ONLINE SOCIAL NETWORKS AS COMMUNICATION AND LEARNING ENVIRONMENTS: POST-GRADUATE STUDENTS' ATTITUDES AND PREFERENCES

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Abstract

The globe has undergone drastic changes in new millennial as a consequence of network technologies and social software. Social network sites have become very popular for people from diverse backgrounds and drown much attention by the academia because of the social features provided on networks. Within this perspective, this paper explores potential of social networks in learning dimension and examines post-graduate students' attitudes and preferences regarding the use of online social networks for learning purposes in addition to their use for social communication and interaction purposes. This paper further examines online social networks in terms of degree of connectivity, social communication and learning. The findings reveal that post graduate students widely employ online social networks for learning as well as communication and interaction. On the basis of research findings, this paper concludes that online social networks are effective and efficient learning environments for social constructivist and connectivist learning.

Keywords: Social Networks, post-graduate students, higher education, social communication, social learning.

1 INTRODUCTION

The advent of Web 2.0 and following that online social networks brought remarkably significant changes into our lives. The well-known concepts such as *Global Village* by Marshall McLuhann (1962) envisioned the world as a small village whose residents connected to each other through digital networks and another work entitled *The World is Flat* by Thomas Friedman (2007) argued that the Information Age has brought about a levelling of the playing field in terms of information creation and dissemination. In digital knowledge age, Social Network Sites (SNSs) have had an important role in terms of learning in addition to its primary role for social communication and interaction. It is also a well-known fact that since the advent of the Internet and integration of online technologies into our lives, our ways of communicating began to change. However, it was not until the creation of SNSs and other similar applications that we have seen such a massive harnessing of the potential of the now-pervasive online connectivity in our everyday lives (Davis III, Deil-Amen, Rios-Aguilar, Gonzalez Canche, 2012).

2 LITERATURE REVIEW

2.1 Social Network Sites

SNSs are defined as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (Boyd and Allison, 2008). SNSs are currently the most popular type of social software because they facilitate the combined usage of many Web 2.0 technologies into single platforms that work as virtual gathering places for social interactions (Arquero and Romero-Frías, 2013).

Ractham and Firpo (2011) indicate that Web 2.0 provides users with a personalized platform that relies on mostly asymmetric information exchange. According to Lee and McLoughlin (2008), SNSs are educational tools because learners can use them for communication and social support as well as for discovering and sharing knowledge. All these learning opportunities that are presented through Web 2.0 in general and SNSs in particular support to use SNSs as learning platforms which can be called as learning 2.0 (Murray, 2008) or pedagogy 2.0 (McLoughlin and Lee, 2008).

2.2 Pedagogy 2.0

As a term for combining technology and education (Bozkurt, 2014), pedagogy 2.0 integrates Web 2.0 tools that support knowledge sharing, peer-to-peer networking, and access to a global audience with socio-constructivist learning approaches to facilitate greater learner autonomy, agency, and personalization (McLoughlin and Lee, 2008). Academia sensed the value of pedagogy 2.0 and started to integrate SNSs in higher education.

SNSs provide opportunities for higher education institutes in terms of increasing their presence within the community, their impact on society, their effectiveness in fulfilling their goals and vision and the efficiency of their actions. These institutes are utilizing the potential of social media technologies for their benefit and embracing the academic possibilities embedded in their usage (Forkosh-Baruch and Hershkovitz, 2012). In addition, SNSs create an online social space where university students can build and maintain social capital with others (Ellison, Steinfield & Lampe, 2007).

Additionally, SNSs facilitate introduction and communication by providing a space for people to connect around a topic of common interest. SNSs not only attract people but also hold their attention, impel them to contribute, and bring them back time and again - all desirable qualities for educational materials. These sites are fundamentally about community: Communities of practice as well as social communities. Social networking is already second nature to many students; our challenge is to apply it to education to meet the demands of today's networked society (NMC, 2007).

3 RESEARCH OBJECTIVES

The purpose of this survey study is to identify and examine post-graduate students' (master and doctoral) attitudes and preferences towards to SNSs in terms of learning.

4 METHODOLOGY

4.1 Research Design

This paper intends to present a descriptive analysis of post graduate students' preferences about learning in SNSs. For this purpose, quantitative survey design was employed.

4.2 Sampling

The participants of this research are 110 post-graduate students of a blended course in a state university in Turkey. The course was a required common course for all the departments in a graduate school of social sciences. Therefore, the participants assumed to come from different academic backgrounds.

4.3 Data Collecting, Procedure and Analysis

The data was collected through an online questionnaire. The questionnaire link announced through learning management system of the course. The first item of the questionnaire was a filtering question. In filtering questionnaire item, participants were asked whether they use SNSs or not. Participants who reported that they used SNSs and who reported that they didn't use were directed to different questionnaire items to be able to harvest detailed information regarding to post-graduate students' preferences and attitudes. At the end of the questionnaire, demographic data was collected. To improve validity, one reverse item included into questionnaire to detect acquiescence bias. A total of 15 participants out of 125 were excluded from research as they gave the same answers to reverse questionnaire items. The data gathered were analyzed by using descriptive statistical analysis.

4.4 Strengths and Limitations

This study has some strengths as well as some limitations. The strength of the study comes from its focus on master and doctoral students' preferences and attitudes towards to SNSs and their value in terms of social learning environments. However, this study has some limitations as well. The number of the participants who reported that they didn't prefer using SNSs are low in number to make a meaningful analysis.

5   FINDINGS AND DISCUSSION

5.1   Who are the participants?

This part of the study presents participants' demographic information. Table 1 presents the data of who used SNSs and who didn't. According to the given info, 44.5% of the respondents are male and 55.5% are female. Their ages range between 22 and 40 years old. 70.9% of the respondents are attending master degree programs while 28.2% are attending doctoral degree programs. Nearly half of the respondents are both students and employees.

Table 1. Demographics of post graduate students.

	Participants who used SNSs (N=100)		Participants who didn't use SNSs (N=10)		TOTAL (N=110)	
Gender	Male	53%	Male	60%	Male	44.5%
	Female	57%	Female	40%	Female	55.5%
Age	22-24	17%	22-24	0%	22-24	15.5%
	25-27	33%	25-27	50%	25-27	34.5%
	28-30	20%	28-30	30%	28-30	20.9%
	31-33	11%	31-33	0%	31-33	10%
	34-36	11%	34-36	10%	34-36	10.9%
	37-39	2%	37-39	0%	37-39	1.8%
	40+	6%	40+	10%	40+	6.4%
Level of Education	Master	69%	Master	90%	Master	70.9%
	Doctoral	30%	Doctoral	10%	Doctoral	28.2%
	Post-doctoral	1%	Post-doctoral	0%	Post-doctoral	0.9%
Occupation	Student	29%	Student	40%	Student	30%
	Working	14%	Working	10%	Working	13.6%
	Both	57%	Both	30%	Both	54.5%
	Not working	0%	Not working	20%	Not working	1.8%

5.2   How long have post-graduate learners been using social networking sites?

Respondents also reported on how long they had been using SNSs (Table 2). According to info provided, 21% of the respondents have been using SNSs for 3-4 years and 76% of users have been using for more than 5 years.

Table 2. Time span of SNSs usage.

Time span	Percentage
Less than 6 months	0%
6 months – 1 year	0%
1 - 2 years	3%
3 - 4 years	21%
More than 5 years	76%

It is clear that a great majority of the post-graduate students have been using SNSs for a long time and they are experienced users which can be interpreted as post graduate students are aware of the features, pros and cons of SNSs. After all, it can be argued that their choices regarding the use of social and academic issues of SNSs are meaningful rather than incidental.

5.3 What is the approximate frequency of using the social networking sites?

The findings regarding the approximate frequency of using SNSs are salient (Table 3). 27% of the post-graduate students connect to SNSs every hour and 62% of them a few times in a day and 7% once in a day.

Table 3. Frequency of connecting to SNSs.

Frequency	Percentage
Every hour	27%
A few times in a day	62%
Once in a day	7%
Twice a week	4%
Once a week	0%
Once a month	0%

In total, 96% of the post graduate students connect to SNSs on daily basis and a great majority of these students are usually online and connected to SNSs.

Short, Williams and Christie (1976) described social presence as a construct comprised of two concepts. Intimacy (Argyle & Dean, 1965) and immediacy (Wiener & Mehrabian, 1968) are two important concepts associated with social presence. This finding demonstrates that post-graduate students sustain their connectivity and are usually online. It seems that the borders between real and online social networks are blurring and post graduate students are available on real and online networks one and at the same time which means that SNSs support immediacy which is an important dimension of social presence.

5.4 How do SNSs affect post-graduate learners' face to face communication?

In order to understand how post-graduate students perceive SNSs in terms of communication, a questionnaire item was directed to respondents (Table 4). While 17% of post-graduate students reported that SNSs don't have an effect on face to face (F2F) communication, 45% of post graduate students reported that SNSs somewhat have an effect on F2F communication and 38% of these students think that SNSs replace most of the F2F communication.

Table 4. How do SNSs affect F2F communication?

Degree of effect	Percentage
Does not have an effect on face to face communication	17%
Somewhat have an effect on face to face communication	45%
Replaces most of the face to face communication	38%

The total of respondents who think SNSs somewhat have an effect (45%) or replaces most of the face to face communication (38%) are 83%. Although this needs further exploration, it can be said that SNSs also support intimacy which is another dimension of social presence as 83% think that SNSs provide similar experiences to F2F communication.

5.5 What is post-graduate learners' interactivity degree on SNSs?

To discover behaviour and interaction patterns of post-graduate students' on SNSs, respondents were asked to report how they behave on SNSs (Table 5). 33% of the post-graduate students stated that they simply audit on SNSs. 22% of post-graduate students like, share and favourite posts while 25% further comment to these posts. 20% of post-graduate students additionally create new posts, join the discussions, like, share and favourite.

Table 5. Behaviour and interaction patterns of post-graduate students.

Degree of interactivity	Percentage
I usually don't do anything, but audit the posts	33%
I like, share and add the posts to my favourites	22%
I comment like and share the posts	25%
I create new posts, join the discussions, like, share and add to my favourites	20%

These findings indicate that the degree of interactivity increase gradually from passive behaviours to active behaviours. These findings also help to discover post-graduate students' roles on SNSs. 33% of the post-graduate students are lurkers, 47% of the post graduate students (total of 22% and 25%) contributors and 20% of the post graduate students are creators on SNSs.

These findings demonstrates a similarity with Pareto Law. The Pareto principle (also known as the 80–20 rule, the law of the vital few, and the principle of factor sparsity) claims that roughly 80% of the effects come from 20% of the causes. In other words, it is a term for the phenomenon that in any population which contributes to a common effect, a relative few of the contributors account for the bulk of the effect (Juran, 1975). Similarly, the concept of the Long Tail (Anderson, 2004) refers to how given a large consumer population and high freedom of choice, the selection and buying pattern of the population results in a power law distribution wherein the upper 20% of items (the head) are favoured over the other 80% (the long tail) (Ractham and Firpo, 2011). The findings demonstrate that 20% of the participants create the content and those %80 use these content by commenting, sharing, liking, favoriting or simply by auditing. These findings also lead to another question for future research: Who are those 20% or creators?

5.6 What are the most popular social network sites?

The participants were asked to report which one of the SNSs they frequently use (Figure 1). Facebook and Twitter are generally preferred by post-graduate students. Interestingly, almost all post-graduate students have a Facebook account and nearly half of them have a Twitter account.
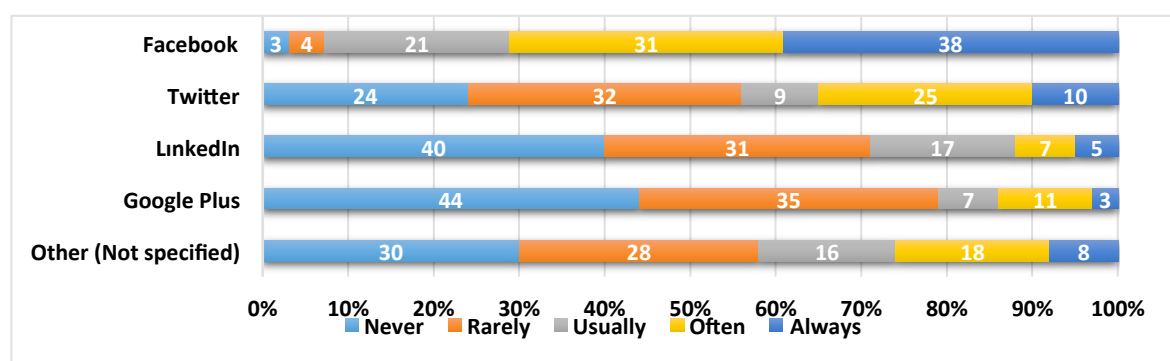

Figure 1. The most popular SNSs among the post-graduate students.

Though name of the popular SNSs may change in different social and cultural backgrounds, it is clear that post graduate students are connected to online networks through one or more than one accounts. On the basis of these findings, one can raise a question why do higher education institutions use Learning Management Systems, or why don't they integrate SNSs into learning process or curriculum. However, the answers to these questions are beyond the scope of this research, yet they are worth examining in future research.

5.7 Why do post graduate students use SNSs?

Post-graduate students reported a number of reasons on a 5 Likert scale to demonstrate why they use SNSs (Figure 2). They use SNSs primarily for communication purposes and also to access and augment knowledge. They also use SNSs for different purposes such as to make professional contacts, share their experiences, to spend time, share multimedia content, express themselves, play

games or to make close relationships. Though the degree of their reasons varies, post-graduate students use SNSs not only for communication but also for a range of activities which increase their value especially in terms of social learning.
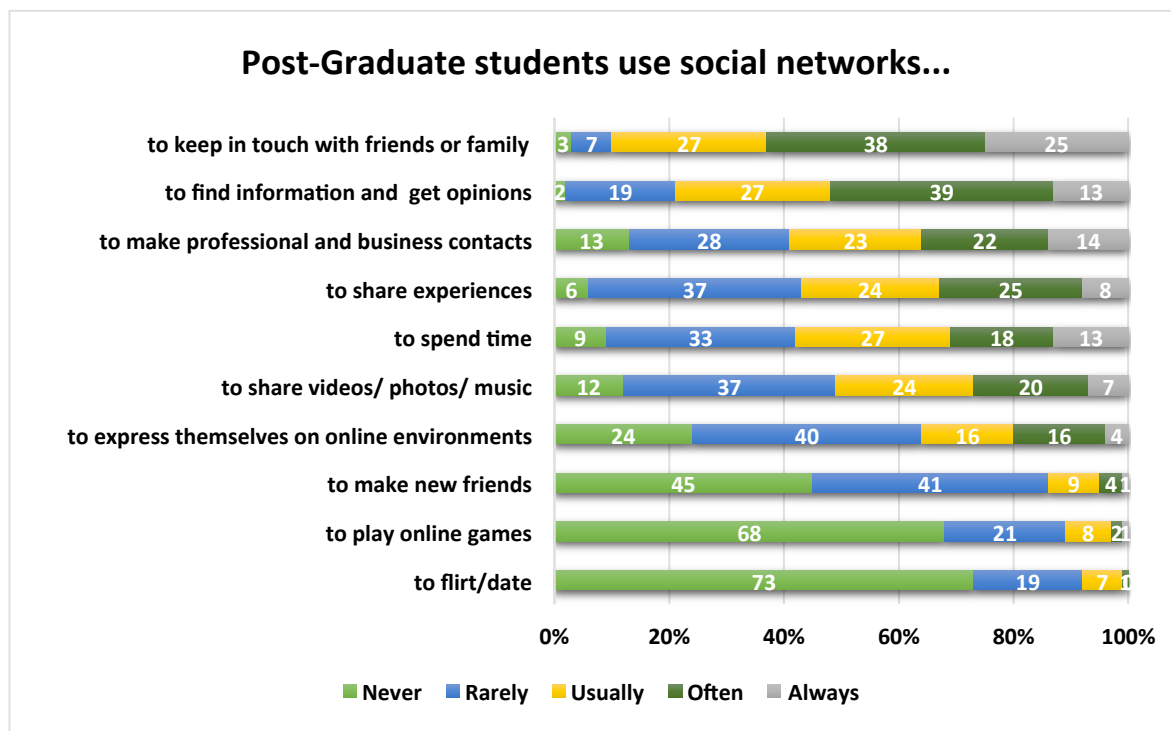

Figure 2. Post-graduate students' reasons to use SNSs.

These findings reveal that though the core idea is communication and interaction, SNSs serve for multiple purposes. Bozkurt (2015) argues that SNSs are a reflection of reality on virtuality that meets individuals' psychological and sociological needs, an eco-system in which individuals are permitted for digital identity formation. Ractham and Firpo (2011) further state that Web 2.0 provides users with a personalized platform that relies on mostly asymmetric information exchange. As a centralized node, users can connect with others through the different channels of their mutually shared online social networks, mirroring the way people network in real life. This represents a paradigm shift in terms of how people use technology to communicate in everyday life.

5.8   What is the value of SNSs in terms of learning?

Post-graduate students further stated how they perceive and value SNSs within learning perspective (Figure 3). According to their responses on a 5 Likert scale (from "completely disagree to completely agree"), post-graduate students think that SNSs have a great potential as a learning environment. In regard to their responses (total of agree and completely agree), post-graduate students think that SNSs; increase interaction (74%), make learning engaging (66%), are an important tool for learning (65%) and positively affect learning (64%). These students also think that SNSs; are an extension of real life on networked environments (63%), move learning beyond classroom walls (58%), increase learners' motivation (56%), improve learners' success (51%) and make learners feel a part of learning community (34%).

Social Networks...

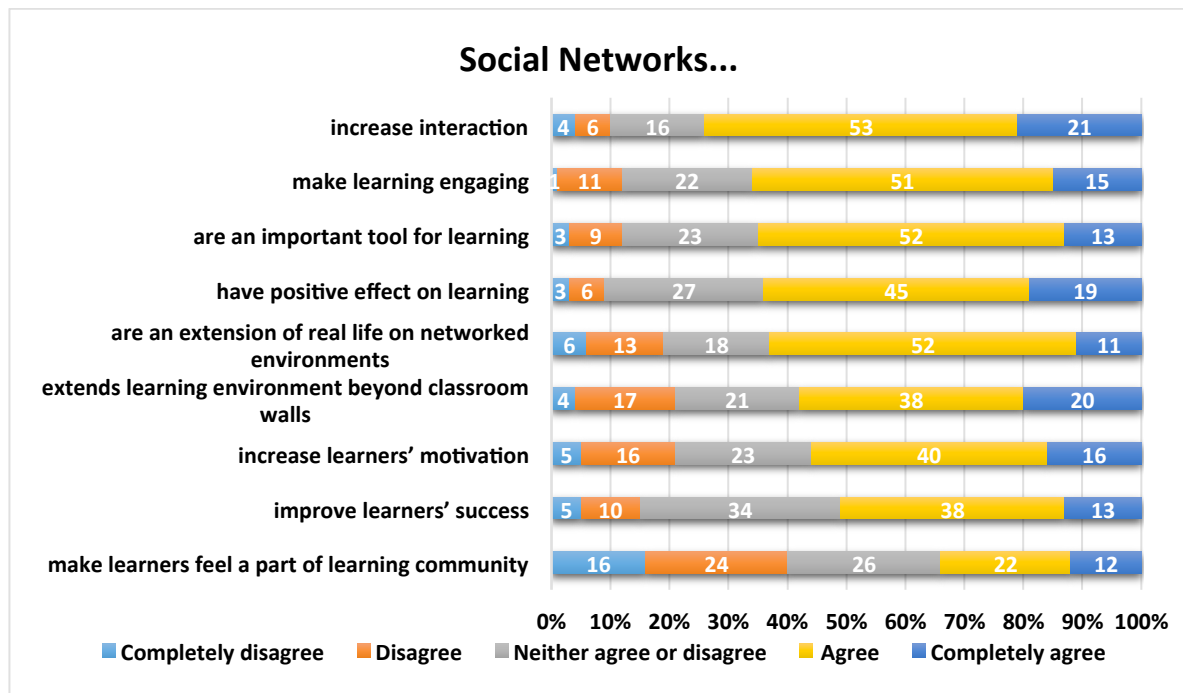| Statement	Completely disagree	Disagree	Neither agree or disagree	Agree	Completely agree
increase interaction	4	6	16	53	21
make learning engaging	1	11	22	51	15
are an important tool for learning	3	9	23	52	13
have positive effect on learning	3	6	27	45	19
are an extension of real life on networked environments	6	13	18	52	11
extends learning environment beyond classroom walls	4	17	21	38	20
increase learners' motivation	5	16	23	40	16
improve learners' success	5	10	34	38	13
make learners feel a part of learning community	16	24	26	22	12

Figure 3. Post-graduate students' reasons to use SNSs for learning.

These research findings demonstrate that SNSs are powerful learning environments that facilitate interaction which is one of the basic component of social learning. Interaction is closely linked to learning and it is catalyst for learning process. It is for sure that SNSs don't have a magic wand and cannot change everything in a sudden. However, learners believe that SNSs are an engaging learning tool which positively affect their learning process and increase motivation. Learners also perceive SNSs as an extension of real life on networked environments and believe that SNSs extend learning beyond classroom walls. These findings indicate two important nuances: Firstly, learning transforms to a seamless action in a social process and secondly learning is not confined to classroom walls, but may occur anywhere as long as you are connected. As a final remark, it can be concluded that rather than isolating, SNSs free the learning as a social process which is one the original idea behind the lifelong learning.

5.9 Why don't post graduate students use social network sites?

The respondents who reported that they don't use SNSs are 9.1% (N=10) (Table 6). These participants stated that they don't use SNSs because of the following reasons: They are not interested in joining social networking (70%); they joined once, but they didn't enjoy it (20%) and as a reason of privacy issues (10%). Though the total number of participants quite low for meaningful analysis, it is also interesting that the majority of non-SNSs users simply don't interested in joining in social networking.

Table 6. Reasons for not using SNSs.

Reasons	Percentage
I am not interested in joining social networking	70%
I joined once, but I didn't enjoy it	20%
Privacy issues	10%
It's against my belief	0%
It's against my culture	0%

6 CONCLUSION AND FUTURE IMPLICATIONS

This paper aims to explore SNSs in terms of learning potential within post-graduate students' perspective. The results of this research exhibit that post-graduate students are usually connected and feel that SNSs provide similar experiences of F2F interaction. In other words, SNSs support and enhance immediacy and intimacy which are two pillars of social presence. Post-graduate learners also use SNSs for multiple purposes which may value SNSs as a good simulation of real life experiences. This is important as meaningful and deep learning occurs in authentic learning environments. Findings indicate that SNSs are a suitable learning environments in terms of facilitating interaction. Post graduate learners perceive them as an extension of reality in virtuality which indicates SNSs' value for seamless lifelong learning experiences. SNSs' ability to provide communication and interaction prove their potential for social constructivism and additionally their ability to make connections and enhance learners' ability on networks prove their potential for connectivism.

Though the number of non-users of SNSs are low and don't provide enough information, the situation further proves that, as a social creature, nearly everyone in post-graduate education have digital identities and they use SNSs to meet their psychological and sociological needs. Features of SNSs present many opportunities that educators and educational institutions can harvest. With this in mind, rather than separating online social networks from leaning process, integrating SNSs into learning might be a wise step. On the ground of these discussions, the following future implications can be taken into consideration by researchers:

- Higher education institutions should investigate SNSs for their potential as a social learning management system which may facilitate formal, informal and non-formal learning.

- The relationship of digital identity formation and learning can be further investigated to be able to understand learners and to be able to design learning process for digitally exist population.

- There is a need for similar research to compare and analyze bachelor degree students' preferences and attitudes in addition to post-graduate students towards to use of SNSs in learning process.

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