

Analysis of Internet Use among College Students

Svetlana Čičević,¹ Marjana Čubranić-Dobrodolac,¹ Milkica Nešić²

Abstract – The purpose of this study was to gather information about college students' Internet use. The results indicated that two most frequent and time-consuming activities were browsing the Internet and checking email. Internet is used more on weekends than during weekdays. For educational purposes most of the students use Internet daily.

Keywords – Internet use; college students; educational purposes.

I. INTRODUCTION

Since the mid-1990s, the Internet has experienced unprecedented growth in both its size and number of users. The Internet has become one of the most popular communication channels among college students worldwide.

With the advent of Internet, a significant transition can be seen in the academic communities' approach and the way they seek information and the methods they employ for teaching and learning activities. This has become possible as Internet provides a wealth of current information and delivers text, graphics, images, audios and videos at the same time. It acts as a powerful supplement to the traditional ways of studying and learning. The Internet can provide access to essentially unlimited resources of information, not conventionally obtainable through other means. There have been a number of research studies on the use of Internet, especially in the developed countries. Some of these studies measure usefulness, some have focused on accessibility, while others have combined all these. A review of literature reveals that the teachers and students are the most frequent users of Internet. They use Internet for teaching, learning and for research purposes.

An increasing number of studies have examined how college students, and youth more generally, use ICTs (Information and communications technologies) [1-4]. Salaway, Caruso, and Nelson (2007) found that students spent an average of 18 hours per week on online activities [5], while Junco and Mastrodicasa (2007) found that college-age instant messaging users typically spent an hour and 20 minutes each day actively chatting [6]. Social networking websites are one of the most popular online activities for college students [2,7,8]. Quan-Haase (2007) found that 65 % of the students spent more than 3 hours per day online, 62 % used e-mail weekly, 67 % used IM (instant messaging) daily, and most

students had been using IM for 4 years or more [9]. Morgan and Cotten (2003) found that students spent an average of 3.9 hours using e-mail, 16.3 hours of chatroom and IM use, and almost 12 hours using the Internet for noncommunication-related activities per week, such as surfing or playing games [10]. Hargittai (2007) found that 82 % of students reported using chat features of digital media, and almost 84 % went online more than once a day [11].

In terms of their daily lives, college student schedules provide them with a lot of flexibility and free time resulting in the flexibility to spend long epochs on various Internet applications. Moreover, college students have easy access through direct Internet connections in dorms, libraries, and computer labs.

As students use of the Internet continues to increase, so does the need for institutions to understand the role the Internet is playing on the college. The evaluation of this question is complex and derives through understanding the activities students engage in online. Bearing the above mentioned in mind, the purpose of this pilot study was to gather descriptive information about college students' Internet use.

II. METHOD

The current investigation describes Internet use and patterns of online behavior among students at the Faculty of Transport and Traffic Engineering in Belgrade.

The sample consisted of 35 college students (60% male and 40% female; with the mean age 21.68 years). Students in an introductory psychology course were invited to complete a self-reported questionnaire on patterns of Internet use. The survey consisted of 45 multiple-choice items. Besides demographical information, general internet usage data was collected including amount of experience, time spent online, type of usage, etc.

III. RESULTS

Students generally use the Internet center in the dorm. Due to the gradual introduction of ADSL in student dormitories, as well as the growing popularity of wireless modems, many of the respondents access the Internet from the room. Also, many students access the Internet from an Internet center at the University or from some other Internet centers.

The results have shown that most of the respondents had extensive experience in using the Internet, about half of participants (46%) have 3 or more years experience using the Internet. Only 11% of them use the Internet less than a year. The analysis clearly indicates that on an average, majority of the respondents used Internet weekly. The two most frequent

¹Svetlana Čičević is with the Faculty of Transport and Traffic Engineering, Vojvode Stepe 305, 11000 Beograd, Serbia, E-mail: s.cicevic@sf.bg.ac.rs;

Marjana Čubranić-Dobrodolac is with the Faculty of Transport and Traffic Engineering, Vojvode Stepe 305, 11000 Beograd, Serbia, E-mail: marjana@sf.bg.ac.rs;

²Milkica Nešić is with the Faculty of Medicine, Blvd. Dr Zorana Djindjica 81, 18000 Nis, Serbia, E-mail: milkica@medfak.ni.ac.rs.

and time-consuming activities were browsing the Internet and checking email. 43% of the students were checking their mails weekly or daily (40%), 5% of them every few hours, and only 6% very rare. To find the necessary information over half of the students (54%) used the Internet weekly, and daily 26%. The participants do not buy online, in general (86%), while 14% rarely. Most of the students use Internet for educational purposes daily (62%) or weekly (26%) (Table I).

TABLE I.
FREQUENCY OF GENERAL INTERNET ACTIVITY ENGAGEMENT

How often you participate in the following activities on the Internet (%)	1	2	3	4	5	6
Email	5	40	43	6	6	0
Instant Message	8	26	54	3	9	0
Find Information	8	40	40	6	6	0
Make Purchases	0	0	0	0	14	86
Academic Research	6	62	26	3	3	0

*1 - Hourly | 2 - Daily | 3 - Weekly | 4 - Monthly | 5 - Rarely | 6 - I don't do this

Although web sites and magazines provide a great source of information, almost equal to the number of students who read the internet sites / magazines is the number of those who do not read. Due to lack of interest, or lack of time most students (74%) do not play online games (Fig. 1).

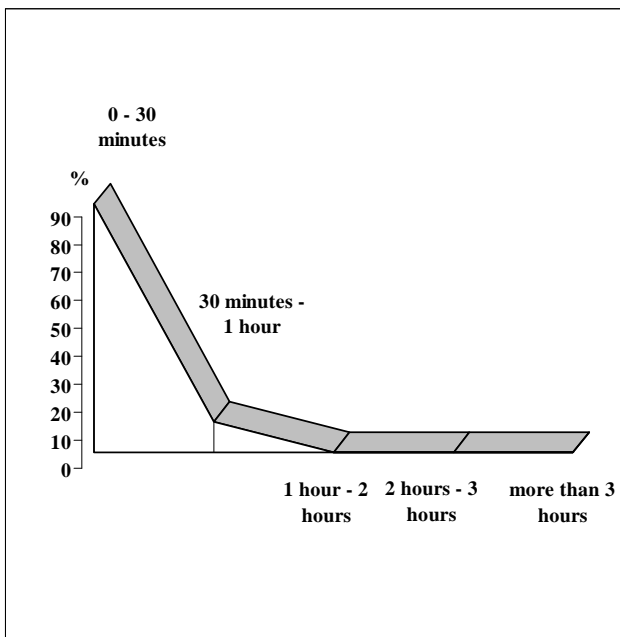


Fig. 1. Time spent playing games online on weekdays and weekends

The respondents use the Internet less on weekdays (Monday – Friday) and more on weekends (Saturday and Sunday). This result was expected because of lower engagement in educational activities on weekends, but not in accordance with the findings from literature (Figs. 2 and 3).

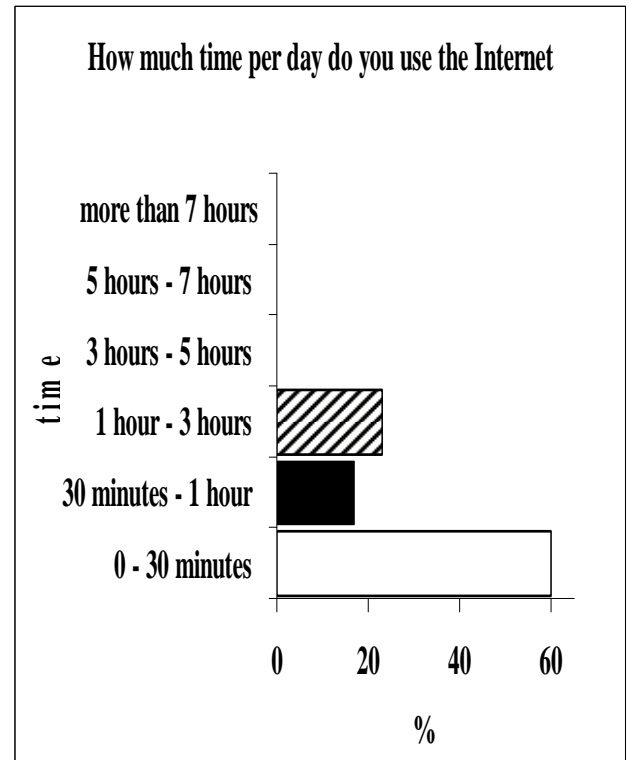


Fig. 2. Frequency of Internet Use on weekdays

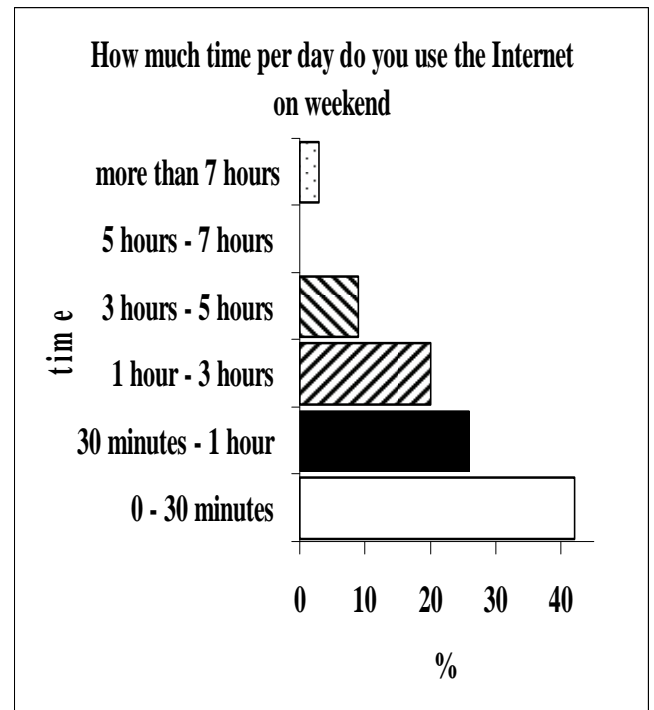


Fig. 3. Frequency of Internet Use on weekends

66% of respondents have opened a Facebook account. On Facebook, 57% spent up to 30 min, 22% up to an hour and 17% by 2 h, still only 4% between 2 and 3 h (Fig. 4).

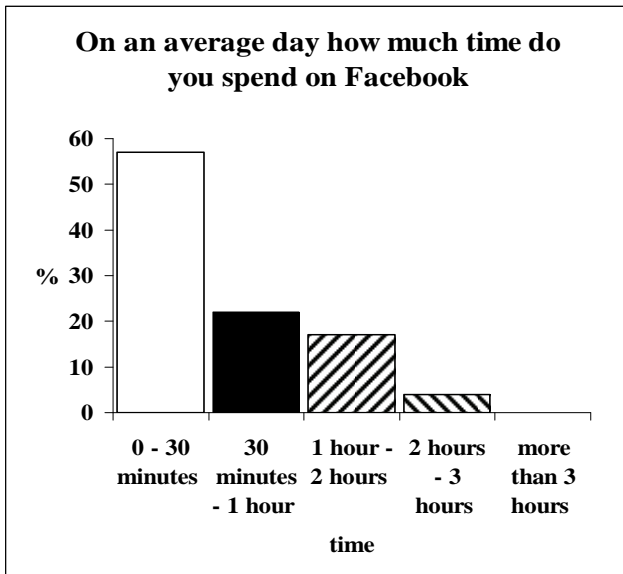


Fig. 4. Frequency of Facebook Daily Use

Mainly (48%), students agree to strongly agree with the statement: "I was excited to join Facebook." The majority of participants (82%) agree to strongly agree with the statement: "I use Facebook to stay connected to friends from high school". Only 21% of respondents use Facebook to make social connections they could not find in person (Table II).

TABLE II.
ACTIVITIES THAT PARTICIPANTS WERE ENGAGED IN ON FACEBOOK

Being involved on Facebook (%)	1	2	3	4	5
I was excited to join Facebook.	4	44	26	13	13
I use Facebook to meet new people.	4	52	9	35	0
I use Facebook to stay connected to friends from high school.	0	9	9	69	13
I use Facebook to keep track of what my friends are doing.	4	26	30	40	0
I feel connected to my friends on Facebook.	4	44	9	39	4
I use Facebook to make social connections that I couldn't find in	17	49	13	17	4
I am addicted to Facebook.	35	35	17	4	9

*1 - Strongly Disagree | 2 - Disagree 3 - Neither Agree Nor Disagree | 4 - Agree | 5 - Strongly Agree

Respondents usually read its own wall at least once a day, some more frequently. Very often the respondents read the wall of their friends, probably because of the need to see what they are doing, or to comment on something. Students also often set the "status", place links to other web pages, pictures or the "like". They rarely seek for new friends, because most have a profile on Facebook for a very long time and have a lot of "friends" and groups in almost all areas, so the creation of new groups and areas of interest is almost rare. The majority of our students didn't feel addicted to Facebook (Table III).

TABLE III.
FREQUENCY OF FACEBOOK WALL USE

How often you participate in the following activities on Facebook(%)	1	2	3	3	5	6
Read my wall	26	39	31	0	4	0
Read my friend's wall	17	36	30	13	0	4
Write on my own wall	22	26	40	4	4	4
Write on my friend's wall	0	39	35	13	9	4
Search for new friends to add	9	4	9	30	35	13
Update my profile	13	53	22	4	4	4
Create groups	0	0	4	13	35	48
Create parties	0	0	0	9	26	65

*1 - Hourly | 2 - Daily | 3 - Weekly | 4 - Monthly | 5 - Rarely 6 - 1 don't do this

The results, in general showed that the two most frequent and time-consuming activities were browsing the Internet and checking email. About two-thirds of the students use the Internet for educational purposes.

From the results of our research it is obvious that our students use ICTs to a lesser extent in comparison with their peers in other countries. This fact could be explained, on the one hand, with the fact that, for example, Facebook, is much more popular among adolescents in secondary schools, and on the other hand, due to the large students' workload during the work week, lacking of their own personal computers, as well as smaller capacities for Internet access.

Approximately 1 / 3 of our students avoided to be engaged in Facebook. The main reasons respondents indicated not participating in Facebook were that they were simply not interested and they didn't want to put personal information online. Other reasons, respectively, included that their friends don't do that, they had no time to participate in it, and that it was too much of a fad (Fig. 5).

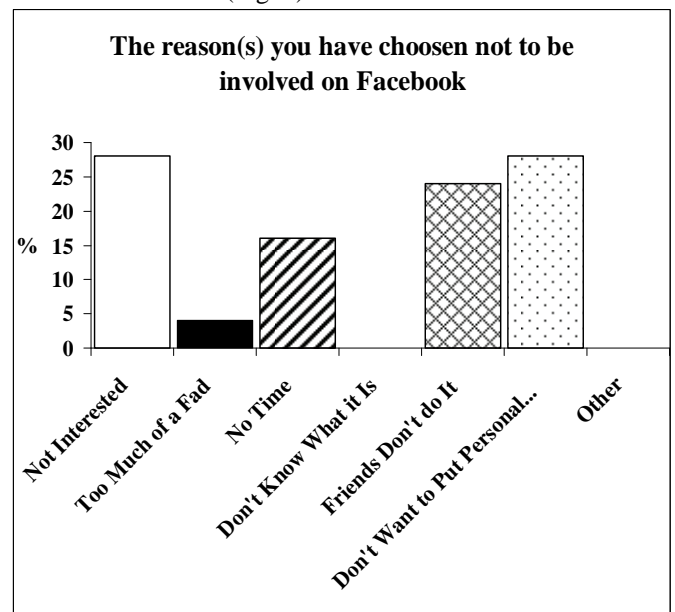


Fig. 5. Reasons why not to be involved on Facebook

IV. CONCLUSION

In the drive in higher education to promote the use of information and communications technology (ICT), the role of the Internet cannot be over emphasized. It has introduced new concepts of the teaching process and is recasting the roles played by the participants of the educational process. Still, while many undergraduates use the Internet, there are many who may not. It is encouraging to note that the respondents were making maximum use of the Internet and were aware of its benefits for educational purposes as well as other purposes.

Several questions remain unanswered in the literature, as well as in current study, on the impacts of ICT use among students and young adults [12]. For example, we know little about the use of multiple technology devices, multitasking with these and other devices, and the impacts of use on well-being. A wide range of activities can be conducted online, among them Web surfing, e-mail, live chatting, IM, list-servs, wikis, blogging, and gaming, and these activities can be social or solitary in nature.

Because modes of online communication differ, researchers need to make distinctions between their various uses. It is important for higher education faculty and staff to be aware of how their students are using technology [13]. Lifelong learners must be equipped with skills to effectively and intelligently find, evaluate, manage, apply, create, publish and store, and retrieve information using both conventional research resources as well as digital tools, such as the Internet, that access very diverse databases of information. Still, there remains a paucity of research on the subject, including the types and reasons for use, and their consequences.

It would be even more fruitful to examine the linkage between Internet use and academic achievement. Such a comparative perspective would further identify the extent to which the current findings can be applied in various social and cultural contexts.

The current research provided, is a starting point at beginning to understand how our students are engaging in online communities.

ACKNOWLEDGEMENT

This study was supported by The Ministry of Science and Technological Development of Serbia (project 36022 and 36006).

REFERENCES

- [1] S. R. Cotten, "Students' technology use and the impacts on well-being", In R. Junco, & D. M. Timm (Eds.), *Using emerging technologies to enhance student engagement*. New Directions for student services issue #124 (pp. 55–70). San Francisco, CA: Jossey-Bass, 2008.
- [2] S. Jones, S. Fox, "Generations online in 2009", Washington, DC: Pew Internet and American Life Project. Retrieved from. http://www.pewinternet.org/w/media/Files/Reports/2009/PIP_Generations_2009.pdf.
- [3] J. Pasek, E. More, and E. Hargittai, "Facebook and academic performance: reconciling a media sensation with data", *First Monday*, vol.14, no.5, 2009.
- [4] D. F. Roberts, U. G. Foehr, "Trends in media use", *The Future of Children*, vol.18, no.1, pp. 11–37, 2008.
- [5] G. Salaway, J. B. Caruso, and M. R. Nelson, "The ECAR Study of Undergraduate Students and Information Technology, 2007", Boulder, Colo.: EDUCAUSE, 2007. Retrieved from <http://connect.educause.edu/library/abstract/TheECARStudyofUnderg/45075>.
- [6] R. Junco, J. Mastrodicasa, "Connecting to the Net Generation", Washington, D.C.: National Association of Student Personnel Administrators, 2007.
- [7] A. Lenhart, S. Arafeh, A. Smith, and A. R. Macgill, "Writing, technology, and teens", Washington, DC: Pew Internet and American Life Project. Retrieved from http://www.pewinternet.org/w/media//Files/Reports/2008/PIP_Writing_Report_FINAL3.pdf.
- [8] New Media Consortium, "The horizon report", Retrieved from http://www.nmc.org/pdf/2007_Horizon_Report.pdf.
- [9] A. Quan-Haase, "College Students' Local and Distant Communication: Blending Online and Offline Media", *Information, Communication and Society*, vol.10, pp. 671–693, 2007.
- [10] C. Morgan, S. R. Cotten, "The relationship between Internet activities and depressive symptoms in a sample of college freshmen", *Cyberpsychology and Behavior*, vol. 6, no. 2, pp. 133–142, 2003.
- [11] E. Hargittai, "A Framework for Studying Differences in People's Digital Media Uses." In N. Kutscher and H.-U. Otto (Eds.), *Cyberworld Unlimited*. VS Verlag für Sozialwissenschaften /GWV Fachverlage GmbH, 2007.
- [12] S. R. Cotton, "Students' Technology Use and the Impacts on Well-Being", In: *New Directions for Student Services*, no. 124, Winter 2008 © Wiley Periodicals, Inc. Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/ss.295, 55-70, 2010.
- [13] R. Junco, S. R. Cotton, "Perceived academic effects of instant messaging use", *Computers and Education*, vol. 56, no. 2, pp.370–378, 2011.