

Factors Affecting the Adoption of Social Network: A Study of Facebook Users in Bangladesh

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Abstract

This study is intended to identify the underlying motives of Bangladeshi people's adoption of social networking sites (SNS) and to determine existing differences in these purposes in terms of their educational level, age and gender. A sample of two hundred students has been selected applying quota sampling. Personal face-to-face interview and electronic survey with structured, close-ended questionnaire having 34 questions placed under nine factors (Involvement, Usefulness, Usage, Trust, Convenience, Openness of Information, Making New Contact, Audience and Acceptability) and rated on five point Likert scale was used. Descriptive statistics, one-way ANOVA and inde-

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pendent sample t-test have been applied for data analysis. Results indicate that, Involvement, Usefulness and Convenience are the three most important and Trust is the least important factor affecting adoption. In terms of educational level and gender there is no significant difference in perception. However, perception regarding Involvement, Usefulness and Convenience differ significantly in terms of age.

By June 2014, 55.6% of the total world population live in Asia, of them 45.7% use the Internet and 254,336,520 people use Facebook. The Internet penetration rate in the world averages 42.3%, while it is 34.7% in Asia (Internet World Stats, 2015). Internet is said to open a whole new world in front of the users. In spite of facing many infrastructural constraints, in Bangladesh, growth of digital technology particularly the use of Internet is undoubtedly noteworthy. This is one of the most prioritized sectors by Bangladesh Government (Azam, 2007). Nowadays, people in urban areas have a knack for technological products. Specifically the urban young keep pace with different modern tech-driven lifestyles. Not only urban but also the rural communities today have various types of information needs depending upon their functions, responsibilities and duties. Different community information centers are meeting these demands through the provision of information services (Islam & Hoq, 2010). Availability of various Internet-based services are making significant positive changes in business by facilitating cheap communication with migrant family members, research works, information trans-

fer, advertisement and celebrity promotion in the country. The younger generation has created a new social class and is using the Internet as an effective tool for career development and globalization of their creativity. Along with Internet, a lot of social networking sites have also been quite familiar to the people of Bangladesh. Facebook is mostly popular and fastest growing (Ahamed, 2010). Most of the Facebook users in Bangladesh are students of universities and colleges. Bangladeshi people use it as an alternative to the phone, for communicating with people living abroad, to find old friends, share recent life by uploading pictures and videos, share comments, likes and dislikes, send good wishes, create notes and blogs and tag others. They join groups created by local organizations to connect with their fans and know about upcoming events and activities of those groups. They follow pages related to Bengali music, places, educational institution, social problems, TV shows, drama, famous persons, clubs, etc. Facebook instantly provide lot of information that is more recent than provided by Google or any other search engine (Ahmed, Hossain, & Haque, 2012).

Regardless of Facebook's use in this county, there is very little research done relating Facebook and Bangladesh. Only very little information can be found regarding the user demography and types of uses in different personal blogs, websites and some organizational sites but those are not that much organized. However, in this country, Facebook can be a great potential for many purposes. New business ideas may be generated by analyzing the social demands of diverse ages, educational groups and gender. Many businesses that are advertising in different social networks may take the advantage of segmented ad-

vertisement. Even new social networks may be created focusing particular groups. For example, educational institutions can focus on the specific requirement of students like required academic information sharing, counseling, training, job searching, etc.

The objective of this study is to identify the factors underlying the adoption of social networks. It has also attempted to compare the underlying factors in terms of educational level, age and gender.

Social Networking Sites (SNS)

Simply, a social network is a cluster of people connected for a specific reason (Ryan, 2011a; Ryan, 2011b). Social networking sites (SNS) are online communities that allows users to come together to communicate and share photos, music, videos, messages, etc. These sites also allow users to ask their friends questions, say how they feel and to comment on something they have seen on someone's network. The term "networking" is used here for two reasons: emphasis and scope. "Networking" emphasizes relationship initiation, often between strangers. Although networking is possible on these sites, it is not the primary practice on many of them. Also, networking is not the differentiating feature that makes SNS distinct from other forms of computer-mediated communication. Social networking sites not only allow individuals to meet strangers, but also enable users to articulate and make visible their social networks that can result in connections between individuals who would not otherwise be made. This aspect makes SNS unique. Participants of these SNS are not necessarily "networking" or looking to meet new people; rather, they are primarily communicating with people who

are already a part of their extended social network. To emphasize this articulated social network as a critical organizing feature of these sites, these are labeled as "social network sites" (Boyd, 2007).

Factors Affecting the Adoption of SNS

General benefits of SNS include easier communication with people of similar interests, contact with potential new friends, simpler way of getting in touch with long-lost friends, ability to create a personal page without any particular technical skill, free sign-up and the ability to post interesting things and achievements (Mansumittrchai, Park, & Chiu, 2012).

People adopt social networking sites, probably because they want to meet and make new friends, find old friends, pass idle time, join interest groups, blog for friends and family, create and share photos, videos and music, express own style (Mansumittrchai et al., 2012), seek advice and help others and most importantly to satisfy their need for belongingness (Gangadharbatla, 2008).

Very few studies have investigated the antecedents of social networking site adoption. Different surveys indicate that people join social networking sites for a variety of reasons, such as

- entertainment,
- post or look at photos,
- get rid of boredom,
- respond to someone trying to contact them,
- contact anyone when there is no other way,
- send messages to multiple people,
- follow the trend of using SNS (Coyle & Vaughn, 2008),
- stay in touch with friends,
- make plans,

- make new friends,
- flirt with someone,
- fulfill a need for affiliation, belonging and information, goal achievement, self-identity, values, and notions of accepted behavior,
- meet new romantic partners and online dating,
- to check-up on current or ex- boyfriends/ girlfriends,
- track people,
- contact classmates for course related issues,
- advertise parties and other social events or academic resources/items,
- avoid socially uncomfortable situations,
- recruit members for a club/group (Stern & Taylor, 2007) and
- for encouraging group interactions through chat rooms among SNS users (Mansumitrchai et al., 2012).

These factors all relate to an individual user's need for recognition, need to belong, and level of collective self-esteem (Gangadharbatla, 2008), perceived ease of use (Mansumitrchai et al., 2012) and self-efficacy for Internet technologies. Successful adoption of technologies depends greatly on gender because it plays an important role on uses of the computer (Hall & Cooper, 1991) and social networking sites (Livingstone & Helsper, 2007; Mossberger, Tolbert, & Stansbury, 2003; Van, 2005). These studies found that the context of Internet uses, level of experience, and background of characteristics of people influenced the types of Web use in general (Mansumitrchai et al., 2012). In addition to these factors, privacy concerns, Internet experience, innovativeness and age are also mentioned as some of the most crucial factors affecting the adoption of social networking sites (Hargittai & Hsieh, 2010).

Though very little research has investigated the

factors that influence SNS adoption, understanding SNS adoption is important because the revenue of most sites ties directly to the number of registered users (Gangadharbatla, 2008). However, a number of research studies have been conducted on SNS, its impact, security issues and other positive and negative sides. Some of them are also concerned with the factors underpinned in the adoption of SNS.

Studies found that getting involved with others and gaining acceptability are some important reasons behind the adoption of SNS (Bicen & Cavus, 2011; Man-sumitrchai et al., 2012). Increasing numbers are using SNS for both personal and professional networking (Tham & Ahmed, 2011) and to dispense data or products (Sharaf, Musa, & Rahman, 2012). It has also been found that using SNS increases the user's life satisfaction, social trust, civic engagement, and political participation (Gangadharbatla, 2008; Valenzuela, Park, & Kee, 2009). Pempek, Yermolayeva and Calvert (2009) found that users actually use SNS to maintain social interactions mainly with those who have pre-established relationships with them offline. Another interesting finding of this study is users typically spend more time observing content rather than posting content.

Some of the researchers found that time spent on SNS decreases with the increase in age (Tham & Ahmed, 2011). But, users in their emerging adulthood often use SNS to express their identity such as religion, political ideology, and work (Pempek et al., 2009). HERI (2007) found that female college freshmen spend more time in SNS than male counterparts. Studies also found that, specially the graduate students with an age between 15 to 25 use

SNS mostly for entertainment. Moreover, these students have GPA in between 3.0 to 3.5. However, male users use SNS primarily for knowledge. It has also been found that, their uses are most importantly influenced by the friends and family members (Khan, 2013). In contrast, some other researchers found no significant impact of age or gender on SNS adoption (Abdelraheem, 2013; Mansumittrchai et al., 2012).

Some of the researchers also focused on the negative sides of using SNS, which could affect adoption. The most cited negative aspect associated with SNS is the privacy issue. Using SNS, users often expose their personal information to new friends or to new systems. These activities can seriously harm them as they may face financial and reputational losses as well as become pray to blackmailing (Dinerman, 2011).

Other negative issues include biological and work-place problems, increasing cybercrime, relationship destruction, lower productivity (Das & Sahoo, 2012), deteriorating academic performance of the students (Tham & Ahmed, 2011), difficulty in time management for other productive works (HERI, 2007) and addiction disorder (Stern & Taylor, 2007). Other problems mostly mentioned are misuse of information, taking things out of their real context to unduly manipulate them, piracy or unauthorized use of intellectual property and copyright etc. (Willems & Bateman, 2011). Again, Judd and Johnston (2012) identified concern related to unprofessional behaviors, conflicts of interest, ethical dilemmas, and problems in protecting confidentiality of clients, colleagues, instructors, and agencies.

Facebook Background and Usage

Launched in February 2004, Facebook was founded by Mark Zuckerberg. Facebook's core service is completely free and ad-supported. Features of Facebook include a user profile, messaging, chat, photos, videos, groups, events, notes pages, etc. Both male and female users and people from different age groups (from 10 to 65) uses Facebook as their part of daily life (Yadav, 2006). Adolescents and young adults are the heaviest computer and Internet users, primarily using it for completing school assignments (46%), e-mail and/or instant messaging (36%), and playing computer games (38%). In a study by Ellison, Steinfield and Lampe (2007) it was reported that 94% of undergraduate students at that particular university were Facebook users who spent approximately 10 to 30 minutes on the site per day and who had between 150 and 200 friends on average (Mishra et al., 2012). For these reasons actually, this study has focused on students' use of Facebook from a Bangladesh perspective.

Bangladesh Facebook Statistics

Bangladesh is still a developing country. But its Internet users are growing at a notably interesting rate. By the year of 2000 there were 1,00,000 Internet users in Bangladesh, whereby in June 2012, the number is 80,54,190. These users constitute 5% of its total population, who are again 0.7% of the total Internet users of Asia. A growing rate of Facebook users have totaled to 33,52,680 by 2012 (Ahamad, 2010). As per May 2013, total Facebook users in Bangladesh are 3,724,800. Bangladesh now counts for 0.4% of Facebook users worldwide and currently sits on position 45 in the list of all Facebook statis-

tics by country. The number of Bangladesh Facebook users has grown by 15.2% from 15 Feb 2013 to 15 May 2013 while the growth rate of Facebook users throughout the world is only 1.6% (allin1social.com, 2014). Facebook's penetration of the population in Bangladesh is 2.6% while the penetration of the online population of Bangladesh is 58.77%. The average cost per click is \$0.08 and average cost per metric is \$0.02. About 49% users of Facebook are between 18 and 24, 29% between 25 and 34, 9% between 16 and 17, 6% between 35 and 44, 4% between 13 and 15 and rest 3% is of above 44 (Socialbakers, 2014). Both male and female are using Facebook in Bangladesh. As of May 15, 2013, male users of Facebook who are Bangladesh is 2,941,320 and total female users are 771,700. These numbers represent that about 79.2% of the total users are male and 20.8% are female. But the growth rate of male users is 16.3% and of female users it is 10.2% (allin1social.com, 2014).

Method

For this study, secondary data analysis technique has been applied by collecting data from related academic papers, magazines and websites to develop a theoretical framework and for the preparation of the questionnaire. The questionnaire has been developed based on the research conducted by Mansumittrchai et al. (2012). All Facebook users of Bangladesh could have been the population of this study. This study focused only on students. All students from different universities from different disciplines, colleges and schools are the target population of this study. From this population, a sample of 200 students has been taken out applying quota sampling method. Quotas

have been attributed to four academic levels as, post graduate 30%, graduate 40%, higher secondary 20% and secondary 10%. Seventy % of the respondents were male. Face-to-face and electronic survey methodology with a structured, close-ended questionnaire of 34 questions measured on a five point Likert scale (1= strongly disagreed to 5= strongly agreed) has been used. Questions have been placed under nine factors: Involvement, Usefulness, Usage, Trust, Convenience, Openness of Information, Making New Contact, Audience and Acceptability. The questionnaire also asked for respondent demographic background. It has been judged by an expert to warrant its content validity and reliability has been tested applying Cronbach's alpha (0.910). For data analysis purposes descriptive statistics, an independent sample t-test and one-way ANOVA have been applied. SPSS 16.0 has been used for these analyses.

Analysis

Factors underlying the adoption of Facebook

To identify which factors are most important for Facebook users of Bangladesh, Table 1 gives a descending representation of mean values of the nine factors. Involvement, Usefulness and Convenience are the three most important factors considered by the Bangladesh students during their Facebook adoption. The opportunity to remain involved with friends, family members and society is the most important factor having a mean value of 4.2979 and standard deviation of .52483. Usefulness of Facebook from different perspectives is the second important factor with mean value 4.1096 and standard deviation .47484. Convenience during the use of Facebook is the third im-

Table 1
Descriptive Statistics of Factors
(N= 200)

	Mean	Std. Dev.
Involvement	4.2979	.52483
Usefulness	4.1096	.47484
Convenience	4.0594	.48858
Usage	3.9902	.65911
Acceptability	3.9635	.42514
Making New Contact	3.8699	.75013
Openness of Information	3.8174	.46495
Audience	3.2603	1.06754
Trust	2.6630	.51086

portant factor considered by the respondents with mean and standard deviation of 4.0594 and .48858 respectively. Usage of Facebook for different purposes, acceptability of Facebook from religious, personal and ethical perspectives, opportunity of making new contact, choice of openness of information shared in Facebook and the users of Facebook as audience are also moderately important factors considered by the respondents. These factors have mean values around 3.0. However, the student users don't care much about the issues related to trust or security. This fact is represented by the small mean value of 2.6630 and standard deviation of .51086.

Table 2 shows the individual mean and standard deviation of every aspect included under these nine factors. The factors are arranged from largest to smallest

Table 2
Descriptive Statistics in Detail (N=200)

	Mean	Std. Dev.
Have time to use	4.5479	.50114
It is a trend	4.4110	.49541
Family and relatives are using	4.3973	.49272
Friends are using	4.3699	.48611
Ethical to use	4.2877	.53953
Sharing photos	4.2603	.64609
Connect with family, friends & relatives	4.2603	.47221
Know how to use	4.2466	.46490
Interaction with the society, community, and events	4.2329	.79093
Check other's status and information	4.2055	.91225
Way to express oneself	4.1918	.77563
Keep in touch with old friends	4.1507	.70062
User friendly than other social network	4.1370	.63059
Keep personal information with friends	4.1233	.40638
Keep personal information with relatives	4.0685	.25434
Way to socialize	3.9863	.80783
Acceptable in religion	3.9726	.74485
Entertaining	3.9589	.75348
Downloading photos and videos	3.9452	1.12904
Chatting	3.8767	.74433
Part of everyday activity	3.8767	1.12971
Sharing videos	3.8493	1.06290
User friendly than other communication	3.7945	.86537
Make friends from other countries	3.7534	.92467

Table 2 cont.
Descriptive Statistics in Detail (N=200)

	Mean	Std. Dev.
Cause problems for the user	3.6849	.59807
Useful	3.6438	.82276
Harm the relationship	3.6301	.56536
Beneficial	3.6027	.66122
Only for young people	3.2603	1.06754
Share personal information	3.2603	1.14294
Privacy	2.6712	.72753
Trustworthiness of other users	2.4658	.70872
Reliability of information	2.3014	1.30900
Safe and secured	2.1918	.49039

mean scores to indicate importance. The availability of time to use Facebook (mean 4.5479 and std. dev. 0.50114) is the most important aspect. It is followed by the trend to use Facebook (mean 4.4110 and std. dev. 0.49541), usage by family members and relatives (mean 4.3973 and std. dev. 0.49272), and by friends (mean 4.3699 and std. dev. 0.48611), the perception of users that using Facebook is ethical (mean 4.2877 and std. dev. 0.53953), ability to share photos, to be connected with family, friends and relatives, having the know how to use and so on. It can also be noted that, the most important factors have small standard deviations, which represent response similarity.

On the other hand, the least important aspects influencing Facebook adoption by the users is the safety and

Table 3
Difference in attitudes in terms of the Level of Education
(ANOVA result)

	Sum of Squares	df	Mean Square	F	Sig.
Involvement	.189	3	.063	.221	.882
Usefulness	.184	3	.061	.264	.851
Usage	.514	3	.171	.384	.765
Convenience	.646	3	.215	.898	.447
Openness of Information	.050	3	.017	.075	.973
Audience	1.594	3	.531	.456	.714
Making New Contact	1.549	3	.516	.915	.439
Acceptability	.904	3	.301	1.717	.172
Trust	.785	3	.262	1.003	.397

security concern (mean 2.1918 and std. dev. 0.49039). It is followed by the reliability of information shared in Facebook (mean 2.3014 and std. dev. 1.30900), trustworthiness of other users (mean 2.4658 and std. dev. 0.70872), privacy concerns (mean 2.6712 and std. dev. 0.72753), willingness to share personal information (mean 3.2603 and std. dev. 1.14294), belief that only young people are the users of Facebook (mean 3.2603 and std. dev. 1.06754) and so on in increasing order for importance. Again, it can be observed that, the least important factors have larger standard deviations, which represent response dissimilarity.

Difference in attitudes in terms of the level of Education

To identify whether there is any difference in the attitudes or the consideration of factors affecting the adoption of Facebook in terms of the level of education of the

Table 4
Difference in attitudes in terms of Age (ANOVA result)

	Sum of Squares	df	Mean Square	F	Sig.
Involvement	4.282	2	2.141	9.638	.000
Usefulness	1.343	2	.671	3.156	.049
Usage	2.218	2	1.109	2.671	.076
Convenience	1.720	2	.860	3.893	.025
Openness of Information	.063	2	.031	.142	.868
Audience	.091	2	.045	.039	.962
Making New Contact	1.086	2	.543	.964	.386
Acceptability	.295	2	.148	.813	.448
Trust	.208	2	.104	.393	.677

students, a one-way ANOVA has been applied (Table 3). For all the nine factors, attitudes of the respondents don't differ significantly in terms of their educational level as the p values in all cases are $>.05$. Values of F- statistics and p values are: Involvement ($F = .221$, $p = .882$), Usefulness ($F = .264$, $p = .851$), Usage ($F = .384$, $p = .765$), Convenience ($F = .898$, $p = .447$), Openness of Information ($F = .075$, $p = .973$), Audience ($F = .456$, $p = .714$), Making new contact ($F = .915$, $p = .439$), Acceptability ($F = 1.717$, $p = .172$) and Trust ($F = 1.003$, $p = .397$). So it can be concluded that students from different academic levels consider the importance of, or are affected by, the factors in more or less similar ways.

Difference in attitudes in terms of Age

This is the analysis of whether there is any differ-

Table 5
Difference in attitudes in terms of Gender (independent sample t-test result)

	Mean value		Levene's Test for Equality of Variances		t-test for Equality of Means (df=198)	
	Male	Female	F	Sig.	t	Sig. (2-tailed)
Involvement	4.3372	4.2417	.487	.488	.763	.448
Usefulness	4.1279	4.0833	.076	.783	.392	.696
Usage	4.0532	3.9000	.137	.712	.976	.332
Convenience	4.1008	4.0000	.354	.554	.866	.390
Openness of Information	3.8295	3.8000	.260	.612	.265	.792
Audience	3.3488	3.1333	.334	.565	.847	.400
Making New Contact	3.8140	3.9500	1.957	.166	-.760	.450
Acceptability	4.0078	3.9000	.146	.703	1.066	.290
Trust	2.7395	2.5533	2.420	.124	1.547	.126

ence in the ways users of the Facebook are affected by the nine factors in terms of their ages. Table 4 shows the one-way ANOVA results, which indicate statistically significant differences among various age groups in terms of consideration of Involvement ($F = 9.638$, p value $.000 < .05$), Usefulness ($F = 3.156$, p value $.049 < .05$) and Convenience ($F = 3.893$, p value $.025 < .05$) of using Facebook. However, Usage ($F = 2.671$, p value $.076 > .05$), Openness of Information ($F = 0.142$, p value $.868 > .05$), Audience ($F = 0.039$, p value $.962 > .05$), Making New Contact ($F = 0.964$, p value $.386 > .05$), Acceptability ($F = 0.813$, p value $.448 > .05$) and Trust ($F = 0.393$, p value $.677 > .05$) seem to have not much different impor-

tance among different age groups.

Difference in attitudes in terms of Gender

Table 5 shows the results of independent sample t-test between gender and the identified nine factors. In this case, for all nine factors the F value for Levene's test has $p > .05$ (equal variance assumption is met). Respective values of F statistics and p values are: Involvement (F = .487, $p = .488$), Usefulness (F = .076, $p = .783$), Usage (F = .137, $p = .712$), Convenience (F = .354, $p = .554$), Openness of Information (F = .260, $p = .612$), Audience (F = .334, $p = .565$), Making new contact (F = 1.957, $p = .166$), Acceptability (F = .146, $p = .703$) and Trust (F = 2.420, $p = .124$). It indicates that there is no significant difference in users' consideration of the selected factors and their gender. t-Test for equity of means also has $p > .05$. In this case respective values of t statistics and p values are: Involvement (t = .763, $p = .448$), Usefulness (t = .392, $p = .696$), Usage (t = .976, $p = .332$), Convenience (t = .866, $p = .390$), Openness of Information (t = .265, $p = .792$), Audience (t = .847, $p = .400$), Making new contact (t = -.760, $p = .450$), Acceptability (t = 1.066, $p = .290$) and Trust (t = 1.547, $p = .126$). The importance given to all the factors during decision regarding Facebook adoption doesn't differ significantly between male and female users.

Results

Involvement, Usefulness and Convenience are the three most important factors and Trust is the least important factor considered by the students of Bangladesh during their adoption of Facebook or social networks. Usage, Acceptability, Making New Contact, Openness of Informa-

tion and Audience are the moderately important factors. More specifically, the availability of time to use Facebook is the most important aspect, which is followed by the trend to use Facebook, usage by family members and relatives and by friends, the perception of users that using Facebook is ethical and so on. Similarly, safety and security concern was the least important aspect followed by the reliability of information shared, trustworthiness of other users, privacy concerns, and willingness to share personal information and so on. Again, it has also been found that, these perceptions of the users for all the nine factors don't differ significantly in terms of their educational level. However, in terms of age group, statistically significant differences have been found for Involvement, Usefulness and Convenience of using Facebook. But, in case of Usage, Openness of Information, Audience, Making New Contact, Acceptability and Trust no significant differences in perception have been found among different age groups.

Conclusion

The number of users of SNS is increasing every day and Facebook is one of the most popular of them. This is also true for Bangladesh. SNS can be a great source of social and socio-cultural progression of such a newly developing country. This research provides information about the reasons why people in this country are recently using SNS as well as educational level, gender and age basis difference in those reasons. Therefore, further researches can be conducted on how this user behavior can be utilized in business, academic, research and other sectors.

References

- Abdelraheem, A. Y. (2013). University Students' Use of Social Networks sites and Their Relation with Some Variables. *WEI International Academic Conference Proceedings*, Turkey, 31-39.
- Ahamad, I. (2010). *Facebook in Bangladesh*. Retrieved from: <http://ibtesham.blogspot.com/2010/09/facebook-in-bangladesh.html#!/2010/09/facebook-in-bangladesh.html>.
- Ahmed, S. M. S. U., Hossain, M. M. & Haque, M. M. (2012). *Usage of Facebook: Bangladesh Perspective*. Social Science Research Network (SSRN).
- allin1social.com (2014). *Facebook statistics for Bangladesh*. Retrieved from: http://www.allin1social.com/facebook/country_stats/bangladesh.
- Azam, M. S. (2007). Internet adoption and usage in Bangladesh. *Japanese Journal of Administrative Science*, 20, 43-54.
- Bicen, H. & Cavus, N. (2011). Social network sites usage habits of undergraduate students: Case study of Facebook. *Procedia - Social and Behavioral Sciences*, 28, 943-947.
- Boyd, D. (2007). Social network sites: Public, private, or what? *Knowledge Tree*, 13, 1-7.
- Brookson, N. (2014). *Top 10 Social Networking Sites*. Retrieved from: <http://www.thinkingit.com.au/blog/top-10-social-networking-sites>.
- Coyle, C. L. & Vaughn, H. (2008). Social networking: Communication revolution or evolution? *Bell Labs Technical Journal*, 13, 13-18.
- Das, B. & Sahoo, J. S. (2012). Social networking sites – A critical analysis of its impact on personal and social life. *International Journal of Business and Social Science*, 2, 222-228.
- Dinerman, B. (2011). *Social networking and security risks*. GFI White Paper.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students'

- use of online social network sites. *Journal of Computer-Mediated Communication*, 12.
- Gangadharbatla, H. (2008). Facebook me: Collective self-esteem, need to belong, and Internet self-efficacy as predictors of the Igeneration's attitudes toward social networking sites. *Journal of Interactive Advertising*, 8, 5-15.
- Guzman, M. R., Weitzenkamp, D., Hall, A., Peterson, D., Kok, C. M. & Loke, J. (2011) *Social networking sites: What they are and how to navigate them*. The Board of Regents of the University of Nebraska on behalf of the University of Nebraska–Lincoln Extension.
- Hall, J., & Cooper, J. (1991). Gender, experience, and attributions to the computer. *Journal of Educational Computing Research*, 7, 51-60.
- Hargittai, E. & Hsieh, Y. P. (2010). Predictors and consequences of differentiated practices on social network sites. *Information, Communication & Society*, 13, pp. 515-536.
- HERI (2007). *College Freshmen and Online Social Networking Sites*. Higher Education Research Institute. Los Angeles: University of California.
- Internet World Stats (2014). *Usage and Population Statistics*. Retrieved from: <http://www.internetworldstats.com/stats3.htm>.
- Islam, M. A. & Hoq, K. M. G. (2010). Community Internet access in rural areas: A study on community information centers in Bangladesh. *Malaysian Journal of Library & Information Science*, 15, 109-124.
- Judd, R. G. & Johnston, L. B. (2012). Ethical consequences of using social network sites for students in professional social work programs. *Journal of Social Work Values and Ethics*, 9, 5-12.
- Khan, S. (2013). Impact of social networking websites on students. *Abasyn Journal of Social Sciences*, 5, 56-77.
- Livingstone, S., & Helsper, E. (2007). Gradations in digital inclusion: Children, young people, and the Digital Divide.

New Media and Society, 9, 671-696.

- Mansumittrchai, S., Park, C. & Chiu, C. L. (2012). Factors underlying the adoption of social network: A study of Facebook users in South Korea. *International Journal of Business and Management*, 7, 138-153.
- Mishra, S., Draus, P. J., Leone, G. J. & Caputo, D. J. (2012). Exploring underlying factors influencing daily usage of Facebook for undergraduate college students: A research model. *Issues in Information Systems*, 13, 350-360.
- Mossberger, K., Tolbert, C. J., & Stansbury, M. (2003). *Virtual inequality: Beyond the digital divide*. Washington, D.C.: Georgetown University Press.
- Pelgrin, W. F. (2011). Staying safe on social networking sites. *Multi-State Information Sharing and Analysis Center Monthly Security Tips Newsletter*, 6.
- Pempek, T. A., Yermolayeva, Y. A. & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30, 227-238.
- Ryan, P. K. (2011a). Introduction. In *Social Networking*. 1st ed. New York: The Rosen Publishing Group, Inc. 4.
- Ryan, P. K. (2011b). What are social networks? In: *Social Networking*. 1st ed. New York: The Rosen Publishing Group, Inc. 7-8.
- Sharaf, G. M., Musa, M. A. & Rahman, A. A. (2012). An Examination of Social Networking Sites Usage among Muslims Student in Islamic Perspectives. *International Journal of Engineering and Advanced Technology (IJEAT)*, 1, 273-278.
- Socialbakers (2014). *Bangladesh Facebook Statistics*. Retrieved from: <http://www.socialbakers.com/facebook-statistics/bangladesh>.
- Stern, L. A. & Taylor, K. (2007). Social networking on Facebook. *Journal of the Communication, Speech & Theatre Association of North Dakota*, 20, 9-20.

- Tham, J. & Ahmed, N. (2011). The usage and implications of social networking sites: A survey of college students. *Journal of Interpersonal, Intercultural and Mass Communication, 2*, 1-11.
- Valenzuela, S., Park, N. & Kee, K. F. (2009). Is There Social Capital in a Social Network Site? Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication, 14*, 875-901.
- Van, D. J. A. G. M. (2005). *The Deepening Divide*. London: Sage Publications.
- Willems, J. & Bateman, D. (2011). The potentials and pitfalls of social networking sites such as Facebook in higher education contexts. *Proceedings ascilite 2011*. Hobart: Poster. 1322-1324.
- Yadav, S. (2006). *Facebook - The Complete Biography*. Retrieved from: <http://mashable.com/2006/08/25/facebook-profile/>.