Loneliness and Internet Use among University Students

GORDANA STANKOVSKA & IMRAN MEMEDI University of Tetova, Republic of North Macedonia

DIMITAR DIMITROVSKI Institute for Public Health, Republic of North Macedonia

ABSTRACT The world is changed by Social Networks Sites (SNSs) on Internet in an extensive way. The studies showed that a large number of children and adolescents in the world have access to the Internet and being exposed to the Internet at a very early age. Most of them used the Social Networks Sites to exchange academic activities and develop social network all over the world. But the excessive Internet use can lead by negative outcomes such as poor school performance, depression, loneliness. According of these findings, the main aim of this research was to investigate whether internet addiction is related to academic performance and loneliness among the university students. The Emotional and Social Loneliness Scale, Scale for Social Networks and a personal information sheet were administered to a sample of 120 (61 female, 59 male) university students. The results indicated that internet addiction positively associated with loneliness among students. At the same time we found the significant positive relationship between social networks and loneliness, but negative relationship between social networks and low academic performance. There was no correlation between social networks, loneliness and high academic performance. It has been concluded that internet addiction predicted loneliness among university students.

Keywords: loneliness, social networks, internet addiction, academic performance, university students

Introduction

It is known that communication connects people with one other. It enables collaborative activities that influence our way of living. Methods for communication are not stagnant, but rather change over the course of time as a function of technology development. People have shifted from exclusively face-to-face communication with individuals in immediate physical proximity to methods of interaction over great distances. For example, the advent of the telephone and the internet revolutionized interpersonal communication.

The world is changed by internet in an extensive way. The internet became an important part of our daily life. Internet gives us many options for communicating, such as e-mail, instant messaging, chat rooms and social networking sites (SNSs). Kaplan (2005) describe as a web-based service that gives individuals chance to construct personal profiles and communicate with their list of connection. Social net-

works caused an increase in on live virtual communities that people can communicate, share information and see each other.

There are some differences between social networks on the internet and social networks in real life. Social networks on the internet are more flexible than in real life. Some studies showed that it is easier to join social networks of people on the internet while to be included into groups and to be effective in groups in real life is very difficult (On, Chang @ Wang, 2011). While social networks in real life include people always meeting each other and strong connection, rarely seen people or people not be seen can be easily included into network in social networks on the internet. In addition, the internet makes communication easy via overcoming time and play limitations.

Today there are many popular social networking sites around the world such as Face book, Twitter, My Space and Google Plus. The uniqueness of social networking sites is providing users with the possibility to present them using their profile picture and personality information. It also allows users to express their feelings on the network. Social networking sites are only useful when people are really using them as application to stay connected with friends and family to share experiences, memories, happiness and sadness. However, it is also dangerous when people are addicted to it.

The most site networking site users are students from high school and colleges. College age users (between 18 and 25 years old) constitute the biggest age group, according for approximately 30% of the total user population. One – third of the population of social networking sites users are college students. The studies showed that a large number of children and adolescents in the world have access to the internet and are being exposed to the internet at a very early age. Common online activities include completing schoolwork, playing online games or reading and writing emails. The internet provides some educational benefits including access to information across a wide variety of topics, establishing educational links and communication with peers. But excessive internet use can lead to negative outcomes such as poor school performance, social isolation, depression, loneliness.

The relationship between social networks and loneliness

Loneliness is a universally common experience. It has been described as negative feeling that exist when there is a discrepancy between what one wants in terms of interpersonal affection and intimacy and what one, in fact, has. This discrepancy can result from changes in the personal social needs and desires (Weiss, 1973).

Loneliness has been defined as "the unpleasant experience that occurs when a person's network of social relations is deficient in some important way either quantitatively and qualitatively" by Preplan and Perlman (1982). According to the research findings, loneliness has a correlation with social skills (Kaplan, 2005), introversion (Kraus, 1993), depression and anxiety (Fox all et al., 1994), internet use (Kaplan, 2002).

According to researchers' findings, social network using has a relationship with anxiety (Shapiro et al., 2000), introversion (Young, 2007), increase level of depression (Cao, Su, Liu, @ Goo, 2007), anxiety (Sealy, Phillips @ Stevenson, 2002), daily life problems (Young, 2007), shyness (Ross, Orr @ Orr, 2009), loneliness (Monahan - Martin @ Schumacher, 2003).

Students who feel lonely use the social network mostly for communication purposes. Sometimes spending too much time on the internet leads them into loneliness. University students who are in the period of young adulthood are in need of developing close relationships.

Lonely students thought that they have problems such as making friends introducing themselves, joining groups, enjoying parties, so they have a high tendency for internet use and at the same time they experience loneliness.

Researchers showed that students who use social networking site for longer time had insignificant relationship and minimized the verbal communication to those who use lesser (On, Chang @ Wang, 2011). Today, traditional communication is neglected while benefits of the social networking site have increased. Now it is clearer why too much depending of social networking sites might increase loneliness among young people.

Social networks and academic performance among students

Today the process of education plays a vital role in building modern society. Education is unique investment of person and academic performance is a vital aspect of it. The theory and practice showed that good academic record over years predicts future success of person.

Studies have shown that the other variable related to internet addiction is academic achievement. Most of the students used the social networks to exchange academic activities and develop social network all over the world. They want to communicate and share their learning experiences with their peers. But some of them used social networking sites for fun, play interactive game, visit unrelated websites, chat in chat rooms. All of these have been determined to impact study habits of student in a significant decrease in their academic performance. While some studies have indicated that spending long hours on the social networking site leads to low academic achievement (Anderson @ Dill, 2000), the other states that there is negative association between internet use or addiction and perceived impact on academic success (Anderson, 2001; Robles, McDaniel, Webb, Herman @ Witty, 2010).

According to this finding, the purpose of this study is to investigate the relationships between social networks, loneliness and academic performance in Macedonian university students.

Methods

Participants

The sample of students was randomly selected and all of them participated voluntarily. Participants were 120 university students aged between 21-23 years. The mean age of the students was calculated as 21.50 (SD=8.97). Among the participants, 61 were female (51%) while 59 were male (49%). Study group of the research were third-year students who studied psychology at State University of Tetova in Tetovo and Skopje.

Data Collection Tools

Within the scope of the study, Personal Information Form constructed by researchers, Loneliness Scale for determination of loneliness levels of students and Scale for Social Network for determination internet and social network addiction status were used among university students.

Personal Information Form: This form includes gender, age and academic success.

Academic Performance: Students were asked to self-report their grades during their studying at the University. Academic success level was ranged from 6-10 and we divided students into two groups: 60 students with academic success low of 7.50 (M=7.08) and 60 students with academic success high than 7.50 (M-8.36).

Loneliness: The Social and Emotional Loneliness scale (SELS) was used. This scale, developed by Adorić Ćubela and Nekić (2002), is used to measure general loneliness level. The scale was composed of 36 items (13 items for social loneliness and 23 items for emotional loneliness). It is a seven-point linker type scale. The total score range from 36 to 252, with higher scores indicating greater loneliness. In this study, Cronbach's alpha coefficient for internal consistency was 0.76.

Scale for Social Network (SSN): The scale developed by Bodroza, Popov and Poljak (2004) was performed by participants. The scale aiming to determine internet addiction in students is composed of 42 items. It is a five-point linker type scale. According to the sum of scores, the range of total score is from 42 to 210, in which the higher score proves higher level of internet addiction. Internal coefficient of consistence (Cronbach's Alpha) was 0.82.

Data procedure and Data Analysis

Data collection tools were administered by the researchers during the winter semester of the 2015-2016 academic years. The instruments were applied to the students in classroom, settings by getting permission from the instructors. The period for answering the scale lasted for 45 minutes.

The data was analyzed by using SPSS 17.0 for Windows package program. In this study, the significance levels were accepted as .01 or .05.

Results

The study group comprised of 120 university students (61 girls and 59 boys) aged between 21-23 years. The results of the internet addiction and loneliness scores were portrayed on Table 1. In our study we observed that the mean rate of internet addiction was 164.22 (SD=23.120), while the mean rate of loneliness was 213.34 (SD=12.980). The range of data from the internet addiction and loneliness were 67-185, and 62-225.

The results indicated that there was positive and significant relationship between internet addiction and loneliness (r=.401, p<.01) among university students. Also the results showed that internet addiction positively predicted emotional loneliness (r=.330, p<.01) and social loneliness (r=.374, p<.01).

Figure 1 illustrates the overall scores for the level of internet addiction and loneliness among university students.

From Table 2 we would see that there was a positive and significant relationship between loneliness and low academic performance (r= .325, p< .05), internet addiction and loneliness (r= .600, p< .01) and a negative and significant relationship between internet addiction and low academic performance (r= .150, p> .01). Also in this group we found that internet addiction positively correlated with emotional loneliness (r= .299, p< .05), but there was negative correlation between internet addiction and social loneliness (r= .250, p> .05). In contrast, there was strong negative relationship between loneliness and high academic performance (r= .112, p> .01), internet addiction and high academic performance (r= .002, p> .01) and internet addiction and loneliness (r= .009, p> .01).

Discussion

The results of this study showed that there was a strong correlation between internet addiction levels of 21-23-year-old adolescents enrolled in the high education process and levels of loneliness. So in our study using of social networking site is playing a significant role in causing loneliness among university students. At the same time, emotional and social aspect of loneliness was found to positively predict internet addiction. That means that individual who is having way too insufficient social relations in terms of quality and quantity will be addicted to the internet. This finding implies that the students who are lonely would be addictive to internet and would also feel more lovely, happy and important while on internet.

The benefits of using social networking site include having new friends, growing friendship and personality improvement. It also improves the user way of communication (Ellison, Seinfeld @ Lampe, 2007). Nelda and Annan (2000) found that students who were pathological users of social networking site had more perceived academic, social and interpersonal problems as well as lower self-esteem. Also when we look at the results of the study, it is clear that students with low academic performance are more inclined to use the social networking sites, because they feel lonely and more isolated in real life. They cannot express themselves, experience difficulty in sharing feelings and having social communication. So they may prefer chatting with internet friends, because that is less stressful compared to face-to-face relationships (Peter, Altenburg @ Schouten, 2005). The internet may be used as a defense mechanism in order to cope with loneliness.

At the same time the results in our study showed that social networking site is not playing a significant role in inducing loneliness among students with high academic success. This means that according to our study there is no correlation between social network use, loneliness and academic performance. Internet was negatively associated with high academic success, perhaps because the students use it to obtain academically related information or to discuss educational matters on it. We think that they are more satisfied with their real lives and do not use internet for social communication. High achieving students may have engaged in a variety of virtual and real learning behaviors, which was effective in their educational process.

Conclusion

The present study summarize that there is a significant positive relationship between social networking sites like Face book, Twitter or Internet, loneliness and academic success among university students. It can be concluded from the findings that excessive usage has converse relation to students.

Students who feel lonely in real live more likely use online communications to form close relationships with those they met online. Social networking sites are tool which help them to polish and maintain relationship, create online personal where they alter their identities and pretend to be someone other than themselves or to complete course assignments.

Some limitations of this study should be kept in mind while examining the results. First, the sample was restricted to university students who studied psychology in Tetovo and Skopje, so the results may not be general to all Macedonian university students. Further research should be carried out with group more representative of all university students in Macedonia. At the same time further studies should be conducted with different demographic variables such as religion, ethnicity, family size, socioeconomic status and different personality traits.

Acknowledgements

The authors would like to express their gratitude to all students who participated in this study.

Correspondence
Prof. Dr. Gordana Stankovska
State University of Tetovo
Republic of Macedonia E-Mail: gorstankovska@gmail.com

References

Adorić Ćubela, V., Nekić M. (2002): Usamljenost srednoškolaca u domenama prijateljskih, obiteljskih i ljubavnih odnosa: Prilog validacije upitnika SELSA. *Radovi Filozofskog fakulteta u Zadru*, 41(18), 69-94.

Anderson, C.A. @ Dill, K.E. (2000): Video games and aggressive thought, feelings and behavior in the laboratory and in life. *Journal of Personality and Social Psychology*, 78(4), 772-790.

Anderson, K.J. (2001): Internet use among college students: An exploratory study. *Journal of American College Health*, 50(1), 21-26.

Cao, F., Su, L., Liu, T. @ Goo, X. (2007): The relationship between impulsivity and internet addiction in a sample of Chinese adolescents. *The Journal of the Association of European Psychiatrists*, 22(7), 466-471.

Ellison, N., Seinfeld, C. @ Lampe, C. (2007): The benefits of face book friends: Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12, 1143-1168.

Fox all, D.J. et al. (1994): Low-vision elders: living arrangements, loneliness and social support. *Computers in Human Behavior*, 28(2), 561-569.

Kaplan, S.E. (2002): Problematic internet use and psychosocial well-being: Development of a theory-based cognitive behavioral measurement instruments. *Computers in Human Behavior*, 18(5), 553-557.

Kaplan, S.E. (2005): A social skill account of problematic internet use. *Journal of Communication*, 55(4), 721-736.

Kraus, L.A. et al. (1993): Personal and social influences on loneliness: The mediating effect of social provisions. *Social Psychology Quarterly*, 56(1), 37-53.

Monahan - Martin, J. @ Schumacher, P. (2003): Loneliness and social uses of the Internet. *Computers in Human Behavior*, 19, 659-671.

Nelda, K. @ Annan, A. (2000): Internet addiction in students: A cause of concern. *Cyber Psychology @ Behavior*, 6(6), 653-656.

On, S.S., Chang, S. @ Wang, C.C. (2011): Comparative loneliness of users versus nonusers of online chatting. *Cyber Psychology, Behavior and Social Networking*, 14 (1-2), 35-40.

Preplan, L.A. @ Perlman, D. (1982): Perspective on loneliness. In L.A. Preplan @ D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*. New York: Wiley and Sons.

Peter, J., Altenburg, P.M. @ Schouten, A.P. (2005): Developing a model of adolescent friendship formation on the internet. *Cyber Psychology* @ *Behavior*, 8(5), 423-430.

Robles, M. D., McDaniel, M., Webb, M., Herman, J. @ Witty, J.V. (2010): Findings on face book in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *Internet and Higher Education*, 13, 134-140

Ross, C., Orr, E.S. @ Orr, R.R. (2009): The influence of shyness on the use of face book in an undergraduate sample. *Cyber Psychology* @ *Behavior*, 50(2), 180-185.

Sealy, M., Phillips, J.G. @ Stevenson, R. (2002): Shyness and anxiety as predictors of patterns of Internet usage. *Cyber Psychology* @ *Behavior*, 5(6), 507-515.

Shapiro, N. et al. (2000): Psychiatric features of individuals with problematic internet use. *Journal of Affective Disorders*, 57, 472-480.

Young, K.S. (2007): Treatment outcomes with internet addicts. *Cyber Psychology @ Behavior*, 10(5), 671-672.

Weiss, R.S. (1973): Loneliness: The experience of emotional and social isolation. Cambridge. MA: MIT Press.

Appendix

Statistic	Internet addiction	Loneliness
Mean	164.22	213.34
Std. Deviation	23.120	12.980
Minimum	67	62
Maximum	185	225

Table 1. Descriptive statistics of research data

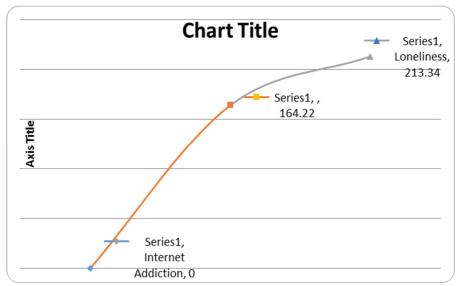


Figure 1. Internet addiction and loneliness level

Table 2. Matrix of intercorrelation between internet addiction, loneliness, social and emotional loneliness among subjects

	Internet addiction ness	Loneliness	Social Emotional loneliness loneli-
Internet ad- diction	1		
Loneliness	0.401**	1	
Social loneli- ness	0.330**	0.215*	1
Emotional loneliness	0.374**	0.763*	0.218** 1

^{*}The difference is significant at a level of p<0.05 $**$ The difference is significant at a level of p<0.01