



Educational Application of the Internet by Basic Pupils in Effutu Municipal Assembly: The Guidance and Counselling Implications

Francis Nyamekye¹
Gideon M. Anapey²

¹University of Cape Coast, Ghana.

Email: franskye29@yahoo.com

²Data Analytics & Instructional Designer, University of Education, Winneba, Ghana.

Abstract

The study sought to investigate educational application of the Internet by basic school pupils in Effutu Municipal Assembly: The guidance and counselling implications. This study examined the use of the Internet among basic school pupils in Effutu Municipal Assembly. A descriptive survey approach was used to select forty-five (45) basic school pupils for the study. Snowball sampling technique was adopted which aided in the data collection. The study used an independent-samples t-test and one-way ANOVA to test Hypothesis 1 and Hypotheses 2 (null hypotheses) respectively. The result of the study reveals that educational use of the Internet is not the foremost priority of the basic school pupils but rather entertainment. The study also found that, sex is a significant factor in predicting Internet use among basic school pupils. Further studies could be carried out using a depth-interview schedule to further explore, whether basic school teachers guide their pupils use of the Internet for academic reasons.

Keywords:

Internet
Social media
Guidance and counselling
Basic school pupils.

Licensed:

This work is licensed under a Creative Commons Attribution 4.0 License.

Publisher:

Scientific Publishing Institute

Accepted: 13 November 2019

Published: 2 December 2019

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

1. Introduction

Technology has aided a lot of progress and general improvement in the lives of people in diverse ways. The 21st century is an era in which almost everything is computerized, and the internet cannot be underestimated. The need for versatility on the job market is on the rise and requires diversifying means through which educational services are provided hence the use of the internet in schools cannot be left out. Gage (2001) argues that the internet is not a thing, a place, a single technology, or a mode of governance: it is an agreement but in the language of those who build it, it is a protocol. Thus, a way of behaving and with it the speed of spreading into all walks of life with the exchange of symbolic meanings stunt the world. According to Mergel (2012) a branch of internet services such as social media applications are interactive platforms which allow a bidirectional exchange of information between government and diverse audiences. The two views concerning what the internet is, agree that it is a two-way medium which aids communication among and between its users. As such, the educational industry cannot be left out especially in the scope of providing guidance and counselling services to pupils. The use of internet by institutions has been explored as there is a claim that over 2.6 million students took at least one online course as compared to 1.6 million students 3 years earlier (Allen & Seaman, 2006; Uncel, 2011).

The research of Eijnden, Spijkerman, Vermulst, van Rooij, and Engels (2009) reported that, using the Internet has become one of the most popular leisure-time activities among adolescents in Western societies. Also, adolescents in Netherlands of ages 11 to 15 years have been found to use the Internet for leisure activities and adolescents aged 14 and older regard internet usage as a more important leisure-time activity

than watching TV (Eijnden et al., 2009). According to Lin, Lin, and Wu (2009) older adolescents appear to be more dependent on the Internet than younger adolescents. Again, in North America it has been revealed that users of the internet aged 12 to 17 years were usually online on a daily basis and about 11 hours per week on average (Qin (2011) citing Forrester Research). Meanwhile, this situation is not well established empirically in the Ghanaian context specifically the Effutu Municipal Assembly, hence the study. The internet was introduced in Ghana by three service providers namely Network Computer Systems, Africa Online and Ghana Internet Services in that respective order and has since then been part of the Ghanaian society in many respects (Ghana, 1998). Despite the efforts of both government and educational institutions to increase patronage, a survey conducted by International Telecommunication Union (ITU) in 2004 suggests that Ghana is experiencing low patronage of the internet. However, when compared to other African countries, the country has seen a higher increment on the average with 172 internet users per 10,000 inhabitants to 688 per 10,000 inhabitants (International Telecommunication Union, 2006). This claim affirms the argument that as at 2003, there were more than 750 internet cafes in Ghana mostly used by students (Ngugi, 2007). The questions therefore are: 1. What do the students use the internet for? 2. Is there a difference in class of students and the sex of students in relation to the usage of the internet? The studies investigating the use of the internet and its cohorts mostly focused on university students, college students and Senior High School students, neglecting the basic school pupils hence the need for this study.

2. Literature Review

2.1. Theoretical Review

The study was guided by Uses and Gratifications Theory which assumes that people are goal-oriented and actively seek gratification. This instinct of goal-orientation is demonstrated as it propels the individual to actively seek the internet in a directed manner in which the needs of the person will be satisfied in a wider range (MaGuire, 1974). The theory specifically explains what social and psychological needs motivate people to engage in a variety of internet use behaviours (Lineberry, 2012). The approach of Uses and Gratifications concerns the social and psychological origins of needs, expectations of the internet and other sources as well as differential patterns of media engagement in other activities and have consequences. That is, the social and educational needs of pupils and their expectations from the Internet attract them to patronize it in search of satisfaction. However, Buami (2013) opined that gratifications sought do not in themselves predict media behaviour but have the ability to explain the behaviour to a large extent when compared with the gratifications obtained. Therefore, the present study adopted the Uses and Gratifications Theory to investigate how basic pupils of Winneba, Effutu Municipal Assembly use the internet. This is to aid in explaining the possible reasons for the use of internet among the basic school pupils for the things they deemed necessary.

2.2. Empirical Review

2.2.1. The Use of the Internet Social Media

There are various ways in which the internet is being used by pupils and it varies depending on the purpose and the need of the individual pupil at the given time. This assertion is supported by Whitty and McLaughlin (2007) who assert that the internet provides different types of entertainment. The entertainment packages available on the internet include playing games with other people in any part of the world, watching movies and listening to music. NAS Insight (2009) also alluded that the internet provides a lot of entertainment such as musical entertainment, free videos, computer games, social networking, chatting etc. A survey conducted in Ghana using 200 samples out of which 164 were received revealed that, 3.1% of respondents always use the internet for entertainment, 9% frequently, 51% occasionally, 24.4% rarely use it and 12.5% never use it (Quarshie & Ami-Narh, 2012). This study did not consider using inferential statistics in making inferences for the data collected but only described hence there is the need to use inferential statistics to ascertain the possible differences in demographic characteristics such as class and gender to establish their role in the use of the internet among basic school pupils.

Zappe (2011) concluded that D'Costa and Kelly (2008) suggests that internet access and web applications, services and platforms improve productivity and make it easier for businesses to collaborate and access new markets via digital distribution and online retail. This increases consumer choice and strengthens competition among service providers which has the potential of increasing the quality of services provided by service providers. Again, Quarshie and Ami-Narh (2012) citing Seybert opined that the internet provides consumers the convenience of shopping anytime and anywhere, getting better access to information and a broader selection of products, comparing prices or obtaining opinions from other consumers. Meanwhile, in the area of commerce it has been found in Ghana by Quarshie and Ami-Narh (2012) that majority of internet users in Ghana do not use it for that purpose. Compared to users in other countries, as high as 52.4% of respondents never use internet to make purchases online, 17.5% rarely use it, 18.75% occasionally, 6.35% frequently and only 5% use it always to make purchases.

The use of the internet broadens to cover social needs as well. Internet tools such as Twitter was used during the East Coast snowstorms in 2010. Facebook was also employed by organisers of the uprising now

called the Arab Spring in 2011 and during the late 2011, people were urged to use social media in checking on family and friends during earthquakes and hurricanes as deemed fit by Federal Emergency Management Agency (FEMA) (Fugate, 2011; Gregory, 2010; Marks, 2011). On the part of Griffiths and Donald (2008) among 186 million Internet users in the US, the most common category of information sought through the Internet is related to personal or family information needs is 89%.

Again, according to Ziegler (2007), social media offers the capacity to radically change the educational system to better aid engaged learners rather than learners who are primarily passive observers of the educational process. In the U.S. it is known that almost all public schools have access to the internet as stated by National Center for Education Statistics (2006) as do the majority of U.S. households (U.S. 2011, 2011). Arafeh, Levin, Rainie, and Lenhart (2002) are of the view that not only do students have access to the internet, but as of 2002 more than 60% use it for diverse needs. Schoolwork is among the most common foci of students' internet use (Lenhart, Simon, & Graziano, 2001; Mason, 2006)(NCES, 2006). According to Ziegler (2007) social media offers the capacity to radically change the educational system to improve engaged learners rather than learners who are primarily passive observers of the educational process. A related study by Churchill (2009) also showed that the use social media such as blogs in education facilitated a useful learning atmosphere. The collaborative and communal qualities of social media mirrors much of what we know to be good models of learning in that, it can be used to promote active participation of learners therefore the need for the current study at Efutu Municipal Assembly.

2.3. Statement of the Problem

Apart from the Internet being a fast medium of accessing information and getting entertained and socialized, it is also useful in conducting businesses of different kinds among which the educational enterprise cannot be overlooked. Its usefulness seems to manifest greatly in the academic circles too, where students and tutors use the Internet for research and relaxation. Brain (2003) concludes that the results of frequent Internet use, particularly among students, have become a highly controversial issue. This, he explains to mean that there is no consensus on what exactly the Internet is used for among a targeted group of people. This, he says, is probably due to the limited amount of research on the subject. Similarly, research on the use of the Internet among basic school pupils has been scanty in Ghana and little is known concerning the Efutu Municipal Assembly. It is against this background that the study sought to examine the use of Internet among basic school children in Winneba Township. The focus of the study was to assess the use of the Internet among basic pupils and the guidance and counselling implication that accompanies it. The study sought explore the level of internet use and its impact on guidance and counselling for basic school pupils of Winneba township.

The study formulated one research question which guided the study.

1. What do basic school pupils use the Internet for?

2.4. Research Hypothesis

The study formulated two hypotheses to explain class and sex influences on pupils' Internet usage for educational reasons as follows:

H1_a: Educational application of the Internet by pupils will not differ by sex.

H1_s: Sex will be a significant factor in the use of the Internet for education.

H2_a: Pupils' class level will not explain the use of the Internet for educational purpose.

H2_s: Class level will significantly affect pupils Internet use for education in this study.

3. Methodology

The study concentrated on basic school pupils in Winneba Township of Effutu Municipal, Assembly. The respondents were forty-five (45) basic school pupils which formed the sample size for the study. The forty-five (45) basic school pupils were selected through snowball sampling technique. Specifically, they were pupils who patronize the various internet café centers in Winneba Township.

The study used a self-developed questionnaire to collect data from respondents. Data from the sample population was gathered using a questionnaire which consists of twenty- seven items that addressed the student's demographic data in the aspect of background, level and gender. The rest of the items included in the questionnaire sought to address the category of things basic school pupils use the Internet for. These items were close ended questions provided on a 4-point Likert's scale that consisted of the options Strongly Agreed, Agreed, Disagreed and Strongly Disagreed. The rating scale items required the participants to respond to an item for selecting options that corresponded to their thinking or feeling.

4. Findings

The study aimed at examining the educational usage of the internet among basic school pupils and whether there is any difference in gender and class of study regarding the use of the internet.

The purpose of research question 1 was to investigate the use of the internet by basic school pupils in Winneba Township. To answer this research question, simple average counts was used.

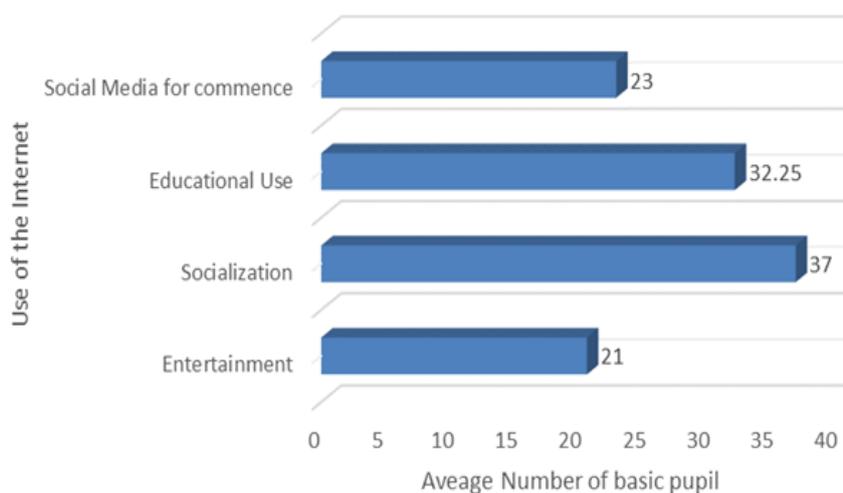


Figure-1. Basic pupils' internet usage in Winneba township.

Source: Field survey data, 2015.

Figure 1 indicates that on average, leisure (n = 32; socialization and entertainment) were the two dominant reasons for which pupils use the internet cafes in Winneba Township. However, educational use was the second highest use of the internet in this study. Consequently, this study concludes that pupils do not consider the educational application of the Internet as the foremost priority.

4.1. Research Hypothesis 1: Sex Difference in Internet Usage for Education

Hypothesis 1 sought to test the statistically significant difference between boys' and girls' use of the Internet. The independent sample T-test was used in testing this hypothesis and the results presented in Table 1. Using Leven's test for equality of variation, it was revealed that the equality of variances test was significant (p= .28).

Table-1. Independent samples test for gender differences in educational use of the internet.

Education	Levene's test for equality of variances		t-test for equality of means						
	F	Sig.	T	df	Sig.(2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
								Lower	Upper
Equal variances assumed	1.178	.284	2.264	42	.029	-.30729	.13571	-.58117	-.03341

Source: Field survey data, 2015.

Consequently, we proceeded to use the Independent sample t-test to evaluate the difference between boys and girls on educational application of the Internet. The test was significant (p = .01; one-tailed), the study rejects the null hypothesis that sex will not be significant difference in Internet use for educational purposes among basic pupils in Winneba. The eta square value of .10 was arrived at. This depicts a large effect hence the difference which exists in the means is indeed statistically significant and not due to chance. Therefore, we conclude that girls use the Internet for educational purposes more than boys.

Hypothesis 2 sought to explain whether there will be statistically significant differences between Form 1 to Form 3 pupils' use of the internet in this study.

Table-2. Test of Homogeneity of variances for one-way ANOVA used in the study.

Education			
Levene statistic	df1	df2	Sig.
.654	2	41	.525

Source: Field survey data, 2015.

The homogeneity of variance test in Table 2, was significant (p>.05) therefore, we have not violated the primary assumption underlying the use of the one-way ANOVA test for Hypothesis 2.

Table-3. ANOVA for class level and educational use of the internet.

ANOVA	Sum of squares	Df	Mean square	F	Sig.
Between groups	.044	2	.022	.104	.902
Within groups	8.793	41	.214		
Total	8.838	43			

Source: Field survey data, 2015.

The result in [Table 3](#) indicates that indeed, pupils' Form did not influence the Internet use for educational purposes ($p > .05$) therefore, we failed to reject the null hypotheses that pupils' Form will not significantly influence the use of the Internet. The effect size using eta square was estimated as (.004) hence the variance accounted for is small and not up to 1% which is considered weak, consequently, any difference which exists in the means was due to chance. In summary, pupils from Form 1 to Form 3 expressed the same view on how they use the Internet for academic purposes.

5. Discussions

5.1. Basic School Pupils Use of the Internet

In respect of [Figure 1](#), this study disagrees with an earlier study conducted by [Quarshie and Ami-Narh \(2012\)](#) in Ghana about the growth and usage of the Internet in Ghana which asserts that, majority of the participants use the Internet 46% for educational purposes especially for research and sending information to colleagues and lecturers. As [Figure 1](#) indicates, educational use is second to leisure activities (socialization and entertainment). Meanwhile, the study accepts a research in the Netherlands among adolescent users of the Internet of ages 11 to 15years. The study claims that, these adolescents use the Internet for leisure and that the older adolescents regard the Internet usage more as an important leisure-time activity than watching TV ([Eijnden et al., 2009](#)). According to [Lin et al. \(2009\)](#) older adolescents appear to be more dependent on the Internet than younger adolescent and it appears this argument is not different in Winneba Township in connection with basic pupils' use of the internet. The situation could emanate from how pupils get to know about the internet and what to use it for. In instances where pupils were introduced to the use of the internet by their peers who were not adequately informed about the educational use of the internet, there is a higher probability that pupils will deviate from the educational usage of the internet.

5.2. Sex Difference in Internet Usage for Education

The study reveals that sex is a significant factor which influences the use of the internet for educational reasons among basic school pupils of Winneba Township. Female basic school pupils used for this study were 38% (17) who agreed to the educational use of the Internet as to 62% (male basic school pupils). Again, the Independent sample t-test used to evaluate the difference between boys and girls on educational application of the Internet was significant ($p = .01$; one-tailed), as revealed in [Table 1](#). The findings of the study disagree with a study conducted in Taiwan which found no statistically significant difference between boys and girls students in the use of the internet although there was a significantly higher difference in the intensity of internet usage ([Meng-Jung & Chin-Chung, 2010](#)). In this study, the girl-child demonstrated high use of the internet for educational purposes than the boy-child. There is the possibility of culture influence in here as males tend to be explorative in the Ghanaian context while the female is usually expected to be conservative. Basic schoolboys seek to gratify diverse needs in their use of the internet other than educational purposes as expected but the girls often keep to their educational needs. For there to be a balance in the use of the internet among pupils, girls could be encouraged to explore in a healthy manner in the use of the internet for a wholesome development.

5.3. Class Level and the Use of the Internet

The study reveals that, pupils' form could not be a factor which influences basic school pupils' use of the Internet for educational reasons as revealed by [Table 3](#). The study agrees to a survey conducted by [Apeanti and Danso \(2013\)](#) using 311 sandwich students comprising of 68(22%) masters students, 241 (77%) post-diploma students and 2(1%) diploma students who all agree to the use of social media in education. Based on these findings, we conclude that basic pupils are aware of the Internet and they are actively using it to satisfy their educational needs. This therefore is an opportunity for counsellors to help these basic school pupils in making informed choices about their career by adopting any of the Internet platforms and creating a website through which career guidance information can be conveyed to them. Also, the basic pupils need to be guided for them to come to accept that, using the Internet for educational activities should be their number one priority.

5.4. Implications for Guidance and Counselling

The very aim of guidance and counselling in the educational industry is ensuring a holistic development of the individual student through the provision of needed information for informed choices and decisions. With the current trend of increment in internet usage among students in Ghana as suggested by [Quarshie and Ami-](#)

Narh (2012), there is a cause for concern as to what pupils use the internet for. The internet is not sensitive to age, level nor does it have limitations on who should have access to what. This requires counsellors to probably include it in their guidance programme to either feature facilitators who are professionals to provide guides for pupils' usage of the internet.

In relation to communication, the internet could be a good platform for the delivery of guidance services such as information service where counsellors could develop and disseminate vital information being it career, social or personal development to aids pupils who feel reluctant to get help from the facility. Also, a tool of the internet such as the social media could be explored and employed for the delivery of counselling services. The services provided may ensure the smooth access to the professional help needed by the client. This has the potency of eliminating labelling among classmates which could accessing counselling services.

6. Conclusions and Recommendations

Based on the findings of this study, the study concludes that sex is a significant predictor of Internet use for educational reasons and that there is no difference in the use of the Internet as far as pupils' level is concerned. Students need to be guided as to what to use the Internet for by guidance and counseling coordinators in the various schools. This will help maximize the use of the Internet for educational reasons by basic school pupils in Winneba Township.

References

- Allen, I. E., & Seaman, J. (2006). *Making the grade: Online education in the United States*. Boston: Sloan Consortium.
- Apeanti, O. W., & Danso, D. E. (2013). Students' use of social media in higher education in Ghana. *Innovative Journal*, 3(1), 3-9.
- Arafeh, S., Levin, D., Rainie, L., & Lenhart, A. (2002). The digital disconnect: The widening gap between Internet-savvy students and their schools. Pew Internet and American Life Project. Retrieved from <http://www.pewinternet.org/~media/Files/Reports/2002/Report.pdf.pdf>.
- Brain, R. (2003). *Problem internet use and locus of control among college students: Preliminary findings*. Paper presented at the Poster Presented at The 35th Annual Conference of the New England Educational Research Organization Portsmouth, New Hampshire.
- Buami, E. K. (2013). Internet using habit among junior high school students of Nima, Accra-Ghana. *International Journal of ICT and Management*, 1(3), 133-138.
- Churchill, D. (2009). Educational applications of web 2.0: Using blogs to support teaching and learning. *British Journal of Educational Technology*, 40(1), 179-183. Available at: <https://doi.org/10.1111/j.1467-8535.2008.00865.x>.
- D'Costa, V., & Kelly, T. (2008). *Broadband as a platform for economic, social and cultural development: Lessons from Asia*. Paper presented at the Joint OECD-World Bank Conference on 'Innovation and Sustainable Growth in a Globalized World'. 2008, Paris: OECD.
- Eijnden, V. D. R. J., Spijkerman, R., Vermulst, A. A., van Rooij, T. J., & Engels, R. C. (2009). Compulsive Internet use among adolescents: Bidirectional parent-child relationships. *Journal of Abnormal Child Psychology*, 38(1), 77-89.
- Fugate, C. (2011). Understanding the power of social media as a communication tool in the aftermath of disasters. Written Statement of Craig Fugate, Administrator, Federal Emergency Management Agency. U.S. government printing office, Washington. Retrieved from <http://www.fdsys.gov/>. 112-390.
- Gage, J. (2001). *What's working now*. Paper presented at the Professional /Scholarly Publishing in the 21st century Annual Conference AAP.
- Ghana, W. (1998). Retrieved from <http://www.ghanaweb.com/GhanaHomePage/it.php>.
- Gregory, S. (2010). Cory booker: The mayor of Twitter and Blizzard superhero. Retrieved from <http://www.time.com/time/nation/article/0,8599,2039945>.
- Griffiths, J. M., & Donald, W. K. (2008). Internet connections: The IMLS national study on the use of libraries. *Museum and the Internet. University of North Carolina at Chapel Hill*.
- International Telecommunication Union. (2006). World telecommunication/ICT development report: Measuring ICT for social and economic development. Geneva, Switzerland.
- Lenhart, A., Simon, M., & Graziano, M. (2001). The internet and education: Findings of the pew Internet American Ipdiffe project. Retrieved from http://www.pewinternet.org/~media/Files/Reports/2001/PIP_Schools_Report.
- Lin, C. H., Lin, S. L., & Wu, C. P. (2009). The effects of parental monitoring and leisure boredom on adolescents' internet addiction. *Journal of Adolescence*, 44(176), 993- 1004.
- Lineberry, Z. X. (2012). *Uses and gratifications on social networking sites: Analysis of use and value of social networking sites for three types of social capital on college students*. Graduate Theses and Dissertation Iowa State University.
- MaGuire, W. J. (1974). Psychological motives and communication gratifications. In J.G. Blumler and E. Katz (Eds.), *The uses of mass communications* (pp. 167-196). Sage: Beverly Hills, CA.
- Marks, J. (2011). Social media's role in Arab Spring still unclear. Nextgov: Technology and the Business of Government. Retrieved from www.nextgov.com/nextgov/ng_/20110916_4696.php.
- Mason, R. (2006). Learning technologies for adult continuing education. *Studies in Continuing Education*, 28(2), 121-133. Available at: <https://doi.org/10.1080/01580370600751039>.
- Meng-Jung, T., & Chin-Chung, T. (2010). Junior high school students' Internet usage and self-efficacy: A re-examination of the gender gap. *Journal Computers and Education*, 54(4), 1182-1192. Available at: <https://doi.org/10.1016/j.compedu.2009.11.004>.
- Mergel, I. (2012). The public manager 2.0: Preparing the social media generation for a networked workplace. *Journal of Public Affairs Education*, 18(3), 467-492. Available at: <https://doi.org/10.1080/15236803.2012.12001695>.
- NAS Insight. (2009). Internet usage in the United States. http://www.nasrecruitment.com/docs/white_papers/.pdf.

- National Center for Education Statistics. (2006). Computer and Internet use by students in 2003. Retrieved from <http://nces.ed.gov/pubs2006/2006065.pdf>.
- Ngugi, C. (2007). ICTs and higher education in Africa, in status reports on information and communication technologies (ICTs) in higher education in eight African countries. *European Journal of Business and Management, 5*(2), 2222-2839.
- Qin, S. Y. (2011). A study of internet addiction among students of Pei Yuan National High School, Kampar. Tunku Abdul Rahman University. Retrieved from <http://eprints.utar.edu.my/274/1/PY-2011-0802518.pdf>.
- Quarshie, H. O., & Ami-Narh, J. (2012). The growth and usage of Internet in Ghana. *Journal of Emerging Trends in Computing and Information Sciences, 3*(9), 1302-1308.
- Uncel, M. (2011). Facebook Is now friends with the court: Current federal rules and social media evidence. *Jurimetrics, 52*, 43-69.
- Whitty, M. T., & McLaughlin, D. (2007). Online recreation: The relationship between loneliness, Internet self-efficacy and the use of the Internet for entertainment purposes. *Computers in Human Behavior, 23*(3), 1435-1446. Available at: <https://doi.org/10.1016/j.chb.2005.05.003>.
- Zappe, J. (2011). More employers than ever recruit on social networks. Electronic Recruiting Exchange. Retrieved from www.ere.net/2011/07/12/more-employers-than-ever-recruit-on-social-networks.
- Ziegler, S. (2007). The (MIS) education of generation "M. *Learning, Media and Technology, 32*(1), 69-81.