

Education and Science tedmen



Vol 41 (2016) No 183 217-231

Effects of Social Network Use on Happiness, Psychological Well-being, and Life Satisfaction of High School Students: Case of Facebook and **Twitter**

Uğur Doğan 1

Abstract **Keywords**

This study aimed to assess whether or not the social network site (SNS) usage of high school students predicts levels of psychological well-being, happiness, and life satisfaction. In order to determine SNS usage, the question "To what extent do you use Facebook and Twitter in a day?" was asked, and the hours spent on SNS were summed and examined. The study was conducted with 459 students in high school educaitob in Bolu district of Turkey. The applied structural equation modeling indicated that SNS usage predicted levels of happiness, psychological wellbeing, and life satisfaction. It was observed that the fit indexes of the created structural equality modeling(x²: 483.28, df: 166, x²/df: 2.91, RMSEA: 0.065, NNFI: 0.95, CFI: 0.95, SRMR: 0.057, GFI: 0.91) had good fit values. According to the results, the social network usage of high school students is an important predictor in terms of making students happy, and ensuring psychological well-being and life satisfaction.

Social network sites usage Happiness

Psychological well-being Life satisfaction High school students

Article Info

Received: 22.04.2015 Accepted: 15.09.2015

Online Published: 17.02.2016

DOI:10.15390/EB.2016.4616

Introduction

Social network sites (SNS) are important for social, emotional and cognitive development of youth. SNS such as Facebook and Twitter provide opportunity for users to give information about themselves, share pictures and connect with others. It is obviously seen that SNS have promoted in order to promote social interactions in a virtual environments. People move their identity to virtual environments through posting personal information, sharing photographs, specifying their interests. These interactions indicate to youth's needs such as making friends and peer feedback (Pempek, Yermolayeva, & Calvert, 2009). The purpose of youth and college students' SNS usage are make social capital, provide sources for social interactions, keeping touch with friends and frequently meeting friends (Kalpidou, Costin, & Morris, 2011; Lenhart & Madden, 2007; Obi, 2014; Öztürk & Akgün, 2012; Rae & Lonborg, 2015).

¹ Muğla Sıtkı Koçman University, Faculty of Education, Department of Educational Sciences, Turkey, ugurdogn@gmail.com

According the study of Turkish Statistical Institute (TSI) (2015)'s "Information and Communication Technology (ICT) Usage Survey on Households and Individuals" 42,921,781 people use internet in Turkey. The rate of households having internet in Turkey is 69.5%, and the rate of active users is 94.2%. According to the same study, 80.9% of the people internet use it for making profile, sending instant massage, uploading photographs etc. on SNS. It can be seen that SNS usage has been increasing in TSI's statistics. The rate of "Facebook" and "Twitter" usage was given by TSI in 2011 at the first time, and the rates of SNS users in internet users were 50.8% (TSI, 2011), 73.2 in 2013 (TSI, 2013), 78.8 in 2014 (TSI, 2014) and 80.9% in 2015 (TSI, 2015) . Based on the statistics, it can beconcluded that SNS usage shows an increasing trend in Turkey. According to the statistics that Kemp (2014) prepared from the "We are social" website, there are 1, 182 million Facebook and 232 million Twitter users, worldwide. According to the same study, 45% of Internet users in Turkey use SNS, 93% of whom are Facebook members, and 72% of whom have Twitter memberships. Therefore, it may be considered that almost all users in Turkey are members of at least one social network. These numbers show us exactly to what degree SNS have become a part of our lives. Why does SNS usage increase? Communicating through SNS is very easy and chip (Valkenburg, Peter, & Schouten, 2006). Despite looking complicate, SNS usage had a simple communicate symmetry. For example, one student can communicate with a teacher or expert via SNS, vice versa. This explains ease of SNS usage (Vural & Bat, 2010).

The relevant literature shows that with the usage of SNS, the number of studies regarding human psychology has increased (Correa, Hinsley, & de Zúñiga, 2010; Lepp, Barkley, & Karpinski, 2014; Pempek et al., 2009; Salehan & Negahban, 2013; Tandoc Jr, Ferrucci, & Duffy, 2015). Moreover, recent databases show that most read and examined studies are those that were conducted on Internet usage, social media, or usage of social networks (Fox & Rooney, 2015; Ross et al., 2009; Ryan & Xenos, 2011). Previous studies have usually shown a negative relationship between psychological well-being and electronic media usage (Mathers et al., 2009). These investigations were primarily carried out on traditional media, and showed that Internet usage disrupts social relationships while isolating people in social terms; the individual cuts off his/her real relationships with his/her environment because of the social media and devotes him/herself to his/her virtual relationships, which may negatively influence the psychological well-being of the person (Lee, Lee, Choi, Kim, & Han, 2014). However, according to those who are opposed to this opinion, usage of the Internet, especially SNS, provides the individual with a freedom in terms of communicating and socializing, and this situation, the usage of SNS, shows that there is a positive relationship between SNS usage and well-being (Chiu, Cheng, Huang, & Chen, 2013; Gonzales & Hancock, 2011; Kim & Lee, 2011). Especially, Yang and Brown (2013)'s study give us an idea that how SNS usage influence psychological well-being; incoming college students that used Facebook to develop new connections reported lower social adjustment and higher levels of loneliness while incoming students that used the site to maintain existing relationships were more likely to report better social adjustment and lower levels of loneliness. Furthermore, according to Buhrmester and Prager (1995)'s model of self-esteem; peer feedback effect user's self-esteem. User's self-esteem is affected directly by tone of the feedback that users received on their profiles, self-esteem effect well-being indirectly (Valkenburg et al., 2006).

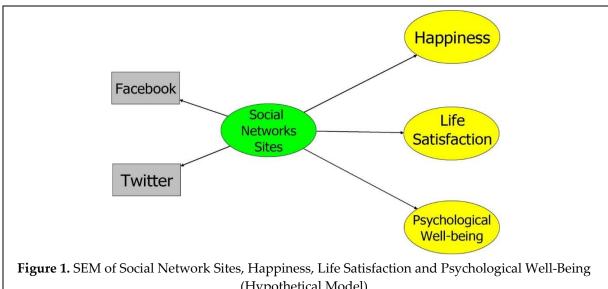
The word happiness is a concept that is used to mean the same as well-being, and these two terms are used interchangeably in daily life. Layard (2005) defined happiness as getting enjoyment out of life and feeling great. Other researchers considered happiness to be something that can be measured using brain waves (Kahneman, Diener, & Schwarz, 1999). The indicator of happiness is usually accepted as experiencing positive emotions frequently, such as safety, joy, happiness, and hope; experiencing negative emotions, such as anger, hatred, anxiety, fear, despair, and sadness relatively less frequently, and being satisfied with life spaces, such as marriage, work, or health (Eryilmaz, 2011). We can also include Internet usage, one of the most important needs of our era, in

the concept of happiness; qualitative (Eren, Çelik, & Aktürk, 2014) and quantitative (Şener, 2009)

studies showed that SNS usage makes people happy.

Life satisfaction and other indicators of quality of life reflect a general evaluation of one's surroundings which may be positive or negative (Scheufele & Shah, 2000). Usually, researchers consider life satisfaction as personal contentment (Diener, Emmons, Larsen, & Griffin, 1985). According to Kahneman and Krueger (2006)'s study life satisfaction is determined by their social connection partly. Life satisfaction is dependent on one's friends (Leary & Kowalski, 1990), frequently of interpersonal communications that have positive affect (Diener, Sandvik, & Pavot, 2009) and happiness of one's family members (Clore et al., 2001) which are correlated to high life satisfaction. It is possible that people who actively participate in Facebook are more likely to experience connectedness and feel happier (Valkenburg et al., 2006). The relationship between personal contentment and SNS also could be reciprocal. For instance, college students with lower levels of life satisfaction could seek to participate in online networks to increase their personal well-being (Ellison, Steinfield, & Lampe, 2007).

It is seen, our relationship and interactions with people, whether we know or not is moved to SNS by the internet into our lives. Accessing internet and SNS is easier due to smartphones. In spite of being most important part of our life's, and that correlating SNS with happiness, life satisfaction and psychological well-being which are predictor of life quality, was not examined via holistic perspective. The studies in Turkey, SNS was investigated in context of motivation sources of SNS, usage of SNS, SNS types, spend time on SNS, friends on SNS, meeting SNS's friend offline etc. (Bilen, Ercan, & Gülme, 2014; Dal & Dal, 2015; Eren et al., 2014; Göker, Demir, & Doğan, 2010; İşman & Albayrak, 2014; İşman & Hamutoğlu, 2013; Kobak & Biçer, 2008; Öztürk & Akgün, 2012; Şahin Baltacı, İşleyen, & Özdemir, 2012; Şener, 2009; Vural & Bat, 2010). It is considered that this study will contribute literature of our country. In light of the above, in this study a structural equation modeling (SEM) to predict Facebook and Twitter usage was used, from which many Internet users benefit, and to identify the most popular SNS with regard to the happiness, life satisfaction, and psychological well-being of high school students. The model of the tested hypothesis is given in Figure 1.



(Hypothetical Model)

Method

Study Group

Research sample consisted of 459 voluntary participants from five high schools that we randomly selected from 15 high schools in the Bolu district of Turkey. The participants were 9th, 10th, and 11th grade students, of whom 172 (37.5%) were male and 287 (62.5%) were female, and who ranged in age between 15 and 19 years. Data collection and data analysis were carried out anonymously. Since 12th grade students were preparing for the university entrance exam, they were not reluctant to answer the questionnaires. For this reason, data derived from 12th graders were not included in the analysis.

Data Collection Tool

Social Network Sites Questionnaire: A questionnaire was developed to collect information regarding the students' use of SNS. This questionnaire consisted of two questions; the first of these was "To what extent do you use Facebook in a day?", and the second was "To what extent do you use Twitter in a day?"

Short Form of the Oxford Happiness Questionnaire: Happiness was measured using the Turkish version of the Short Form of the Oxford Happiness Questionnaire (Doğan & Cötok, 2011; Hills & Argyle, 2002). This is a 7-item, self-reported, 5-point Likert-type measurement scale (1=strongly disagree to 5=strongly agree). Higher scores indicated higher levels of happiness. Exploratory factor analysis for structural validity of the scale demonstrated 46.74% total variance for this Turkish adaption study. The results of confirmatory factor analysis indicated that the model was well-fit and the Chi-Square value (x^2 = 36.05, n= 532, SD= 13, p= 0.00), which was calculated for the adaptation of the model, was significant. The goodness-of-fit index values of the model were RMSEA = .074, NFI = .92, CFI = .95, RMR = .044, GFI = .97, AGFI = .93, and IFI = .95. The Cronbach alpha internal consistency coefficient of the Turkish form was .74. To ensure test-retest reliability, the scale was administered twice in 2 weeks to 81 college students. The Pearson's correlation coefficient was .85.

Psychological Well-Being Scale: Psychological well-being was measured using the Turkish version of the Psychological Well-Being Scale (Diener et al., 2010; Telef, 2013). This is an 8-item selfreported, 7-point Likert-type measurement scale (1=strongly disagree to 7=strongly agree). Higher scores indicated a higher level of psychological well-being. Exploratory factor analysis for structural validity of the scale showed 41.94% total variance for this Turkish adaptation study. The results of the confirmatory factor analysis indicated that the model was well-fit and the Chi-Square value (x²= 92.90, n= 339, SD= 20, p= 0.00), which was calculated for the adaptation of the model, was significant. The goodness-of-fit index values of the model were RMSEA = 0.08, SRMR = 0.04, GFI = 0.96, NFI = 0.94, RFI = 0.92, CFI = 0.95, and IFI= 0.95. The Cronbach alpha internal consistency coefficient of the Turkish form was .80. To ensure test-retest reliability, the scale was administered twice in 2 weeks to 100 college students. The Pearson's correlation coefficient was .86.

Life Satisfaction Scale: Life satisfaction was measured using the Turkish version of the Life Satisfaction Scale (Diener et al., 1985; Köker, 1991). This is a 5-item, self-reported, 7-point Likert-type measurement scale (1=strongly disagree to 7=strongly agree). Higher scores indicated higher levels of psychological well-being. This scale, which measures overall life satisfaction, is suitable for use with individuals of all ages from adolescent to adult. The Turkish translation of the scale was conducted using the "face validity" technique developed by Köker (1991). As a result of the item analysis, the correlation between the scores of each item and the total scores of scale was satisfactory. The test-retest reliability value of the scale was .86, the internal consistency coefficient was .80, and the test-retest reliability coefficient was .85.

Analysis of Data

Completion of the scales was anonymous and a guarantee of confidentiality was given to all participants. The students were divided into groups, and the scales were implemented in the classroom. The measures were counter balanced in implementation. The participants were fully informed of the purposes of the study before the scales were administered. Pearson's correlation coefficient was utilized to determine the relationships between variables and SEM was utilized to assess the contributions made by usage of SNS to the participants' happiness, life satisfaction, and psychological well-being. SEM examine the predictive association between two (or more) variables over time. Therefore, each variable is regressed onto its own lagged measure to determine the autoregressive paths and also onto lagged measures of other variables to estimate the directionality of effects between different measures. Lisrel 8.80 was used as a tool to analyze the pattern of correlations between SNS and happiness, life satisfaction, and psychological well-being.

Results

The findings showed a relationship between SNS use, happiness, life satisfaction, and psychological well-being, as well as how these variables (happiness, life satisfaction, and psychological well-being) are predicted by SNS use.

Descriptive Data and Inter-Correlations

Descriptive findings and correlation coefficients related to SNS use, happiness, life satisfaction, and psychological well-being are shown in Table 1.

Table 1. Descriptive Findings and Correlation Matrix for Variables Used in SEM

Variables	M	SD	1	2	3	4
1-SNS usage**	2.05	2.30	1			
2-Happiness	20.31	4.21	0.48*	1		
3-Life satisfaction	22.68	6.62	0.34*	0.65*	1	
4-Psychological well-being	32.60	5.80	0.27*	0.57*	0.51*	1

^{*}p<.01, n = 459 **Facebook M=1.29, Twitter M=.77

Table 1 presents correlations between pairs of variables in the model. As shown, SNS usage is positively related to happiness (r=.48), life satisfaction (r=.34), and psychological well-being (r=.27). These findings indicate that SNS usage, happiness, life satisfaction, and psychological well-being are positively changing variables.

Structural Equation Model

Before analysis, measurement models were calculated, and the fit indices are presented in Table 2.

Table 2. Goodness-of-Fit Statistics for Happiness, Life Satisfaction and Psychological Well-Being

Variables	X^2	df	X^2/df	RMSEA	SRMR	CFI	NNFI	GFI
Happiness	23.88	8	2.985	0.075	0.035	0.95	0.94	0.98
Life satisfaction	0.74	5	0.148	0.000	0.005	1	1	1
Psychological well-being	38.66	13	2.973	0.067	0.038	0.98	0.96	0.98

Note: x2 = Chi-square; df = degrees of freedom; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; NNFI = non-normed fit index; GFI = goodness-of-fit index.

All measurement models showed acceptable fit indices, according to most of the applied criteria. After specification of the measurement models, the SEM was evaluated using the Robust Maximum Likelihood estimation method with Lisrel 8.80. Figure 2 shows standardized estimates of the model.

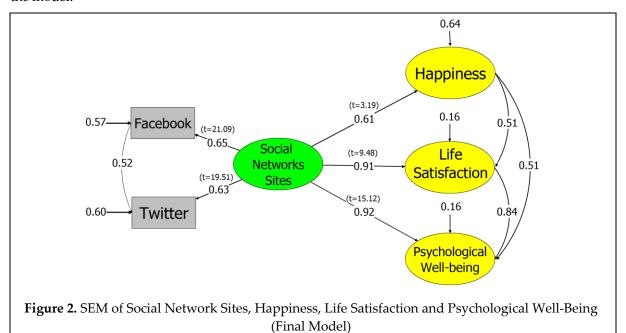


Figure 2 indicates that SNS use was significantly associated with happiness, life satisfaction, and psychological well-being. In addition, the t values were meaningful and all of the fit indices fell within levels of acceptable values (x^2 : 483.28, df: 166, x^2 /df: 2.91, RMSEA: 0.065, NNFI: 0.95, CFI: 0.95, SRMR: 0.057, GFI: 0.91). SNS use significantly predicted life satisfaction (β :0.91, $p\leq$.001) and psychological well-being (β :0.92, $p\leq$.001) almost at the same level. Similarly, SNS use significantly predicted happiness (β :0.61, $p\leq$.001), but not to the same degree as the other variables.

Discussion, Conclusion and Suggestions

This study aimed to evaluate the influence of high school students' SNS usage on happiness, life satisfaction, and subjective well-being. According to the SEM conducted in this respect, the study showed that Facebook and Twitter usage significantly predicted all three variables studied, and the fit indexes were good.

According to findings, SNS usage significantly and positively predicts happiness; in other words, SNS usage makes high-school students (i.e., teenagers) happy. It is seen that there are several studies supporting this finding in the literature: Brandtzæg and Heim (2009) found the SNS use make the people happy. Rae and Lonborg (2015) in their study including 311 university students reported that there is a positive relationship between SNS use and happiness. Moreover, Brooks (2015) in a study with 209 participants found that SNS usage positively predicts happiness among university students. In a similar way, Obi (2014) conducted a study with 300 high school students, and showed that there is a positive relationship between time spent on Facebook and happiness among high school students. However, there are also some studies having the results that are not supporting the findings of this study. Tandoc Jr et al. (2015) reported that time spent on SNS is 29th activity among 30 daily activities that make university students happy. Hayes, van Stolk-Cooke, and Muench (2015) found that SNS usage predicts negatively happiness among university students. In other words, SNS usage is not seen as a source of happiness. Muusses, Finkenauer, Kerkhof, and Billedo (2014) showed that there is a negative relationship between the Internet and happiness and internet usage negatively predicts happiness in university students as well. Similarly Uysal, Satıcı, and Akın (2013) found that in addition to a negative relationship between Facebook usage and happiness, Facebook usage negatively predicts happiness in university students. Similarly, Satıcı and Uysal (2015)'showed that there is a negative relationship between problematic Facebook use and happiness. Problematic Facebook use negatively predicts happiness in university students as well. Moreover, Spraggins (2009) found that happiness significantly negatively predicted problematic SNS usage in 367 university students. It should not ignore the fact that smart phone usage is common among the students who participated in this study, and that the smart phone is virtually the most important communication device among young people. In addition, it is obvious that the most important channel of communication is the Internet. When considered from this angle, SNS usage contributes to the happiness of students, because the more friends they have on Facebook or the more followers they have on Twitter, the more they see themselves as social beings, and the more they feel happy. According the previous studies, people use SNS for some reasons, such as to communicate with friends and family (İşman & Albayrak, 2014; İşman & Hamutoğlu, 2013; Kalpidou et al., 2011; Obi, 2014; Öztürk & Akgün, 2012; Rae & Lonborg, 2015; Şahin Baltacı et al., 2012), to make new friends (Bilen et al., 2014; Brandtzæg & Heim, 2009; Dal & Dal, 2015; Masur, Reinecke, Ziegele, & Quiring, 2014; Nadkarni & Hofmann, 2012), to get information about old friends (Dal & Dal, 2015; Göker et al., 2010; Kobak & Biçer, 2008; Pempek et al., 2009). Pempek et al. (2009) pointed out an interesting result; "Online-disclosure". In this way, students keep disclosing themselves to learn more information about others, stay away from meeting new people with face to face communication and so keeping the tensions to a minimum level. According to Tandoc Jr, Ferrucci, and Duffy (2015)'s study, since it provides communication and socialization, Facebook use reduces depression.

It was also found that SNS usage significantly and positively predicts degree of life satisfaction; it enables students to obtain satisfaction from their lives, as shown by the prediction coefficient. In their study examining social media usage, personality traits and life satisfaction, Correa et al. (2010) found the opposite; while there was a negative relationship between life satisfaction and SNS usage, such usage negatively affected life satisfaction. In addition, Oh, Ozkaya, and LaRose (2014)

showed that, although small, there is a significant relationship between social media usage and life satisfaction, and SNS usage indirectly influences life satisfaction. In another study, Spraggins (2009) showed that life satisfaction negatively and significantly predicts problematic SNS usage, while Mahan Iii, Seo, Jordan, and Funk (2014) showed that SNS usage positively predicted life satisfaction in athletes. Similarly, Ong and Lin (2015)'s study showed that there is a positive relationship between Facebook use and life satisfaction. On the other hand to the results of the study conducted by Satica and Uysal (2015) problematic Facebook use negatively predicts life satisfaction in university students. According to Castronova and Wagner (2011), the users who spend a second life on SNS have more satisfaction with their online lives compared to their daily lives. Facebook and Twitter, the most popular SNS, are available on every tablet and smart phone, and access to these networks via these technological devices is getting easier by the day. On the basis of this ease of access and use, participating in SNS has become an important part of life, so it is not surprising that this is one of the most important predictors of life satisfaction. For this satisfaction, Valenzuela, Park, and Kee (2009) noted that SNS usage does not make the people isolated and less connected on contrary to the popular view. People's life satisfaction is affected by experience, social interaction and some other factors. SNS provide a second life to individual by social interactions. Although some previous studies have shown that there is a negative relationship between SNS usage and life satisfaction, these networks continues to occupy an increasing amount of space in the lives of the high school students whom we studied. Kalpidou et al. (2011) explained one of the reasons of satisfaction that; not only SNS usage such as Facebook is not only provides the opportunity to meet with old friends but also helps get information about school events. Of course, the satisfaction obtained via social networks will directly influence their lives.

It was also found that SNS usage significantly and positively predicted psychological wellbeing; as the usage of social networks increased, the psychological well-being of the students also increased. Spraggins (2009) explains this result as, SNS provide more social benefit and social control than face to face communication; it changes people's emotional state and help them in their personal, social and professional (academic) life. Bollen, Gonçalves, Ruan, and Mao (2011) explain another reason that; happy people write happy twit and happy people follow happy people like themselves, unhappy people follow unhappy people. In other words, everyone communicate with people who like themselves. Based on this result, the authors make the following comment; happy people tend to like sharing which happy photos (Lin & Utz, 2015), positive emotions (Shi, Yue, & He, 2013) and this sharing & comment increase psychological well-being of the individual in a positive sense. Bevan, Gomez, and Sparks (2014) emphasize contents of sharing; to share important negative health events, important events in life decrease tension, increase well-being. Several previous studies support our findings. For example, Wang, Jackson, Gaskin, and Wang (2014) showed that there is a positive relationship between well-being and social media usage in university students. Similarly, Ryff (1989) found an average and significant relationship between the parameters of SNS usage and well-being. Moreover, the present study showed that SNS usage predicts well-being. Similarly Uysal (2015)'s study with university students show that there is a negative relationship between problematic SNS usage and well-being, and problematic SNS usage negatively predicts well-being. Satici and Uysal (2015) found a similar result. Shi et al. (2013) pointed that there is a relationship between SNS usage, well-being and happiness. According to them SNS usage predicts both well-being and happiness. Ong and Lin (2015) emphasize that individual which has high well-being continued to use Facebook. In addition, well-being is more effective than life satisfaction. Kim and Lee (2011)'s study showed that there is relationship between friends on Facebook and well-being and also friends on Facebook predict well-being. Rae and Lonborg (2015) found similar results; there is a relationship between friends on Facebook and high well-being and also there is a relationship between time spent on Facebook and

low well-being. Valkenburg et al. (2006) showed that SNS usage indirectly predicted psychological well-being in 881 teenagers. Similarly, Lee et al. (2014) separately analyzed participants from two countries (Korea and America) and found that SNS usage indirectly predicted psychological wellbeing for both samples. Ahn and Shin (2013) showed that SNS usage coefficients negatively predicted well-being in adults, while Grieve, Indian, Witteveen, Anne Tolan, and Marrington (2013) showed a positive and significant relationship between Facebook usage and well-being in university students. The present study results showed that SNS usage parameters are also parameters of psychological well-being, which is required for a better life. As with the two other variables, it was observed that the SNS usage influences the positive parameters in students' lives because it meets their need to communicate and socialize. Students believe that they positively influence their lives by using the technological devices in order to meet their socializing and communication needs, which are the most important parts of their lives. Indeed, when beginning with the definition of management of existential challenges faced in life (Ryff, 1989), high school SNS usage can be seen as their existential need (Spraggins, 2009). Accordingly, the usage of SNS, such as Facebook and Twitter, holds a significant place in students' lives, and as they use SNS their psychological health is positively influenced.

In today's world, technological development is progressing at an unbelievable speed and constantly connects people of every age and type, and it could be say that this is generally truer for individuals in their teenage years. However, when this is considered in terms of countries that are in the process of change and development, such as Turkey, it is observed that technological processes, and therefore SNS, are also on increase and are becoming increasingly important.

In high-school students, that is, among the individuals who are in the most important period of adolescence, this gains may be seen even more importance. The fact that the individuals in this group want to be in environments where they can feel limitless freedom and expression will create an environment that they seek, but cannot find. The individual sees and wants to see him/herself at the peak of his/her ideal self. It can be obviously seen how much even the smallest approval in this environment could reinforce him/her. This becomes a fake or momentary tool regarding his/her life quality. However, this situation will subsequently become the reverse for the individual, and this is unavoidable. It will lead to a weakening, and then a complete disappearance, of the social relationships of the individual, and that person will become lost in his/her own world. This of course will come back to everything from his/her life quality to his/her affective domain as negativity. In a period such as adolescence, the smallest thing that can make the individual happy will not be enough in time. The fact that an individual who articulate his/her thoughts and desires in an environment of limitless freedom, and who is familiar with the approvals that come from that environment, will bring many negative outcomes by his/herself if his/her needs are met.

There are some limitations in this study. In order to determine the students' SNS usage it was asked "To what extent do you use Facebook and Twitter in a day?". So, it is assumed that all students' use the SNS, all students is active user of Facebook and Twitter, and then analysis made in this direction. It might be more useful including students who use SNS actively in future studies. In addition, students' SNS usage characteristics have not been examined. It is ignored whether SNS usage is normal or not. All SNS usage types are not problematic usage, studies on problematic usage could be conducted. Moreover, in this study, the most popular SNSs "Facebook" and "Twitter" is examined but other are, recent popular SNSs like "Swarm", "Whatsapp", "Vine" and "Periscope" are not examined. This is the other limitation of the study. It may be more inclusive that studies which are including another recently popular SNS. Another limitation of this study is that SNS's impact examined only the direct effect on happiness, life satisfaction and psychological well-being, not

moderate and mediates effects. Researchers should examine moderate or mediates effects as well as direct effect. Studies of SNS usage effect on other personality traits, source of motivation on SNS usage should be taken into consideration in new future studies. Specially, studies examining the effects of SNS usage on academic achievement, life satisfaction in school life and career planning would be more useful for students.

Therefore, SNS usage has a very important place in the lives of students. Those of high-school age can usually adapt to Internet usage more easily than the individuals in older age groups, and the Internet occupies a bigger place in their lives. The high school students in this study were born in internet age, defined as digital world, which have grown and has been still living in this digital world. Older individuals found themselves in the Internet era, and they are still trying to adapt to this era.

References

- Ahn, D., & Shin, D. H. (2013). Is the social use of media for seeking connectedness or for avoiding social isolation? Mechanisms underlying media use and subjective well-being. *Computers in Human Behavior*, 29(6), 2453-2462. doi:10.1016/j.chb.2012.12.022
- Bevan, J. L., Gomez, R., & Sparks, L. (2014). Disclosures about important life events on Facebook: Relationships with stress and quality of life. *Computers in Human Behavior*, 39, 246-253. doi:10.1016/j.chb.2014.07.021
- Bilen, K., Ercan, O., & Gülme, T. (2014). Sosyal ağların kullanım amacı ve benimseme süreci; Kahramanmaraş Sütçü İmam üniversitesi örneği (Intended uses and adoption process of social networks; Kahramanmaras Sütçü İmam university example). *Journal of Research in Education and Teaching*, 3(1), 115-123.
- Bollen, J., Gonçalves, B., Ruan, G., & Mao, H. (2011). Happiness is assortative in online social networks. *Artificial Life*, 17(3), 237-251. doi:10.1162/artl_a_00034
- Brandtzæg, P., & Heim, J. (2009). Why people use social networking sites. In A. A. Ozok, & P. Zaphiris (Eds.), *Online communities and social computing* (Vol. 5621, pp. 143-152). Springer Berlin Heidelberg.
- Brooks, S. (2015). Does personal social media usage affect efficiency and well-being? *Computers in Human Behavior*, 46, 26-37. doi:10.1016/j.chb.2014.12.053
- Buhrmester, D., & Prager, K. (1995). Patterns and functions of self-disclosure during childhood and adolescence. In K. J. Rotenberg (Ed.), *Disclosure processes in children and adolescents* (pp. 10-56). New York, NY, US: Cambridge University Press.
- Castronova, E., & Wagner, G. G. (2011). Virtual life satisfaction. *Kyklos*, *64*(3), 313-328. doi:10.1111/j.1467-6435.2011.00508.x
- Chiu, C. M., Cheng, H. L., Huang, H. Y., & Chen, C. F. (2013). Exploring individuals' subjective well-being and loyalty towards social network sites from the perspective of network externalities: The Facebook case. *International Journal of Information Management*, 33(3), 539-552. doi:10.1016/j.ijinfomgt.2013.01.007
- Clore, G. L., Wyer Jr, R. S., Dienes, B., Gasper, K., Gohm, C., & Isbell, L. (2001). Affective feelings as feedback: Some cognitive consequences. In L. L. Martin, & G. L. Clore (Eds.), *Theories of mood and cognition: A user's guidebook* (pp. 27-62). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Correa, T., Hinsley, A. W., & de Zúñiga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, 26(2), 247-253. doi:10.1016/j.chb.2009.09.003
- Dal, N. E., & Dal, V. (2015). Kişilik özellikleri ve sosyal ağ sitesi kullanım alışkanlıkları: Üniversite öğrencileri üzerine bir araştırma [Personality traits and social network sites usage habits: A research on university students]. *Mehmet Akif Ersoy University Journal of Social Sciences Institute,* 6(11), 144-162.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75. doi:10.1207/s15327752jpa4901_13
- Diener, E., Sandvik, E., & Pavot, W. (2009). Happiness is the frequency, not the intensity, of positive versus negative affect. In E. Diener (Ed.), *Assessing Well-Being* (Vol. 39, pp. 213-231). Netherlands: Springer.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. doi:10.1007/s11205-009-9493-y

- Doğan, T., & Cötok, N. A. (2011). Adaptation of the short form of the oxford happiness questionnaire into Turkish: A validity and reliability study. *Turkish Psychological Counseling and Guidance Journal*, 4(36), 165-170.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168. doi:10.1111/j.1083-6101.2007.00367.x
- Eren, F., Çelik, İ., & Aktürk, A. O. (2014). Ortaokul öğrencilerinin facebook algısı: Bir metafor analizi [Secondary school students' perceptions of Facebook: A metaphor analysis]. *Kastamonu Education Journal*, 22(2), 635-648.
- Eryilmaz, A. (2011). Ergen öznel iyi oluşunun, öznel iyi oluşu arttırma stratejilerini kullanma ile yaşam amaçlarını belirleme açısından incelenmesi [Investigating adolescents' subjective wellbeing with respect to using subjective well-being increasing strategies and determining life goals]. Dusunen Adam: The Journal of Psychiatry and Neurological Sciences, 24(1), 44-51. doi:10.5350/DAJPN2011240106
- Fox, J., & Rooney, M. C. (2015). The Dark Triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. *Personality and Individual Differences*, 76, 161-165. doi:10.1016/j.paid.2014.12.017
- Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior, and Social Networking,* 14(1-2), 79-83. doi:10.1089/cyber.2009.0411.
- Göker, G., Demir, M., & Doğan, A. (2010). Ağ toplumunda sosyalleşme ve paylaşım: Facebook üzerine ampirik bir araştırma [Socialization and sharing in the network society: An empirical research on facebook]. *e-Journal of New World Sciences Academy*, 5(2), 183-206.
- Grieve, R., Indian, M., Witteveen, K., Anne Tolan, G., & Marrington, J. (2013). Face-to-face or Facebook: Can social connectedness be derived online? *Computers in Human Behavior*, 29(3), 604-609. doi:10.1016/j.chb.2012.11.017
- Hayes, M., van Stolk-Cooke, K., & Muench, F. (2015). Understanding Facebook use and the psychological affects of use across generations. *Computers in Human Behavior*, 49, 507-511. doi:10.1016/j.chb.2015.03.040
- Hills, P., & Argyle, M. (2002). The Oxford happiness questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences*, 33(7), 1073-1082. doi:10.1016/S0191-8869(01)00213-6
- İşman, A., & Albayrak, E. (2014). Ağlardan facebook'un eğitime yönelik etkililiği [Effectiveness of facebook as a social network in education]. *Trakya University Journal of Education*, 4(1), 129-138.
- İşman, A., & Hamutoğlu, N. B. (2013). Sosyal ağlarin eğitim-öğretim sürecinde kullanılması ile ilgili karma öğrenme öğrencilerinin görüşleri: Sakarya üniversitesi örneği [Blended student's views about using social networks in education period: A case study in Sakarya university]. *International Journal of New Trends in Arts, Sports & Science Education*, 2(3), 61-67.
- Kahneman, D., Diener, E., & Schwarz, N. (1999). Well being: The foundations of hedonic psychology. New York: Russel Sage.
- Kahneman, D., & Krueger, A. B. (2006). Developments in the measurement of subjective well-being. *The Journal of Economic Perspectives*, 20(1), 3-24. doi:10.1257/089533006776526030
- Kalpidou, M., Costin, D., & Morris, J. (2011). The relationship between Facebook and the well-being of undergraduate college students. *Cyberpsychology, Behavior, Social and Networking,* 14(4), 183-189. doi:10.1089/cyber.2010.0061
- Kemp, S. (2014). Social, digital & mobile worldwide in 2014. Retrieved March 1, 2015 from http://wearesocial.net/blog/2014/01/social-digital-mobile-worldwide-2014

- Kim, J., & Lee, J. E. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. *Cyberpsychology, Behavior, and Social Networking*, 14(6), 359-364. doi:10.1089/cyber.2010.0374
- Kobak, K., & Biçer, S. (2008). Facebook sosyal paylaşım sitesinin kullanım nedenleri [Usage foctors of Facebook social share site]. Paper presented at the 8th International Education Technology Conference, Eskişehir.
- Köker, S. (1991). Comparison of life satisfaction levels on normal and problematic adolescent (Unpublished master's thesis). Ankara University, Institute of Social Science, Ankara.
- Layard, R. (2005). Happiness: Lessons from a new science. London: Penguin Books.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34-47. doi:10.1037/0033-2909.107.1.34
- Lee, H. R., Lee, H. E., Choi, J., Kim, J. H., & Han, H. L. (2014). Social media use, body image, and psychological well-being: A cross-cultural comparison of Korea and the United States. *Journal of Health Communication*, 19(12), 1343-1358. doi:10.1080/10810730.2014.904022
- Lenhart, A., & Madden, M. (2007). *Teens, privacy and online social networks*. Retrieved March 5, 2015 from http://www.pewinternet.org/2007/04/18/teens-privacy-and-online-social-networks/
- Lepp, A., Barkley, J. E., & Karpinski, A. C. (2014). The relationship between cell phone use, academic performance, anxiety, and Satisfaction with Life in college students. *Computers in Human Behavior*, 31, 343-350. doi:10.1016/j.chb.2013.10.049
- Lin, R., & Utz, S. (2015). The emotional responses of browsing Facebook: Happiness, envy, and the role of tie strength. *Computers in Human Behavior*, 52, 29-38. doi:10.1016/j.chb.2015.04.064
- Mahan Iii, J. E., Seo, W. J., Jordan, J. S., & Funk, D. (2014). Exploring the impact of social networking sites on running involvement, running behavior, and social life satisfaction. *Sport Management Review*, 18(2), 182-192. doi:10.1016/j.smr.2014.02.006
- Masur, P. K., Reinecke, L., Ziegele, M., & Quiring, O. (2014). The interplay of intrinsic need satisfaction and Facebook specific motives in explaining addictive behavior on Facebook. *Computers in Human Behavior*, 39, 376-386. doi:10.1016/j.chb.2014.05.047
- Mathers, M., Canterford, L., Olds, T., Hesketh, K., Ridley, K., & Wake, M. (2009). Electronic media use and adolescent health and well-being: Cross-sectional community study. *Academic Pediatrics*, *9*(5), 307-314. doi:10.1016/j.acap.2009.04.003
- Muusses, L. D., Finkenauer, C., Kerkhof, P., & Billedo, C. J. (2014). A longitudinal study of the association between Compulsive Internet use and wellbeing. *Computers in Human Behavior*, 36, 21-28. doi:10.1016/j.chb.2014.03.035
- Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook? *Personality and Individual Differences*, 52(3), 243-249. doi:10.1016/j.paid.2011.11.007
- Obi, A. N. (2014). Time spend on Facebook vs. total time spent online: Effects on the quality of life on high school students (Unpublished doctoral thesis). Golden Gate University, USA.
- Oh, H. J., Ozkaya, E., & LaRose, R. (2014). How does online social networking enhance life satisfaction? The relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. *Computers in Human Behavior*, 30, 69-78. doi:10.1016/j.chb.2013.07.053
- Ong, C. S., & Lin, M. Y. C. (2015). Is being satisfied enough? Well-being and IT post-adoption behavior: An empirical study of Facebook. *Information Development*. doi:10.1177/02666666915587032
- Öztürk, M., & Akgün, Ö. E. (2012). Üniversite öğrencilerinin sosyal paylaşım sitelerini kullanma amaçları ve bu sitelerin eğitimlerinde kullanılması ile ilgili görüşleri [University students' purposes in using social networking sites, and their opinions on using these sites in education]. Sakarya University Journal of Education, 2(3), 49-67.

- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(3), 227-238. doi:10.1016/j.appdev.2008.12.010
- Rae, J. R., & Lonborg, S. D. (2015). Do motivations for using Facebook moderate the association between Facebook use and psychological well-being? *Frontiers in Psychology*, 6, 771. doi:10.3389/fpsyg.2015.00771
- Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior*, 25(2), 578-586. doi:10.1016/j.chb.2008.12.024
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, 27(5), 1658-1664. doi:10.1016/j.chb.2011.02.004
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081. doi:10.1037/0022-3514.57.6.1069
- Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behavior*, 29(6), 2632-2639. doi:10.1016/j.chb.2013.07.003
- Satıcı, S. A., & Uysal, R. (2015). Well-being and problematic Facebook use. *Computers in Human Behavior*, 49, 185-190. doi:10.1016/j.chb.2015.03.005
- Scheufele, D. A., & Shah, D. V. (2000). Personality strength and social capital: The role of dispositional and informational variables in the production of civic participation. *Journal of Communication Research*, 27(2), 107-131. doi:10.1177/009365000027002001
- Shi, Y., Yue, X., & He, J. (2013). Understanding social network sites (SNSs) preferences: Personality, motivation, and happiness matters. In A. A. Ozok, & P. Zaphiris (Eds.), *Online communities and social computing* (Vol. 8029, pp. 94-103). Springer Berlin Heidelberg.
- Spraggins, A. (2009). Problematic use of online social networking sites for college students: Prevalence, predictors, and association with well-being (Unpublished doctoral thesis). University of Florida, USA.
- Şahin Baltacı, H., İşleyen, F., & Özdemir, S. (2012). Eğitim fakültesi öğrencilerinin romantik ilişki durumları ve sosyal ağ kullanımlarına göre etkileşim kaygısı ve sosyal destek algılarının incelenmesi [The investigation of interaction anxiety and social support perceptions of the faculty of education students according to the romantic relationship status and social network use]. *Mersin University Journal of the Faculty of Educationi, 8*(2), 25-36.
- Şener, G. (2009). *A study of use facebook in Turkey*. Paper presented at the INET 14. Conference Internet in Turkey, Istanbul.
- Tandoc Jr, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing? *Computers in Human Behavior*, 43, 139-146. doi:10.1016/j.chb.2014.10.053
- Telef, B. B. (2013). Psikolojik iyi oluş ölçeği: Türkçeye uyarlama, geçerlik ve güvenirlik çalışması [The adaptation of psychological well-being into Turkish: A validity and reliability study]. *Hacettepe University Journal of Education*, 28(3), 374-384.
- TSI. (2011). Hanehalkı Bilişim Teknolojileri Kullanım Araştırması [Information and Communication Technology (ICT) Usage Survey on Households and Individuals]. Retrieved February 2, 2015 from http://www.tuik.gov.tr/
- TSI. (2013). Hanehalkı Bilişim Teknolojileri Kullanım Araştırması [Information and Communication Technology (ICT) Usage Survey on Households and Individuals]. Retrieved February 2, 2015 from http://www.tuik.gov.tr/

- TSI. (2014). Hanehalkı Bilişim Teknolojileri Kullanım Araştırması [Information and Communication Technology (ICT) Usage Survey on Households and Individuals]. Retrieved February 2, 2015 from http://www.tuik.gov.tr/
- TSI. (2015). Hanehalkı Bilişim Teknolojileri Kullanım Araştırması [Information and Communication Technology (ICT) Usage Survey on Households and Individuals]. Retrieved February 2, 2015 from http://www.tuik.gov.tr/
- Uysal, R. (2015). The predictive roles of social safeness and flourishing on problematic Facebook use. *South African Journal of Psychology*, 45(2), 182-193. doi:10.1177/0081246314560010
- Uysal, R., Satıcı, S. A., & Akın, A. (2013). Mediating effect of Facebook addiction on the relationship between subjective vitality and subjective happiness. *Psychological Reports*, 113(3), 948-953. doi:10.2466/02.09.18.PR0.113x32z3
- Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication*, 14(4), 875-901. doi:10.1111/j.1083-6101.2009.01474.x
- Valkenburg, P. M., Peter, J., & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *Cyberpsychol & Behavior*, 9(5), 584-590. doi:10.1089/cpb.2006.9.584
- Vural, Z. B. A., & Bat, M. (2010). Yeni bir iletişim ortamı olarak sosyal medya: Ege üniversitesi iletişim fakültesine yönelik bir araştırma [Social media as a new communication environment: A research on Ege university faculty of communication]. *Journal of Yasar University*, 20(5), 3348-3382.
- Wang, J. L., Jackson, L. A., Gaskin, J., & Wang, H. Z. (2014). The effects of Social Networking Site (SNS) use on college students' friendship and well-being. *Computers in Human Behavior*, 37, 229-236. doi:10.1016/j.chb.2014.04.051
- Yang, C. C., & Brown, B. B. (2013). Motives for using facebook, patterns of facebook activities, and late adolescents' social adjustment to college. *Journal of Youth and Adolescence*, 42(3), 403-416. doi:10.1007/s10964-012-9836-x