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THE RELATION BETWEEN LONELINESS IN SOCIAL LIFE AND FACEBOOK USAGE

Abstract:

Social networks like Facebook have become one of the most important mass communication vehicles at the present day. It is estimated that today more than 1 billion people use Facebook on the world. Facebook was designed to develop the social attraction in virtual areas. In this type of communication style, users can declare their personal information on their personal page provided by social networking sites and they can share videos and photos with other users or they can supply information to other users about their personal life. Members can see each other's pages and they can communicate with other members with using chat implementation which seems mobile messaging. This interaction and possibility of social networking sites draw attention of young people and adolescents because of providing detailed information for them to develop friendship. On the other hand, young people feel more lonely themselves in modern life style and this has increased the demand of young people for media usage. Especially foreign students leaving their culture and families back come Turkey for their education and they are so sensitive in terms of loneliness and media dependency. This study aims to measure the relation between loneliness level and Facebook usage patterns of foreign students in Turkey. Survey method was used to collect data and data were got together from 316 participants with using face to face questionnaire technique. The results of the study show the relations among participants' loneliness level, daily Facebook usage rates, weekly Facebook usage frequency, Facebook usage experience and Facebook usage reasons. As a first finding, it was found that the most frequent used communication medium was the social media. A large majority (90 %) of the participants stated that they had been using Facebook since 1-6 years with an average duration of 54 minutes each session. Usage motives were given as communicating with friends, getting informed about events and people and leisure time pursuit. The study revealed a positive relationship between loneliness of foreigners and Facebook usage that implies social network usage is increasing with rising loneliness level.

Keywords:

Social Networking Sites, Facebook, Loneliness, Foreign University Students

Introduction

The evolution of information and communication technologies of the recent decade has resulted in many conveniences in the everyday of the individual by decreasing communication barriers and enabling individuals to communicate with others faster and in a more interactive manner. On the other hand, this state also has started a process of change in the social life of the individual in means of social communication and relations. Social networking sites are enhancing personal capabilities of social interaction, cooperation and communication that are providing new possibilities of establishing and maintaining personal communications and relations. These capabilities are appreciated by individuals in ever increasing numbers every day and social networking sites are continuously widening their social coverage area. Among these, Facebook comes first by visitor and sharing numbers (Özgür, 2013, p. 668).

The style of Facebook communication enables the user to present his personal interests, visuals and other personal information on his personal page for sharing with other people (Lee & Ma, 2012, p. 332; Special & Li-Barber, 2012, p. 624). Interactions like these provide the information that is needed by the youth and adolescents for establishing friendships and relationships (Pempek et al., 2009, p. 228). In addition to enabling self-representation to individuals, social sharing web sites like Facebook also serve as a means for interpersonal relationship establishment and maintaining (Muscanell & Guadagno, 2012, p. 107) that range from business relations to romantic relations, friendships on shared interests diverse as music, politics etc. (Ellison et al., 2007, p. 1143).

While the rapid growth in social network usage produced positive effects like enhanced communication, social interaction, sharing, cooperation and socialization (Özgür, 2013, p. 669), usage problems as decreased face to face interpersonal communication (Das & Sahoo, 2011; İşbulan, 2011), loneliness (Sheldon, 2008; Ryan & Xenos, 2011; Sheldon, 2012; Karakoç & Taydaş, 2013; Tiryaki, 2015), narcissism (Gülnar et al., 2010; Ryan & Xenos, 2011), socialization anxiety (Şahin et al., 2012) and addiction (Pelling & White, 2009; Wilson et al., 2010; Kuss & Griffiths, 2011; Andreassen et al., 2012; Çam & İşbulan, 2012; Balcı & Gölcü, 2013; Balcı & Tiryaki, 2014; Tiryaki, 2015) have also been observed.

While communication capabilities in contemporary society facilitated information and contacting, it has diminished time for company together. Social communication through social networks facilitates the omitting of face to face presence which may influence communication standards in everyday life. Social media may produce lonely individuals amidst a crowd of friends/ followers (Karakoç & Taydaş, 2013, p. 36).

Although Facebook seems to endorse an extrovert life style, on the other hand it has also the potential to help introvert and solitary people to socialize. This forms a double sided relation between Facebook and loneliness (Tiryaki, 2015, pp. 123-124).

As a study on foreign students in Turkey, our study explores the relationship between Facebook usage patterns and loneliness subscale and loneliness level.

1. Loneliness in Social Life

The problem of loneliness is not a problem that is solely seen in the societies of underdeveloped and developing countries. This problem has been increasing in parallel with progress, development, technology production and the use of technology in the world.   With the beginning of the development process, business fields and employment capacities are also gradually increasing. In conclusion, development turns into the principal motif of the social change. There directly lies this phenomenon of change in the base of the birth and rise of social and psychological problems. In majority of the developed countries, there are numerous institutions and organizations which aim to sort out such problems of people and help them in their adaptation (Özodaşık, 2001, p. 15).

Perlman and Peplau (1981, p. 32) define the loneliness as "a negative experience which emerges as a result of significant qualitative or quantitative inadequacy of social relationship networks for the person". This description of loneliness by Perlman and Peplau points out three distinctive and significant aspects related to loneliness: (**1**) Loneliness results from inadequate social relationships of people in the society, (**2**) loneliness is a subjective phenomenon, (it doesn't always mean social isolation, the person may feel lonely even in the crowd), (**3**) loneliness is a unpleasant and agonizing state of emotion.

Lonely people don't feel in harmony with the people around them. Because, they generally perceive themselves distinctive from other people from the points of their lives, attitudes and opinions. They generally lack of friends due to the scarcity of their social activities, their avoiding from responsibilities and their failure in forging closer ties with other people. Since they aren't very close with anybody, they don't give confidence to the people around them; the number of the people around them whom they can ask for help when they need is only a few. They are generally introverted since they don't share their sorrow and joy. Those people are mostly pessimistic, anxious, withdrawn, insecure and lacking of the activities in the society. Since they fail in establishing emotional intimacy with the other people, their relationships are superficial and factitious (Özodaşık, 2001, p. 65; Jin, 2013, p. 2464).

According to Perlman and Peplau (1998, p. 573) who made similar evaluations, the characteristics defining the lonely person may be explained as follows: The lonely person has negative feelings such as discrepancy, being isolated, debauchery, being unlovable and insignificance and being rejected. They are introverted, avoiding social contacts, mostly working extremely hard, sorry, furious, depressive, with low self-esteem, troublesome and they feel angry at the others.

According to Jin (2013, p. 2464), loneliness has some negative impacts on mental and physical health. Loneliness is related to depression, substance uses, committing suicide and death. Among the problems of lonely people, lower friendship relationship from the point of quality and quantity, fewer activities with friends are the major ones.

Majority of the individuals who hasn't tagged their status as "lonely" yet although they extremely severely experienced this agonizing experience, even majority of those who

tags themselves as "lonely" don't or can't receive help from the clinics. Instead, they use overcoming strategies which they consciously or unconsciously developed. Those strategies help them diverse from their own status or finding something alternative for the social interactions they need and make up for this deficiency (Çakır & Çakır, 2011, p. 132). The recent researches generally provide evidences that using media could be one of the alternative ways to cope with loneliness (Çakır & Çakır, 2010; Çakır & Çakır, 2011; Gülnar & Balcı, 2010; Gülnar & Balcı, 2011; Balcı & Gölcü, 2013; Özben, 2013; Tiryaki, 2015).

The introvert personality traits of the lonely people and their escaping from face to face relationships lead them to the virtual world which is one of the ways to establish a risk-free relationship. Since the people having the feeling of loneliness at high levels wouldn't like to be known well in the society and the internet environment allows hiding the names, ages, gender and sense of identity and easily gaining a different identity, it provides a comfortable environment for them. Thus, the lonely people of the contemporary ages may make friend in the virtual environments without their identity or using the identities they emulate and they may find response to their various needs and expectations. Even such that, in the virtual world, they may comfortably express the thoughts, emotions, attitudes and behaviors they had to suppress in the real world. It may be observed that the lonely person who is quiet and introverted in the real life may easily express the feeling of hostility and humiliate other people or depressed pornographic emotions related to sex may easily emerge (Özodaşık, 2001, p. 104).

2. Loneliness and Facebook

While Facebook supports the use of it by the extravert people due to its nature, on the other hand, it employs a structure which enables people who are introverted and suffer from loneliness become socialized. Thus, loneliness and the use of Facebook become related to each other. The researchers claim that extensively use of internet had close relationships with loneliness and numerous symptoms of depression (Rosen et al., 2013, p. 1243).

Some evidences reveal that the lonely people use Facebook more frequently than those who aren't lonely. The lonely individuals regard the internet access as another way to communicate with people and get motivated; thus, the use of Facebook enlarges the social world of such people. It is a well-known fact that, moreover, the real world gets deprived of social resources since the individuals met new people using the internet and they are positively affected through joining the social groups. The lonely people may use Facebook in order to benefit from the social resources. Finally, the theory of utilizations and satisfactions focuses on that individuals execute the mass communication and other types of communication in order to satisfy their needs and requests (Katz et al, 1973, p. 165; Katz et al, 1974, p. 510). If the individual is alone, then Facebook may be an instrument to provide social interaction and serve to the relationship between requests and needs (Song et al., 2014, p. 447).

The psychological-based issues such as loneliness and depression are the previews of problematic Facebook utilization. The individuals with poor inter-personal

communications may prefer computer-based communication methods in order to contact with people. The communication executed in the virtual world safer, less risky and anonym than face to face communication (Morahan-Martin & Schumacher, 2000, p. 25) attracts the lonely and depressed people more. In other words, the users focus on spending their time online rather than real life conditions and they spend more time on this field. As an alternative, the internet may provide security to the people experiencing lack of confidence in their social skills (Yuen & Lavin, 2004, p. 380).

In their research executed in Australia, Ryan and Xenos (2011, pp. 1662-1663) determined that Facebook users mostly suffered from the loneliness resulting from their families. The authors also discovered that the individuals who don't use Facebook suffered from the loneliness more than those who use it. It shows that the lonely people use Facebook more, the level of loneliness decreases among the individuals who consistently use Facebook while those levels are rather high among the individuals who don't use. Moreover, the individuals who use Facebook are more inclined to social shyness than those who don't use. There is no distinct relationship between the loneliness levels of the participants and the sub-dimension of romantic loneliness. However, there is a positive and significant relationship between the civil time spent on Facebook and loneliness levels. As the results stated, the Facebook users are more extroverted, narcissist and they have strong family loneliness. The individuals who don't use Facebook are more responsible, shy and socially alone. According to Marche (2012) who made similar evaluations, Facebook encourages people to get in touch with people except their families at the risk of losing their families or provides an opportunity for companionship with people having unhappy family relationships for the first thing.

When the data obtained by Skues et al., (2012, p. 2417) who researched the connection between the quantity of friends on Facebook and the loneliness levels and executed on 548 university students is examined, it is striking that the users who has a lot of friends on Facebook had higher loneliness levels. On the other hand, the evidences showing the uncertainty about whether the high quantity of friends is effective on decreasing the levels of loneliness are concomitantly presented (Tiryaki, 2015, p. 125).

According to the data obtained by Balcı and Gölcü (2013, pp. 271-273) who conducted a research on Facebook addiction among the university students in Turkey, the strongest independent variant which discriminate the addicted ones from non-addicted ones is the level of loneliness among the university students who answered the questions of this research. Accordingly, Facebook addicted people feel themselves more lonely. The more level of feeling lonely increases among the participants the more level of addiction to Facebook increases.

Özgür (2013, p. 680) who examined the relationship between the addictiveness of Facebook and the levels of anxiety for interaction and loneliness levels determined that the average scores of teacher candidates for the addictedness to social network sites were below the average while their average scores for the anxiety of communication and their loneliness levels were above the average. Moreover, it was revealed that there was a high level of relationship between the levels of addictedness to the social network

sites among the teacher candidates and their anxiety of communication, the relationship between loneliness levels and addictedness levels to social networks sites was moderate. Again, the research points out that the individuals with high levels of loneliness used the social network sites more densely and this dense utilization may cause negative effects on the individuals. As the author stated, the online environments enabled individuals who especially suffer from the anxiety of interaction and/or lonely individuals express themselves more comfortably and sort out their loneliness through establishing new friendships and they lead the use of such environments more frequently.

In another study executed in Turkey, Tiryaki (2015, p. 228) examined the relationship between the loneliness levels of the individuals in social life and their addictedness levels to Facebook. When the results of the research were reviewed, a low level and positively significant correlation between the loneliness levels of the participants and their addictedness levels may be seen. In other words, the loneliness levels of the participants increase the same as the increase in the levels of addictedness.

In the consideration of the literature review above, the answers are sought for the following 6 questions:

- ✓ **RQ1:** What is the pattern of the use of Facebook among the foreign students?

- ✓ **RQ2:** Is there a relationship between the sub-dimensions of loneliness among the students?

- ✓ **RQ3:** Do the levels of loneliness among the foreign students differentiate according to the gender?

- ✓ **RQ4:** Do the levels of loneliness among the foreign students differentiate according to the use of Facebook?

- ✓ **RQ5:** Is there a relationship between the levels of loneliness and the use of Facebook?

- ✓ **RQ6:** What type of relationship is there between the levels of loneliness and the reasons for using Facebook?

3. Method

This study which based the field research as the method has descriptive character which aims to reveal the relationships between the habits of foreign students (the students of Selcuk University, Necmettin Erbakan University, Mevlana University and Karatay University) proportionally related to using Facebook and the use of Facebook.

3.1. Procedure and Sampling

A field research was conducted in the sample of Selçuk University, Necmettin Erbakan University, Mevlana University and Karatay University in order to determine the habits of foreign students in Konya, Turkey for using Facebook and the relationship between the use of Facebook and the level of loneliness. Thus, the population of the study consists of foreign students studying at four universities. The reason for especially

choosing university students in the study is their opportunity to access the internet more easily and their background information at high levels thus the possibility that they use Facebook is higher than the other population groups (Balcı & Sarıtaş, 2015, p. 515).

For the determination of the samples, accidental sampling technique was employed; a face to face interview was conducted on the students who study at faculty and high schools in the campuses of Selçuk University, Necmettin Erbakan University, Mevlana University and Karatay University in the center of Konya. After the preliminary review, 316 questionnaires were considered appropriate for the analysis.

3.2. Measurements

A questionnaire form consisting of 40 questions was prepared to determine the habits of the university students participating the research related to using Facebook and the relationship between the use of Facebook and their loneliness levels. The questionnaire form was prepared by the researchers through researches related to the topic so that it can be understood by the participants. In the first section of the question form, the Social and Emotional Loneliness Scale (**SELSA- A The Social and Emotional Loneliness Scale for Adults**) developed by DiTommaso and Spinner'in (1993) and DiTommaso et al., (2004) consisted of 15 items and based on the scoring of the participants between 1 and 7 (*1= I Totally Disagree, 7= I Totally Agree*). In order to reveal the reliability of the scale, the reliability coeefcient was calculated as follows: *Cronbach's Alpha*= .802. in the second section, 10 questions were designed in order to reveal the patterns related to the use of media among the participants. In the third section, the reasons for the participants use Facebook using a scale consisting of 10 questions in the form of 5 point Likert Scale (1= *I totally disagree, 5= I totally agree)* employed in the studies of Balcı and Gölcü (2013) and Balcı and Tiryaki (2014). The reliability of the scale is rather high (*Cronbach's Alpha*= .806). In the final section of the questionnaire, the demographic characteristics of the foreign university students were examined through 5 questions.

3.3. Analytical Procedure

The field research was conducted through face to face interviews between the dates of March 1 and March 15, 2015. The obtained data was processed in the electronic environment using a statistical package. In the analysis of data, the *Frequency Analysis* was based in determining the demographic characteristics of the participants answering the questions and obtaining some data related to the attitudes of using Facebook. It was aimed through the *Independent Samples T-Test* to measure whether the loneliness levels of the participants to the research differentiated according to the gender and the use of Facebook or not. The *Correlation Analysis* was employed in order to determine the relationships between the variants such as the use of Facebook and their loneliness levels. The *Exploratory Factor Analysis* was used to determine the sub-dimensions of loneliness.

4. Results

In this section of the research, some findings employing the some findings showing the relationships between demographic characteristics of foreign university students and

their habits of using Facebook, their loneliness levels and the use of Facebook and loneliness were employed.

4.1. Some of Features of Participants

✓ From the point of gender of the participants to the research, 68% of them are male while 32% of them are female. The rates have a level enough to make comparisons regarding the gender.

✓ When the descriptive statistics of age distribution is analyzed, it was found that the ages of the participants varied between 17, the lowest and 39 the highest. The average age of the participants to the research was 21,8 while its standard deviation was 2.92.

✓ Among the foreign university students who answer the questions of the research, 3.8% of them stated that they lived alone at home, 23.1% stated they lived with at home with their friends, 3.5% of them lived with their parents and 69.6% of them lived in dormitories.

✓ Totally 316 people from Somali, Mauritania, Ethiopia, Togo, Kosovo, Ghana, Libya, Turkmenistan, République de Côte d'Ivoire, Chad, China, Mongolia, Thailand, Cameroon, Egypt, Afghanistan, Egypt, Azerbaijan, Guinea, Bosnia Herzegovina, Yemen, Nepal, Indonesia, Sudan, Georgia, Montenegro, Kazakhstan, Bulgaria, Congo, Nigeria, Indian Iraq, Djibouti, Tanzania, South Africa Republic, Kirgizstan, Poland, Mali, Kenya, Benin, Algeria, Niger, Burkina Faso, Russia, Syria, Uzbekistan, Philistine, Uganda, Bangladesh, Iran, Macedonia, Mozambique, Algeria, Pakistan, Norway, Belgium, Malaysia, Ukraine, Portugal, Leetonia, Canada, Tajikistan, Madagascar, Fas, Germany and Crimea in various quantities.

✓ When the descriptive statistics of among the foreign university students staying in Turkey are considered, the period of staying in Turkey varied between 1 year, the least and 10 years, the most. The average period for staying in Turkey among those who answered the questions of the questionnaire was 2.2 years.

✓ In order to interrogate the loneliness levels of the participants in social life (in addition to the **SELSA- A Loneliness Scale**), a scale which they will score between 1 and 10 was employed. The emerging results show that the participants had a level of loneliness below the average ($\overline{X}$ =4.11).

4.2. Habits of Facebook Usage

The most frequently used mass communication vehicle is internet by foreign students participating to the survey ($\overline{X}$ =4.48). Thereafter social media takes its place on second turn with 4.27 arithmetical mean (Facebook, Twitter etc.). The less used mass communication vehicle is radio by participants ($\overline{X}$ =1.96).

Table 1. *Central Tendency Statistic about Facebook Usage Frequency*

	N	Range	Min.	Max.	$\overline{x}$	SD
Internet	316	4	1	5	4.48	0.97
Social Media (*Facebook, Twitter etc.*)	316	4	1	5	4.27	1.20
Television	316	4	1	5	2.16	1.19
Newspaper	316	4	1	5	2.15	1.26
Radio	316	4	1	5	1.96	1.23

90.8 percent of foreign students answering to the survey questions declared that they use Facebook, 9.2 percent of foreign students declared that they do not use Facebook (see, *Table 2*). The findings show that new communication technologies like social networking sites have become an indispensable part of university students.

Table 2. *Participants' Facebook Usage Situation*

Facebook Usage Situation	Frequency	Percent
Facebook User	287	90.8
Facebook Non-User	29	9.2

5.9 percent of participants declared that they have been using Facebook for more than 1 year; 39.7 percent of participants have been using Facebook for 1-3 years, 40.8 percent of participants have been using Facebook for 4-6 years and 13.6 percent of participants have been using Facebook for 1-6 years. According to these results, majority of Facebook users using Facebook 1-6 years constitutes the majority (see, *Table 3*).

Table 3. *Facebook Usage Experiences of Participants*

Facebook Usage Experience	Frequency	Percent	Valid Percent
Less than 1 year	17	5.4	5.9
1-3 years	114	36.1	39.7
4-6 years	117	37.0	40.8
7 years and more	39	12.3	13.6
Missing System	29	9.2	

When the descriptive statistic results of foreign students' Facebook usage time in one session are taken in hand; participants generally use Facebook the lowest 5 minutes and the highest 400 minutes. Foreign students' Facebook usage time in one session is approximately 54 minutes.

Table 4. *Central Tendency Statistics of Facebook Operating Time*

	N	Range	Min.	Max.	$\overline{\mathrm{x}}$	SD
Facebook Operating Time	261	395	5	400	54.08	53.28

It is understood from the Table 5 that 16.1 percent of participants use computer, 42.7 percent of participants use mobile phones and 41.3 percent of participants use these two vehicles to benefit or reach Facebook and its applications. It is found that mobile phones providing people the possibility of reaching Facebook from every place are the most used connection vehicle by foreign students to use Facebook.

Table 5. *Facebook Connection Tools of Participants*

Facebook Connection Tools	Frequency	Percent	Valid Percent
Computer	46	14.6	16.1
Mobile Phone	122	38.6	42.7
Both of them	118	37.3	41.3
Missing System	30	9.5	

When the Table 6 is analyzed; it is seen that participants use social networking sites like Facebook to communicate with friends ($\overline{\mathrm{x}}$ = 3.99), to send or receive messages ($\overline{\mathrm{X}}$ = 3.94), to learn something about people and events ($\overline{\mathrm{x}}$ = 3.74) and to employ their leisure times ($\overline{\mathrm{x}}$ = 3.43). On the other hand, foreign students accept Facebook as a communication vehicle but they use this vehicle relatively lesser to share personal information, to write and read others' walls.

Table 6. *Central Tendency Statistic about Facebook Usage Reasons.*

Facebook Usage Reasons	N	$\overline{\mathrm{X}}$	SD
To communicate with friends	287	3.99	1.08
To instant messaging	287	3.94	1.04
To get information about people and events	286	3.74	1.11
To spent leisure times	286	3.43	1.25
To reach communication information of people	286	3.39	1.13
To entertain and relax	286	3.38	1.30
To loading photos and looking photos of acquaintances	287	3.32	1.28
To be a keen judge of people	287	3.19	1.28
To read writings on my wall and write others' wall	287	3.13	1.26
To share personal presentation and profile information	286	2.93	1.36

Note: In the scale of Facebook Usage Reasons 1 is coded as *I never agree* and 5 are coded as *I completely agree*.

4.3. Loneliness Subscales of Participants

15 items prepared to define the Facebook usage level of foreign university students were taken in hand with using factor analysis in accordance with the answers given to these items and then it was understood that 3 factor group can be taken in hand after the research of Evigenvalue and scree plot. 1 item was excepted from analysis because of not having loading value or being under the level of minimum loading level. Factor loadings and arithmetical means of statements in the scale are displayed on *Table 7*.

Table 7. *Items and Varimax Rotated Factor Structure Coefficients for the Family, Social and Romantic Subscales (N= 316)*

SELSA- S= *Social and Emotional Loneliness Scale for Adults*	$\overline{\mathrm{x}}$	Factor Loading
1. Factor: *Family subscale*		
11- I feel part of my family [a]	3.34	.799
12- My family really cares about me [a]	3.25	.733
8- I feel close to my family [a]	3.59	.708
4- There is no one in my family I can depend on for support and encouragement, but I wish there was	3.58	.616
1- I feel alone when I am with my family	2.98	.495
2. Factor: *Social subscale*		
2- I feel part of a group of friends [a]	3.38	.688
9- I am able to depend on my friends for help [a]	3.15	.643
7- I don't have any friends who share my views, but I wish I did	3.14	.604
13- I do not have any friends who understand me, but I wish I did	2.75	.533
3. Factor: *Romantic subscale*		
6- I have a romantic or marital partner who gives me the support and encouragement I need [a]	3.90	.817
14- I have a romantic partner to whose happiness I contribute [a]	3.78	.760
3- I have a romantic partner with whom I share my most intimate thoughts and feelings [a]	3.83	.625
10- I wish I had a more satisfying romantic relationship	3.96	.608
15- I have an unmet need for a close romantic relationship	3.86	.574

SELSA- S= Social and Emotional Loneliness Scale for Adults (short form): [a] Reverse scoring on these items.

The table with varimax rotation was taken into account for the evaluations and classifications of factors. Eigen values of items put to factor analysis are higher than 1.5 and as minimum loading value criteria 0.5 was used. Reliability quotient (Cronbach's α = .802) of the 15 items implicated to factor analysis was found up to the commonly

accepted level. Three factors coming into picture after the analysis explains 48.49 percent of total variance.

When factor analysis is taken in hand, the first important loneliness subscale of foreign university students is family. This subscale explains 19.28 percent of total variance. Reliability ratio (Cronbach's α = .746) and eigenvalue (Eigenvalue= 3.78) of family loneliness subscales are higher than from the accepted level. Second important dimension's name is "social". This dimension explains 15.28 percent of total variance; eigenvalue (Eigenvalue= 1.88) and reliability ratio (Cronbach's α = .722) are satisfactory. Third and the last dimension are named as romantic. This dimension explains 13.71 percent of total variance. Eigenvalue (Eigenvalue= 1.57) and reliability ratio (Cronbach's α = .637) of romantic dimension are in a fair condition.

Table 8. *Findings Correlations Analysis among Family, Social and Romantic Subscales (Pearson r)*

	SELSA-S Subscale		
Subscale	Romantic	Family	Social
Romantic	1	222**	251**
Family		1	299**
Social			1

Note: **p< .01

When the findings of Correlation Analysis in Table 8; it is drawn attentions that there is a weak meaningful relation between subscales of loneliness such as Family-Social (r= .299, p<.01), Romantic-Social (r= .251, p<.01) and Family-Romantic (r= .222, p<.01).

Table 9. *Differences in Loneliness Subscales According to Gender*

	Gender	N	$\overline{\mathrm{x}}$	SD	t-value	Sig.
Romantic	Male	215	4.05	1.23	.074	.941
	Female	101	4.04	1.13		
Family	Male	215	4.25	0.93	-.733	.464
	Female	101	4.33	0.87		
Social	Male	215	4.07	0.89	2.27	**.024**
	Female	101	3.83	0.86		

The importance cared by the foreign university students to Social Loneliness Subscale shows a meaningful difference according to gender (t= 2.27; df= 314; p<.05). When the results of descriptive statistic are taken in hand; male experience more loneliness than female. There is no meaningful relation between gender and other two loneliness subscale.

Table 10. *Correlation Analysis Findings between Residence Time in Turkey and Loneliness Subscales of Participants (Pearson r)*

	SELSA-S Subscale		
	Romantic	Family	Social
Residence Time in Turkey	.112*	.079	.114*
N	316	316	316

Note: *p< .05

There is a weak positive relation between the living period of the participants in Turkey and Romantic (r= .112, p<.05) and Social (r= .114, p<.05) loneliness subscale.

Table 11. *Correlation Analysis Findings between Loneliness Level and Loneliness Subscales of Participants (Pearson r)*

	SELSA-S Subscale		
	Romantic	Family	Social
Loneliness (Compute)	.758**	.678**	.685**
N	316	316	316

Note: *p< .01

When the relations between loneliness level and loneliness subscales of foreign university students are taken in hand; it was found that there is a powerful and meaningful relation between loneliness level and Romantic subscale (r= .758, p<.01). This study also showed that there is a positive and meaningful relation between Family (r= .678, p<.01) and Social (r= .685, p<.01) subscale.

4.4. Relations between Facebook Usage and Loneliness

The loneliness level of foreign students according to gender shows meaningful difference (t= 2.04; df= 312; p< .05). Loneliness level of male ($\overline{x}$=4.25) are higher than female ($\overline{x}$=3.74) among participants.

Table 12. *The Difference in Loneliness Level According to Gender*

	Gender	N	$\overline{x}$	SD	t-value	Sig.
Loneliness (Compute)	Male	214	4.25	2.15	2.04	**.041**
	Female	100	3.74	1.86		

Similarly, loneliness level of foreign students according to Facebook usage situation has meaningful differences (t= 2.71; df= 312; p< .01). When the table of descriptive statistic is analyzed, it is seen that average of loneliness level of Facebook users' loneliness level ($\overline{x}$ = 4.18) is higher than other people who do not use Facebook ($\overline{x}$ = 3.10).

Table 13. *The Difference in Loneliness Level According to Facebook Usage Situation*

	Facebook Usage	N	$\overline{X}$	SD	t-value	Sig.
Loneliness (Compute)	Facebook user	285	4.18	2.11	2.71	**.007**
	Facebook non-user	29	3.10	1.26		

When the correlation analysis are taken in hand to display the relation between Facebook using time and loneliness level, there is a weak positive meaningful relation between the two variants (r= .148; p< .05).

Table 14*. Relation between Facebook Operating Time and Loneliness Level (Pearson r)*

	Loneliness (Compute)
Facebook Operating Time	.148*
N	259

Note: *p< .05

When the correlation analysis results are taken in hand to show the relation between Facebook usage purpose of participants and loneliness level, there is a weak positive meaningful relations among Facebook usage purposes such as to communicate with friends (r= .173; p< .01), to spent leisure times (r= .211; p< .01), to read writings on my wall and write others' wall (r= .142; p< .05), to instant messaging (r= .214; p< .01), to share personal presentation and profile information (r= .132; p< .05).

Table 15. *Relation between Facebook Usage Reasons and Loneliness Level*

	Loneliness (Compute)	
Facebook Usage Reasons	**N**	**Pearson *r***
To communicate with friends	287	.173**
To loading photos and looking photos of acquaintances	287	.004
To entertain and relax	286	.065
To spent leisure times	286	.211**
To get information about people and events	286	.096
To read writings on my wall and write others' wall	286	.142*
To instant messaging	287	.214**
To be a keen judge of people	287	-.007
To reach communication information of people	287	.070
To share personal presentation and profile information	286	.132*

Note: *p< .05, **p< .01

Discussion

This study was designed to explore the relationship between the Facebook usage patterns of foreign students living in Turkey and their loneliness perception levels. As a first finding, it was found that the most frequent used communication medium was the social media. A large majority (90%) of the participants stated that they had been using Facebook since 1-6 years with an average duration of 54 minutes each session. Usage motives were given as communicating with friends, getting informed about events and people and leisure time pursuit.

The most frequent expressed loneliness subscale of the participants who were far away from their families and county, was understandably missing of family members, followed in second by social loneliness and then by romantic loneliness.

The study revealed a positive relationship between loneliness of foreigners and Facebook usage that implies social network usage is increasing with rising loneliness level. Facebook usage activities like seeking contact with friends, writing to others' walls, messaging etc. were increasing with increase in loneliness level. Facebook provides to individuals who suffer from social interaction anxiety, loneliness and similar socialization inhibitions the convenient means for finding contacts for friendships and relationships, developing and maintaining a relationship, bringing individuals with common interests together, thus has the features of a helpful socialization environment.

To be able to harness the potential of social networks, in particular individuals in a foreign environment need to be aware of capabilities but also the possible counterproductive impacts that uncontrolled use could cause. Possible adverse effects of uncontrolled social network use should be communicated in appropriate activities and settings to notify all users (Özgür, 2013, p. 683). An additional measure to help to foreign students in their adaptation process may be psychological counseling services by their respective universities with the aim to enhance their social skills.

As a result, this study has been conducted in four different universities in the city of Konya in Turkey with the aim to explain the nature of the relationship of the felt loneliness level of foreign students and their social network usage patterns. Further studies can be implemented in other cities and universities in Turkey and can compare varying individual parameters of dissimilar groups like with Turkish students to shed more light on the relationship of perceived loneliness levels and Facebook usage.

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