

Motivations for Using Social Networking Sites by College Students for Educational Purposes

Kholoud H. Al-Zedjali, Abir S. Al-Harrasi, Ali H. Al-Badi

Abstract—Recently there has been a dramatic proliferation in the number of social networking sites (SNSs) users; however, little is published about what motivates college students to use SNSs in education. The main goal of this research is to explore the college students' motives for using SNSs in education. A conceptual framework has therefore been developed to identify the main factors that influence/motivate students to use social networking sites for learning purposes. To achieve the research objectives a quantitative method was used to collect data. A questionnaire has been distributed amongst college students. The results reveal that social influence, perceived enjoyment, institute regulation, perceived usefulness, ranking up-lift, attractiveness, communication tools, free of charge, sharing material and course nature all play an important role in the motivation of college students to use SNSs for learning purposes.

Keywords—Social networking sites (SNSs), education, college students.

I. INTRODUCTION

RECENTLY, researchers have shown an increased interest in the adoption of social networking sites (SNSs) in education. Karimi et al. [1] define SNSs as online spaces that allow individuals to present themselves, articulate their social networks, and establish or maintain connections with others. SNSs have three typical aspects that are: user profile; user connection with other users; and comments and private messages [2]. In addition, SNSs provide users with social networking services, collaborative filtering, social bookmarking, social search engines, file sharing and tagging, mash-ups, instant messaging, and online multi-player games [3]. Therefore, many college students prefer to use these sites to enhance their learning performance.

SNSs have significant positive impacts in education and provide several advantages for students. These advantages can be presented from three perspectives: students, instructors, and educational situation. Firstly, from the students' perspective, SNSs enable students to interact with peers and instructors [3], [4], work independently and collaboratively [4], share content [2], spend fun time while learning [4], debate and share opinions [2], and become partners in creative problem-solving [4]. Secondly, from the instructors' perspective, SNSs help instructors to perform efficiently and demonstrate outstanding pedagogical commitment [4]. Thirdly, from an educational situation perspective SNSs have transformed the landscape of

interpersonal and group communication and have minimized the need for face-to-face discussion in learning and teaching, shrinking the cultural gap between diverse students, and helping to achieve both short and long-term academic goals and objectives [4].

On the other hand, the authors in [4] discuss four drawbacks and negative impacts of SNSs on students' learning: (1) their extensive use increases students' rate of absenteeism and impedes their inability to submit assignments that reflect their own effort, (2) they negatively affect students' independent work, self-reliance, and creative endeavors, (3) their extensive use results in heavy dependence on collaborative work, which compromises students' initiative and integrity, and (4) they challenge students' ability to manage their time. Most instructors cling to old and familiar technologies such as e-mails, and they resist using SNSs for teaching and maintaining online interactions with their students [3].

Most studies in SNSs adoption in education have only been carried out from limited perspectives. Therefore, this study aims to identify the factors influencing students' adoption of SNSs for educational purposes from four different perspectives: the student perspective, the institution prospective, the SNS perspective, and the discipline perspective.

The paper is structured in the following way: Section II provides a literature review on the use of SNSs in education; Section III explains the research framework and theorizes the research hypotheses; Section IV describes the research methodology and design; Section V discusses the research findings and results; Section VI provides a conclusion and suggestions for future work.

II. LITERATURE REVIEW

Nowadays it is highly noticeable that many college students are engaged in the web community, which is defined in [2] as a group of people who are gathered together on the web to share some particular intention, to access information, to gain and exchange knowledge and to realize personal learning goals [5]. The overall integration style of SNSs could draw the students' attention through simplicity, flexibility and freedom of speech [6]. In addition, SNSs combine studying and leisure time which seems to be the most relevant purpose for which such a system could be useful [2].

However, students need examples and models of how SNSs can be used in education [7]. This need can be fulfilled by having unique relationships between students and instructors in order to get the best out of SNSs in learning and teaching

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[3], but sometimes this relationship cannot be enough to motivate students to use SNSs in learning. Therefore, Cao and Hong [3] suggest that putting pressure on students to use SNSs may foster the adoption of this technology.

Okoro states that the competitive positioning of academic institutions has increased the value of SNSs in education. He states that in some universities there are courses that are hybrid (face-to-face and web-enhanced) as well as completely online applications. These have enhanced the learning opportunities to students and instructors [4]. Even though the university and instructors pressure students to use SNSs in learning, students will never be motivated if they consider SNSs to be non-motivational learning tools.

Venkatesh et al. state that SNSs should be well designed and developed with good usability and technical sustainability. They should be well thought out. They add that SNSs should have some added value in education [7]. On the other hand, the nature of the course should be taken into consideration when deciding whether or not to use SNSs in education because some courses cannot be appropriately conducted online.

III. RESEARCH CONCEPTUAL FRAMEWORK AND HYPOTHESES

This research comprises both qualitative and quantitative methods. It is based on a proposed conceptual framework which consists of four sets of factors, as illustrated in Fig. 1. These sets are: (1) student-related factors that include social influence, perceived enjoyment, perceived ease of use and perceived usefulness; (2) institution-related factors that include instructor influence, institute regulations, ranking up-lift, and low level of teaching; (3) SNS-related factors that include attractiveness, communication tools, free of charge and sharing materials; (4) discipline-related factors that include the nature of the course.

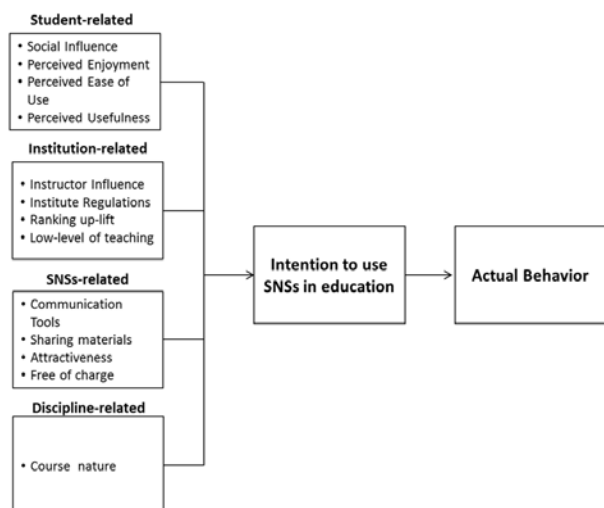


Fig. 1 Conceptual framework for using SNSs in education

A. The Student-Related Factors

‘Social influence’ is the extent to which a student perceives that others who are important to them (e.g., family and

friends) believe they should use SNSs in learning [7]. Shen et al. [8] state that social influence along with personally held attitudes could be used to predict one's behaviour. ‘Perceived enjoyment’ is the extent to which the activity of using SNSs is perceived to be enjoyable in its own right, aside from any performance consequences resulting from its use [9]. In fact, the results of a study by [10] show that perceived enjoyment influences user intention to use new technology. ‘Perceived ease of use’ is the extent to which a student believes that using SNSs will be free of effort [9]. ‘Perceived usefulness’ is the extent to which a student believes that using SNSs will enhance their performance [9]. The Technology Acceptance Model (TAM) explains the psychological interaction of people with technology and proposes two main factors that could predict users' behaviour: ‘perceived ease of use’ and ‘perceived usefulness’ [11]. Accordingly, we hypothesized:

H1.a: Social influence has a positive influence on intention to use

H1.b: Perceived enjoyment has a positive influence on intention to use

H1.c: Perceived ease of use has a positive influence on intention to use

H1.d: Perceived usefulness has a positive influence on intention to use

B. Institution-Related Factors

Instructors have always been recognized as interpersonally influential in the education of students and their achievement of academic goals such as cognitive learning [12]. Therefore, instructor influence can be defined as the extent to which college instructors are able to inspire students to use SNSs in learning. Shen et al. [8] claim that instructor presence influences students' motivation, course engagement, learning achievements, and intention to use SNSs. Even though instructor influence is related to social influence, which is discussed in the previous section, the researchers decided to separate it because they consider the instructor to be part of the institution. ‘Institute regulations’ are the extent to which college regulations influence students' decisions to use SNSs in learning. ‘Ranking up-lift’ is the extent to which SNSs in education will raise the reputation of the university. ‘Low level of teaching’ is the extent to which having a high level of teaching incompetency will lead to using SNSs in learning. These last three items have not been considered in previous research as factors impacting students' intention to use SNSs in learning. However, the researchers included them in this study in order to test their influence on the intention to use SNSs in education. Accordingly, we hypothesized:

H2.a: Instructor influence has a positive influence on intention to use.

H2.b: Institute regulation has a positive influence on intention to use.

H2.c: Ranking up-lift has a positive influence on intention to use.

H2.d: Lowlevel of teaching has a positive influence on intention to use.

C. SNS-Related Factors

The efficacy of these communication tools can be measured by the extent to which SNSs can improve the communication between instructors and students and amongst students. SNSs provide the opportunity for group interaction, discussion and co-production, anytime and anywhere [13]-[15] which motivates students to use them for learning purposes. 'Sharing materials' refers to the extent to which the ability of sharing content and course-related materials will increase the intention of students to use SNSs in learning. SNSs enable students to aggregate and share the results of learning achievements, participate in collective knowledge generation [16], and share learning materials [15]-[17]. 'Attractiveness' is the extent to which SNS features will influence students' intention to use them in learning. The 'free of charge factor' refers to the extent to which the availability of free of charge SNSs will influence students' decisions towards using them in their education. Nothing has been mentioned in the literature about what influence the fact that social networking is free of charge has on students' intention to use SNSs for learning purposes. However, researchers consider this to be an important factor in their choice. Accordingly, the following were hypothesized:

H3.a: Attractiveness has a positive influence on intention to use.

H3.b: Communication tools have a positive influence on intention to use.

H3.c: Free of charge has a positive influence on intention to use.

H3.d: Sharing materials has a positive influence on intention to use.

D. Discipline-Related Factors

'Course nature' is the extent to which SNSs meet course requirements. Lai et al. [18] claim that there is a strong relationship between students' frequency and nature of technology use and the course requirements. That is, using SNSs in education is interrelated with the course requirements which, therefore, impact on students' intentions to use such sites for learning purposes. Accordingly, we hypothesized:

H4.a: Course nature has a positive influence on intention to use.

IV. RESEARCH METHODOLOGY

The aim of this study is to identify the factors that motivate students to use SNSs in education. The research methods consist of a questionnaire, which was distributed amongst college students in Oman. It was divided into three sections: participant general information, the motivation for using social networking sites in education, and comments and feedback, there being a total of seven main questions in the three sections.

V. FINDINGS AND DISCUSSION

Having collected the data through the online survey, it was then analysed to investigate the trends of the college students with regard to the use of SNSs in education while they are at

college. Table I shows general information.

TABLE I
 SELECTED DEMOGRAPHIC PROFILE OF RESPONDENTS

Category	Number(N)	Percentage (%)
Gender		
Male	34	38%
Female	59	62%
Educational Background		
Medicine and Health Science	10	11%
Science	15	16%
Arts and Social Sciences	9	10%
Law	3	3%
Engineering	20	22%
Education	10	11%
Agriculture and Marine Science	6	6%
Economics and Political Science	20	22%

A. Qualitative Results

The research revealed that most students believe that SNSs are useful in education, that their use enhances learning and that they serve as complementary tools in education. Furthermore, according to the students surveyed, SNSs facilitate and boost the learning process by enabling two great sources of information: 1) a wider communications between students and their class-mates, instructors and other interested parties; 2) a huge repository of illustrations for all kinds of problems for all subjects/topics that students might need to enquire about. All these factors constitute a driving force that encourages students to use SNSs for learning purpose.

B. Statistical Analysis: Correlation

The statistical analysis used in this paper is Pearson correlation analysis [19]. The factors of social influence, perceived enjoyment, institute regulation, perceived usefulness, ranking up-lift, attractiveness, communication tools, free of charge, sharing material and course nature all have strong positive correlations towards the intention to use SNSs in education with the actual behaviour, and instructor influence has positively correlated with actual behavior in using SNSs in education but the correlation is substantially weaker. All hypotheses proposed in the paper [H1.a, H1.b, H1.c, H1.d; H2.b, H2.c, H2.d; H3.a, H3.b, H3.c, H3.d and H4.a] are accepted as having a p-value of less than 0.01 at a 1% level of significance except H2.a, which is also accepted but at a 5% level of significance (see Table II) .

TABLE II
CORRELATION

Constructs	Acceptance Rating of intention	
	Pearson Correlation	Sig. (2-tailed)
Social influence	.521**	.000
Perceived ease of use	.613**	.000
Perceived usefulness	.658**	.000
Perceived enjoyment	.681**	.000
Instructor influence	.320*	.002
Institute Regulation	.469**	.000
Ranking-up lift	.581**	.000
Low level of teaching	.597**	.000
Attractiveness	.627**	.000
Communication tools	.628**	.000
Free of charge	.643**	.000
Sharing materials	.695**	.000
Course nature	.663**	.000

** Correlation is significant at the 0.01 level (2-tailed): N=93

* Correlation is significant at the 0.05 level (2-tailed).

VI. CONCLUSION

This research attempted to explore the motivations for using social networking sites by college students for educational purposes. Variables such as social influence, perceived enjoyment, institute regulation, perceived usefulness, ranking up-lift, attractiveness, communication tools, free of charge status, sharing material and course nature were found to play an important role in motivating college students to use social networking sites for learning purposes.

In brief, SNSs are valuable tools that high education institutions should take advantage of in order to increase the quality of their education. Universities should focus on the factors influencing college students to use such sites while learning. This will result in the best utilization of SNSs and will ensure positive outcomes for technology-based education.

REFERENCES

- [1] Karimi, L., Khodabandelou, R., Ehsani, M. M. and Ahmad, M., (2014), Applying the Uses and Gratifications Theory to Compare Higher Education Students' Motivation for Using Social Networking Sites: Experiences from Iran, Malaysia, United Kingdom, and South Africa.
- [2] Silius, K., Miilumaki, T., Huhtamaki, J., Tebest, T., Merilainen, J. and Pohjolainen, S., (2010), Students' motivations for social media enhanced studying and learning, *Knowledge Management & E-Learning: An International Journal (KM&EL)*, vol. 2 (1), pp. 51-67.
- [3] Cao, Y. and Hong, P., (2011), Antecedents and consequences of social media utilization in college teaching: a proposed model with mixed-methods investigation, *On the Horizon*, vol. 19 (4), pp. 297-306.
- [4] [4] *International Education Research (JIER)*, vol. 8 (3), pp. 255-262.
- [5] Redecker, C., Ala-Mutka, K. and Punie, Y. (2010), *Learning 2.0-The impact of social media on learning in Europe*, Policy brief., Institute for Prospective Technological Studies.
- [6] Heikkinen, S., (2012), Impact of Motivation, Language and Social Network on Learning Process, *Engineering Education*, vol. 23, pp. 26.
- [7] Venkatesh, V., Thong, J. and Xu, X., (2012), Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology, *MIS quarterly*, vol. 36 (1), pp. 157-178.
- [8] Shen, D., Laffey, J., Lin, Y. and Huang, X., (2006), Social influence for perceived usefulness and ease of use of course delivery systems, *Journal of Interactive Online Learning*, vol. 5 (3), pp. 270-282.
- [9] Park, Y., Son, H. and Kim, C., (2012), Investigating the determinants of construction professionals' acceptance of web-based training: An extension of the technology acceptance model, *Automation in Construction*, vol. 22, pp. 377-386.

- [10] Huang, J.-H., Lin, Y.-R. and Chuang, S.-T., (2007), Elucidating user behavior of mobile learning: A perspective of the extended technology acceptance model, *Electronic Library*, The, vol. 25 (5), pp. 585-598.
- [11] Davis, F. D., (1989), Perceived usefulness, perceived ease of use, and user acceptance of information technology, *MIS quarterly*, pp. 319-340.
- [12] Rodriguez-Keyes, E., Schneider, D. A. and Keenan, E. K., (2013), Being Known in Undergraduate Social Work Education: The Role of Instructors in Fostering Student Engagement and Motivation, *Social Work Education*, vol. 32 (6), pp. 785-799.
- [13] Aydın, G. S., Muyan, M. and Demir, A., (2013), The Investigation of Facebook usage Purposes and Shyness, Loneliness, *Procedia-Social and Behavioral Sciences*, vol. 93, pp. 737-741.
- [14] Mao, J., (2014), Social media for learning: A mixed methods study on high school students' technology affordances and perspectives, *Computers in Human Behavior*, vol. 33, pp. 213-223.
- [15] Usher, K., Woods, C., Casella, E., Glass, N., Wilson, R., Mayner, L., Jackson, D., Brown, J., Duffy, E. and Mather, C., (2014), Australian health professions student use of social media, *Collegian*.
- [16] Dabbagh, N. and Kitsantas, A., (2012), Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning, *The Internet and higher education*, vol. 15 (1), pp. 3-8.
- [17] Bogdanov, E., Limpens, F., Li, N., El Helou, S., Salzmann, C. and Gillet, D., (2012), A social media platform in higher education, In the proceeding of Global Engineering Education Conference (EDUCON), 2012 IEEE, 1-8
- [18] Lai, C., Wang, Q. and Lei, J., (2012), What factors predict undergraduate students' use of technology for learning? A case from Hong Kong, *Computers & Education*, vol. 59 (2), pp. 569-579.
- [19] Chandel, J. K., Sharma, D. S. K. and Bansal, D., (2011), Linking the 'Big Five' personality domains to organizational commitment, *International journal of research in commerce, IT and management*, Vol. 1(3), pp 19-24.