The investigation of Facebook usage purposes and shyness, loneliness

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Abstract

The aim of the study was to investigate the relationship between Facebook usage purposes and shyness, loneliness among the college students. UCLA Loneliness Scale, Cheek and Buss Revised Shyness Scale and a personal information sheet were administered to a sample of 435 (274 female, 161 male) students from different departments of Middle East Technical University (METU). The results of this study showed that there was a positive and significant relationship between following pictures, videos, status, comments on Facebook and shyness (r = .13), and a negative and significant relationship between communicating with current friends and loneliness (r = -.12).

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1. Introduction

Internet usage increases very fast and this global increase in internet diffusion fundamentally has changed our ways of communication (Ellison, Steinfield, & Lampe, 2007). Internet gives us many options for communicating, such as e-mail, instant messaging, chat rooms, and social networking sites (SNSs). Boyd and Ellison (2007) describe SNS as a web-based service that gives individuals chance to construct personal profiles and communicate with their list of connections.

Facebook is becoming the most popular SNS for social communication among all of the SNSs (Ross et al., 2009). It is a website with a combination of many useful tools that users need on Internet; it allows people to do many things in one platform rather than use separate websites and software (Ulusu, 2010). Facebook allows a user to create a profile and share personal information, pictures, comments, videos, communicate with Facebook friends with the help of different applications (messages, gifts, groups, fun pages, games etc.). Facebook users engage in searching for people with whom they have an offline connection more than they browse for complete strangers to meet (Ellison et al., 2007). However, people also use Facebook to make new friends instead of communicating with current friends (Hei-Man, 2008). According to official reports, it is the second website that is most frequently visited on the Internet (Alexa Internet Inc., 2011) and reached 901 million users (Facebook, 2012). This great increase of Facebook usage raises important questions about its roles and effects on social life (Ryan & Xenos, 2011). There are some studies that have researched the relationship between Facebook and Big Five personality factors of extraversion, openness to experience, agreeableness, conscientiousness, and neuroticisms (Amiel & Sargent, 2004;
Hughes, Rowe, Batey, & Lee, 2012; Moore & McElroy, 2012; Ross et. al., 2009; Ryan & Xenos, 2011); narcissism (e.g. Ong et al., 2011; Ryan & Xenos, 2011); loneliness (e.g. Ryan & Xenos, 2011); well-being (e.g. Kalpidou, Costin, & Morris, 2011); shyness (e.g., Orr et al., 2009; Ryan & Xenos, 2011). Beside the findings about the negative effects of Facebook usage, as similar with internet usage, there are also advantages of using it. Ellison et al. (2007) presented a significant and positive relationship between amount of Facebook usage and psychological well-being, especially users with lower self-esteem and lower overall life satisfaction.

Particular features of Facebook may be more attractive for people who have difficulty in face-to-face social communication. Papacharissi and Rubin (2000) stated that people who were socially anxious and had difficulty in face to face communication see the internet as an alternative communication way.

Shyness and loneliness are essential personality traits which help to shape social life of individuals. It is an intriguing question whether shyness and loneliness have a significant effect on online communication as like as offline communication. Shyness is a form of social anxiety which prevents a person’s ability to integrate into social situations (Zimbardo, Pilkonis & Norwood, 1974). Studies show that shyness is related to interpersonal rejection (e.g., Koydemir & Demir, 2008), self-esteem (e.g., Koydemir & Demir, 2008), loneliness (e.g., Jackson, Fritch, Nagasaka, & Gunderson, 2002), and depression (e.g., Alfano, Joiner, Perry, & Metalsky, 1994). Past research has focused on the relationship between shyness and Facebook. Orr et al. (2009) investigated the use of Facebook and reported that shy students spent more time on Facebook. They also found that participants’ self-reported shyness levels increased when they reported having fewer Facebook contacts on their profile. Oppositely, Scealy, Phillips and Stevenson (2002) concluded that the use of email and chat rooms was not related to shyness, suggesting shyness does not pose an obstacle to social network applications. Besides, the study of Sheeks and Birnmeier (2007) indicated that shy university students seemed to find computer-mediated communication as positive in terms of their relationship development.

Loneliness has been increasingly recognized as a major social problem (Schmidt & Sermat, 1983). Loneliness is defined as "the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively" by Peplau and Perlman (1982, p. 4). According to the research findings, loneliness has a correlation with social skills (Eldelekgolu, 2008), introversion (Kraus, Davis, Bazzini, Church, & Kirchman, 1993), depression (Foxall, Barron, Von Dollen, Shull, & Jones, 1994), anxiety (Sears, 1991), Internet use (Amichai-Hamburger & Ben-Artzi, 2003; Deniz, 2010) and shyness (Erözkan, 2009; Kraus et al., 1993).

According to researches’ findings, social network using has a relationship with loneliness (Leung, 2002), shyness (Orr et al., 2009), narcissism and extraversion (Ong et al., 2011), personality characteristics (Wilson, Fornasier, & White, 2010), well-being (Ellison et al., 2007; Kalpidou et al., 2011).

As considering the increase of Facebook usage, the purposes behind using Facebook have attracted a lot of interest. At this point, it is important to understand which personality characteristics have relationship with which Facebook usage purposes. Little is known about personality characteristics of Facebook users (Sheldon, 2008). This study has significance in two ways. Firstly, there is little research which answers whether there is a relationship between Facebook usage purposes and shyness, loneliness. Secondly, as indicated by Straub, Loch and Hill (2001), culture and social norms contribute to shape Internet usage. Although there are some studies which focus on the negative results of excessive Internet using (Deniz, 2010) in Turkish culture, there is not a study known focusing on Facebook usage and its relationship with psychological traits in Turkey. The purpose of this study is to investigate Facebook usage purposes, shyness and loneliness in Turkish university students.

2. Method

2.1. Participants and procedure

The sample of this study consisted of 435 university students from Middle East Technical University (METU). Convenience sampling procedure was used and the participants were chosen from different faculties of METU. Among the participants, 274 were female (63%) while 161 were male (37%) with the age mean of 21.95 (SD = 4.05) and the age mode of 20. Considering the Facebook usage status, 393 of them (90.3%) had a Facebook account,
whereas 42 of them (9.7%) did not have a Facebook account. Before the application of the instruments, the necessary permission was obtained from the University Ethical Committee. The instruments were applied to the students in classroom settings by getting permission from the instructors.

2.2. Instruments

UCLA Loneliness Scale and Revised Cheek and Buss Shyness Scale (RCBS), and a personal information sheet were used in the study. The UCLA Loneliness Scale was developed by Russell, Peplau and Cutrona (1980). It has 20 items with a 4-point Scale ranging from “never” to “often” (1 = never, 4 = often). The total scores range from 20 to 80, with higher scores indicating greater loneliness. Russell et al. (1980) reported internal consistency for the scale was .94; test-retest reliability over 2 months was .73; concurrent validity was in the form of correlations with the Beck Depression Inventory \( r = .62 \). The Turkish version of the UCLA Loneliness Scale (Demir, 1989) was found to be internally consistent \( (r = .96) \) and correlated highly with Beck Depression Inventory \( (r = .77) \) and the test-retest reliability over 5 weeks was .94. RCBS (Cheek & Briggs, 1990) consists of 13 items that assess dispositional shyness. It uses a 5-point Likert-type scale ranging from 1 (very uncharacteristic) to 5 (very characteristic). Total scores ranged from 13 to 65, with higher scores reflecting greater degrees of shyness. The RCBS was found to be internally consistent \( (\alpha = .90) \), and the 45-day test–retest reliability coefficient was \( r = .88 \) (Cheek & Briggs, 1990). The RCBS correlated highly with the Social Avoidance and Distress Scale (Watson & Friend, 1969; \( r = .77 \)), and the original 9-item version \( (r = .96) \). The Turkish version of the 13-item RCBS (Koydemir & Demir, 2005) was found to be internally consistent \( (r = .91) \) and correlated highly with social anxiety \( (r = .77) \). The personal information sheet contained personal information (age and gender) and Facebook usage information which had eight statements showing the perception of the participants on Facebook usage status, Facebook usage frequency, time spent on Facebook, and Facebook usage purposes (meeting new friends, contacting with old friends, communicating with friends, following photographs, videos, and notifications, sharing photographs, videos, and notifications, playing game). The statements ranged between the least frequent to the most frequent (1 - 5).

3. Results

The results indicated that there was a positive and significant relationship between shyness and following pictures, videos, status, comments on Facebook \( (r = .12) \) and a negative and significant relationship between loneliness and communicating with current friends \( (r = -.12) \). Whereas, there was no significant relationship between shyness and meeting new friends \( (r = -.05) \), contacting with old friends \( (r = -.00) \), communicating with current friends \( (r = .01) \), sharing photographs, videos, and notifications \( (r = -.02) \), playing games \( (r = -.02) \). As considering loneliness, there was no significant relationship between loneliness and meeting new friends \( (r = .04) \), contacting with old friends \( (r = -.10) \), following pictures, videos, status, comments on Facebook \( (r = -.01) \), sharing photographs, videos, and notifications \( (r = .00) \), playing games \( (r = .05) \).

4. Discussion

The results of this study showed that there was a positive and significant relationship between shyness and following pictures, videos, status, comments on Facebook \( (r = .13) \) and a negative and significant relationship between loneliness and communicating with current friends \( (r = -.12) \). Whereas, there was no significant relationship between shyness and meeting new friends \( (r = -.05) \), contacting with old friends \( (r = -.00) \), communicating with current friends \( (r = .01) \), sharing photographs, videos, and notifications \( (r = -.02) \), playing games \( (r = -.02) \). As considering loneliness, there was no significant relationship between loneliness and meeting new friends \( (r = .04) \), contacting with old friends \( (r = -.10) \), following pictures, videos, status, comments on Facebook \( (r = -.01) \), sharing photographs, videos, and notifications \( (r = .00) \), playing games \( (r = .05) \).
contacting with old friends, communicating with current friends, sharing photographs, videos, and notifications, and playing games. One of the explanations may be that by following comments, pictures and videos of others, they do not need to disclose themselves although they visit the site. This finding is consistent with the study of Ma and Leung (2005), people who are unwilling to communicate in real life, tend to open less on online communication.

The other significant finding of the study was that there was a negative relationship between loneliness and communicating with friends which shows that when the loneliness level increased, the frequency of communicating with friends decreased, vice versa. This finding may be seen consistent with the study which indicated that loneliness was associated with the lack of ability to develop and maintain close interpersonal relationships (Wittenberg & Reis, 1986). However, there was no significant relationship between loneliness and meeting new friends, contacting with old friends, following pictures, videos, status, comments on Facebook, sharing photographs, videos and notifications, and playing games. Although personality trait has an influence on Facebook usage, it is not seen solely factor to impact the use of the Internet for communication (Ross et al., 2009). Ross et al. (2009) suggest that personality may not be an essential issue in the use of social networks. In addition, some studies found that anxiety and loneliness were not actual indicators of online relationship (Bonebrake, 2002; Peter, Valkenburg, & Schouten, 2005). Similarly, in this study all Facebook usage purposes were not found to be significantly correlated with shyness and loneliness.

As mentioned before, the personality traits of shyness and loneliness had a great importance for social life and social skills development. The association between shyness and loneliness can be partially explained by traits of a protective self-presentation and reductions in social support from relationships (Jackson et al., 2002). Consistently in this study, the protective self-presentation may be seen as an important factor for why shy people followed others instead of disclosing themselves and reductions in social support may be seen as an important indicator for negative relationship between loneliness and communicating with friends.

Some limitations of this study should be kept in mind while examining the results. The current sample was a convenient one, composed of university students at sole university in Ankara, any generalization of the results should be done with caution. Further studies could be conducted with different demographic variables such as age, family size, socio economic status and different Facebook variables such as content of posting, self-presentation on Facebook, self-disclosure on Facebook and different personality characteristics such as self-efficacy, intelligence. Also, number of Facebook friends, time spent on Facebook, and Facebook usage frequency should be taken as continuous variables. In further studies, standard measurement assessing Facebook usage should be developed or adapted to Turkish culture. Finally, actual Facebook data should be obtained from Facebook accounts of volunteer participants.

References

Amichai-Hamburger, Y., & Ben-Artzi, E. (2003). Loneliness and internet use. *Computers in Human Behavior, 19*(1), 71-80.
Amiel, T., & Sargent, S. L. (2004). Individual differences in internet usage motives. *Computers in Human Behavior, 20*(6), 711-726.
Alexa (2011). Top sites. Retrieved April 24, 2012 from http://www.alexa.com/topsites
Alfano, M. S., Joiner, T. E., Perry, M., & Metalsky, G. I. (1994). Attributional style: A mediator of the shyness-depression relationship? *Journal of Research in Personality, 28*(3), 287-300.
Bonebrake, K. (2002). College students’ internet use, relationship formation, and personality correlates. *CyberPsychology & Behavior, 5*(6), 551-557.
Boyd, D., & Ellison, N. B. (2007). Social network sites: Definition, history and scholarship. *Journal of Computer Mediated Communication, 13*(1), 210-230.
Cheek, J. M., & Briggs, S. R. (1990). Shyness as a personality trait. In W. R. Crozier (Ed.), *Shyness and embarrassment: Perspectives from social psychology* (pp. 315-337). Cambridge: UK: Cambridge University Press.
Demir, A. (1989). UCLA Yalnızlık Ölçeğinin geçerlik ve güvenirliği. [The validity and reliability of UCLA Loneliness Scale]. *Psikoloji Dergisi, 7*(23), 14-18.
Deniz, L. (2010). Excessive Internet use and loneliness among secondary school students. *Journal of Instructional Psychology, 37*(1), 20-23.
Ebeling-Witte, S., Frank, M. L., & Lester, D. (2007). Shyness, Internet use, and personality. *Cyberpsychology and Behavior, 10*(5), 713-716.
Eldelekioğlu, J. (2008). Gender, romantic relationships, Internet use, perceived social support and social skills as the predictors of loneliness. *Eurasian Journal of Educational Research, 33*, 127-140.
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.

Erözkan, A. (2009). The predictors of loneliness in adolescents. *Elementary Education Online, 8*(3), 809-819.

Facebook (2012). Facebook statistics. http://www.newroom.fb.com/content/default.aspx?NewAreaId=22. (Retrieved 15.05.12).

Foxall, M. J., Barron C. R., Von Dollen, K., Shull K. A., & Jones P. A. (1994). Low-vision elders: living arrangements, loneliness and social support. *Journal of Gerontological Nursing, 20*(8), 6-14.

Hei-Man, T. (2008). An ethnography of social network in cyberspace: The Facebook phenomenon. *The Hong Kong Anthropologist, 2*, 53-76.

Hughes, D. J., Rowe, M., Batey, M., & Lee, A. (2012). A tale of two sites: Twitter vs. Facebook and the personality predictors of social media usage. *Computers in Human Behavior, 28*(2), 561-569.

Jackson, T., Fritch, A., Nagasaka, T., & Gunderson, J. (2002). Towards explaining the association between shyness and loneliness: A path analysis with American college students. *Social Behavior and Personality, 30*(3), 263-270.

Kalpidou, M., Costin, D., & Morris, J. (2011). The relationship between Facebook and the well-being of undergraduate college students. *Cyberpsychology, Behavior, and Social Networking, 14*(4), 183-189.

Koydemir, S., & Demir, A. (2005). Reliability and validity of 13 item Cheek and Buss Shyness Scale. Unpublished manuscript.

Koydemir, S., & Demir, A. (2008). Shyness and cognitions: an examination of Turkish university students. *The Journal of Psychology, 142*(6), 633-644.

Kraus, L. A., Davis M. H., Bazzini, D., Church, M., & Kirchman, C. M. (1993). Personal and social influences on loneliness: The mediating effect of social provisions. *Social Psychology Quarterly, 56*(1), 37-53.

Leung, L. (2002). Loneliness, self-disclosure, and ICQ (“I seek you”) use. *Cyber Psychology & Behavior, 5*(3), 241-251.

Ma, M. L., & Leung, L. (2005). Unwillingness-to-communicate, perceptions of the internet and self-disclosure in ICQ. *Telematics and Informatics, 23*(1), 22-37.

Moore, K., & McElroy, J. C. (2012). The influence of personality on Facebook usage, wall postings, and regret. *Computers in Human Behavior, 28*(1), 267-274.

Ong, E. Y. L., Ang, P. A., Ho J. C. M., Lim J. C. Y., Goh D. H., Lee, C. S., & Chua, A. Y. K. (2011). Narcissism, extraversion and adolescents’ self-presentation on Facebook. *Personality and Individual Differences, 50*(2), 180-185.

Orr, E. S., Sisic, M., Ross, C., Simmering, M. G., Arsenault, J. M., & Orr, R. R. (2009). The influence of shyness on the use of Facebook in an undergraduate sample. *CyberPsychology and Behavior, 12*(3), 337-340.

Papacharissi, Z., & Rubin, A. (2000). Predictors of internet use. *Journal of Broadcasting and Electronic Media, 44*(2), 75-196.

Peplau, L. A., & Perlman, D. (1982). Perspectives on loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*. New York: Wiley-Interscience.

Peter, J., Valkenburg, P. M., & Schouten, A. P. (2005). Developing a model of adolescent friendship formation on the internet. *CyberPsychology and Behavior, 8*(5), 423-430.

Ross, C., Orr, E. S., Sisic, M., Arsenault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior, 25*(2), 578-586.

Russell, D., Peplau, L. A., & Cutrona, M. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology, 39*(3), 472-480.

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.

Sears, D. O., Peplau L. A., & Taylor S. E., (1991). *Social Psychology*. London: Prentice Hall.

Scealy, M., Phillips, J. G., & Stevenson, R. (2002). Shyness and anxiety as predictors of patterns of Internet usage. *CyberPsychology & Behavior, 5*(6), 507-515.

Schmidt, N., & Sermat, V. (1983). Measuring loneliness in different relationships. *Journal of Personality and Social Psychology, 44*(5), 1038-1047.

Sheeks, M. S., & Birchmeier, Z. P. (2007). Shyness, sociability, and the use of computer-mediated communication in relationship development. *CyberPsychology & Behavior, 10*(1), 64-70.

Sheldon, P. (2008). The relationship between unwillingness-to-communicate and students’ Facebook use. *Journal of Media Psychology, 20*(2), 67-75.

Straub, D. W., Loch, K. D., & Hill, C. E. (2001). Transfer of information technology to the Arab world: A test of cultural influence modeling. *Journal of Global Information Management, 9*(4), 6-28.

Ulusu, Y. (2010). Determinant factors of time spent on Facebook: Brand community engagement and usage types. *Journal of Yaşar University, 5*(18), 2949-2957.

Watson, D. & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Counseling and Clinical Psychology, 33*(4), 448-457.

Wilson, K., Fornasier, S., & White, K. M. (2010). Psychological predictors of young adults’ use of social networking sites. *Cyberpsychology, Behavior, and Social Networking, 13*(2), 173-177.

Wittenberg, M. T., & Reis, H. T. (1986). Loneliness, social skills and social perception. *Personality and Social Psychology Bulletin, 12*(1), 121-130.

Zimbardo, P. G., Pilkonis, P. A., & Norwood, R. M. (1974). The social disease called shyness. *Psychology Today, 8*, 68-72.