

# Facebook Addiction Levels of Students in the Physical Education and Sport Department

[1] Sakarya University, Faculty of Sports Sciences, Recreation Department  
cyaman@sakarya.edu.tr

Çetin YAMAN [1]

## ABSTRACT

Time spent using various technological equipment increases every day with rapid technology development. Unfortunately, technology addiction is becoming an important issue. Especially with the development and ubiquity of mobile technologies, social media addiction is expanding. The aim of this study is to measure the Facebook addiction levels of 274 students at the Physical Education and Sports Teaching Department in a public university in Turkey and to examine their Facebook addiction levels against a number of variables. Descriptive method was used within the framework of the study and the "Facebook Addiction Survey" developed by Çam and İşbulan (2012) was used as the data collection instrument. The results of the study show the students had low levels of Facebook addiction. On the other hand, when the Facebook addiction level mean scores were compared, male students were seen to have higher scores than female students. Students in the 3rd grade had higher mean scores than those in the 1st and 2nd grades. Although Facebook addiction is not a problem among the students, proactive action is needed to enhance student awareness of the problem and ensure future teachers can be role models in an addiction-free academic environment.

**Keywords:** *Facebook, addiction, social network, teacher candidates, sport education*

## INTRODUCTION

Addiction is defined by factors such as a person has attempted numerous times to withdraw the substance being used, increasing the amount of usage, facing withdrawal symptoms when ceasing the substance usage, continuing to use despite seeing the harmful effects and spending most of their time seeking the substance (Ögel, 2001). Individuals can be addicted to many substances such as cigarettes, alcohol or drugs. Other addictions independent of physical substances, such as food addiction based on behavior, game addiction, computer addiction, television addiction, shopping addiction and internet addiction also exist (Greenfield, 1999; Kim & Kim, 2002).

Nowadays, substance addiction is the first notion coming to mind while talking about addiction. However the notion of addiction includes different activities such as internet addiction (Young, 1998), gambling addiction (Griffiths, 1995), food addiction and video game addiction (Griffiths, 1993). With the technology developments in the 21st century, addictions such as internet addiction and social media addiction have taken their place within the list of important and frequently encountered addictions.

Internet addiction shares similar features with substance addiction. Here, internet usage reaches a pathological level as "technological addictions" (Young, 1996). Internet and technology addiction can be described as the situation where an individual cannot control the usage with their own willpower, cannot refrain from performing that act and feel withdrawal symptoms when unable to access the technological

product causing the addiction. While technological addictions can occur in passive states such as watching TV, they can also be in active addiction form while performing other acts such as playing video games (Griffiths, 1995).

Another type of addiction discussed alongside internet addiction in recent years is social network addiction. Various definitions exist within the literature regarding social networks, such as: social interaction network (Çetin, 2009), informal learning environment (Stevenson & Liu, 2010), advertisement and public relations environment (Onat & Alikılıç, 2008), online human community (Buss and Strauss, 2009), marketing environment and the innovator phenomenon of the internet (Akar, 2010).

Social networks are websites where individuals can create their profiles in a registered system either publicly or semi-publicly, share links, see other people's lists and see the relationship status of other people within the system while also allowing individuals in online groups to share their likes and activities and also share messages, e-mails, discussion groups, videos, audio chats and files (Boyd & Ellison, 2007). The most essential features of these environments include allowing the individuals to work with others and actively participate, give and receive feedback and customize their space in a comfortable environment, in a two-way communication process and interactive environment (Lee & McLoughlin, 2007). Thus a form of communication was born, where discussion and sharing are almost cost free and the individual is in the center.

One of the social networks allowing individuals to spend time in cyber space together with their loved ones, share information and have fun together is Facebook. This software, first developed by Mark Zuckerberg in 2004 at Harvard University for the university students, is now one of the most recognized and used social networks in the world (İşman & Albayrak, 2014; Yaman & Yaman, 2014).

The popular social networks such as Facebook, Twitter, Instagram, Google+, Snapchat and Whatsapp are followed and used actively by millions of people (Hergüner, 2011). Social network addiction has started to be observed with the increasing rate of use. While these social networking sites increased in usage, they brought positive results such as communication, interaction, sharing, collaboration and socializing for users, yet they can also cause problems such as anxiety of socializing (Şahin, İşleyen & Özdemir, 2012), decrease in face-to-face communication (Das & Sahoo, 2011; İşbulan, 2011), solitude (Sheldon, 2008, 2012), and addiction (Pelling & White, 2009; Wang, 2009; Wilson, Formasier, & White, 2010).

Social network addiction needs to be included in the internet addiction or technology addiction categories due to the messaging, online gaming and other interaction activities by the individuals and problematic internet usage by staying connected to the internet in carrying out these activities (Das & Sahoo, 2011; Karaiskos, Tzavellas, Balta, & Paparrigopoulos, 2010). Therefore, the internet usage ratings are expected to rise in proportion to the increase of social networking addiction among individuals.

The purpose of this study is to determine the Facebook addictions and the addiction levels of the students studying in the Sakarya University, Faculty of Sports Sciences, Physical Education and Sports Teaching Department, concerning the gender and class variables.

## **METHOD**

Information regarding the findings related to the study, participants, data collection tool and the processes is given in this section.

### **Participants**

Some 274 students of the Physical Education and Sports Teaching Department in the University of Sakarya participated in this study, which aimed at measuring the Facebook addiction levels of the students. Participant selection in the study was carried out through convenience sampling. By gender, 146 (53%) of the students are female while 128 (47%) are male. As for grade distribution, 65 (24%) of the students are in the 1st grade, while 69 (25%) are in the 2nd grade, 74 (27%) in the 3rd grade and 66 (24%) in the 4th grade.

### Data Collection Tool

The "Facebook Addiction Scale" developed by Çam and İşbulan (2012) was used as the data collection instrument in this study in which the descriptive method is used. The Facebook Addiction Scale consists of a single factorial model. The load value of the 19 items on the factor vary between 0.57-0.73. The factor in the scale accounts for 43.86% of the total variance. As a result of the exploratory factor analysis, the scale was found to be consisting of 19 items and a single factor.

In the confirmatory factor analysis carried out afterwards, the weight of the factor varied between .55 and .77 for Facebook addiction. In the confirmatory factor analysis, the findings were as follows, chi square = 767.26, sd = 143.02 ( $p < 0.01$ ), RMSEA = 0.054, NFI = 0.98, CFI = .99, SRMR = 0.035, and IFI = .99 AGFI = 0.93. The 19- item internal coefficient of consistence of the Facebook Addiction scale was found as Cronbach  $\alpha$  .93. This value is seen as an acceptable value for the reliability level of the Facebook Addiction Scale.

### Data Collection Process

The data of this study which aims to determine the Facebook addiction levels of the Physical Education and Sports Teaching Department students and examine the data in terms of various variables. The data was collected from 274 students who continue their studies in a public university, Sports Sciences Faculty, Physical Education and Sports Teaching Department in the fall semester of the 2015-2016 academic year, and through the application of the Facebook Addiction Scale. The data collection process lasted for approximately 2 weeks and special attention was paid to data collection from the volunteering students.

## FINDINGS

In this section, the findings regarding the research are presented in terms of Facebook addiction levels, differences in the Facebook addiction levels in accordance with the gender and grade variables.

**Table 1. The Facebook Addiction Levels of the Students**

	$\bar{X}$	Min	Max	sd	%
<b>Facebook Addiction Levels</b>	40.53	19	114	19.97	35

According to the analysis, the Facebook addiction levels of the students who participated in the study are around 35%. This represents the fact that the Facebook addiction of the group is at a low level.

**Table 2. The Items Rated Highest and Lowest by the Students**

Items	$\bar{X}$
How often do you choose to spend time on Facebook instead of going out with your friends?	1.83
How often do you feel yourself depressive, down or tense when you are not browsing Facebook?	1.86
How often do you find yourself trying to hide how much time you spend browsing Facebook?	1.85
How often do you check Facebook while having something else to do?	2.46
How often do you establish new connections with Facebook users?	2.49
How often do you choose to browse Facebook in order to get away from the negative thoughts in your life?	2.57

Analysis of the results suggests that students do not prefer to spend time on facebook rather than going out with their friends; they were not feeling depressive, down or tense and not trying to hide their behavior while browsing Facebook. In addition, another conclusion was that the students sometimes checked Facebook while doing other things, established new connections with Facebook users and used Facebook in order to escape a negative occurrence in their life. The innovations and developing technologies bring a new and different dimension into the lives of the individuals while offering them different options (Karaman & Kurtoğlu, 2009). As can be seen, the results of the study reveal that even though they are not addicted to Facebook, the students choose from these options even if only occasionally.

**Table 3. The Facebook Addiction Levels of the Students by Gender**

	Gender	N	$\bar{X}$	sd	t	p
Facebook Addiction	Female	146	37.31	17.34	2.88	.005
	Male	128	44.24	22.11		

Analysis of the mean scores of the male students showed that their scores were significantly higher when compared to the scores of the female students. However, because the scores are still at low levels, the consideration is that the male students should not be qualified as Facebook addicts.

**Table 4. The Facebook Addiction Levels of the Students by Grade**

	Grade	N	$\bar{X}$	sd	Source of Variance	df	Squares Mean	F	p
Facebook Addiction	1. Grade	65	38.0	17.9	Inter-group	3		3.26	.022
	2. Grade	69	36.9	19.8	Group Internals	267	1269.2		
	3. Grade	71	46.4	21.0	Total	270	389.25		
	4. Grade	66	40.4	19.7					

Significant differences with regards to the grade variable were found in the Facebook addiction levels of the students as a result of the analysis. LSD test was applied in order to identify between which groups the significant differences took place.

**Table 5. Results of the LSD Test**

	Grades	Mean Dif.	p
Facebook Addiction	3. Grade - 1. Grade	8.45	.013
	3. Grade - 2. Grade	9.53	.005

According to the LSD Test results, the Facebook addiction levels of the students in the 3rd grade are higher than the levels of the students in the 1st and 2nd grades.

**RESULTS AND SUGGESTIONS**

The findings of the study indicate that the Facebook addiction levels of the students in the Physical Education and Sports Teaching Department at Sakarya University are not at a serious level. Although the addiction levels are low, significant differences were observed with regard to gender and grade variables among the participants. The male students achieved higher scores in the Facebook addiction scale when compared to the female students and the students in the 3rd grade obtained significantly higher scores in

the Facebook addiction scale in comparison to those in the 1st and 2nd grades.

The fact that the addiction levels of the group represent low levels can be described as a decent state. Facebook addiction has possible negative effects on the lives of individuals, as shown in many studies. This is because Facebook addicts may show behaviors such as feeling as if they are left behind when not using Facebook (Denti et al., 2012), hacking the Facebook accounts of their partners and keeping them under control (Abhijit, 2011).

Xu & Tan (2012) show that Facebook addiction may be causing loneliness and stress. In addition Facebook addiction has been identified as a cause of decreased sleep quality (Wolniczak et al., 2013). However, despite other studies, in this study the Physical Education and Sports Teaching students come into view as not being addicted to Facebook or having addictions at mild levels. Therefore, the students participating in this study are thought not to be carrying the symptoms of Facebook addiction.

To help prevent addiction, teachers need to be role models for the students in our schools. When the fact that these pre-service teachers will be the teachers in the near future is taken into consideration, this finding of the study can be considered to be reassuring. The pre-service teachers of the Physical Education department are considered to be promising role models. Namely, since a teacher who is addicted will not be able to recommend their students not to be addicted, they will also not be able to be a good role model.

Extension of computer and internet usage nowadays also increases the amount of time spent using the internet. Especially with the ability to access the internet service anytime anywhere through mobile technologies, addiction to Facebook is rising on a daily basis. Therefore, to prevent problematic internet use or increase in Facebook addiction levels, time spent on the internet and social media must be limited to certain levels. Moreover, it is important for educators to take further steps by holding events such as in-service training, seminars and briefings organized by the counsellors and teachers of IT, aimed at raising the awareness levels of the students, parents and other teachers regarding the dangers of social media addiction.

## REFERENCES

- Abhijit, N. (2011). Facebook Addiction. Retrieved from <http://www.buzzle.com/articles/facebook-addiction.html>
- Akar, E. (2010). Sanal Toplulukların Bir Türü Olarak Sosyal Ağ Siteleri – Bir Pazarlama İletişimi Kanalı Olarak İşleyişi. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 10(1), 107-122.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Buss, A., & Strauss, N. (2009). *Online communities handbook: Building your business and brand on the web*. Berkeley, CA: New Riders Press.
- Çam, E., & İşbulan, O. (2012). A new addiction for teacher candidates: Social networks. *TOJET: The Turkish Online Journal of Educational Technology*, 11(3), 14-19.
- Çetin, E. (2009). Sosyal İletişim Ağları ve Gençlik: Facebook Örneği. *Uluslararası Davraz Kongresi Bildiri Kitabı*, 1094-1105.
- Das, B., & Sahoo, J. S. (2011). Social networking sites: A critical analysis of its impact on personal and social life. *International Journal of Business and Social Science*, 2(14), 222-228. Retrieved from [http://www.ijbssnet.com/journals/Vol.\\_2\\_No.\\_14%3B\\_July\\_2015/25.pdf](http://www.ijbssnet.com/journals/Vol._2_No._14%3B_July_2015/25.pdf)

- Denti, L., Barbopoulos, I., Nilsson, I., Holmberg, L., Thulin, M., Wendblad, M., & Davidsson, E. (2012). *GRI-rapport, Sweden's largest Facebook study*. Gothenburg Research Institute School of Business, Economics and Law at University of Gothenburg.
- Greenfield, D. N. (1999). Virtual addiction: Sometimes new technology can create new problems. Retrieved from [http://virtual-addiction.com/wp-content/pdf/nature\\_internet\\_addiction.pdf](http://virtual-addiction.com/wp-content/pdf/nature_internet_addiction.pdf)
- Griffiths, M. D. (1993). Are computer games bad for children? *The Psychologist: Bulletin of the British Psychological Society*, 6, 401-407.
- Griffiths, M. D. (1995). Technological addictions. *Clinical Psychology Forum*, 76, 14-19.
- Hergüner, G. (2011). Opinions of students in physical education and sports teaching on the use of social network sites. *TOJET: Turkish Online Journal of Educational Technology*, 10(2), 174-183.
- İşbulan, O. (2011). Opinions of university graduates about social networks according to their personal characteristics. *TOJET: Turkish Online Journal of Educational Technology*, 10(2), 184-189.
- İşman, A., & Albayrak, E. (2014). Sosyal Ağlardan Facebook'un Eğitime Yönelik Etkililiği; *Trakya Üniversitesi Eğitim Fakültesi Dergisi*. 4(1), 129-138
- Karaman, M.K., & Kurtoğlu, M. (2009). Öğretmen Adaylarının İnternet Bağımlılığı Hakkındaki Görüşleri; Akademik Bilişim'09 - XI. Akademik Bilişim Konferansı Bildirileri 11-13 Şubat. Harran Üniversitesi, Şanlıurfa.
- Karaiskos, D., Tzavellas, E., Balta, G., & Paparrigopoulos, T. (2010). Social network addiction: A new clinical disorder? *European Psychiatry*, 25, 855. doi: 10.1016/S0924-9338(10)70846-4
- Kim, S., & Kim, R. (2002). A study of internet addiction: Status, causes, and remedies: Focusing on the alienation factor. *International Journal of Human Ecology*, 3(1), 1-19
- Lee, M. J. W., & McLoughlin, C. (2007). Teaching and learning in the Web 2.0 era: Empowering students through learner-generated content. *International Journal of Instructional Technology and Distance Learning*, 4(10), 21-34.
- Ögel, K. (2001). *İnsan, Yaşam ve Bağımlılık Tartışmalar ve Gereçler*. İstanbul: IQ Kültür Sanat Yayıncılık.
- Onat, F., & Alikılıç, Ö. A. (2008). Sosyal Ağ Sitelerinin Reklam ve Halkla İlişkiler Ortamları Olarak Değerlendirilmesi. *Journal of Yaşar University*, 3(9), 1111-1143.
- Pelling, E. L., & White, K. M. (2009). The theory of planned behavior applied to young people's use of social networking web sites. *CyberPsychology & Behavior*, 12(6), 755-759.
- Şahin, H., İşleyen, F. and Özdemir, S. (2012). Eğitim fakültesi öğrencilerinin romantik ilişki durumları ve sosyalağ kullanımlarına göre etkileşim kaygısı ve sosyal destek algılarının incelenmesi. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 8(2), 25-36

- Sheldon, P. (2008). The relationship between unwillingness-to-communicate and students' Facebook use. *Journal of Media Psychology, 20*, 67-75.
- Sheldon P. (2012). Profiling the non-users: Examination of life-position indicators, sensation seeking, shyness, and loneliness among users and non-users of social network sites. *Computers in Human Behavior, 28*, 1960-1965. doi:10.1016/j.chb.2012.05.016
- Stevenson, M. P., & Liu, M. (2010). Learning a language with web 2.0: Exploring the use of social networking features of foreign language learning websites. *CALICO Journal, 27*(2), 233-259.
- Wan, C. (2009). *Gratifications & loneliness as predictors of campus-SNS websites addiction & usage pattern among Chinese college students*. (M.S thesis, Chinese University of Hong Kong).
- Wilson, K., Fornasier, S., & White, K. (2010). Psychological predictors of young adults' use of social networking sites. *CyberPsychology, Behavior & Social Networking, 13*(2), 173-177.
- Wolniczak, I., Caceres-DelAguila, J. A., Palma-Ardiles, G., Arroyo, K. J., Solís-Visscher, R., Paredes-Yaur, S., et al. (2013). Association between Facebook dependence and poor sleep quality: A study in a sample of undergraduate students in Peru. *PLoS One, 8*(3), e59087. <http://dx.doi.org/10.1371/journal.pone.0059087>
- Xu, H., & Tan, B. C. Y. (2012). Why do I keep checking Facebook: Effects of message characteristics on the formation of social network services addiction. Retrieved from <http://elibrary.aisnet.org/Default.aspx?url%http://aisel.aisnet.org/cgi/viewcontent.cgi?article%1216&context% icis2012>
- Yaman, M., & Yaman, Ç. (2014). The use of social network sites by prospective Physical Education and sports teachers (Gazi University sample). *TOJET: Turkish Online Journal of Educational Technology, 13*(1).
- Young, K., (1996). Internet addiction: The emergence of a new clinical disorder. *Cyber Psychology and Behavior, 1*(3), 237-244.
- Young, K. S. (1998). *Caught in the Net: How to recognize the science of internet addiction and a winning strategy for recovery*. New York, NY: Wiley.