of education and average daily internet use time were analyzed by One-Way ANOVA analysis. Scheffe test was used to determine among which groups the resulting differences were. Pearson Product Moment Correlation Analysis was used to determine the relationship between the social network adoption levels and social intelligence levels of participants. Regression analysis was carried out to determine how much of the social network adoption the level of social intelligence explained.

3. Findings

Primarily, SNAS and SIS average scores of the participants were calculated in the research. The average values calculated are interpreted according to the criteria in Table 2. and processed in Table 3.

Table 3: SNAS and SIS Evaluation Results

	Average	Standard Deviation	Review
SNAS Usefulness	5.37	2.41	Medium
SNAS Ease of Use	7.80	2.46	High
SNAS Social Effect	3.84	2.16	Low
SNAS Facilitating Conditions	6.88	2.30	High
SNAS Community Identity	5.58	2.60	Medium
SNAS General Situation	5.94	1.86	Medium
SIS Social Information Process	3.63	.56	High
SIS Social Skill	3.49	.70	High
SIS Social Awareness	3.65	.64	High
SIS General Situation	3.60	.47	High

It can be concluded that the SNAS levels of 1145 people surveyed were low in the "social impact", high in the "ease of use" and "facilitating conditions" sub-dimensions, "usefulness", "community identity" and social network adoption overall situation were in the medium level. Participants' all sub-dimensions of SIS and Social Intelligence overall situation can be said to be high.

The variation according to gender and social network adoption levels and social intelligence levels of the participants were analyzed using independent samples t-test. The analysis results are given in Table 4.

Table 4: Variation of Social Network Adoption, Social Intelligence and their Sub-dimensions according to gender

	Female		Male		Sd	t	p
	Mean	SD	Mean	SD			
SNAS Usefulness	5.23	2.40	5.54	2.42	1143	2.16	.03
SNAS Ease of Use	7.99	2.41	7.57	2.50	1143	2.89	.00
SNAS Social Effect	3.68	2.09	4.02	2.22	1143	2.66	.01
SNAS Facilitating Situations	7.08	2.28	6.64	2.30	1143	3.20	.00
SNAS Community Identity	5.58	2.57	5.59	2.64	1143	.07	.95
SNAS General Situation	5.97	1.82	5.91	1.90	1143	.53	.60
SIS Social Information Process	3.63	.55	3.63	.58	1143	.20	.84
SIS Social Skill	3.48	.67	3.49	.73	1143	.17	.87
SIS Social Awareness	3.67	.63	3.63	.65	1143	1.00	.32
SIS General Situation	3.60	.45	3.59	.49	1143	.30	.77

Men surveyed were found to have adopted the "Usefulness" and "Social Impact" sub-dimensions of the SNAS more than women. Women were observed to have adopted the "Ease of Use" and "Facilitating conditions" sub-dimensions of the SNAS more than men. Statistically no significant difference was found by gender in terms of the SNAS overall situation. No significant difference was found statistically by gender in terms of SIS sub-dimensions and SIS overall situation of the individuals participated in the study.

Participants' adoption of social networks and social intelligence levels variations according to the level of education were analyzed using one-way analysis of variance. The Scheffe test was used to determine among which groups the resulting differences were. The analysis results are given in Table 5.

Table 5: Variations of SNA and Social Intelligence according to Education status

	Source	Sum of Squares	Mean Square	df	F	P	Difference
SNAS General Situation	Between groups	63.52	31.76	2	9.32	.00	*Primary School-Graduate / Postgraduate
	Within groups	3893.64	3.41	1142			
	Total	3957.16		1144			
SIS General Situation	Between groups	2.48	1.24	2	5.73	.00	*Primary School-Graduate / Postgraduate
	Within groups	247.57	.22	1142			
	Total	250.06		1144			

A statistically significant difference between the average scores of the education of the participants and from SNAS and SIS was found. The Scheffe test was applied to determine between which education levels this difference occurred. The analysis resulted in that both the social network adoption levels and social intelligence levels of Graduate/Postgraduate participants were higher than the primary school graduates.

Participants' Social Network Adoption levels and social intelligence levels were analyzed using one-way analysis of variance change according to the daily average internet usage. The Scheffe test was used to determine among which groups the resulting differences were. The analysis results are given in Table 6.

Table 6: Variation of SNA and Social Intelligence Levels according Internet Usage Time

	Source	Sum of Squares	Mean Square	df	F	P	Difference
SNAS General Situation	Between groups	217.92	108.96	2	33.28	.00	*5 hours or over – others
	Within groups	3739.24	3.27	1142			
	Total	3957.16		1144			
SIS General Situation	Between groups	.11	.06	2	.26	.77	-
	Within groups	249.94	.22	1142			
	Total	250.06		1144			

A statistically significant difference was found between the average scores obtained from the SNAS and daily average internet use time of the participants surveyed. The Scheffe test was used to determine among which groups the differences are. The analysis of the results in an average of 5 hours per day or more Internet users' social network adoption level was found to be higher than those using the Internet less. No statistically significant difference was found between the average scores obtained from SIS and daily average internet use time of the participants surveyed. In other words, there is no significant relationship between the daily internet use time and the social intelligence of the individuals.

The correlation analysis performed to see if there is a relationship between the social network adoption levels and the social intelligence levels of participants surveyed, or if there is a relationship on which side and what level it is given in Table 7.

Table 7: Correlation Analysis between SNA Levels and Social Intelligence Levels

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. SNAS Usefulness	1									
2. SNAS Ease of Use	.53**	1								
3. SNAS Social Effect	.43**	.23**	1							
4. SNAS Fac. Condit.	.59**	.76**	.37**	1						
5. SNAS Comm. Ident.	.62**	.47**	.40**	.59**	1					
6. SNAS Gen. Sit.	.81**	.78**	.60**	.87**	.80**	1				
7. SIS Social Infor. Proc.	.10**	.18**	-.04	.19**	.12**	.15**	1			
8. SIS Social Skill	.15**	.13**	-.05	.13**	.20**	.15**	.36**	1		
9. SIS Social Awareness	.02	.14**	-.15**	.08**	.03	.04	.29**	.36**	1	
10. SIS Gen. Sit.	.12**	.20**	-.11**	.18**	.16**	.15**	.74**	.75**	.74**	1

According to the table, there is a significant correlation of the sub-dimensions of SNAS with each other ranging between .23 and .87 (r> .23 and r <.88, p <.01). There is a significant correlation between the sub-dimensions of SIS with each other ranging between .29 and .75, (r>.29 and r <.76, p <.01). There is a positive meaningful relationship between the social information process and social skill sub-dimensions of SIS and all sub-dimensions of SNAS ("Usefulness", "Ease of Use", "Facilitating Conditions," "Community Identity") except the "social effect" sub-dimension. That is one of these values is increased by increasing the other; one of them is decreased by decreasing the other.

A positive correlation was found between the "Social Awareness" sub-dimension of the SIS and the "Ease of Use", "Facilitating Conditions" sub-dimensions NSAS significantly; a negative correlation was found with the "Social impact" sub-dimension. Factors that make social intelligence levels were examined to find out if they were predictors of social network adoption levels or not. Findings obtained from the regression analysis performed are given Table 8.

Table 8: Variables Predicting Social Network Adoption Level

Model	Predicting Variables	B	Standard Error	β	t	P
1	Constant	3.77	.42		8.94	.00
	Social Intelligence	.60	.12	.15	5.19	.00

As a result of these analyses the level of social intelligence is a predictive variable for social network adoption and it was seen that [R = .15, R2 = .0225, F = 26.97, p <.01] explained a 2.25% the total variance. As shown in Table 7, social intelligence is a significant variance predicting the social network adoption significantly.

4. Discussion

In this study which was conducted on 1145 people who use Facebook which is the most popular online social networking platform, participants' levels were found to be low in "social effect" sub-dimension of the SNAS, medium at "usefulness", "community identity" sub-dimensions and social network adoption the general state; high at the "Ease of use" and "facilitating conditions" sub-dimensions. Akyazi and Tutgun Unal (2013) with Tanriverdi and Sagir (2014) also found similar results from the study carried out on university and high school students; they were high at "ease of use" and "facilitating factors" sub-dimensions of the social network adoption states. Again, Tanriverdi and Sagir (2014) found the "social impact" sub-dimension at low level which is similar to the findings obtained in this study. We can say that online social networks

simplifying the works to do and ease of use contribute to the rapid spread of it all around the world.

Men surveyed adopted the "usefulness" and "social influence" sub-dimensions of SNAS more than girls; while girls adopted the "ease of use" and "facilitating conditions" sub-dimensions more than men. The general situation of the adoption of social networks showed no difference the according to the gender of the participants. Hoy and Milne (2010) stated that both men and women adopted the internet however their internet usage motivation was different. Tanriverdi and Sagir (2014) likewise explained that girls adopted social networks in terms of "facilitating conditions" more than men; men adopted social networks more than girls in terms of "social impact". Both in the same study and Akyazi and Tutgun Unal (2013) stated that individuals' social network adoption didn't change by gender in general situation. Even though general technology usage was adopted by men in some researches, the ease of use of social networks hasn't led us to the conclusion that the adoption of social networks changes according to gender.

Among the participants in the study, the social network adoption states of university graduates were found to be higher than primary school graduates. Vosner, Bobek Kokol and Kręcic (2016) stated that education was a key element in the use of online social networks; 4-year college graduates, postgraduates and doctoral graduates were using the Internet at least once a day; this rate for 2-year college graduate and high school graduate adults was lower. Similarly, Choi and DiNitto (2013) mentioned that education was one of the strongest predictors in the use of technology (Vosne et al., 2016). Gulcan, Vurgun, Gurdin and Akpinar (2015) noted a positive opinion for the students using social networks for examining educational aimed groups and activities at a high level. Corrocher (2011) stated that there is a positive correlation at a positive level between social network applications and the level of education in a similar manner. It is thought that the widespread use of social networks in training environment recently and social networking platforms training supporting elements supply has made a contribution for the highly educated people to adopt social networks.

Social network adoption level of average of 5 hours per day internet using participants surveyed was found to be higher than less internet users. Ozgur (2013) states that there is a relationship between the increase in the frequency of social network use of an individual and adoption of these networks more. Individuals' use the media they adopted more is an expected situation.

In this study, a significant positive correlation was found between the social network adoption levels and social intelligence levels of individuals. Social intelligence has been seen to explain 2.25% of social network adoption situation. Habib, Saleem and

Mahmood (2013) define the social intelligence as the capacity of the individual to establish, develop and maintain interpersonal relationships. Hence, communication can be seen as an important element of social intelligence. This situation is expected to explain the social network adoption that allows establishing easy, cheap and fast communication.

6. Conclusions and Recommendations

As a result of this research, it appears that users have adoption states arising from their socialization needs for social networking at a significant level. On the other hand in this study, it is put forward that the social intelligence concept which is considered to have a relationship with social network adoption at a high level didn't have a relationship with social network adoption states at a foreseen level or in other words, why social networks are adopted at this rate is predicted with a very low statistical rate. In this context, it is important to work on different samples in order to generalize the findings about the relationship between social intelligence concept and social network adoption in similar researches that will be conducted in the future. In particular, the investigation of social network adoption and internal and external affecting factors in terms of the socio-psychological variables would be beneficial. However, by considering social intelligence variable together with the social interaction dimension, the impact to the adoption level can be examined in a future research. Finally, this study has some limitations. Primarily, social media gathered data from participants has been limited to Facebook. And also, as the survey data is the data obtained for self-evaluation, findings possibility to change over time should be taken into consideration. We can say that the findings of the research can contribute to the studies on social networks increasing every day and investigated at different.

References

1. Akyazi, E., & Tutgun Unal, A. (2013). Purpose, adoption and level of loneliness relation and the use of social networks: A study on undergraduate communication students. *Global Media Journal, 3*(6), 1-24.
2. Bruque, S., Moyano, J., & Eisenberg, J. (2008). Individual adaptation to IT-induced change: The role of social networks. *Journal of Management Information Systems, 25*(3), 177-206. doi:10.2753/MIS0742-1222250305

3. Choi, N.G., & DiNitto, D.M. (2013). Internet use among older adults: association with health needs, psychological capital, and social capital. *Journal of Medical Internet Research, 15*(5). doi:10.2196/jmir.2333
4. Corrocher, N. (2011). The adoption of web 2.0 services: An empirical investigation. *Technological Forecasting and Social Change, 78*(4), 547–558. doi:10.1016/j.techfore.2010.10.006
5. Dogan, T., & Cetin, B. (2009). The validity, reliability and factorial structure of the Turkish version of the Tromso social intelligence scale. *Educational Sciences: Theory & Practice, 9*(2), 691-720.
6. Dogan, T., Totan, T., & Sapmaz, F. (2009). Self-esteem and social intelligence in university students. *Sakarya University Journal of Education Faculty, 17*, 235-247.
7. Donohue, L.K. (2015). The dawn of social intelligence (SOCINT). *Drake Law Review, 63*, No. 1061, Available at SSRN: http://ssrn.com/abstract=2693689
8. Dursun, O.O., & Cuhadar, C. (2015). Cognitive absorption levels of social network users. *Trakya University Journal of Social Sciences, 17*(1), 241-253.
9. Geczy, P., Izumi, N., Hasida, K., Mori, A., Eto, K., & Hirano, S. (2014). Social intelligence technologies: menace or aid? *The International Journal of Science in Society. 5*, 47-56.
10. Gulcan, Z., Vurgun, S., Gurdin, B., & Akpinar, G.M. (2015). Vocational high school students and social networks: comparison of Nazilli, Atça and Kuyucak vocational high schools. *Electronic Journal of Vocational Colleges,* 4. UMYOS Special Volume, 164-172.
11. Habib, S., Saleem, S., & Mahmood, Z. (2013). Development and validation of social intelligence scale for university students. *Pakistan Journal of Psychological Research, 28*(1), 65-83.
12. Hancer, M., & Tanrisevdi, A. (2003). The concept of empathy and performance as an aspect of social intelligence. *C.U. Journal of Social Sciences, 27*(2), 213-227.
13. Hoy, M.G., & Milne, G. (2010). Gender differences in privacy-related measures for young adult Facebook users. *Journal of Interactive Advertising, 10*(2), 28-45. doi:10.1080/15252019.2010.10722168
14. Huang, W.D., Hood, D.W., & Yoo, S.J. (2012). Gender divide and acceptance of collaborative Web 2.0 applications for learning in higher education. *The Internet and Higher Education, 16*, 57–65. doi:10.1016/j.iheduc.2012.02.001
15. Ilhan, M., & Cetin, B. (2014). An investigation of the relationship between social and cultural intelligence through structural equation model. *Turkish Journal of Education, 3*(2), 4-15.
16. Joseph, C., & Lakshmi, S.S. (2010). Social intelligence, a key to success. *The IUP Journal of Soft Skills, 4*(3), 15-21.

17. Kabilan, M.K., Ahmad, N., & Abidin, M.J.Z. (2010). Facebook: An online environment for learning of English in institutions of higher education? *The Internet and Higher Education, 13*(4), 179–187. doi:10.1016/j.iheduc.2010.07.003
18. Kocak Usluel, Y., Kokoc, M., Cirali Sarica, H., & Mazman Akar, S.G. (2016). English version of Social Networks Adoption Scale: A validation study. *Telematics and Informatics 33*, 484–492. doi:10.1016/j.tele.2015.10.007
19. Li, Y.M., Chen, H.M., Liou, J.H., & Lin, L.F. (2014). Creating social intelligence for product portfolio design. *Decision Support Systems 66*, 123–134. doi:10.1016/j.dss.2014.06.013
20. Marlowe, H.A. (1986). Social intelligence evidence for multidimensionality and construct independence, *Journal of Educational Psychology, 78*, 52-58.
21. Ozgur, H. (2013). Investigation the relationship between adoption and use of social networks in educational context in terms of various variables. *Dicle University Journal of Social Science Institute, 5*(10), 169, 182.
22. Ozturk, M., & Akgun, O.E. (2012). Unıversity students' purposes in using social networking sites, and their opinions on using these sites ın education. *Sakarya University Journal of Education, 2*(3), 49-67.
23. Peng, G., & Mu, J. (2011). Technology adoption in online social networks. *Journal of Product Innovation Management, 28*, 133–145. doi:10.1111/j.1540-5885.2011.00866.x
24. Putzke, J., Fischbach, K., Schoder, D., & Gloor, P.A. (2014). Cross-cultural gender differences in the adoption and usage of social media platforms – An exploratory study of Last.FM. *Computer Networks, 75*(B), 519–530. doi:10.1016/j.comnet.2014.08.027
25. Rahim, M.A. (2014). A structural equations model of leaders' social intelligence and creative performance. *Creativity and Innovation Management, 23*(1), 44-56. doi:10.1111/caim.12045
26. Rahim, M.A., Civelek, I., & Liang, F.H. (2015). A model of department chairs' social and faculty members' turnover intention, *Intelligence, 53*, 65-71. doi:10.1016/j.intell.2015.09.001
27. Reychav, I., Ndicu, M., & Wu, D. (2016). Leveraging social networks in the adoption of mobile technologies for collaboration. *Computers in Human Behavior, 58*, 443-453.
28. Silvera, D.H., Martinussen, M., & Dahl, T.I. (2001). The Tromso Social İntelligence Scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology, 42*, 313-319.
29. Tanriverdi, H., & Sagir, S. (2014). The impact of high school students' intentions in the use of social media and the way of their adoption of social media on their

success. *Adıyaman University Journal of Social Sciences Institute, 7*(18), 775-822. doi:10.14520/adyusbd.849

30. Usluel, Y.K., & Mazman, S.G. (2009). Social Networks Adoption Scale. *Educational Sciences & Practice, 8*(15), 137-157.
31. Uzamaz, F. (2000). Social skills and evaluation methods in adolescent. *Çukurova University Journal of Social Sciences Institute, 6*(6), 49-58.
32. Vosner, H.B., Bobek, S., Kokol, P., & Krecic, M.J. (2015). Attitudes of active older internet users towards online social networking. *Computers in Human Behavior, 55*(A), 230–241. doi:10.1016/j.chb.2015.09.014