

Interpersonal Sensitivity and Problematic Facebook Use in Turkish University Students

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ABSTRACT Facebook has held vital importance for socialization for university students, and has occasionally becomes problematic for them. As personality traits may have impacts on problematic Facebook use, the purpose of this research is to examine the relationship between problematic Facebook use and interpersonal sensitivity among Turkish university students. Participants included 349 university students (224 female, 125 male; $M_{age} = 20.83$ yr.) who answered a questionnaire package that included the Bergen Facebook Addiction Scale, the Interpersonal Sensitivity Measure and a Personal Information Form. The relationship between problematic Facebook use and the three subscales of interpersonal sensitivity that are interpersonal worry and dependency, low self-esteem, and unassertive interpersonal behavior were examined by using correlation analysis and multiple regression analysis. According to the results, the scores on the problematic Facebook use scale were predicted positively (32%) by subscales of interpersonal sensitivity. These findings were discussed in light of the social compensation theory.

INTRODUCTION

Social networking websites (SNS) like Facebook have become very popular and are used increasingly as a means of communication. The Facebook website has become an indispensable part of nearly every university student's daily routine. According to Stutzman (2005), learning about each other and developing social networks with friends at university are of significant importance for the socialization of the university students. Even though Facebook use is indispensable among young people, it sometimes causes difficulty in limiting and controlling time. This popularity of Facebook among university students has led the researchers in the field to investigate the factors that influence the use of Facebook. Previous studies have revealed that personality traits have an important role on problematic Facebook use (Amichai-Hamburger and Vinitzky 2010; Ebeling-Witte et al. 2007; Farahani et al. 2011; Lemieux et al. 2013; Jin 2013; Mehdizadeh 2010; Moore and McElroy 2012; Orr et al. 2009; Ross et al. 2009; Schwartz 2010; Shel-

don 2008; Sheldon et al. 2011). In this study, the role of interpersonal sensitivity on problematic Facebook use has been investigated.

Problematic Facebook Use

In recent years, SNSs have achieved more popularity especially among college students. According to Socialbakers Report (2014), thirty-two percent of Facebook users in the world are between the ages of 18 and 24. Students are found to use a social networking website 1 to 2 times each day for about 10 to 15 minutes at a time (Spraggins 2009). Facebook use is very common in Turkey too, as sixty percent of active Facebook users spend 2.32 daily hours on the website currently (Global Digital Statistics 2014).

The basic reason behind intensive Facebook use among young people is the desire to develop social interaction (Dhaha 2013; Ellison et al. 2007; Shaw et al. 2015; Spraggins 2009). Moreover, keeping old ties strong, networking, keeping in contact with existing friends, entertainment, passing time, companionship and relaxation were found to be the motives for using Facebook by college students (Foregger 2008; Hew and Cheung 2012; Hunt et al. 2012; Sofiah et al. 2011; Spraggins 2009). The increasing popularity of Facebook among young people comes from its advantage of being a free service with easy access. A previous research has shown that the

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frequency of Facebook use is positively correlated with feelings of general connections in life (Sheldon et al. 2011).

Using Facebook has potential benefits and harms for young people. The reason why some people use social networking sites is to change their affective states in addition to gaining greater social control and social benefits than they do in face-to-face relationships (Shaw et al. 2015; Spraggins 2009). Additionally, some students have difficulty in stopping their use of social networking websites and keeping themselves away from these sites, while also utilizing the sites for larger amounts of time than they plan to (Spraggins 2009). It can be difficult for problematic users to control and limit the amount of time they spend on Facebook activities (Lee and Cheng 2014). Therefore, Facebook use may become problematic for some. Facebook addiction or problematic Facebook use can be called as improper use of Facebook, which has similar symptoms with behavioral addictions and impulse control disorders (Yu 2010). Problematic Facebook use was also found to be related with lower social safety and flourishing (Uysal 2015), lower self-esteem, lower subjective wellbeing (Denti et al. 2012), lower social competence and higher psychological vulnerability (Satici et al. 2014), severe depression and anxiety (Koc and Gulyagci 2013), lower life satisfaction and flourishing (Satici and Uysal 2015), and lower academic performance (Kalpidou et al. 2011). In short, problematic use of Facebook may create psychological, social, academic problems in one's life.

In literature, it has been known that problematic Facebook use may lead to unsocial behaviors and avoiding of real social relations that result in loneliness, depression and low self-esteem (Cam and Isbulan 2012). Some other research findings support that Facebook use is more common among unsocial personalities (Ebeling-Witte et al. 2007; Farahani et al. 2011; Orr et al. 2009; Schwartz 2010; Sheldon 2008; Sheldon et al. 2011). Individuals who have unsocial personality traits such as shyness, introversion, loneliness, rejection sensitivity and social anxiety were reported to deal with problematic Facebook use (Ebeling-Witte et al. 2007; Farahani et al. 2011; Orr et al. 2009; Schwartz 2010; Shaw et al. 2015; Sheldon 2008; Sheldon et al. 2011).

Interpersonal Sensitivity

Interpersonal sensitivity is a personality style that is associated with an excessive awareness of the behavior of others as well as their feelings (Boyce and Parker 1989). Interpersonal sensitivity has been previously defined as a degree to which a person is aware of what other people think about him/her and how much those perceptions lead and control his/her behavior (Boyce and Parker 1989). Interpersonal sensitivity is considered as being oversensitive towards interpersonal relations as a result of perception about potential disapproval of others (Harb et al. 2002; Sapmaz 2011).

Interpersonal sensitivity has a multidimensional construct involving interpersonal awareness, separation anxiety, need for approval, timidity, and fragile inner self-components (Boyce and Parker 1989). These constructs are explained as, interpersonal awareness, hyper attentiveness to the behavior and reactions of others, need for approval, the desire to make others happy and minimize conflict, separation anxiety, sensitivity to threatened relationship bonds, timidity, the inability to be assertive in relationships, fragile inner self, an unlikely ability for the inner self related to having a fragile self-esteem and low self-worth. It can be understood that interpersonal sensitivity because of dependency on others may limit the number of healthy social relations.

Interpersonally sensitive individuals consider themselves as socially neglected and vulnerable. These individuals may experience a feeling of inadequacy and inferiority (Boyce and Parker 1989; Davidson et al. 1989). In addition, they attach particular importance to feedback from others related to their own behaviors (Boyce and Parker 1989) and they experience feelings of disapproval in social settings because of their personality characteristics (Harb et al. 2002). In order to minimize negative evaluations and risks (Boyce et al. 1991) they may avoid establishing social relations and may exhibit less assertive behaviors (Boyce and Parker 1989; Davidson et al. 1989).

Besides restricting the individuals' social relations (Smith et al. 2004), interpersonal sensitivity also increases vulnerability of the individual to respond negatively to life stressors (Boyce et al. 1993). Interpersonal sensitivity was found to be positively related to depression (Boyce et al.

1991; Wilhelm et al. 2004) and social anxiety (Erozkan 2011). Furthermore, among college students, interpersonal sensitivity was associated with depressive symptoms, low social and academic self-esteem, and poorer academic performance (McCabe et al. 1999). To sum up, interpersonal sensitivity is correlated with maladaptive functioning that covers the social, psychological and academic spheres of influence.

Problematic Facebook Use and Interpersonal Sensitivity

There are two theories that explain Facebook use and its relations with personality: Social Enhancement Theory and Social Compensation Hypothesis (McKenna et al. 2002; Valkenburg et al. 2005). According to the Social Enhancement Theory, socially skillful people use Facebook in order to enhance their social connections (Valkenburg et al. 2005). On the other hand, the Social Compensation Theory claims that those considering their face-to-face social networks as insufficient compensate them with more extensive online social networks (McKenna et al. 2002; Valkenburg et al. 2005). According to the Social Compensation Theory, individuals who are shy, lonely and anxious in social relationships are likely to have difficulties in establishing and maintaining healthy interpersonal relations. They tend to use virtual world in order to cater their social needs that they cannot fulfill in reality (Orr et al. 2009; Ryan and Xenos 2011; Valkenburg et al. 2005; Weidman et al. 2012).

In terms of relations between the interpersonal sensitivity and problematic Facebook use, the Social Compensation Theory can be considered more interpretational. Individuals with interpersonal sensitivity tend to have low self-esteem and social anxiety and demonstrate unassertive behavior. These people are highly sensitive to verbal and nonverbal signals coming from others (Boyce and Parker 1989; Boyce et al. 1993). Owing to lack of self-esteem and social anxiety these people encounter difficulties in attending a social life and establishing friendly relations. Because of their anxiety in social relationships and inadequate social skills, individuals with interpersonal sensitivity feel uncomfortable in face-to-face communication. For this reason, they prefer to refrain from social interactions to decrease the risk of negative evaluations of others (Boyce and Parker 1989; Davidson et al. 1989).

Interpersonally sensitive people mostly prefer to communicate via a virtual environment like Facebook. Facebook allows them to cater to the need of belonging through communicating with and learning about others (Zhao et al. 2008). Facebook use enhances peer acceptance and relationship development (Yu et al. 2010), and promotes self-esteem (Gonzales and Hancock 2011; Steinfield et al. 2008). Moreover, problematic Facebook users present themselves in the virtual world through photographs, profile information, wall posts and self-presentational activities that they upload on their pages (Zhao et al. 2008). University students with unsocial personalities generally believe that social networking sites like Facebook are crucial to gain knowledge, social acceptance and social support in university life (Yu et al. 2010). As a result, those who are interpersonally sensitive, which is a trait of an unsocial personality, prefer to meet their needs via Facebook and are more at risk of problematic Facebook use. Unfortunately, research suggests that social anxiety symptoms, linked to online interaction preference are found to have negative consequences, such as depression or lower quality of life (Weidman et al. 2012).

Although a number of previous studies have documented the link between problematic Facebook use and personality traits for poor relations as sensitivity to rejection (Farahani et al. 2011), shyness (Orr et al. 2009), social anxiety (Ebeling-Witte et al. 2007), social safety (Uysal 2015), social competence and psychological vulnerability (Satici 2014), researchers have not come across any paper focusing on the relationship between problematic Facebook use and interpersonal sensitivity. This paper aims to investigate the role of interpersonal sensitivity personality traits on the Facebook use of university students in Turkey. In summary, the following research questions were formulated:

Research Question 1: Is interpersonal worry and dependency exhibited by university students' significant predictors of their problematic Facebook use?

Research Question 2: Is the low self-esteem of the university students a significant predictor of their problematic Facebook use?

Research Question 3: Is the unassertive interpersonal behavior of the university students a significant predictor of their problematic Facebook use?

METHODOLOGY

Participants

Participants included 349 university students [224 female (64%) and 125 male (35%)] studying at the Faculty of Education, Faculty of Economics and Administrative Sciences, and Faculty of Pharmacology, Faculty of Science at Anadolu University, Turkey. Of the participants, 45 (13%) were first-year students, 39 (12%) were second-year students, 142 (40%) were third-year students, and 123 (35%) were fourth-year students. Their ages ranged from 18 to 32 years (Average age: 20.8; SS 1.5). The researcher tried to reach a representative sample of students from all grades and faculties to represent the universe.

Measures

Bergen Facebook Addiction Scale (BFAS; Andreassen et al. 2012)

The scale was developed to assess overuse of Facebook. The BFAS consists of 18 items and each item was presented in the form of a 5-point Likert scale (1: Very Rarely and 5: Very Often). The BFAS has six subdimensions, namely salience, mood modification, tolerance, withdrawal, conflict, and relapse. Also, the BFAS gives a total score ranging from 18 to 90, and higher scores indicate greater Facebook addiction. The Cronbach alpha coefficient of the original form was .83. Turkish adaptation of this scale was done by Akin et al. (2013). According to Akin et al. (2013), the results of the confirmatory factor analysis indicated that the scale was well fit ($\chi^2 = 291.88$, $df = 118$, $p < 0.001$, $RMSEA = .061$, $CFI = .95$, $GFI = .92$, $IFI = .95$, and $SRMR = .040$). The internal consistency reliability coefficient of the Turkish BFAS was .93. In the present paper, the internal consistency coefficient was found as .91.

Interpersonal Sensitivity Measure (IPSM, Boyce and Parker 1989)

The scale was developed to assess hypersensitivity towards interpersonal relations. IPSM consists of 13 items and each item was presented as a 5-point Likert scale (1: Very Unlike Me and 5: Very Like Me). Although the original scale has a five-factor structure, the one adapted to Turkish has three factors. The measure has three factors, namely interpersonal worry and dependency (*I feel anxiety towards criticism for what*

I say and what I do), low self-esteem (*Other people, if they really introduced me, they'd think more negatively about me*), and unassertive interpersonal behavior (*I fear that I might hurt people so I am not angry*). The Cronbach alpha coefficient of the original form was .85 for healthy samples. Turkish adaptation of this scale was done by Dogan and Sapmaz (2012). In the present study, the internal consistency reliability coefficient was found .88 for interpersonal worry and dependency, .72 for low self-esteem, and .71 for unassertive interpersonal behavior.

Personal Information Form (PIF)

It is prepared by the researcher included the information about the participants' demographic information, their time spent on the Internet, and number of Facebook friends.

Procedure

Faculty board approval was obtained prior to data collection for the research. The researcher collected the data in the middle of the spring semester in a period of 3 weeks. Data was collected from volunteer participants in a classroom environment. Completion of the scales was anonymous and confidentiality was guaranteed. The researcher encouraged the students to keep their answers confidential and reminded them not to discuss their answers with their peers. The data collection tools were administered to groups of students in the classrooms. The measures were counterbalanced in administration. Before the administration of measures, all the participants were informed about the aim of the study. Instruments were completed approximately in 10 minutes.

RESULTS

Descriptive Data

The average time spent on the Internet on a typical weekday was reported to be as 15-20 minutes [standard deviation (SD) = 94.87]. The number of friends that the participants have on Facebook ranged between 0 to 1200, and the average number of friends was calculated as 322. The number of real friends that participants have on Facebook ranged between 0 to 1000 and the average number of real friends was calculated as 125. Sixty-six percent of the participants had considered deactivating their Facebook account and the rest of them had not considered deactivating

yet. Also, the high proportion of the participants (78%) reported that if Facebook were not free, they would not use it.

Intercorrelations

The relationships between the variables were examined and a multiple regression analysis was conducted to answer the research questions. Table 1 shows the means, descriptive statistics, intercorrelations of Facebook use and interpersonal sensitivity.

Correlation analysis showed that the amount of Facebook use was positively related to interpersonal worry and dependency ($r = .51, p < .01$), low self-esteem ($r = .32, p < .01$), and unassertive interpersonal behavior ($r = .39, p < .01$).

Multiple Regression Analysis

Assumptions of multiple regressions were checked before applying the regression analysis. The stepwise multiple regression analyses were applied to determine which factors of interpersonal sensitivity were significant predictors of Facebook use (Table 2).

According to the results of the multiple regression analysis, summarized in Table 2, interpersonal worry and dependency entered the equation first, accounting for twenty-six percent of the variance in predicting Facebook use (adjusted $R^2 = .257$). Low self-esteem entered on the second step accounting for an additional four percent variance ($\Delta R^2 = .037$, adjusted $R^2 = .292$). Unassertive interpersonal behavior entered on the third step accounting for an additional three percent variance ($\Delta R^2 = .032$, adjusted $R^2 = .322$). The standardized beta coefficients indicated the relative influence of the variables in the final model with interpersonal worry and dependency ($\beta = .34, p < .01$), low self-esteem ($\beta = .23, p < .01$), and unassertive interpersonal behavior ($\beta = .21, p < .01$), all significantly influence Facebook use, and interpersonal worry and dependency was the strongest predictor of Facebook use.

DISCUSSION

In this paper, the researcher attempted to investigate the relationship between problematic Facebook use and the subscales of interpersonal-

Table 1: Descriptive statistics and inter-correlations of the variables

Variables	1	2	3	4
1. Problematic Facebook use	-			
2. Interpersonal worry and dependency	.51**	-		
3. Low self-esteem	.32**	.28**	-	
4. Unassertive interpersonal behavior	.39**	.52**	.01	-
Mean	33.1	43.8	13.9	22.3
SD	12.8	11.6	4.2	4.8

** $p < .01$

Table 2: Regression results for problematic Facebook use

Variable	Step 1				Step 2				Step 3			
	B	SE _B	\hat{a}	t	B	SE _B	\hat{a}	t	B	SE _B	\hat{a}	t
Interpersonal worry and dependency	.56	.05	.51	11.1**	.47	.06	.42	7.9**	.37	.06	.34	6.2**
Unassertive interpersonal behavior					.46	.14	.17	3.2**	.57	.14	.21	4.1**
Low self-esteem									.69	.14	.23	4.9**
R ²			.260				.281				.328	
Adj R ²			.257				.277				.322	
SE			11.1				10.9				10.6	
F _(dfn,dfd)			121.6**				67.6**				56.2**	
			(1, 347)				(2, 346)				(3, 345)	

** $p < .01$

al sensitivity, which are interpersonal worry and dependency, low self-esteem, and unassertive interpersonal behavior. The results of the correlation and regression analyses indicated that problematic Facebook use positively relates with interpersonal worry and dependency, low self-esteem, and unassertive interpersonal behavior.

The related literature supports that interpersonally sensitive and unsocial young people are more prone to meet their needs via Facebook. Findings of this paper showed that interpersonal worry and dependency was a significant predictor of problematic Facebook use of university students. This finding of the paper was consistent with other studies related to problematic Facebook use of the university students (Caplan 2007; Ebeling-Witte et al. 2007; Shaw 2015; Sheldon 2008). Young adults with interpersonal sensitivity may be over sensitive toward others' behaviors and criticism (Ebeling-Witte et al. 2007). In addition, people with social anxiety and interpersonal sensitivity may experience feelings of inadequacy and lack of self-confidence in terms of establishing and maintaining social relations (Sheldon 2008). The desire to leave a positive impression on others leads individuals with interpersonal worry and avoiding face-to-face interactions. These people tend to choose less risky virtual environments in which they can control the communication and use them passively (Caplan 2007; Shaw 2015). Besides, virtual environments cause social anxiety with an opportunity to hide and control anxiety symptoms such as sweating, stammering, shaking or blushing during social situations (Caplan 2007; McKenna and Bargh 2000). For this reason, these people are likely to prefer using Facebook since they have more control over the situations that otherwise make them anxious in real life.

It was also found that problematic Facebook use was predicted by low self-esteem. This finding of the paper was also consistent with the findings of previous studies related to problematic Facebook use and self-esteem (Amichai-Hamburger et al. 2002; Lee and Cheung 2014; McKenna et al. 2002; Sheldon et al. 2011; Steinfield et al. 2008; Yu et al. 2010). Lee and Cheung (2014) found that low self-esteem causes individuals to be inclined towards a preference for online social interactions. Individuals with low self-esteem tend to make negative self-evaluations, are suspicious of praise, and interpret evaluative information negatively (Swann 1996).

Owing to lack of self-esteem, these people encounter difficulties attending social life and establishing friendly relations. Since it is a priority for young adults to establish and maintain social and emotional relationships, they are persistently in search of different ways to meet these needs. Individuals with low self-esteem may choose to use social networking sites to get away from the negative evaluations and the stress of face-to-face interpersonal relationships (Lee and Cheung 2014). They opt for online social communication methods, which make them feel more relaxed, confident, and have more self-presentation control (Caplan 2002). Low self-esteem users might be attempting to promote their self-image (Zywica and Danowski 2008), compensate for their self-esteem, and fix their shortcomings to be able to be socially acceptable (Tice 1993). Moreover, perception of disconnection of real social life induces Facebook use and so Facebook use may trigger the feeling of connection and self-esteem (Sheldon et al. 2011; Steinfield et al. 2008; Yu et al. 2010) and subjective well-being (Kim and Lee 2011). During periods of adulthood, young adults are in the search of areas in which they can express themselves and find social approval in order to fulfill their developmental tasks. In this manner, Facebook allows them to create a virtual identity by exaggerating their positive aspects and concealing negative ones.

Problematic Facebook use was found to be positively predicted by unassertive interpersonal behavior. People with interpersonal sensitivity become vulnerable towards others' evaluations and emotions about them (Harb et al. 2002; Sappmaz 2011; Satici et al. 2014). For these people verbal and nonverbal behavioral patterns of emotions and opinions of others are significant (Boyce and Mason 1996). People who feel inadequacy experience restlessness and avoidant behaviors in social settings. Hence, these people try to conceal their negative aspects in order to minimize the potential risk of negative evaluations (Boyce et al. 1991), and generally tend to avoid social relations (Boyce and Parker 1989; Davidson et al. 1989). University students who feel lower social safety and social sufficiency prefer to socialize on Facebook rather than in real life (Uysal 2015; Satici et al. 2014). In this research, interpersonally sensitive people consider Facebook as a secure way of building relationships, because of its nature that does not

allow for negative, nonverbal feedbacks. Therefore, young adults without social skills may prefer to use Facebook more.

In a broad manner, the interpersonal sensitivity levels of young adults positively predict their Facebook overuse. These findings can be explained by the Social Compensation Theory. According to this theory, introverts and socially anxious adolescents tend to use the Internet extensively, as they prefer having online contacts to undesirable offline social networks (Valkenburg et al. 2005). It can be inferred from these findings that young adults who have social anxiety, low self-esteem, and unassertive behaviors experience difficulties in face-to-face interactions. Thus, young adults try to meet their unmet social needs such as belongingness and self-presentation by means of Facebook. Current studies have agreed that Facebook provides a painless and easy way to establish and maintain interpersonal relations for individuals who have difficulties in establishing social relations. Although interpersonally sensitive university students prefer to compensate their unmet social needs through the virtual environment via Facebook as they find it less threatening, studies claim that problematic Facebook use may lead to psychological and social problems in the long term (Spraggins 2009).

To prevent problematic Facebook use, informative seminars, psycho-educational group studies, and guidance and counseling group studies need to be organized by the universities' psychological counseling support centers to inform young adults about the risks of problematic Facebook use and enhance safe use of Facebook. In addition, young people need to be supported with psycho-educational group programs organized by psychological counseling centers to develop social and emotional skills in order to maintain their online social ties in real life. Also to improve awareness among university students, the course curriculum and elective course contents need to be regulated and enriched with risks and harms of problematic Facebook use.

CONCLUSION

In conclusion, problematic Facebook use is positively related with interpersonal worry and dependency, low self-esteem, and unassertive interpersonal behavior in Turkish university students. Young people with high interpersonal sen-

sitivity who have troubles with forming relationships face-to-face tend to fulfil their social needs in virtual environments by using Facebook. While social networking sites like Facebook cater to the needs of young people for socializing, they also cause them to lose touch with the real world because of the problematic use.

RECOMMENDATIONS

On the other hand, when the findings of this investigation are taken into consideration, it may be recommended that universities may redesign campus life, which in turn allows students to initiate and maintain satisfactory relations. When Turkish culture is taken into account, students should experience relations that prevent addictive patterns towards Facebook, which have a negative influence on emotional and social welfare of students.

LIMITATIONS

This paper has some limitations. First, the sample included only university students. Second, explicit investigation of mediating or latent variables is needed, as the relationships between the various factors might be quite complex. Third, this paper relied upon self-report measures that can be misleading. Finally, the research design can be extended by comprising different data collection techniques, such as observational interviews or even direct observation of Facebook behavior.

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