

Students' perception of social networking for academic purposes in Bangladesh

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Abstract: This study attempts to determine the students' perception of social networking on their academic purpose. In this paper, a survey was conducted by 480 self-administrative questionnaires given to a sample of students from the business faculties of different public and private universities in Chittagong. The purpose was to aggregate respondent's opinions on the uses of their favorite social networking site(s) and their impact on the students' academic performance. Most of the respondents report a positive impact of social networking on their academic purposes and there is a favorable perception of social networking taking different nuances. Hence, there is a need for higher education policy makers in Bangladesh to properly connect the students' (especially undergraduate and postgraduate) involvement in social networking with their academic purposes to enable the current generation to fully take advantage of the technological advances that are changing the educational landscape.

Keywords: social network, academic purpose, perception, student involvement, Facebook, technology, education

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Introduction

Recently, the world has been shaped and updated by the development of the Internet. The progressive evolution of the Internet has made it become the most popular communication medium. A large portion of the people in the world is connected by social networks through the Internet (Oye et al., 2012). Social networking websites is the technological tool used by Internet users to as a platform to develop eventually mutually relationships for personal interests, business, games or academic purposes (William, 2009). From a global perspective, the number of social networking sites is used as a channel for transforming multiple areas of knowledge. The Arab Spring is recent great example. A bundle of benefits is associated with social networking, but it is not free from darker effects on the users especially when it comes to their academic purposes. The focal point of social networking is to build up an association of ideas, knowledge and sharing among people in a global community. Social

networking sites (SNS) are a very popular communication tool in Bangladesh. Different types of users are interested in SNS for various purposes. Teachers and students use SNS frequently, which is why social networking has been recognized as an important resource for academic purposes.

Literature review

Recently, from the World Bank report 2012, we found that 5%, 9%, 10.10%, 38.3%, 77.90% people are using the Internet in Bangladesh, Pakistan, India, China, and USA respectively. In Bangladesh, 5% equals to 33.43 million people who use the Internet (Dhaka Mirror, 2013) and out of them 95% people are mobile internet users (The Daily Independent, 2013).

Table 1. Market share of Internet users (Subscriber)

Cell operator in Bangladesh	Internet subscribers (million)
Grameen Phone	10.00
Banglalink	9.70
Robi	4.40
Airtel	2.80
Citucell	0.30
Teletalk	0.26
ISPs & PSTN	1.22

Source: *The Financial Express, May 31, 2013.*

Social network sites provide web design services that allow users to build a profile within a compact system (Boyd and Ellison, 2007). A number of SNS diversify the technological affordances made available to millions of people around the world including the 33.43 million people of Bangladesh. Developing relationships with fans or friends is a basic characteristic of social networking. Students use social networking sites for fun, passing time, communicating with existing friends or finding new ones (Boyd and Ellison, 2007). But, some students have blamed social networking sites for their decreasing GPA (Grade Point Averages) (Banquil et al., 2009). However, there are comparative studies which show that some students use social networking for academic and professional purposes.

Out of hundreds of social networking websites, only the following sites are frequently used in Bangladesh: google.com, facebook.com, yahoo.com, youtube.com, bloggers.com etc. Most of the people use youtube.com, but facebook.com is the most preferred social networking site in Bangladesh. Facebook attracts a large number of local and international users because it provides adaptive and interactive services for all, based on users' interests and activities (Oye et al. 2012), especially for students.

Social networking is a well-liked activity that may help in academic learning and sharing activities with or among learners. Recently, social media has been driven to create a positive attitude towards social problems like: social injustice, information asymmetry, climate change, health concerns, growth and development in the globe as well as business issues i.e. marketing (Leskovec, 2011), labor market (Montgomery, 2005), connecting with the customer (Goldfarb and Tucker, 2011) and communicating with people within the business

environment (Musiał and Kazienko, 2013) since CBSM (Community Based Social Media) is able to support information sharing and collaboration between individuals, group of individuals, societies, communities, countries etc. (Zhang and Zheng, 2009). It also manifests a huge and significant influence on the daily search for information necessary for decision making. Social networking is expanding through the sharing of knowledge and experience (Lampe et al., 2007).

All sort of students like secondary, higher secondary, graduate and postgraduate use social networking not only for connecting with friends but also for sharing information, circulating guidelines, cases, assignments, etc., about classes, examinations, tutorials, class presentations and other purposes like concerts, sports, games, parties, or any other related interests etc. Graduate and postgraduate students also use social networking sites to ask questions about their field of the study and to make comparisons between class materials and the experience from the field. By these literatures, students in world benefit from the contributions of SNS, but what are the actual perceptions of Bangladeshi students who use SNS for their individual purposes? How can we encourage students to use the SNS for academic purposes? This research paper is focused on these research questions. 'Digitalization' is the basic slogan of Bangladeshi economy. For effective digitalization, proper education and appropriate application are the prerequisites. Social networking is the technological improvement enclosed in the traditional education system. No other research papers were found about the student's academic perception of social networking in Bangladesh.

Objectives, hypotheses and methodology of the study

This study examines the perception of social networking in relation to academic excellence in Bangladesh. Two research questions were proposed: (1) How do students use social networking sites for academic purposes? (2) What are their perceptions about using social networks? The participants in this study were selected from a population of undergraduate and graduate students belonging to different departments from different public and private universities in Chittagong. The participants were selected according to their level of experience in using social networking sites. The objectives of the study are:

1. To explain the conceptual understanding of social networking
2. To determine the perception of social networking used in academic purposes in Bangladesh.
3. To identify the students' perception on social networking in Bangladesh.

Considering the objectives of the study, the following working hypotheses have been developed and tested:

H1: There is no association among the social networking dimensions with academic purposes in Bangladesh.

H2: There is no significant relationship between academic perception and actual social networking usage among Bangladeshi students.

Both primary and secondary data were used in the study. In order to collect primary data, a questionnaire was designed in the light of the objectives of the study. 480 graduate and postgraduate students were selected purposively from

a number of public and private universities in Chittagong like Chittagong University (CU), Open University (OUB-Regional Resource Center, Chittagong), Chittagong University of Engineering and Technology (CUET), International Islamic University Chittagong (IIUC), Chittagong Independent University (CIU) and Southern University Bangladesh (SUB). The group was selected based on their experience level in using social networking. The interview method was used to collect primary data since it is difficult to observe the users' behavior while using social networking sites due to privacy concerns.

The questionnaire is the combination of two parts. One is called demographic and socio-economic section where demographic and socio-economic characteristics of the respondents were registered using descriptive statistics for determining the users' propensity towards social networking. Another section was used to find the level of perception towards the different dimensional perceptions of social networking. SPSS version 21.0 and SPSS-AMOS version 21.0 were used to analyze the factors involved in the study. Finally, structural equation modeling (SEM) was used to determine the consequential dependency of respondent's perception on social networking in Bangladesh.

Secondary data were collected from different sources like articles from both national and international recognized journals, texts, websites and periodicals published in the daily newspaper etc. These sources are used to obtain a pool of literature knowledge about social networking and its application in different areas of business.

The concept of social networking

A social network is a set of human beings in digital form which represent the registered users who are linked by relationships extracted from the data about their activities, common communication or direct links gathered in the Internet based systems (Musiał and Kazienko, 2013). It can also be defined as a social structure made of nodes, which are usually individuals or organizations tied by one or more specific types of relations, such as financial exchange, friendship, passion, trade, web links, hobbies, etc. (Dorn, 2010). It connects people with all different types of interest. In social networks, people connect to one another and this principle is used to analyze their position (Musiał and Kazienko, 2013). Boyd and Ellison (2007) define social networking as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, to articulate a list of other users with whom they share a connection, and to view and navigate their list of connections and those made by others within the system.

Social networking is based on developing communication and building relationships through sharing views and information. Various well known social software applications have been developed for smooth social networking and can be regarded as components of social networking. The most well-known social software applications are wikis, weblogs, social networking sites, instant messaging (Assaad and Gómez, 2011), social book-marking, podcasting, social search engines and RSS (Rich Site Summary) feeds (Maged et al., 2007). The term of social software is being described as the tools, which support the social

relationships between people using the web (Mathiasen and Dalsgaard, 2006). Social software may provide different services for community members such as finding members with similar interests, finding information on interesting subjects, discussing common problems, or simply the storing of private or publicly-accessible documents. Generally, subscribers are habituated to use Wikis for easily adding, removing, and otherwise editing and changing available content (Dorn, 2010). Weblogs are usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video (Assaad and Gómez, 2011; Barsky, 2006), Social networking sites are used as instruments for building virtual communities, or social networks, for individuals with similar education, lifestyles, interests, or activities (Bolotaeva and Cata, 2011) i.e. Facebook, Twitter, Skype, Hi5, Orkut, MySpace and LinkedIn, etc. (Musiał and Kazienko, 2013). Instant messaging is a form of real-time communication between two or more people based on typed text (chatting) is transmitted over the Internet (Dorn, 2010) i.e. Google Talk, Google Mail and Yahoo Messenger etc. (Maged et al., 2007), Social bookmarking is used to collect and annotate (tag) their favorite web links in an online (Maged et al., 2007; Dorn, 2009), podcasting is considered as a part of the field of video-audio-on-demand and refers to the production and provision of media files (audio or video) through the internet (Assaad and Gómez, 2011) and RSS Feeds (Really Simple Syndication or Rich Site Summary) is used to exchange web content (Lin, 1999).

Social networking in Bangladesh

Social networking sites have gained in recent years considerable popularity on a global scale, and have attracted a significant part of the online community (Bortoli et al., 2009). Users with interests and subject areas can now find each other and can stay connected in communities and networks (Richter and Koch, 2008). Social networking has a vital influence on our live as it helps a lot in every field of life such as the political field, the economic field and the educational field and they are playing a big and influential role in decision-making in the events of the global world economically, politically, socially and educationally speaking (Zaidieh, 2012).

Bangladesh is one of Asia's giants of LDC's consisting of more than 160 million people. 50% of the people in Bangladesh maintain their living standards below the international poverty line (UNICEF Report, 2012). 5% of the people (approximately 33.43 million people) of our country are habituated to use the Internet and out of them 95% use mobile devices to connect to social networks. In Bangladesh, Facebook and YouTube are the most useful social networking sites. The penetration growth rate of social networking in Bangladesh is 2% or around 50,000 people per year. Based on our national economics, Bangladeshi people are not still familiar with social networking due to the limited income level since an hour of Internet access in an Internet cafe in Bangladesh costs the equivalent of 70% of the average daily income (www.wearesocial.net/Statistics). There is a dominant age-group (18-24) in the user pool of social networking.

Findings and analysis

Demographic and socio-economic characteristics of the respondents

Bangladesh is a progressive country consisting of 159.5 million people (World Populations Review, 2014). It has a large number of public and private universities organized based on a conventional education system. Due to the high costs of technological infrastructure developments, the universities are not able to fit themselves with modern technologies like Internet connection. But some private universities have developed their campuses by installing Wi-Fi facilities for Internet access. Public universities students are trying their best to match with private universities students and both use their social networking based on the different objectives established by their academic agenda. Furthermore, public universities are incentivized to offer Internet facilities for their students recently under the HEQEP project of UGC.

The responses of the respondents are always significantly affected by the demographic and socioeconomic characteristics (Elangovan and Sabitha, 2011). The demographic data shows that male students are (58%) more prone to use social networking than female students (42%) and graduate students are more habituated to use social networking for their academic perspectives (65%).

Table 2. Socio-demographic descriptive statistics of the sample

	Frequency	(%)		Frequency	(%)
Gender			Source of educational expenditure		
Male	278	57.92%	Self	143	29.79%
Female	202	42.08%	Family	337	70.21%
Educational status			Social networking provider		
Graduate	312	65.00%	Broadband	82	17.08%
Post Graduate	168	35.00%	Wi-Fi	91	18.96%
Educational institution/University			Wi-Max	53	11.04%
CU	120	25.00%	CDMA	110	22.92%
OUB	96	20.00%	GSM	144	30.00%
CUET	58	12.08%	Time of using social networking		
IIUC	106	22.08%	6Am-12PM	72	15.00%
CIU	48	10.00%	12PM-6PM	187	38.96%
SUB	53	11.04%	6PM-12AM	202	42.08%
Purpose of use of social networking			12AM-6AM	120	25.00%
Curriculum share	86	17.92%	Source of social networking		
Syllabus update	72	15.00%	Facebook	428	89.16%
Class schedule update	58	12.08%	Twitter	58	12.08%
Text and reference	29	6.04%	Skype	115	23.96%
Journal and articles	24	5.00%	Google Plus	53	11.04%
Knowledge sharing	72	15.00%	LinkedIn	134	27.92%
Concept and idea sharing	110	22.92%	My Space	24	5.00%
Review	0	0.00%	H5	43	8.96%
Image and video sharing	130	27.08%	Orkut	5	1.04%
			Others	5	1.04%
Sites use of social networking					
Business world	96	20.00%	Recreation (celebrity)	163	33.96%
Academic	106	22.08%	Political	106	22.08%
Sports	254	52.92%	Expert and experience	101	21.04%
Social awareness and activities	298	62.08%	Exposure		

Source: Authors' own findings.

Social networking sites are used for different purposes on different sources. Out of 20 top websites, Bangladeshi students are habituated to use 8 networking sites for their academic purposes such as Facebook, Skype, Google Plus, Twitter, LinkedIn, Hi5, MySpace and Orkut. Out of these sites students most likely favor Facebook (89%) followed by LinkedIn (28%). In Bangladesh, 63% respondents visit social awareness sites followed by sports sites (53%) and academic sites (22%). The greatest number of students (27%) uses social networking for image and video sharing followed by concept and idea sharing (23%), 70% respondents who are dependent on their family for their educational expenses use social networking in the time of 6pm-12am (42%) followed by 12pm-6pm (39%).

Students' academic perception and reliability test

In this study, we have collected the respondents' opinions to find their patterns of usage of SNSs. The demographic information shows the real scenario of using social networking by students of Bangladesh. To find out the perceptions, we used a modified SERVQUALS model (Parasuraman et al., 1985) consisting of twenty two dimensions with four constructs using a 5-point Likert non-comparative scale and found average mean scores ranging from 3.80 to 4.44. The standard deviation of these mean scores is comprised in the interval 0.796 to 1.161. The skewness does not show extreme values over ± 3 (-1.510 to -0.463) and kurtosis was between -0.314 to 2.024 not exceeding the rule of thumb of kurtosis ± 8 . The descriptive statistics show that the respondents' answers exhibit a normal distribution.

The reliability test of the administrative questionnaire is varied to measure the impact of the respondents' perceptions on social networking (Wei and Nair, 2006). The coefficient of Cronbach's Alpha of four constructs i.e., academic perceptions, communication perceptions, entertainment perceptions and social perceptions are 0.710(5), 0.657(5), 0.615(5) and 0.693(7) respectively. The coefficient of Cronbach's alpha of the 22 dimensions is 0.837. This statistics show the normality of respondents' respondent (Finn and Lamb, 1991).

Analysis

Basically the survey was designed to find out the student views on the academic purposes of SNS. We use structural equation modeling to determine the relationships between observed value (respondents' responses) and unobserved value (perceptions of social networking). To analyze the factors, first order conformity factor analysis (CFA) and second order conformity factor analysis were run and the dimensions were tested.

First order conformity factor analysis (CFA)

The first order conformity factor analysis is used to determine the associations of the factors using factor loading. Factor loading is the regression value between the observed values and the unobserved value with reference to Kline (2004) and Byrne (2010), factor loadings were analyzed and found 14 factors

were justified for analyzing and 8 factors were deducted expressed in Table 3 and Table 4.

Table 3. Factor loading

Variables	AP	CP	EP	SP	R ²
AP1	0.704 (6.519*)				0.39
AP2	0.587(11.554*)				0.36
AP3	0.853(5.578*)				0.27
AP4	0.730(14.485*)				0.30
CP1		0.516(9.451*)			0.34
CP3		0.649(13.591*)			0.37
CP4		0.609(12.627*)			0.27
CP5		0.539(11.682*)			0.42
EP2			0.548(12.365*)		0.37
EP4			0.583(12.740*)		0.29
EP5			0.606(13.478*)		0.50
SP1				0.624(13.532*)	0.36
SP2				0.597(12.031*)	0.73
SP4				0.519(12.014*)	0.53

Source: Authors' own computations.

Table 4. Result of Factor Loading: Deducted Items from 1st order conformity factor analysis (CFA)

Symbol	Head of the Items	Constructs
AP5	Preparation for prospective challenges	Academic perception
CP2	Sharing knowledge and information	Communication perception
EP1	Gaming	Entertainment perception
EP3	Messaging	
SP3	Rumor	Social perception
SP5	Privacy	
SP6	Relationship break-up	
SP7	Relationship distance	

Source: Authors' own computations.

Results of the CFA

First order conformity factor analysis (CFA) is used to determine the associations of the factors and find the correlation of the four constructs developing from 22 dimensions. Table 5 shows the correlation among the constructs and found significantly positive values that indicate that constructs of the study are interrelated and associated.

Table 5. Coefficient of correlation among the constructs of the study

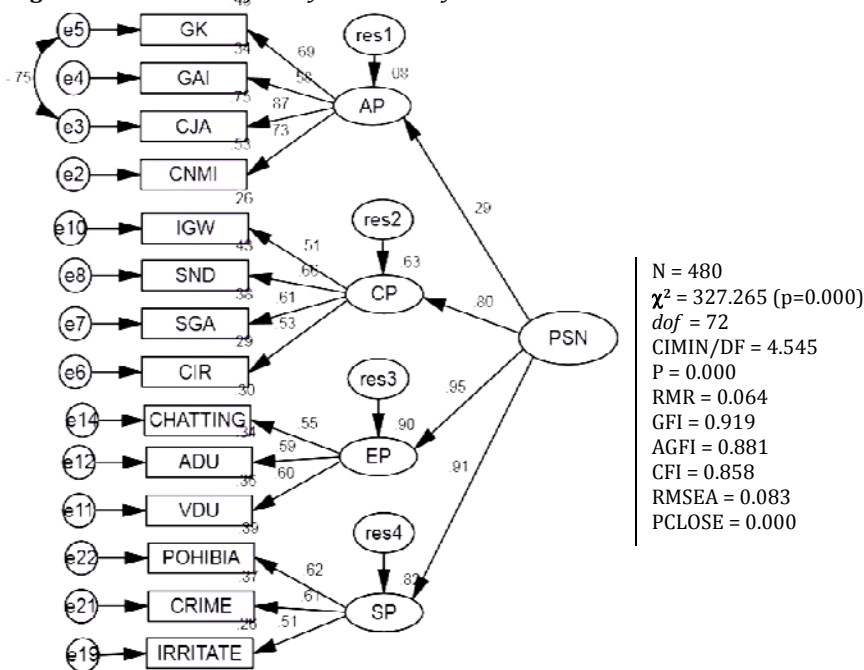
	AP	CP	EP	SP
AP	1			
CP	0.346*	1		
EP	0.146*	0.765*	1	
SP	0.306*	0.681*	0.881*	1

Source: Authors' own computations. Notes:*=coefficient of correlation is significant at 1% level of significance. AP= Academic perceptions. CP= Communication perceptions. EP= Entertainment perceptions. SP= Social perceptions.

Second order conformity factor analysis (CFA)

2nd order CFA is used to determine the variables dependency on construct exposes the power of explanation of respondent's responses. 1st Order CFA has been justified 14 dimensions in four constructs (Perception) and 8 items were deducted due to the inconsistency of respondent's responses. Figure 1 exposes the 2nd order CFA and fitness measurements of the model. The measurement shows the model's fitness is acceptable CFI= 0.858 due to the model sensitivity. Model Sensitivity indicates that sample size is exceeding 400 and case of the model exceeds 15 (Hair, 1998).

Figure 1. 2nd Order Conformity Factor Analysis



Source: Generated by authors using SPSS AMOS 21.0.

Results

From the Table 5 of 1st Order CFA, it has been shown that perception constructs are significantly correlated which is the justification of Hypothesis 1 and 2nd order CFA has been explored the dependency of 14 dimensions on social networking perception in Bangladesh which is supported by Hypothesis 2. Finally, the justified dimensions (from Table 3) are orderly arranged on the basis on standard regression weight (β), the explanatory power of variables.

Table 6. Orderly arrangement of the variables/constructs related to the students' perception of social networking in Bangladesh

Dependency of variables to the constructs			Mean	Standardized regression weights (β)	Rank	
EP		<-	PSN	0.946 ⁽¹⁾		
EP5	Video download and upload	<-	Entertainment perception	4.444	0.603 (12.266*)	1
EP4	Audio download and upload	<-		3.994	0.587 (12.555*)	2
EP2	Chatting	<-		4.014	0.547 (13.346*)	3
SP		<-	PSN	0.906 ⁽²⁾		
SP1	Phobia	<-	Social perception	4.064	0.622 (12.024*)	4
SP2	Crime	<-		4.320	0.607 (11.898*)	5
SP4	Irritating	<-		4.025	0.514 (13.619*)	6
CP		<-	PSN	0.795 ⁽³⁾		
CP3	Networks development	<-	Communication perception	3.979	0.657 (11.443*)	7
CP4	Social group activities	<-		3.973	0.613 (12.488*)	8
CP5	Circulation	<-		3.891	0.534 (13.606*)	9
CP1	Introducing in the global window	<-	4.023	0.507 (13.910*)	10	
AP		<-	PSN	0.285 ⁽⁴⁾		
AP3	Collect Journals and Articles	<-	Academic perception	3.871	0.866 (4.900*)	11
AP4	Collect news and modified information	<-		3.799	0.729 (11.227*)	12
AP1	Gathering Knowledge	<-		4.066	0.690 (9.666*)	13
AP2	Gathering academic information	<-		3.906	0.584 (14.425*)	14

Source: Authors' own computations.

Table 6 shows the orderly arrangement of the variables used to determine the students' perceptions of social networking in Bangladesh. In this table, the values are arranged by standardized regression weight (β), F-Statistics and 1% level of significance (*). It also shows that academic perceptions of social networking exist in the students' minds to small extents ($\beta_{AP}=0.285$ as 4th Position). Basically, in Bangladesh, students' perceptions are more to the entertainment ($\beta_{EP}=0.946$) and social ($\beta_{SP}=0.906$) sides of social networking sites.

Conclusions

This study attempts to obtain students' perceptions of the impact of social networking on their academic performance. But we discovered that students associate social networking sites in just a small proportion with academic usage. Bangladeshi students are mostly driven by entertainment needs followed by social needs. So, constructively, the policy makers, BTRC, Government, university governing bodies must concentrate the management of ICT on identifying ways in which to divert the students' attention from the entertainment side to the academic side of social networking sites.

This research paper is relevant as a preliminary observation of students' perceptions of social networking for academic purposes. It represents a positive benchmark for policy makers from the government regarding the development of the education system in Bangladesh. Social networking is used for different purposes such as fraud, transferring misinformation, odd presentation and plagiarism the statements of people in order to create misunderstandings for the users. These patterns negatively affect university students and divert their concentration from academic purpose to others. So

the policy makers like the Ministry of Education and relative secretaries, UGC, vice-chancellors of universities and related affiliated bodies like the syndicate, the senate, the academic council and the academic committee of individual departments should assist the development of a digital education system that takes advantage of the potentially beneficial uses of social networking sites for academic purposes. Technology can enhance the teaching and learning experience, but it can also distract the attention of the users from the message that is to be transmitted to the medium itself and it is the responsibility of the professor to make sure that students remain focused on the objectives of the course (Cantaragiu and Hadad, 2013). This is how we will have students that are well informed, motivated and concerned about the developments happening in nations around the world. This would assist the digitalized modern student generation to purposefully achieve the macro scale goals supported by Vision 21.

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