

Redefining the Virtual Self: Analysis of Facebook Discourse of College Students in Kolkata

UMA SHANKAR PANDEY

Surendranath College for Women, University of Calcutta, India

One way in which Facebook is unique for creating perceptions of individuals is the degree to which private information is presented by avenues other than revelation by the person himself. Discourses, are not just insulated linguistic 'objects,' but are constitutive parts of communicative acts in a particular socio-cultural situation. The present study looks at a particular set of socio-economic factors which influence the Facebook discourse of undergraduate and post graduate communication students in Kolkata, India. This research posits the role of interpreting the intentionality of the discourse on the respondents. This recognizes the process in which people decide about how and when they will disclose private information on a group site. The 292 respondents to our online questionnaire classify the topicality, functionality and colloquality of their Facebook discourse among closed ended options. The objective is to relate these intentionality to factors such as broadband use, medium of education, perceived usefulness and goal directedness.

Keywords: Computer-mediated communication, discourse, colloquality, modality, perceived usefulness, language of instruction, broadband, Anova.

Facebook is not just an integral part of college students' vocabulary in India, but has also become a verb. Facebook has become something to do and not just somewhere to be on the internet. Recent statistics show that Facebook penetration in India is 5.06% of its population. Roughly three out of every four internet user in India logs on to Facebook. The total number of Facebook users in India is over 59 million and grew by over 13 million in the last 6 months. Cheaper Internet-ready phones are poised to make India Facebook Inc.'s biggest market after the US, in the next few months, which has more than 167 million Facebook users (India Facebook Statistics, 2012).

As Facebook grows in popularity and continues to increase its market share, studies on the factors affecting the use of Facebook, especially by college students has not kept

Correspondence to: Uma Shankar Pandey, Assistant Professor, Department of Journalism & Mass Communication, Surendranath College for Women, University of Calcutta, Kolkata-700 009. India. E-mail: mailusp@gmail.com. All rights reserved with *Media Watch*. For permission and reprint, please mail to: mediawatchjournal@gmail.com

pace with the growth of its usage. This study seeks to provide a typology of college and university student uses of Facebook from an empirical view, using the author-defined typology of discourse. The advent of the internet technology in the eighties led to intense research in the West on different aspects of computer mediated communication and its impact. An important strand of this research is the impact of Internet use on social bonds. One of the earliest studies in this stream is Rheingold's conceptualization of 'virtual community.' He described Internet as capable of 'bringing strangers together' to form close online networks. (Rheingold, 1993) This deviated with the somewhat unflattering observation of other scholars who regarded online social networks as 'the illusion of community.' (Parks & Floyd, 1996)

The prevalent approach in the initial Computer Mediated Communication (CMC) studies has been the Reduced Social Cues (RSC). Lack of social cues that communicators have access to in face-to-face communication was regarded as a major hindrance in CMC. The most obvious cues in face-to-face communication are that of direct and indirect physical appearance, indicators of behavior or personality individualities and other more indirect prompts that develop during social interactions. These include signals in elucidation and other characteristics of language. This apart, once we have framed our image of the communicators, we even employ a variety of strategies to create a desired impression about ourselves.

The exclusion of impression-forming signals leads to the development of relatively nebulous impressions in CMC. The reduced cues in CMC 'may lead people to forget that messages are communications, not just soliloquies to a computer'. Communicators are not aware of the characteristics and size of their audience or even that their message will be read at all (Hancock & Dunham, 2001, pp. 325-326).

The lack of these nonverbal indicators in CMC produces a 'depersonalized form of communication' and decreased awareness of others, which in turn hinders interpersonal relations (Hancock & Dunham, 2001). Other studies have pointed out other later latent effects of the RSC approach. They estimate development of such psychological conditions that weaken social effects on individuals. The result is 'uninhibited' and extreme behavior, along with 'polarized, extreme and risky' decisions. (Sproull and Kiesler, 1991). Another related phenomenon of the early CMC is the notion of flaming. It is closely linked to the distinctive transient character of CMC, in which text messages flicker on and off the screen without leaving behind a trace of 'tangible artifacts.' Another estimation is that communicators who use the medium of computers believe that they must use stronger semantic cues to get their messages across. According to an earlier study, 'electronic messages are often startlingly blunt and can intensify rapidly into name calling and epithets' (Sproull & Kiesler, 1991).

The hyper-personal model was an adaptation of the RSC approach. The early form of CMC largely consisted of textual information. Participants deliberately chose cues which would frame a personality of their choice (witty or matter-of-fact for example). Suppression of physical and behavioral cues is not possible in face to face interaction. The hyper-personal model notes that this lack of cues may allow the communicator to transfer all cognitive resources to language selection, content and perception management.

SIDE Approach

An important challenge to the RSC standpoint was the Social Identification Deindividuation (SIDE) approach. The major significance of this de-individuation, identified by visual facelessness and physical remoteness, is an augmented confidence on the residual social cues on which to form perceptions of a CMC partner. Under these situations, communicators are presumed to build a more 'typecast and exaggerated' illustrations of their partners, grounded on the indications developing from the appropriate circumstantial cues demonstrated in text-based discourse. Perception-relevant evidence may also appear from the participant's communication style. These de-individuated individuals partaking in CMC see themselves as part of a group. At times the allegiance to the group becomes more intense and at times more substantial than their individual identities. As a result there are stronger constructive feelings toward the simulated community members and deepened attributions of likeness.

The fundamental difference in the SIDE model is between societal and personal identities. Social identities are about people's empathy with certain groups, while personal identities denote the exclusive traits of the individual. The SIDE model suggests that a de-individuation process in CMC actually enhances social identity. Once people are identified with a particular group, possible intra-group dissimilarities turn out to be less significant due to visual obscurity. This reinforces predictable behaviour patterns to emphasize group identity. However, when communicators are not identified with a particular group but observe their personal identities, group identity will decrease as a result of facelessness and physical remoteness (Spears & Lea, 1992, p. 47).

There are diverse views among scholars on whether computer mediated communication decreases or increases social ties or it has no effect on social networks (Wellman, Hasse, Witte, & Hampton, 2001). The correlation between internet use and social networks is a factor of the qualitative use of online activities. An earlier study (Zhao, 2006) predicted those using the Internet for interpersonal contacts are expected to have more social networks than those who use it for self-contained activities like net surfing. Also single net users are predicted to have fewer social network linkages than nonusers. Heavy surfers on the net are inclined to have fewer social network linkages than light surfers (Zhao, 2006, p. 858).

Social Networking is defined as ideally connecting people by matching profile material with direct exchanges. These exchanges may be in the form of dating concern, employment opportunities, or political party association (Counts & Geraci, 2005). It provides two essential purposes. The first is the facility to create and sustain a profile that serves as an online personality inside the ecosystem. The second is the facility to forge linkages between other people in the network. Social networking tools, such as Facebook offer a balance of interactive and fixed features in the users' profile. Others also contribute information to the site. Postings by other individuals on one's own profile create a perception of the person who made the 'status updates'. The observers' reactions to these postings may affect impressions of the recipient profile maker as well, even though he did not start the communication process. This makes interactive social networking tools different from Web 1.0 applications that allow the source absolute control over the content (Walther, Heide, Kim, Westerman, & Tong, 2008, p. 29).

One way in which Facebook is unique for creating perceptions of individuals is the degree to which private material is presented by devices other than revelation by the individual himself. In traditional communication environment, people make conscious decisions about when and how they will provide information about themselves. These judgments involve a multifaceted process in which individuals decide the extent and the qualitative nature of personal information, 'negotiate those rules', and make 'decisions on disclosure based on violations of those rules'. However, social networking sites to some extent preclude an individual's judgment, negotiations, and revelation decisions by placing the option in the control of the social networks (Walther, Heide, Kim, Westerman, & Tong, 2008, p. 32).

In his important work on social psychology, (Berger, 1979) identified eight strategies — three passive, two active, and three interactive ones, that people employ to obtain information about others. This can provide some information about the ways in which perceptions are created through third-party posts on sites such as the Facebook.

Passive strategies are defined as situations in which evidence is collected about the individual without influencing the individual's or other's behavior. The first passive strategy is the discreet surveillance of a person in a situation in which he interacts with others. The second is social contrast, exploring the behavior of the target when he interrelates with people known to the observer. The third strategy is deviation testing which identifies the person's 'real' self in situations where he is not inhibited by social regulations.

The active strategies include active efforts to get information about others. However, they are indirect in the sense that they do not directly communicate with the target. The first strategy is asking others about their perception of the individual in question. The second is about creation of a set of situations followed by discreet scrutiny of the individual in that setting, in order to view the consequence of the 'manipulation.'

An interactive strategy involves direct communication and deals with trying to identify of falsifications and misrepresentations. The second is about questioning. Finally, the third interactive strategy is self-disclosure by the communicator who knowingly communicates to another about himself, to elicit disclosure from a target person (Tidwell & Walther, 2002, pp. 321-322).

Three sources of information can be differentiated on the social networking sites: self-generated cues, other-generated cues, and system-generated cues. Self-generated indicators are the ones that a person deliberately provides, such as updating pictorial and descriptive content. Other-generated indicators are info/views on a individual's profile that emanate from others, such as the timeline postings on Facebook by friends of the communicator and also pictures of those friends. Finally, system-generated indicators are cues that the system displays on a user's profile, such as the number of friends etc. (Tong, Heide, Langwell, & Walther, 2008). Information gathered about an individual through others in that individual's social network is common. People try to gain information about one another via commonalities in the overlying social networks. Objectivity and cogency of other-generated cues and system generated cues are often considered more reliable than self-generated cues. Though these are not fully in control of the individual but since the salience of third party information is known, often the self-generated cues are generated with an effort to manipulate the other two.

Framework for Analysis

A classical analysis of discourse examines a media text as a discourse in its own right. It primarily targets the illumination of qualitative data through the prism of underlying semantic constructs and makes categorical implications and presumptions which are embedded in the discourse. Discourse analysis generally involves explicit hypotheses or even sub-disciplines of linguistics. Morphology, for example, is about formulating the philosophies of word formation; syntax provides the instructions according to which words of diverse categories are combined into grammatical sentences, and semantics, deals with the ‘meaning of words, phrases, sentences, or whole discourses by formulating rules of interpretation’ (van Dijk, 1983, p. 23).

Discursive protocols are also studied according to the intentionalities they serve (Anderson, 2012, pp. 276-277). Anderson speaks of four intentionalities, the intention of the text, the intention of the audience, the intention of the audience and the intention of the interpretation. The approach in our study involves the analysis of content produced by students in an open Facebook group — Department of Journalism and Mass Communication, University of Calcutta. The group is administered by students and also has members of the faculty as members.

This research does not perform a qualitative content analysis of the Facebook wall as dataset. Instead of ascribing codes to the text, pictures, video links and other content produced on the group wall, this research posits the role of interpreting the intentionality on the authors. This recognizes the process in which individuals decide the extent to which they will disclose private information on a group site, and make ‘judgments on disclosure based on violations of those rules’. The respondents to our questionnaire are thus asked to classify the topicality, functionality and colloquality of their Facebook discourse among closed ended options. The objective is to relate these intentionalities to factors such as broadband use, medium of education, perceived usefulness and goal directedness.

Discourses, as we know them, are not just isolated linguistic ‘objects,’ but are constitutive elements of communicative acts in particular socio-cultural situations (van Dijk, 1983, p. 24). The present study looks at a particular set of socio-economic factors which influence the Facebook discourse of students. One of the unique factors that influences online discourse is the medium of instruction of Indian students. One out of four students go to private schools which has English as a medium of instruction, while the others go to state-aided schools which adopt one of India’s 18 regional languages as a medium of instruction. These students complete their education in their mother tongue. There have been a number of studies on the influence on the language of instruction on various cognitive abilities of Indian students (Aiyar, 2012).

There have been hardly any research on the influence of medium of instruction on Facebook discourse — which primarily uses English. The quality of internet access is another factor that is unique to students here. Broadband subscription — defined here as having an internet speed of more than 256 kbps — as a share of total Internet subscription increased from 57.6% in September 2011 to 58.8% in December 2011. Number of Narrowband subscribers using internet connections with speed less than increased from 7.59 million in September 2010 to 7.70 million in December 2010, registering a growth of 1.42% as against a growth of 4.71% in the previous quarter. (Telecom Regulatory Authority of India, 2011, p. 30) The number of cybercafés, most of whom provide narrowband access to consumers

also went down to 8792 cybercafés at the end of December 2011 compared to 9288 at the end of September registering a decline of 5.34%. The impact of the quality of internet access on Facebook discourse is also attempted here.

The overall topic or theme of a discourse can be studied only at the semantic level of the discourse. Here too we concentrate on author intentionality. Among a given choice of topics the respondents who use the Facebook group were asked to define the topic and frequency of their Facebook posts. Variation in styles too can occur at different levels, such as etymological choice, word construction, or syntactic arrangements.

The following elements of discourse are analyzed in this study:

Functionality (Perceived Usefulness). A discourse is taken to be the expression of an arrangement of sentences in a particular social context. The different elements of a discourse are predicted to be functional in different social perspectives. The surface structures and meanings are constructed and decoded as signals about intentions, wishes and moods of the author and his effort to convey 'confidence, intimacy or even authority' (van Dijk, 1983, p. 25).

Goal-directedness. A meaningful discourse is articulated, firstly, in order to accomplish a social act, that is, a communication act. Then, such an act targets some goal that is sought to be realized through the communication act (van Dijk, 1983, p. 26). Individuals do not usually utter meaningful homilies on their own or randomly. Some 'communicative acts' like Facebook posts are meant to trigger other posts.

Modality is a factor of whether the surface structure of the discourse is perceived terms of formal, informal or matter-of-fact modes.

Colloquiality is a factor of the extent to which languages other than English is used in conjunction with English.

The discursive approach in our study will try to explain, how various forms of Facebook posts are understood in terms of underlying structures. The relation between content and explicit 'effects' is hypothesized in terms of a number of intervening variables.

Methodology

Mass Communication students of University of Calcutta and its affiliated colleges who are members of the group Department of Journalism and Mass Communication @ University of Calcutta were provided Facebook links from a questionnaire prepared through Google docs. Links were also sent out to other members of the departments through email. The email ids of the students were made available through the administrative office of the University. This ensured that students who did not use internet were left out of the study. The responses were collected over a week. Reminders to the students to complete the response sheets were also send out during the classes. Six responses which were incomplete were left out of the survey. Results of the 292 respondents were analysed through SPSS 16 using cross tabulations and ANOVA including post hoc Tukey tests. Research Questions were tested for reliability using statistical techniques defined below.

Findings

The sample size of the respondents was N = 292 (200 females, 69.2% and 92 males, 30.8%), Measures of central tendency were computed to summarize the data for the age variable

(N =292, M=23, SD=1). As can be seen in Table 1, A multiple response survey for Internet use showed that 80.1% (N=234) of the respondents used the internet for sending and receiving emails, 71.9% of the respondents used the internet to access Facebook (N=210); 10.3% of the respondents (N=30), used it for searching jobs.

Table 1. Function for which Internet is used in the multiple response survey

Purpose of Internet use	N	Per cent of cases
For sending and receiving emails	234	80.1
To read on line editions of newspapers	94	32.2
To access Facebook	210	71.9
To download music	78	26.7
To research on topics/issues	80	27.4
To chat with friends	66	22.6
To search for jobs	30	10.3
As a learning tool	48	16.4

Among the respondents, 63% (N=184) accessed the internet on broadband connection, while 31% (N=108) accessed it on slower narrowband connections. (Table 2)

Table 2. Number of broadband users in the sample

Internet use	Frequency	Per cent
Broadband	184	63.0
Narrowband	108	37
Total	292	100.0

A majority of the respondents, 80.8% (N=236) accessed internet at home, while 31.5% accessed it on mobile phones. Respondents were asked to provide a maximum of two places where they accessed the internet. (Table 3)

Table 3. Place where Internet is used in the multiple response survey

Place of internet use	N	Per cent of cases
At Home	236	80.8
At Cyber Cafe	60	20.5
At University	32	11.0
Through mobile phones	92	31.5
At Work Place	8	2.7

The maximum posts by the users of Facebook were about their friends: 28.8% (N=84). 21.9 percent (N=64) posted about issues of current affairs. 17.1% (N= 50) used motivational quotes in their posts. (Table 4)

Table 4 Topics preferred by respondents for their online posts in the multiple response survey

Topics of online posts	N	Per cent of cases
Do not use Facebook	88	30.1
About other friends	84	28.8
About state or national politics	72	24.7
About film personalities	16	5.5
About Sports	30	10.3
About issues/events which are in news	64	21.9
About motivational quotes	50	17.1
About smart quotes	38	13.0
Pictures/Videos	54	18.5
Interesting information	40	13.7
About yourself	46	15.8

Most respondents used Facebook to connect with their friends. 28.1 % (N=76) used the internet to keep pace with what was happening in the university, while 17.8 % (N=48) of the respondents accessed Facebook to find new friends. (Table 5)

Table 5. Reasons provided for accessing social network sites by respondents in the multiple response survey

Reason for using Social Networking	N	Per cent of cases
Connect with old friends	220	81.5
Find new friends	48	17.8
Since it is fashionable	20	7.4
Stay abreast of latest trends	28	10.4
Keep pace with latest fads	24	8.9
Keep pace what is happening in your university	76	28.1
Have information about world events	38	14.1
Pick up new terms	8	3.0
Pick up new ideas	10	3.7
Let others know about you	12	4.4
Let you keep tabs on others	8	3.0
To network with important people	22	8.1

Colloquiality is a function of the vernacular terms used in online communication. A defining feature of communication among Indian students is the use of the regional language in conjunction with English which is the most popular language of internet users. A multiple response survey was conducted to provide two types of language forms out of a choice of six provided to them. 50.7 % (N=147) of the users used informal English, while 46.4% (N=133) used a mix of English and Bengali/Hindi for their online content. (Table 6)

Table 6. Preferred mode of language content of respondents in the multiple response survey

Type of Language Use	N	Per cent of cases
Formal English	94	33.6
Informal English	142	50.7
Witty	54	19.3
Matter of fact	34	12.1
Bengali/Hindi	28	10.0
Mix of English and Bengali/Hindi	130	46.4

RQ-1: *Do students from an English Medium background use broadband more than their Bengali medium counterparts?*

A chi-square test was performed to test the null hypothesis of no association between type of internet use and medium of education. An association between type of internet use and medium of school education was found, $\chi^2(2, N = 292) = 9.260, p < 0.002$

This proves our hypothesis that students from an English Medium background prefer broadband internet usage compared to narrowband.

RQ-2: *Do students with a broadband connection use Facebook and other Web 2.0 features more than those with a narrowband connection?*

A chi-square test was performed to test the null hypothesis of no association between type of internet connection and usage of Facebook. A Phi (2x2) test of association was also conducted. A significant association was also observed between speed of the internet and whether Facebook is accessed regularly: $\chi^2(4, N = 292) = 32.34, p < 0.001$ ($\phi = .73$)

RQ-3: *Is there any correlation between regularity of Facebook use and variety of language use?*

A chi-square test was performed to test the null hypothesis of no association between regularity of use of Facebook and the use of language used while online. A significant association was observed between the use of language and the regularity of use of Facebook, $\chi^2(12, N = 292) = 64.63, p < 0.001$

RQ-4: *Do students who use broadband internet discuss more issues of current national and international issues that those who use narrowband?*

A chi-square test was performed to test the null hypothesis of no association between the use of broadband and online content produced. The Cramer's V coefficient was also calculated to reflect the strength of association. A significant association was observed between the use of broadband and the topic of online content. $\chi^2(6, N = 292) = 49.687, p < 0.001$ (Cramer's V = .69)

RQ-5 : *Do Broadband users employ less colloquality in their internet content?*

A chi-square test was performed to test the null hypothesis of no association between type of internet use and use of language. An association between type of internet use and medium of school education was found, $\chi^2(12, N = 292) = 15.92, p < 0.001$

A Significant association (.61) was reported using Phi analysis for nominal by nominal variables. Broadband users thus employ more formal, informal and witty language structures compared to the narrowband users who use more of Bengali/Hindi and a mix of English and Bengali/Hindi in their online discourse.

RQ-6 : *Is there any association with type of internet use and family income?*

A chi-square test was performed to test the null hypothesis of no association between type of internet use and family income. No significant association was observed for the chi square tests between family income and use of broadband/narrowband. The family income was thus not an important factor in our sample for usage of broadband/narrowband. This may be due to the fact that students of mass communication who comprised the sample did not show those lower thresholds of family income where it could have been a deciding factor in broadband usage.

A significant association however was reported for Chi-square results for association between family income and the use of language: $\chi^2(18, N = 292) = 33.917, p = 0.01$

RQ-7 : *Students with higher family income use broadband at home on personal computers while those with lesser family income access it on mobile phones and cyber café?*

A chi-square test was performed to test the null hypothesis of no association between place of internet use and family income.

A significant association was observed between the family income and place of internet use: $\chi^2(12, N = 292) = 33.917, p < 0.001$. This proves our hypothesis.

RQ-8 : *Do students who accessed internet on personal computers at home spend more time on the internet?*

A chi-square test was performed to test the null hypothesis of no association between place of internet use and total time spent on the internet. A significant association was also observed between place of use and the total time spent on internet: $\chi^2(12, N = 292) = 37.65, p < 0.001$

RQ-9 : *Do students who accessed internet on personal computers at home use more formal, matter-of-fact and witty language compared to those who accessed it at cybercafés and on mobile phones?*

A chi-square test was performed to test the null hypothesis of no association between place of internet use and total time spent on the internet. Significant association was observed between the place of use and the type of language used: $\chi^2(24, N = 292) = 63.33, p < 0.001$

RQ-10 : *Is Goal directedness of students an important factor in deciding the place of internet use?*

A chi-square test was performed to test the null hypothesis of no association between place of internet use and the purpose for which the internet is used. A Cramer's V strength of association test was also performed. A very significant association was observed between the place of internet use and the purpose for which the internet is used. $\chi^2(36, N = 292) = 1.874, p < 0.001$ (Cramer's V coefficient = .801)

RQ-11 : *Is Goal directedness of students an important factor in deciding the type of language used for online content?*

A chi-square test was performed to test the null hypothesis of no association between the purposes for which the internet is used and the variety of language structures used in Facebook posts. A significant association was observed between the purpose for which internet is used and the type of language: $\chi^2(36, N = 292) = 1.87, p < 0.001$

RQ-12 : *Do Students from an English medium background use greater variety of language constructs in their online content?*

A chi-square test was performed to test the null hypothesis of no association between the use of language and medium of school education. The Cramer's V coefficient was also calculated to reflect the strength of association. (Table 7)

A significant association was observed between the types of language and the medium of school education. $\chi^2(6, N = 292) = 49.687, p < 0.001$ (Cramer's V = .71)

Table 7. Medium of instruction of respondents in the sample survey

Medium of Education at the School level	N	Per cent
English	172	58.9
Bengali	120	41.1
Total	292	100.0

RQ-13: *Do Female students spend more time on the internet than their male counterparts?*

Null hypothesis: The mean times of internet use are the same for both genders.

Alternative hypothesis (Ha): The mean times of internet use test differ for the two genders.

A two-sample Student's *t*-test assuming equal variances was performed to test the hypothesis that the resulting mean internet use of the two genders was equal. Since a preliminary Levene's test for equality of variances indicated that the variances of the two

groups were significantly different, a two-sample *t*-test was performed that does not assume equal variances. (Table 8)

Table 8. Average hours spent on the internet for Male/Female students

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	90	1.6744	1.10059	.11601
Female	202	1.9614	1.12482	.07914

The mean time spent by females on internet ($M = 1.96$ hours, $SD = 1.12$, $N = 202$) was significantly longer than that by the males ($M = 1.67$ hours, $SD = 1.10$, $N = 90$), $t(175) = -2.040$, $p = 0.043$. This proves our hypothesis that female students spend more time on the internet. However no significant difference across genders was observed for use of broadband and narrowband.

RQ-14 : *Do students who display more colloquiality in their language use spend less time on the internet?*

A One-Way Anova test was performed to test the null hypothesis that there was no significant difference between groups of varied language use in their online content.

The overall Anova table results reported that at the $p < .001$ level of significance, there was at least one mean that was different from the rest. The post hoc Tukey test (performed at the 0.05 level of significance) examined all possible pair-wise comparisons and determined that there was a statistically significant difference in the mean scores of the different language use groups. (Table 9)

Table 9: Results of the One-Way Anova on average hours spent on Internet per day for different language types.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31.968	6	5.328	4.529	.000
Within Groups	335.273	286	1.176		
Total	367.241	292			

The average time spent on the internet was found to be different across sections, $F(6, 286) = 4.53$, $p < 0.01$. The Tukey multiple comparisons performed at the 0.05 significance level found that the time spent on the internet for those who use informal English ($M = 2$, $SD = .89$, $N = 90$) was significantly higher than that for mix of English and Bengali ($M = 1.17$, $SD = 1.12$, $N = 32$). (Table 10)

Table 10: Results of the Tukey Test for average hours spent on Internet per day for different language types

Use of language	N	Subset for alpha = 0.05 Mean
Mix of English and Bengali/Hindi	32	1.1688
Witty	8	1.5625
Matter of fact	12	1.7083
Bengali/Hindi	16	1.7500
Formal English	90	2.0000
Informal English	120	2.1017

RQ-15 : *Do Broadband users spend more time on the internet than their narrowband counterparts ?*

A two-sample Student's *t*-test assuming equal variances using the time spent on internet was performed to test the hypothesis that time spent for the broadband and the narrowband users were equal. (Table 11) Since a preliminary Levene's test for equality of variances indicated that the variances of the two groups was not significantly different, a two-sample *t*-test was performed that assumed equal variances.

Table 11: Average Hours spent on the internet per day between broadband and narrowband users.

Internet speed	N	Mean	Std. Deviation	Std. Error Mean
Broadband	184	2.0989	1.08497	.07998
Narrowband	108	1.5940	1.05986	.10599

The mean time spent by broadband users on internet ($M = 2.09$ hours, $SD = 1.09$, $N = 184$) was significantly longer than that by the narrowband users ($M = 1.59$ hours, $SD = 1.05$, $N = 108$), $t(284) = 3.77$, $p < .001$.

RQ-16 : *Do Students with more family income spend more time on the internet than those with lesser family income ?*

A One-Way Anova was performed to test the hypothesis that the average time spent across different income groups was same. The average time across the groups $F(3, 282) = 2.41$, $p = 0.067$. Hence the difference was not statistically significant. (Table 12)

Table 12: One-Way Anova on Average Hours spent on the internet per day by family income

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.000	3	3.000	2.412	.067
Within Groups	358.241	282	1.244		
Total	367.241	292			

The hypothesis was thus rejected that students with a higher family income spend more time on the internet than those with a comparatively lesser family income. As explained earlier since our sample group is of greater homogeneity in income hence variations across groups are not observable.

Discussion

The study shows that perceived usefulness is an important factor determining the quality of internet use. Thus students who thought they could stimulate better usefulness through their internet use opted for Broadband internet when they had a choice. As expected these students had education through the English medium and could use the Web 2.0 features of interactivity and social networking better than their Bengali/Hindi medium counterparts who spent lesser time on internet. The topics of posts were also more varied for those using Broadband more often. The broadband users thus showed more modality and colloquality in their Facebook posts. Interestingly the use of internet was not dependent on family income. It was more dependent on perceived usefulness. The variations in topics were also greater for the broadband users. The 'virtual cues' provided about oneself was also higher for the broadband users. These cues were often directed to elicit online responses from friends (Table 4). However only three per cent of the respondents admitted that their online communication was to let others know about them. As discussed earlier, respondents used more passive strategies to affirm their online self. Female students spent more time than their male counterparts. Importantly, those who showed more modality (formal, informal, matter-of-fact, witty, mix of more than one language) spent more time on internet. The ability to communicate online was thus more dependent on the perceived competence in topicality and variety of language forms.

Limitations

This study has a number of indications for further theory and research. This study was limited to investigating the different initiators of content on a social networking site. We examined the consequence of both other-generated indicators and those generated by the system. In this study other-generated indicators are timeline postings and its attendant discourse. Our findings demonstrated that other-generated indicators are more important clues of the individual's profile than the ones generated by the system. College going students construct their perception of individuals based on the system elements and responses on the individuals social networking sites. However, the indicators generated by the system did not affect the observers' perception of the profile owner. Further research can explore this perspective by examining if the number of friends is indeed outshined by the private information provided on the sites. Though the study proves a relation between quality of internet use and the functionality, goal-directedness, modality colloquality of content creation, a second level framing analysis needs to provide further evidence of 'richness' of discourse among Broadband and regular users of Facebook.

A majority of students did not add to content creating on Facebook and resorted to more passivity. This was more pronounced among users who were not comfortable with English. With the advent of transliteration technology more and more users prefer using Hindi and Bengali for their online communication. This is another area that needs further exploration.

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Uma Shankar Pandey is an Assistant Professor in the Department of Journalism & Mass Communication at Surendranath College for Women, Kolkata-700007, India. He worked as a senior correspondent with *The Asian Age*, Kolkata before taking up teaching job in 2002. He has presented papers at a number of national and international conferences including Istanbul, London, Durban, Bangkok, Colombo and Kathmandu. At present he is also working on a UGC Minor Research Project on New Media Literacy Index. E-mail: mailusp@gmail.com