Pupils' Self-Efficacy and Readiness to use Social Media Instructional Platforms for Extended Learning in Ekiti State, Nigeria

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ABSTRACT

Social media platforms have attracted the need to repackage the conventional teaching and learning processes across the globe. As an online avenue for social interaction and meaningful academic engagement, active learning among learners within and outside the classroom activities is encouraged. The main aim of this study was to assess learners' self-efficacy and readiness to use social media instructional platforms for extended learning. An extensive survey was conducted among 170 pupils consisting of 79 males and 91 females from five selected primary schools in each geo-political zone in Ekiti State. Data were collected using two self-developed instruments: Pupils' self-efficacy and learners' readiness to use social media instructional platforms for extended learning. The findings of the study indicated that pupils have a high level of social media efficacy. In other words, a significant number of these pupils used social media for social engagement but were willing to use it for learning activities. Similarly, most pupils have a moderate agreement on their level of readiness for the use of social media platforms for instructional purposes. Learners were eager to use social media instructional platforms beyond classroom instruction due to their interactive features.

KeyWords: Social media instructional platform, social media efficacy, readiness, primary school pupils, extended learning

INTRODUCTION

The gap created by the Covid-19 pandemic across the globe in teaching and learning processes has further called for a review of the conventional method of delivering instruction, especially at the primary school level. Kusel, Martin and Markic (2020) observed that Covid-19 has impacted on individuals' private life and has brought strict limitations to physical gatherings and enormous changes in teaching and learning. To bridge this gap, some studies have recommended the use of social media platforms for instructional purposes as Ho (2014) observed that new technologies have come to outpace the old techniques of instructional delivery and Javaeed, Kibria, Khan and Ghauri (2020) affirmed that social media integration provided better examination outcomes.

Kietzmann and Kristopher (2011) described Social media as interactive technologies that allow people to create, share information, ideas, and other forms of expression through virtual communities and networks. According to Friedman (2014), a social media platform is a platform that helps to build relationships where professional networks are developed online through connections with colleagues, teachers, role models and others. There, relationships are nurtured and professional guidance is given to those in need as well as ample opportunity for group discussions. This provides a direct opportunity for different groups or sets of learners in

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diverse situations and can be modified by the teacher. In essence, the emergence of social media instructional platforms has improved the communication landscape and the way people interact as much as the teaching and learning processes. Aditi (2010) noted that it has a significant impact on the teaching activity in the classroom as it generates discussions and strengthens classroom activities to promote active learning and collaboration; this has encouraged researchers and educators to examine the level of user's self-efficacy in social media instructional platforms and construction of knowledge.

Bandura (1986) defined self-efficacy as the judgment of people through their ability to organise and execute courses of action required to attain designated types of performances. Two aspects of this definition require further explanations. First, self-efficacy is a belief about one's perceived capability but does not necessarily match one's actual ability in a specific domain. Other studies have suggested that most learners actually overestimate their academic capabilities (Bandura, 1997; Pajares, 2016). However, the most useful efficacy judgments are those that slightly exceed one's actual capabilities, as overestimation can actually increase effort and persistence during difficult times (Anthony, 2016). A second aspect of Bandura's (1986) definition of self-efficacy is the idea that individuals make use of their efficacy judgments in reference to some attainable goal or designated types of performances, which according to Pajares (2016) can reflect both the task and situation-specific nature of efficacy beliefs. Moreover, individuals use four sources of information when making self-efficacy judgments: enactive mastery experience, vicarious experience, social persuasion as well as physiological and emotional state (Bandura, 1986; Bandura, 1997).

Nevertheless, self-efficacy is yet to be explored in the context of social media instructional platforms specifically, but scholars have used self-efficacy to examine performance using contemporary technologies such as computers and the Internet (Compeau and Higgins, 2015; Eastin and LaRose, 2017). The Internet is a broad environment and learners who are efficacious in the area of using the web to access and send email may be much less efficacious in using social media. Some scholars have differentiated between proficiencies which are defined as higher-level competence with computers, email, and the web, respectively (Bunz, 2014; Bunz, Curry, and Voon, 2017). This suggests that a pupil's self-efficacy with the Internet may differ from his or her perceived efficacy with social media. Therefore, from Bandura's theory of the sources of information that confirms self-efficacy judgments; social media self-efficacy is based upon a pupil's level of social media content production and consumption, perceived social media skill, and confidence in his or her ability to successfully obtain information online. There is a need to encourage the integration of technology into the education system among primary school pupils through the regular use of social media platforms being patronised by all and sundry. This could assist them to get prepared to cope with current educational needs occasioned by globalisation before the transition to high school.

To this end, it is very important to examine the readiness of pupils to use social media platforms to extend learning beyond the classroom as this will encourage teachers to deploy it to teach. The readiness of pupils to use social media platforms in extended learning is a key issue in this research. Borotis and Poulymenakou (2004) defined learners' readiness as being prepared mentally and physically for online learning. Poellhuber (2013) noted that learners have diverse views and experiences but they also show strong and significant age and gender differences in a variety of measures but Mostafa (2015) submitted that few studies have shown that learners who are ready to participate in value creation tend to perceive more value from social media engagement. However, where learners perceive role clarity, have higher ability and are motivated to take an active part in creating value, they demonstrate high functional, social and emotional value. Therefore, necessary efforts should be put in place to enhance pupils' willingness or readiness to take an active part in the use of social media for extended learning. Studies are scarce about learners' expertise with social media or their interest in using it to learn individually or to collaborate with peers but teachers should reflect on their view of pupils' readiness and to provide technical support.

PROBLEM AND GAP

In recent times, a social media instructional platform has become an interesting way to extend any form of learning. Where learning does not go beyond what is done within the classroom environment, it is not ''extended''. Learners need more than classroom teaching for effective learning outcomes in school as they have to be thoroughly engaged in the learning process. Thus, it is important for the 21st century teachers to employ a wide range of instructional materials/attractive platforms to be able to respond to learners' needs and areas of deficiencies. It is also necessary to fully prepare pupils to integrate the use of social media into learning processes to further engage them outside the classroom settings, especially during the current global challenge of the covid-19 pandemic which has informed lockdowns in the education sector like any other areas of human endeavour. In response to this problem, this study is concerned about pupils' self-efficacy and readiness to use social media instructional platforms to extend learning.

Research Questions

1. What is the level of pupils' self-efficacy to use social media instructional platforms for: Extended learning in Basic Science?

2. What is the level of pupils' readiness to use social media instructional platforms for: Extended learning in Basic Science?

3. What are the major problems limiting the effective use of social media for learning in Basic Science?

METHODOLOGY

This study is a descriptive survey research designed to investigate learners' self-efficacy and readiness to use social media for extended learning. The population of the study was made up of primary five pupils from three senatorial districts in Ekiti-State; consisting of 79 males and 91 females. Random sampling technique was used in this study. A total of 170 pupils from nine public primary schools were randomly selected across all levels. In each school, a total of 20 pupils were randomly selected.

Research Instrument

The instrument used for data collection was a well-structured questionnaire, titled "pupils self-efficacy and readiness to use social media instructional platform for extended learning in basic sciences". The questionnaire was divided into three sections. Section A focused on the demographic information of the respondents, Section B was designed to gather information on the level of pupils' self-efficacy and readiness to use social media instructional platforms for extended learning, and Section C was interview-based questions to gather personal views on the major problems of effective use of social media and solutions. The questionnaire was developed using the Likert scale format, precisely, the three-point Likert scale: Yes, No and Uncertainty. The validity of the instrument used was determined by an expert in the Early childhood department at the University of Ibadan. This was to give a face and content validity. Corrections, modifications, contributions and suggestions regarding the items were made. The instrument was subjected to a reliability technique. The instrument was tested using the Cronbach Alpha reliability technique, after which a reliability coefficient of 0.71 was recorded.

RESULTS AND DISCUSSION OF FINDINGS

Research Question 1: What is the level of pupils' self-efficacy to use social media instructional platforms for Extended learning in Basic Science?

Table 1: The level of pupils' self-efficacy to use social media instructional platforms for Extended learning in Basic Science

S/N	Items	Yes	No	UnD	Mean	STD.D
1	I am capable of using social media.	61	23	57	2.68	1.133
		35.9%	13.5%	33.5%		
2	I am confident I will learn how to use social media.	40	39	50	2.46	1.09
		23.5%	22.9%	29.4%		
3	I am capable of registering an email account.	30	38	43	2.23	1.110
		17.6%	22.4%	25.3%		
4	I can confidently browse the internet.	40	46	45	2.51	1.089
		23.5%	27.1%	26.5%		
5	I am capable of using social media platforms for learning after school hours.	81	53	20	3.17	0.973
		47.6%	31.2%	11.8%		
6	I find it easier to interact with my teacher/tutors on social media platforms after school hours.	44	38	50	2.52	1.105
		25.9%	22.4%	29.4%		
7	I don't know how to interact with other pupils on social media platforms.	36	46	49	2.46	1.067
		21.2%	27.1%	28.8%		
8	Group discussion on social media platforms is difficult.	47	47	49	2.67	1.048
		27.6%	27.6%	28.8%		
9	I quickly figure out how to use social media platform for learning purposes.	50	39	46	2.61	1.116
		29.4%	22.9%	27.1%		
10	I find learning new things after school period on social media platforms difficult.	58	36	46	2.70	1.135
		34.1%	21.2%	25.3%		
	Weighted mean	**= 2.60**				

Table 1 revealed the responses of the respondents' level of pupils' self-efficacy to use social media instructional platforms for extended learning. The rating is as follows: I am capable of using social media. (2.68); I am confident I will learn how to use social media. (2.46); I am capable of registering an email account (2.23); I can confidently browse the internet (2.51); I am capable of using social media platforms for learning after school hours (3.17); I find it easier to interact with my teacher/tutors on social media platform after school hours. (2.52); I don't know how to interact with other pupils on social media platforms. (2.46); Group discussion on social media platforms is difficult (2.67); I quickly figure out how to use social media platforms for learning purposes. (2.61); and I find learning new things after school period on social media platforms difficult (2.70)

Results further revealed a weighted mean of 2.60; this indicated that the level of pupils' self-efficacy to use social media instructional platforms for learning is very high. The use of social media instructional platforms for instruction in extended learning resulted in an improvement of students' self-efficacy, but what exactly is self-efficacy? Self-efficacy is described as one's beliefs about behavioural outcomes and expectations about one's ability to engage in, execute, persist in, and be successful at a particular behaviour (Gokmem, 2016). The use of social media instructional platforms alone is reported to significantly increase or change learners' science self-efficacy by promoting a belief in their own ability to do science and be successful in learning (Çakır, Hava, Gülen, and Özüdoğru, 2015).

The report of the study has also shown that social media instructional platforms enable pupils to see the results of their efforts and receive feedback in a relatively risk-free environment and thus helping them develop their

self-efficacy over the subject matter. This was due to the fact that pupils were active participants in the learning process; self-efficacy was improved compared with the conventional mode of instruction. These findings suggest that there is a link between self-efficacy and classroom success and that an individual's level of engagement in a task and willingness to persist in the task are indicators of success (Durmuş and Başarmak 2014); however, other studies revealed that self-efficacy is also inextricably linked to achievement (Timur, Yılmaz, and Timur 2013). Therefore, it is logical to affirm that, if pupils' confidence in their abilities to do science increases, so will their learning outcomes.

Research Question 2: What is the level of pupils' readiness to use social media instructional platforms for Extended learning in Basic Science?

Table 2: The level of pupils' readiness to use social media instructional platforms for Extended learning in Basic Science

S/N	Items	Yes	No	UnD	Mean	STD.D
1	The idea of using social media is boring tome	60 35.3%	28 16.5%	55 32.4%	2.71	1.112
2	I am ready to use social media platforms forlearning	47 27.6%	34 20.0%	56 32.9%	2.56	1.09
3	I am ready to do my homework on socialmedia platforms	31 18.2%	52 30.6%	41 24.1%	2.40	1.07
4	I am ready to interact with my friend onsocial media	46 27.1%	43 25.3%	42 24.7%	2.56	1.119
5	I am ready to send	83 48.8%	56 32.9%	18 10.6%	3.23	0.923
6	I don't want to use social media at all	47 27.6%	35 20.6%	51 30.0%	2.54	1.115
7	I don't want to use social media for learning	41 24.1%	49 28.8%	48 28.2%	2.58	1.053
8	I don't like doing my homework on social Media	69 40.6%	50 29.4%	30 17.6%	2.98	1.040
9	I am always eager to use social media instructional platforms to learn in extended Classroom	44 25.9	43 25.3	45 26.5	2.55	1.104
10	I am highly stimulated to discover more from the use of social media instructional platforms to learn beyond the classroom	44 25.9	35 20.6	49 28.8	2.48	1.126
	Weighted mean	**= 2.65**				

Table 2 revealed the responses of the respondents' level of pupils' readiness to use social media instructional platforms for extended learning in basic science. The rating is as follows: The idea of using social media is boring to me (2.71) I am ready to use social media platforms for learning (2.56); I am ready to do my homework on social media platforms (2.40); I am ready to interact with my friend on social media (2.56); I am ready to send (3.23); I don't want to use social media at all (2.54); I don't want to use social media for learning (2.58); I don't like doing my homework on social media (2.98); I am always eager to use social media instructional platforms to learn in the extended classroom (2.55); and through the use of social media instructional platforms; I am highly stimulated to discover more from the use of social media instructional platforms to learn beyond the classroom (2.48)

Results further revealed a weighted mean of 2.65, this indicated that the level at which pupils were ready to use social media instructional platforms for learning is very high. Furthermore, the result has clearly shown that pupils were always eager and very comfortable to use social media instructional platforms for learning activities beyond the classroom; they also achieved better in group study through social media instructional platforms. Most of the pupils have a moderate agreement on their level of readiness towards the use of social media platforms for instructional purposes. From the findings, learners were eager to use social media instructional platforms to learn beyond the classroom setting due to its interactive feature and collaborative method. Pupils strongly agreed that they were comfortable using social media instructional platforms for knowledge sharing and they also enjoyed the group study through social media instructional platforms. Most of them believe that social platform is an open space for instructional discussion. This is similar to Becker (1999) who indicated that as a technology-based generation, pupils have become content producers, who like to connect with peers for regular interactivity, which independence and ability to connect to the internet have encouraged them to manage their learning environment. Also, Cole (2019) revealed that social media instructional platforms can increase pupils' learning through interactions, as they were eager and agreed to use certain types of social media instructional platforms for learning.

However, there were specific areas in which pupils expressed less satisfaction. Some studies revealed that, while some learners believe that social media platform has many benefits, others were reluctant to incorporate them into their learning style (Coleman, 2018; Livingstone, 2018 and Moore, 2017). This indicates that some learners are more adaptable and ready for the use of digital technology than others or, as Mohammed (2017) found, some pupils, when faced with the introduction of new technology, can cope with technology and it is best defined as "adaptation". Nevertheless, how ready pupils are to embrace and incorporate new digital technology can also impact their engagement. On the contrary, Davies and Cranston (2018) enumerated some of the risks associated with social media platforms such as criminal activities like identity theft, fake contacts, sexual abuse or harassment and unsuitable advertising which are prevalent today and appear to discourage some users which could result to the unwillingness of pupils to use any type of social media platform.

Further to this, Orakpo, (2015) found that while a minority of pupils attempt to effortlessly incorporate social media platforms into their learning style and are more motivated to see the benefits of technology use in their classrooms, many others were seen to be defiant to incorporating social media usage into existing modes of studying. To successfully incorporate the use of social media into a teaching-learning setting, both teachers and learners must first understand the benefits and purpose of using the new technology.

Research Question 3: What are the major problems limiting the effective use of social media for learning in Basic Science?

Table 3: Major problems limiting the effective use of social media for learning

S/N	Items	Frequency (F)	Percentage (%)
1	Data	60	35.2%
2	Distractions	5	2.9%
3	Bad network	25	14.7%
4	Unstable power supply	22	12.9%
5	High subscription cost	20	11.8%
6	Lack of time for browsing	10	5.9%
7	Inadequate devices	7	4.2%
8	Low internet bandwidth	21	12.4%
	Total	**170**	**100%**

Table 3 revealed the major problems limiting the effective use of social media for learning. Out of many responses derived from the open-ended questionnaire, 8 frequent challenges were analysed using a simple percentage. Data (35.2%) was rated the highest problem, followed by Bad network (14.7%), Unstable power supply (12.9%) High subscription cost. (11.8%), Lack of time for browsing (5.9%) and Distractions (2.9%). These are similar to Agboola (2019) who revealed that efforts are being made globally to encourage easy access to information in all formats to address the attendant features of challenges such as power failure, machine breakdowns, lack of spare parts and technical assistants which intermittently stops the performance of modern equipment from information storage and transfer in developing countries.

CONCLUSION

This study highlights important results that provide further information concerning pupils' self-efficacy and readiness to use social media instructional platforms for extended learning in Ekiti State. The results of this study have shown that most of the pupils have a high level of self-efficacy and a moderate level of readiness towards the use of social media instructional platforms for extended learning. The study has also shown that pupils are eager to use social media instructional platforms to learn beyond the classroom settings due to its interactivity functions and collaborative system. It further showed that most pupils in Ekiti- State believe that social media platform is an open space for instructional discussion.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

Learners should be encouraged to make it a habit to use social media instructional platforms after each lesson so that they would be able to leverage on the wide range of materials available on the platforms. Also, primary school teachers should strongly incorporate the use of social media instructional platforms for extended learning to improve pupils' understanding of the subjects and to further engage them beyond the classroom settings, especially during any situation that warrants any form of lockdown in the state or the nation.

BIBLIOGRAPHY

- Aditi, H. 2018. Readiness for implementation of e-learning in colleges of education. Journal of novel applied sciences. 769-775
- Agboola, V.O. 2019. Evaluation of the Use of English Programme in Polytechnic in South Western, Nigeria. Oscotech Journal of Art and Social Sciences (OJASS). Ojass.oscotechesaoke.edu.ng ISSN 2315.5701. Retrieved May 20, 2017
- Anthony R, 2016 Academic self-efficacy: from educational theory to instructional practice Published online: 11 April 2016 The Author(s) 2016. This article is published with open access at Springerlink.com
- Bandura, A. 1986. Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. 1997. Self-efficacy: The exercise of control. W H Freeman/Times Books/ Henry Holt & Co.
- Berker, V. 2009. Older adolescents' motivations for social network site use: The influence of gender, group identity, and collective self-esteem. Cyber Psychology and Behavior, 12, 209-213.
- Borotis, S.; Poulymenakou, A. 2004. E-Learning Readiness Components: Key Issues to Consider Before Adopting e-Learning Interventions. In Proceedings of the World Conference on E- Learning in Corporate, Government, Healthcare, and Higher Education; Nall, J., Robson, R., Eds.; Association for the Advancement of Computing in Education (AACE): Chesapeake, VA, USA, 1622–1629.
- Bunz, U. 2014. The computer-email-web (CEW) fluency scale –Development and validation. International Journal of Human-Computer Interaction, 17(4), 479-506
- Bunz, U., Curry, C., and Voon, W. 2017. Perceived versus actual computer-email-web fluency. Computers in Human Behavior, 23, 2321-2344
- Burke, M., Marlowe, C., Lento, T. 2010. Social Network Activity and Social Well-Being. Carnegie Mellon Human-Computer Interaction Institute
- Çakır, H., Hava, K., Gülen, Ş. B., and Özüdoğru, G. (2015). An investigation of pre-service teachers' security awareness on social networking sites. International Journal of Human Sciences, 12(1), 887. https://doi.org/10.14687/ijhs.v12i1.3142
- Cheshire C. and Antin J., 2018 Designing Social Psychological Incentives for Online Collective Action. Conference Paper. General Online Research (GOR), Leipzig, Germany. Google Scholar
- Cole H. 2019 . Information sharing online: a research challenge. International Journal of Knowledge and Learning, 1, 62– 79. Crossref Google Scholar
- Coleman W. S. 2018, Validity of web-based surveys. In: Orville Vernon Burton. ed. Computing in the Social Sciences and Humanities. University of Illinois Press, Urbana, pp. 51– 66. Web of Science®Google Scholar
- Compeau, D. R., and Higgins, C. A. 2015. Application of social cognitive theory to training for computer skills. Information Systems Research, 6(2), 118–143
- Cotton J., 2018. Statistical power analysis for the behavioral sciences. Hillside, NJ: Erlbaum.
- Davies, T., and Cranston, P. 2018. Youth work and social Networking. Final research report. How youth can work best to support young people to navigate the risks and make the most of the opportunities of online social networking? National youth agency and research.Retrieved from http://www.nya.org.uk/resource/youth-work-social-networking
- Durmuş, A ve Başarmak, U. 2014. Öğretmen Adaylarının Eğitsel İnternet Kullanım Öz-yeterlik İnançları ve Problemli İnternet Kullanım Durumları Arasındaki İlişkinin İncelenmesi, 15- 16 April. International Conference on New Trends in Educaional Technology. Eastern Mediterranean University, Cyprus. For The Languages Literature and History of Turkish or Turkic, 7/2 Spring 2012, p. 1079-1091.
- Eastin, M. S., and LaRose, R. 2017. Internet self-efficacy and the psychology of the digital divide. Journal of Computer-Mediated Communication. https://doi.org/10.1111/j.1083- 6101.2000.tb00110.x.Eric, O. 2018. History educators and the challenge of immersive pasts: a critical review of virtual reality tools and history pedagogy. Learning, Media and Technology, 33.4:343-352.
- Friedman, L. 2017. Web 2.0 applications as alternative environments for informal learning: A critical review. Paper for OCEDKERIS expert meeting, Session 6–alternative learning environments in practice: using ICT to change impact and outcomes.

● Goker, G., Demir, M., and Dogan, A. 2017. Ag toplumunda sosyallesme ve paylasim: Facebook uzerine ampirik bir arastirma (Socialization and sharing in the network society: an empirical research on Facebook). e-Journal of New World Sciences Academy, 5(2), 183- 206.

● Gokmem M. J. 2016 A study on the motives of high school and undergraduate college students for using the social network site Facebook, (Unpublished Doctoral Thesis). Liberty University, Virginia/USA.

● Ho, K. 2014. Harnessing the social web for health and wellness: issues for research and knowledge translation. J Med Inter Res.16:2.

● Javaeed A, Kibria , Z. Khan Z, Ghauri S.K. 2020. Impact of Social Media Integration in Teaching Methods on Exam Outcomes. Adv Med Educ Pract.11:53-61 https://doi.org/10.2147/AMEP.S209123

● Kietzmann, J. H. and Kristopher, H. 2011 "Social media? Get serious! Understanding the functional building blocks of social media". Business Horizons (submitted manuscript). 54:3:241-251

● Kusel, J., Martin, F., and Markic, S. 2020. University Students' Readiness for Using Digital Media and Online Learning-Comparison between Germany and the USA. Education Sciences, 10.11:313. MDPI AG.

● Livingstone A., 2018 The impact of Facebook use on romantic relationships, (Unpublished Master's Thesis). University of Alberta, Alberta/USA.

● Mohammed J. 2017, The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. Cyberpsychology, Behavior, and Social Networking, 14(6). DOI: https://doi.org/10.1089/cyber.2010.0374

● Moore J. E. 2017. Developing a comprehensive definition of sustainability. Implementation Sci 12, 110 (2017). https://doi.org/10.1186/s13012-017-0637-1

● Mostafa R. E. 2015, Make new friends or keep the old: Gender and personality differences in social networking use. Computers in Human Behavior, 28(1), 107-112. DOI: https://doi.org/10.1016/j.chb.2011.08.016

● Omoike M. and Oke B. 2017, Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. Computers in Human Behavior, 62, 155-167. DOI: https://doi.org/10.1016/j.chb.2016.03.084

● Orakpo M., 2015, Creating, consuming and connecting: Examining the relationship between social media engagement and loneliness. The Journal of Social Media in Society, 4(1), 66-98. Retrieved from http://www.thejsms.org/tsmri/index.php/TSMRI/article/view/92/52, on 25.08.2017.

● Pajares S. D., 2016 Do motivations for using Facebook moderate the association between Facebook use and psychological well-being? Frontiers in Psychology, 6. DOI: https://doi.org/10.3389/fpsyg.2015.00771 Poellhuber O. S., 2013 Personality and motivations associated with Facebook use. Computers in Human Behavior, 25, 578-586. DOI: https://doi.org/10.1016/j.chb.2008.12.024

● Preston S. and Cox I., 2016 Gender differences in Facebook self-presentation: an international randomized study. Computers in Human Behavior, 35, 388-399. DOI: https://doi.org/10.1016/j.chb.2014.03.016

● Timur E. C, Yılmaz P., and Timur M. 2013, Facebook use, envy, and depression among college students: is Facebooking depressing? Computers in Human Behavior, 43, 139-146. Retrieved from https://doi.org/10.1016/j.chb.2014.10.053, on 17.08.2017.