Analysis of Uses and Gratifications of Facebook – A Study of College Students in the Indian IT City of Mysore

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Abstract

Facebook, the medium that has melted the norms of culture and value system has paved the way for public discourse of private lives. One of the post modern theories that perceived communication from an audience perspective is the theory of Uses and Gratifications. The characterization of Facebook shows that it has many features that influence the social relationships. A survey was conducted by using online questionnaire administered to regular students of undergraduate and post graduate colleges.A stratified sample of Facebook user was drawn. The study has investigated what motivates users to use Facebook and what they intend to do with Facebook and its content. Overwhelming percentage of respondents felt the motivation is friendship. Statistically, the causal relationships have been proved in this study illustrating media audience is not only active but reflective too. Instead of getting manipulated by the media, the user here customizes the media to cater to his needs and interests.

Key Words: *Facebook, Friendship, Social relationships, Chat, Links, Uses, Gratifications, Motivation.*

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Introduction

The emergence of Newspapers, radio, cinema and TV as agents of mass communication caused significant changes in the society establishing media as one of the important social institutions. The post modern raise in communication technology has changed the dynamics of human communication. The perception of communication has transformed since the days of Magic Bullet theory that propounded that audience is passive and powerless against the great power of mass communication. One of the post modern theories that perceived communication from an audience perspective is the theory of Uses and Gratifications. The theory is more relevant and important today as it advocates the understanding of media use pattern and content from audience perspective, 'The audience is conceived as active, they choose media, audience needs are varied, audience use media to build their identities and finally it is the audience who judge the content of media' (Katz, Blumler, & Gurevitch, 1974). This theory places more importance on the user than on the media stressing that users are responsible enough to choose their media to fulfill gratifications. The present study proposes to investigate the perception, motivation and influence of Facebook, the immensely popular social media site, on the users by revisiting the Uses and Gratifications theory.

Facebook, the medium that has melted the norms of culture and value system has paved the way for public discourse of private lives. The total users of Facebook touched 1 billion that is 12.1% penetration in world population. USA has 166 million Facebook users covering 52.9% of American population whereas India has 62 million Facebook users demonstrating its popularity over Twitter which has 33 million users. The study investigates the behavioural pattern of facebook users in terms of factors viz., Social Connection, Social Surfing, Wasting Time, Using

Applications (Lampe et al. 2007), Social communication and Public communication. Launched in February 2004, Facebook , the social networking site is owned by Facebook, Inc. and is a multi-pronged tool of communication that claims to have over a billion active users in the world. A popular social media Facebook has been the subject of innumerable studies. Facebook is a tool of mediated communication that democratizes the means of constructing public profile of a private individual. The characterization of Facebook shows that it has many features that influence the social relationships. It has text based communication attributes like posts, comments and private messages. The other important indicator that measures social relationships is the "like" variable indicating the emotional support the person enjoys with his/her Facebook friends on different type of content like posts, comments, photographs, videos and links. Tagging is another variable that reflects the emotional bondage two people have when they decide to tag. Time is a significant variable that indicates the degree of interest in maintaining a strong relationship. The relationship can be termed weak if the time spent in interaction is occasional.

Uses and Gratifications theory

The investigation into the mass media influence on people in early 1970s lead researchers to make path breaking studies throwing insight into the definite role media play in providing uses and gratifications to the users. The crux of the U & G theory is 'what people do with media rather than what media does to people' (Katz, Blumler, Gurevitch, Haas, 1973). Theorists believe that there is not merely one way that the people use media. Instead there are as many reasons for using the media, as there are media users. (Ibid). The theory basically gives us a list of basic needs the users derive out of media. Why people use media and what they get out of it are the basic questions that this theory tries to address. The original study by Katz., et.al encouraged voluminous studies on media gratifications

with variety of findings. All theorists endorsed the premise of original U & G theory that audience is active, rational and self-aware and over the course of time, they develop certain expectations about which media and contents fulfill their needs and desires (Katz et.al., 1974).

The primary theory on U & G as propounded by Katz, Blumler and Guevitch (1974) has five basic premises:

1. The audience is active and its media use is goal oriented.
2. In the mass communication process much initiative in linking need gratification and media choice lies with the audience member.
3. The media competes with other sources of need satisfaction.
4. Many of the goals of media use can be derived from data supplied by ther individual audience members themselves.
5. Value judgments of the audience's linking its needs to specific media or content should be suspended.

The U & G theory created a comprehensive list of human needs and investigated if a particular medium is more helpful than others in fulfilling certain types of needs. The list of human needs are classified as following; (Katz,Gurevich, and Haas, 1973)

1. Cognitive needs (Knowledge and Information)
2. Affective needs (Emotions, pleasure, feelings)
3. Personal integrative (Credibility, Status)
4. Social Integrative needs (Interact with family and friends
5. Tension free needs (Escape and Diversion)

People use media to satisfy different needs like surveillance, entertainment, correlation, cultural socialization and personal identity (Katz, Blumler, & Gurevitch, 1974). Rosengren (1974) indicated that the use of media is affected by individuals' needs, motives, behavior patterns, media consumption, daily problems and characteristics of society. Much of the earlier theories focused predominantly on television viewing as the visual

media gave a new perspective to the studies on mediated communication. Researchers were curious to understand what prompts people to watch television and how the media helped in satisfying their basic needs. If media are presumed to have the potential to satisfy the human needs, then what are those needs and how does it work in human mind are the vital issues that the theorists have focused on. The gratifications theory is basically a psychological approach to understand the emotions and feelings that explains the human bonding with the technology driven media. Studies on television viewing cites relaxation, companionship, habit, passing time, entertainment, social interaction, information, pleasure, escape as the gratifications that uses get. (Rubin, 1981).

Literature Review

Internet has been the subject of voluminous studies by the scholars in USA, Europe and Asia from sociological, economical, cultural and technological perspectives. Obviously, Facebook has generated significant interest among researchers as it has created a new public sphere ever seen in the history of human civilization.

Gratification research of traditional media has a vast number of studies. Recent studies have undertaken comparison of gratifications from Facebook with that of instant messaging. One of the studies (Quan-Haase and Young, 2010) has identified six key dimensions of gratifications namely pastime, affection, fashion, share problems, sociability and social information. 'Comparative analysis showed that Facebook is about having fun and knowing about the social activities occurring in one's social network, whereas instant messaging is geared more toward relationship maintenance and development' (Ibid).

Many studies have endorsed the high rates of penetration of social media in the society (Lenhart, 2009, Rankin McGill and Smith, 2007). Studies vouch for the distinct attributes of social media. Users normally do

not replace one social media with the other. Instead, they integrate all platforms of communication (Baym, Zhang and Lin, 2004; Quan- Haase, 2007; Squires, 2003). Many adopt tools of new media as part of 'communication repertoire' (Lenhart and Madden, 2007). The premise of the original theory has been applied to new media (Flanagin, 2005; LaRose, Mastro and Eastin,2001; Leung, 2001).The original theory gave us a model of media gratifications (Katz, Blumer, and Gurevit, 1974; Katz, Gurevitch, and Haas, 1973) in the context of newspapers and television (Kippax and Muray, 1980; Palmgreen and Rayburn, 1979; Rubin, 1983; Bantz, 1982; Bryant and Zillmann, 1984; Cazeneuve, 1974; Dobos, 1992; Eastman, 1979; Mcilwraith, 1998; Rubin, 1983;). Comparative studies have thrown insight into how people switch from traditional media to new media (Eighmey and McCord, 1998; LaRose et.al., 2001; Lee, 2008; Papacharissi and Rubin, 2000; Stafford, Stafford and Schkade, 2004). Audience control the content due to integration of consumer and producer roles of new media called as 'prosumer' (Toffler, 1980). The ability of users to control is what makes it worth to study new media in comparison with traditional media to understand how both the media motivate users to derive gratifications (Lin, 2001).

Impact of Facebook on the Social Life, Health and Behavior: In a study to evaluate the effect of social life on medical students of Dow University of Health Sciences in Pakistan, one comes across a specific pattern in the usage of Facebook denoting a high degree of addiction of students to the social media. Interestingly, the young medical students hailing from conservative Islamic society like Pakistan exhibit the behaviours of heavy users, sparing 3-4 hrs per day on Facebook alone and 'are willing to compromise their health, social life and studies for the sake of fun and entertainment of whatever satisfaction' they derive out of Facebook (Farooqi et.al, 2013). Interestingly, in this study students have admitted

that 'their social life became worse after they start using Facebook' (Ibid).
Using a survey method with a sample of 1000 respondents the study
supports the contention that Facebook helps in changing the perception of
people. Students who were regarded as shy were considered 'as fun loving'
by Facebook friends based on their presentation in Facebook.

In a study on the characterization of egocentric networks, the
researcher has endeavored to study the factors underlying social
relationships. A Facebook application called Facebook Analyser (FBA)
was designed for this study and the respondents were asked to use
Facebook using these apps (Arnaboldi et.al, 2011). In a study spanning
three weeks, the researchers have collected a total of 7665 relationships
and have extracted 3245 active friendships in a methodology that helped
them to electronically access all the users' pages and their conversations.

The study shows that text based interaction consisting of posts,
comments and private messages demonstrate a medium correlation with
the perceived strength of private messages and the results display the high
importance of like-based communication inside Facebook. Study after
study has endorsed that fact that 'users are willing to continuously use
Facebook when user attitudes are high towards Facebook. Further,
perceived enjoyment is positively related to user attitude.' (Chen, 2013).

The researchers are studying the factors that compel users to log on
to Facebook in such huge numbers. One of the studies has found that
'perceived enjoyment, perceived ease of use and perceived usefulness all
impact attitude towards continuance intention of Facebook' (Suki,
Ramayah,Ly, 2011). The question whether Facebook is a friend or a foe
has generated academic interest. Facebook 'encourages voyeurism and
narcissism' but social media alone may not be the reason. 'Problems with
Facebook are reflective of broader, long-standing problems with social
values that lead to alienation and that this alienation does not outweigh its

benefits' (Seligman, 2011). Gender is a vital variable that has been studied in all social relationship studies of Facebook. There is correlation between user behaviour and gender in Facebook. ' Females and males exhibit contrasting behaviours while hiding their attributes, such as gender, age, and sexual preference, and that females are more conscious about their online privacy on Facebook'. (Tang et.al, 2011). Facebook has become a common digital reference point to maintain visibility among the social groups. Facebook build visual identity with the help of photographs, texts, links, video and comments that the user shares with the intended audience. The new generation is more visual and believes in exploring visual options than textual ones. 'By visually expressing their selves through profile photographs, users engage in the social construction of reality, crafting their digitally mediated identities in interaction with their online social relations'. (Uimonen, 2013). Facebook has improved over the years and technology has changed and made it user friendly. ' The 'Wasting time' factor and the growth of 'Using Applications' factor indicate that Facebook has already become an integral part of daily computing routine, alongside with the rest of the entertainment desktop and web applications'. (Giannakos et.al, 2013). Does the use of Facebook differ with generations as participants belong to different old and new generations? The studies endorse the premise that 'there are differences in how two generations of Facebook users relate to social media ' (Hilsen, Helvik, 2014).

Ethics and Facebook: Technology has eroded the privacy of individuals as private messages in the form of text and visuals are available in public domain. Privacy is a significant issue that is bothering the law makers in different countries in both democracies and others. A study on the invasion of privacy with respect to the students' Facebook data information of a US university infers that 'a set of ethical concerns must be

addressed before embarking on future research in social networking sites respecting expectations of privacy and strategies for data anonymization prior to public release'.(Zimmer, 2010). The issue of privacy has raised the debate on whether Facebook is a public space or private space as more number of judicial investigations are considering FB content as evidence in support of their findings in the courts of law. It has been found that outside non-users perceive Facebook as private space where public display their personal messages in the form of both text and visuals to an intended audience. However studies have pointed out that ' online social spaces are indeed loci of public display rather than private revelation. Further, participants view and treat online social networks as public venues' (Burkell et.al, 2013). Studies show that in the case of the students most of them are not bothered about the 'privacy settings that limit viewing of personal content' (Hinck, Evans, 2012). Young students post unprofessional content that could have negative effect on the reputation and professionalism of the student and there is need to orient the students about responsible use of social media. (Ibid). Facebook has raised serious issues concerning privacy and how to cope with as the wrong audience is unavoidable in intended audience that user intends to reach. Studies reveal that one of the probable solutions is 'to change the users' behaviour and other is to address the very architecture of social network sites' (Leenes, 2011).

Social Capital and Facebook: Technology has enabled Facebook users to create issue based peer groups to exchange information related to common interests and problems. In an exploratory study that analyzed 1352 messages posted by active Facebook diabetes group, the users bonded with each other across the globe irrespective of race, gender and nationality. The issue of Diabetes bonded all the members to exchange medical and lifestyle information through Facebook platform demonstrating the potential of this social networking site to overcome even language and

cultural barriers. (Zhang, He & Sang, 2013). Cross cultural networking on Facebook increases social capital and because of perceived benefits of FB interactions and the type of friendship. (Jiang and Bruijn, 2013). Facebook networks teachers and students and can be an excellent platform for teaching and learning. Using a case study method, a course named Introduction to Database System with code CS3462 was used by researchers by creating a Facebook account by teaching staff. The technical features of Facebook were extensively used to support the premise that ' Facebook is an excellent supplementary education framework that can replace some features of traditional classroom learning' (Shiu, Fong and Lam, 2010).

OBJECTIVES

- Fundamentally, what makes a student to engage in Facebook use? The study aims to find out the Facebook uses and gratifications of college students.
- To analyze the usage pattern of Facebook by the college students
- To study the user profile of Facebook
- To study how students use Facebook to shape their personality
- To examine the Facebook consumption pattern in satisfying needs

METHODOLOGY

The study is part a larger national survey, National Facebook Study, conducted and designed by a research team at Mudra Institute of Communications Ahmedabad, Gujarat, India in collaboration with universities and colleges in India. This paper is based on the data collected in one of the cities that participated in the national study. A representative sample of 300 undergraduate and postgraduate students was selected in the academic streams of Arts, Commerce, Science and Engineering. Sample was drawn from both public and private colleges and universities in the city of Mysore. Mysore is regarded as the IT bowl and is the head quarters

of IT giant Infosys. Mysore located in the southern state of India has a literacy rate of 72.56 per cent. A survey was conducted by using online questionnaire administered to regular students of undergraduate and post graduate colleges and who are Facebook users. Field investigators were oriented to the method of administering electronic questionnaire. The filling up of the questionnaire online would take 30-40 minutes. Provision was made to complete the partially done questionnaire at their convenience as the respondents were all students and difficult to sustain their interest for long hours. Collecting the students' email IDs and obtaining their willingness to take part in the survey was part of data collection process. The questionnaire link was sent to those students who were willing to do the survey. Those who's IDs were obtained but not willing to do the survey were given the option to follow another link to exit from the site. This is an online survey stratifying sample by education and consisted of Facebook users. Data collection was based on a system of electronically generating tokens collecting the students' basic data and a questionnaire link.

Though hundreds of students were administered questionnaire online, the response was not overwhelming as students are not used to filling up time consuming online questionnaires and most of them did not answer all the questions. Therefore, finally 164 students completed all the questions in the questionnaire and hence were considered as the sample size for the study. Despite generating over 300 tokens, the total number of students who ultimately took part in the survey was 164. Therefore, the valid sample size was confined to 164 as it consisted of respondents who voluntarily took the survey and completed the questionnaire and these students also gave their consent to use their email IDs. Questionnaire was designed to find out the motivation for using Facebook. The socio demographic and economic variables like gender, income and education formed the variables for investigation. The study intended to find out the uses and gratifications

of Facebook by categorizing the variables under selfhood, constructing personal identity, social relationship, and social interaction vis-a-vis communication in real life.

Analysis and Discussion
SDE Profile

Table-1

Distribution of Demographic Variable of College Students Using Facebook

Demographics	f	Percentage
Gender		
Male	107	65.2
Female	57	34.8
Education		
Graduate Student	70	42.6
Post Graduate Student	94	57.3
Income		
Lower Middle Class	74	45.1
Middle Class	72	43.8
Upper Middle Class	18	10.8
College/ University		
Government	99	60.4
Private	65	39.6
Owning Media Devices		
Personal Computer	73	44.5
Laptop	70	42.7
Smart Phone	52	31.7
Tablet	13	07.9
None of the Above	24	14.6
Mother tongue		
Kannada	122	74.4
Hindi	4	2.4
Konkani	4	2.4
Tamil	5	3.0
Telugu	7	4.3
Urdu	7	4.3
Sambalpuri	1	0.6
Himachal	1	0.6
Marathi	12	7.3
Malayalam	1	0.6

Respondents consisted of 65% males and 34.8% females and all the participants were undergraduates or postgraduates and belonged to middle income group. Majority (60.4%) studied in government colleges and the rest in private institutions. More number of students owned personal computers (44.5%), Laptops (42.7%) and Smart Phones (31.7%). Majority of the respondents spoke the regional language *Kannada* (74.4%) and rest of them other languages. Language is an important variable in Facebook as it involves content generation. Though the respondents' mother tongue is not English the students preferred English (40.2%), English and Mother tongue (42.7%) but only mother tongue had very few users (9.1%) showing the preference of students to a language other than their own mother tongue in Facebook in a multilingual society like India. Accessing Facebook showed that majority access Facebook on computer at home (63.4%) followed by mobile (51.8%). The time spent on social media makes interesting revelations. Most of the students have been using Internet for more than 5 years (M=5.34, SD= 2.814) and Facebook for over 2 years (M=2.94, SD= 1.417). A student on an average spends over 2 hrs per day on Internet (M=2.91, SD= 2.579) whereas spends over 1hr per day on Facebook (M=1.8976, SD= 3.29508).

Motivation for Using Facebook

Investigating factors like why college students use Facebook and what motivates them drew interesting responses Studies have revealed that 'perceived enjoyment, perceived ease of use, perceived usefulness, and attitude are determinants of Facebook use behavior. (Suki, Ramayah, 2012). Cyber space has widened the scope of gaining friendship among young students looking for social-emotional benefits through Facebook. Youngsters perhaps find some internal solace in their association with Facebook as their real life social relationships find an extension. It is all about the amount of freedom that they enjoy in sharing and interacting with

TABLE -2
Why do College Students Use Facebook?

	Description of the Item	Agree		Neither Agree nor Disagree		Disagree	
		f	%	f	%	f	%
1.	Gives greater visibility to friends	103	62.8	49	29.9	12	7.3
2.	Allows me to present image of myself I desire	96	58.6	43	26.2	25	15.2
3.	Makes me look cool	69	42	49	29.9	46	28.1
4.	Entertaining	114	69.6	34	20.7	16	9.7
5.	Become an extension of my personality	68	41.4	48	29.3	48	29.3
6.	Helps me to keep up with my friend circle	132	80.5	22	13.4	10	6.1
7.	Get to know latest updates from friends	133	81.1	19	11.6	12	7.3
8.	Enjoyable	122	74.4	29	17.7	13	8
9.	Because everybody uses Facebook these days	97	59.2	33	20.1	34	20.7
10.	It is fun	103	63.4	40	24.4	20	12.2
11.	Helps to express my individual character	80	48.7	55	33.5	29	17.7
12.	Helps me relax	82	50	43	26.2	39	23.8
13.	I Can keep myself informed about events happening around me	121	73.8	28	17.1	15	9.1
14.	My friends asked me to join	81	49.4	29	17.7	54	32.9
15.	My friends use it, so do I	55	33.5	34	20.7	75	45.8
16.	Update myself about people and places of my interest	93	56.7	45	27.6	26	15.9
17.	To be friends with people who are far away	122	54.2	23	14.0	19	11.6
18.	It is a medium to connect with friends with whom I had lost touch	134	81.7	22	13.4	8	4.9
19.	I get to know what are ongoing events so that I can be part of it	124	75.6	33	20.1	7	4.2
20.	Helps keep up with friends and family members	129	78.6	22	13.4	13	7.9

old and new friends. Overwhelming percentage of respondents felt the motivation to use Facebook is friendship. *Helps me to keep up with my friend circle* (80.5%) *Get to know latest updates from friends* (81.1%), *Helps keep up with friends and family members* (78.6%), *Get information to participate in events* (75.6%), *Informed about events around me* (73.8%), and *great visibility to friends* (62.8%). *It is a medium to connect with friends with whom user had lost touch with say* an overwhelming percentage of students (81.7%) endorsing the earlier studies that Facebook is usually used by the students to maintain contact with offline friendships rather than to develop new relationships (Ellison et al., 2007; Lampe et al., 2006). Interestingly, people are curious to know more about people whom they know in real life or through other sources in what is known as 'social searching' and 'social browsing' (Ibid). People gain access to family photo albums and day to day events of their Facebook friends satisfying their curiosity about friends. In one platform, a user gains access to all that is happening in friends' lives consequently satisfying the basic human urge to know about other people. Facebook is a kind of social newspaper that informs breaking news about people and every user has a target audience who is active by responding to user's post, upload, comments and other activities.

Chat status shows that students prefer to keep *online for all status* (37.2%) denoting their desire to interact with everybody. Some are cautious and keep online for *only some of their friends* (28%). Gender is an issue while making friends on Facebook with modest group of users (32.3%). Though gender matters in friending or defriending, an overwhelming majority of users do not think so reflecting the change in the stereotypical mindset especially in a conservative society like India. Perhaps, free access to friends irrespective of gender may be one of the motivating factors to access Facebook in many societies bound by tradition and

stringent social norms. It appears that boys and girls feel liberated and is attributed to Facebook.

'Enjoyable', 'it's great fun' and 'it's entertaining' are the responses that have received high response. 'Perceived enjoyment' has been proved to be one of the determinants of Facebook use behavior. (Suki, Ramayah, 2012). *Enjoyable* (74.4%), *Entertaining* (69.6%), *It is Fun* (63.4%), *helps me relax* (50%), and *makes me cool* (42%) responses reflect the sense of belongingness and the delightfulness of owning some private space far from the preying eyes of the family, educational institutions and society determine the students' engagement with social media. Interestingly, very few (3.7%) wants to keep *invisible* status indicating the desire to get noticed and recognized in social media.

Facebook related practices of students reveal that students *often/ always* (32.31%) *accept friend requests*. *Chat* (32.92%) is another favourite pastime. The most popular practice is *sending and checking messages* (46.34%) and *commenting/sharing /liking* (41.46%) comes close second. *Sharing links* (28.65%) is preferred as it is easy to do it and it also reflects on their thoughts and ideas. So whoever passes on the links believes that it creates positive vibes / thinking about the sender in the minds of the receivers. More students prefer to upload photos (25.6 %) than video (6.7%). Students still prefer to share the photos than the videos for technical reasons. Playing games (14.63%) and using Facebook applications (15.24%) are least motivating factors among students. Majority of them have not subscribed to apps and games to avoid their Profile becoming public (54.9%).

Facebook and Profile Building

Everybody maintains Facebook profile and build a friend's list. Many students have claimed it to be *an extension of personality* (41.4%), it

allows them to *present an image of what they desire* (43%) and it helps to express their *individual character* (48.7%). The settings are designed to favour profile building. Profile (36%) , photo/video albums (43.3%), wall posts (40.9%), Friends' posts on wall (42.1%), status updates (40.9%) and apps activities (37.8%) are kept open to all friends instead of anyone/public as the intention is to reach the known circle of friends. Students work towards shaping their profiles to get noticed and to prove their worth. Most of them have posted their own picture (67.1%) and some have family and friends in Profile Picture (30.5%) but have not faked while a small number of them have left the profile blank (6.7%) and some of them have posted other picture (11%) in the Picture Profile again due to social values, shyness and fear. Do users have two different profiles one in real life and the other in Facebook? Though many claim to edit their pictures to be more presentable (40.9%) by and large they share authentic information (60.4%). According to them there is no difference between their presence in real life or in virtual life (56.1%). The dedication and commitment to friendship platform is so intense that over 74.3% vouch for the Facebook album as a true representative of themselves in real life and share genuine events and happenings of their life without faking (59.1%).

Facebook and Selfhood

Friends in real life have a different meaning than all those who join the friend list once the user approve the 'friends' request'. Relatives, students, mere acquaintances, friend's friends and stranger become 'friends' once approved. The site is so designed that the phrase/labels are imposed on the users complicating the perception of the very concept of friendship. The phrase 'friend' in Facebook is born out of labeling that has been instrumental in successful marketing of virtual groups. Many of the so called friends may not meet each other in their lifetime but remain Facebook

Friends forever. So, how does user present self to the intended friends on Facebook? How do we want to be perceived by the virtual friends as we do not have such expectations from friends in real life? Facebook is a platform for image building or image makeover and every user is conscious of his/her image and works towards shaping one. One category of Users exhibits self by being true to themselves.

Comparatively, over 54.9% respondents said that they rarely initiate friendship with others in real life outside Facebook in contrast to 37.3% who do. This is corroborated by the users who rarely accept friend requests from unknown persons (48.8%) indicating familiarly in real life as one of the determinants for accepting friend requests in virtual groups. Users normally do not search (63.4%) for information about people whom they have met in person. Over 72.5% say that they express true opinion on issues in their comments and the posts are all true (65.9%). A moderate percentage of respondents feel that their Facebook profile not only tells who they are (45.8%) but also reflects their personality (46.3%). The second category of users makes efforts to portray a self that is different from the real life. Many present themselves as *simple persons* (51.2%) , *positive thinking person* (41.4%), portray in *presentable manner* (51.8%) and portray *oneself different from others* (35.3%), *fake about one's personality, past life and self confidence* (22%) and those who *don't cheat in real life do fake information in order to be accepted by the virtual groups* (17.1%). Facebook do not reflect their emotional self (52.5%) is a vital finding illustrating the gap between mind boggling physical features of the site and the minds behind the content creators. Undoubtedly Facebook is an emotional succor to many users but is it a hostage to technology?

Facebook and Privacy

Users do not have control over privacy settings as technology is rapidly changing. Every Facebook user by default has access to the Facebook page content. Wide coverage of cyber crimes seems to have some impact on the users. Respondents alter privacy settings according to their needs. Friendship is one determinant factor that runs through all major activities including privacy settings. A small percentage admit that they are not bothered about privacy on Facebook (26.8%) but the rest is concerned about privacy and take precautions that speaks volumes about their commitment to the medium. They not only want to safeguard the interests of the medium but also desire to protect their private space in a public medium. Students search for any unwanted content and report or delete it (67.7%), some of them have never uploaded their Profile Picture to protect their privacy (30.5%) and majority of them have put in limited information about themselves (73.8%). A high degree of commitment is seen in the students' profile is vouched by the fact of over 89% of them having not faked their date of birth and real name (75.6%) but few of them have indeed faked information in Profile to protect privacy (20.1%). But the moot question is whether Facebook is a public space or private space? Students believe nothing is really private once user shares personal details on Facebook (45.1%). User's pictures (64.6%) that are post are perceived to reflect their strong characteristics related to personality and skills. Facebook users perceive family and friends positively as those who understand and reciprocate their feelings (64%), those who listen to their ideas and suggestions (67.6%) and enjoy a circle of friends who seek their opinions and advice (62.2%). Users who are not insecure enjoy good circle of friends and family in real life do not fake or dishonest with 'friends' in virtual life and portray self that is true to themselves. They do not pretend to be somebody as there is no need for them to do so.

Communication Skills of Facebook Users

Facebook is all about interaction with social groups and sharing content. The site generates voluminous content by the users. The text, photos, videos and comments test the communication skills of the users. The study shows that majority of the users have not written (43.3%) anything about themselves. The online lingo consisting of couple of sentences (27.4%), couple of words (19.5%), couple of short paragraphs (8.5%) and long paragraphs (1.2%) denote the poor efforts to generate content on their own. The young students who enjoy visual content extensively indulge in posting photos and links as those activities require little physical and mental effort. Users are more interested in apparent exchange and sharing of information of themselves or of others with ease rather than walking that extra mile to collect information for their long write ups. Further, influenced by the extensive usage of whatsApp and SMSs the new generation seems to have little interest in reading or writing lengthy write ups. This however cannot be perceived as poor communication skills.

Table 3

Income and Use of Facebook

Dependent Variable	Independent Variable	df	Signi ficance	Level of Sig.
Sometimes I edit my pictures to present myself in different ways	Income	34	.085	10%
I usually do not reveal right information to people on Facebook whom I know only through Facebook	Income	34	.088	10%
At times, I fake about my personality, past life and self confidence on Facebook	Income	34	.041	5%
I try to portray myself in a presentable manner in Facebook	Income	34	.084	10%
It's fun	Income	34	.044	5%
My friends asked me to join it	Income	34	.020	5%
Average time spent on Internet every day	Income	204	.000	1%
Duration of using Internet per day	Income	255	.072	10%
Length of using Facebook	Income	170	.000	1%
Average time spent on Facebook every day	Income	238	.000	1%

Income and Gender: Use of Facebook

Income is significant in defining how users present themselves on Facebook. Faking information is dependent on income among students. Fun is the motivating factor and is significantly related to income of the user. Length of time using Internet and average time spent on it every day is dependent on income. The same is true with the length of using Facebook and time spent on it everyday. Gender is significant among users who fake information about themselves to protect privacy. Gender and privacy find correlated with boys and girls expressing different behavior and attitude in matters like privacy. Games apps is gender specific and boys obviously show great inclination towards games apps than girls. Gender is a variable in defining the personality and skills of the Facebook users. Girls are more forthcoming expressing their relationship status than boys. Gender is a determinant in revealing his/her real name in profile. Females seem to be mischievous with them posting more sarcastic or funny pictures on Facebook. How users want to portray themselves on Facebook is also gender specific. Both boys and girls exhibit different behavior in their pretences.

CONCLUSION

The study gives valuable insights into uses of Facebook, where the dominant factor is establishing social communication. The study has investigated what people want and what they intend to do with Facebook and its content. The study shows that ultimately users follow their interests, needs, passion, and curiosity to choose and create content accordingly with a truly democratic medium like Facebook that has liberated students from the stereotypical behaviour. Statistically, the causal relationships have been proved in this study illustrating media audience is not only active but reflective too. Instead of getting manipulated by the media, the user here customizes the media to cater to his needs and interests. It states the

Table 4

Gender and Use of Facebook

Dependent Variable	Independent Variable	df	Significance	Level of Sig.
Do not subscribe to applications and games so that my profile doesn't become public	Gender	1	.042	5%
I have given fake information about myself in my profile to protect my privacy	Gender	1	.049	5%
Users' Facebook pictures present your strong characteristics/points related to personality and skills?	Gender	1	.015	5%
Currently, what is your 'Relationship status' in your Facebook profile?	Gender	6	.023	5%
How have you described yourself in 'About you' section of your Facebook profile?	Gender	4	.023	5%
What kind of profile name do you have on Facebook?	Gender	2	.047	5%
I generally put funny or sarcastic pictures on my Facebook profile	Gender	2	.003	1%
I pretend to be more global on Facebook	Gender	2	.009	1%
At times, I fake about my personality, past life and self confidence on Facebook	Gender	2	.008	1%
I try to portray myself as a positive thinking person on Facebook	Gender	2	.016	5%
Facebook has become an extension of myself	Gender	2	.056	10%
It makes me look cool	Gender	2	.014	5%
Status Update	Gender	2	.042	5%
I try to portray myself different from others in Facebook	Gender	4	.003	1%
Length of time using Facebook	Gender	10	.088	10%

audience is active. The study endorses the thesis (Katz, Blumler, Gurevitch, Haas,) on Uses and Gratifications theory, that ' a media user seeks out a media source that best fulfils the needs of the user besides assuming that the user has alternate devices to satisfy their need' (1973). The theorists believed that 'there is not merely one way that the people use media. Instead, there are as many reasons for using the media, as there are media users' (Ibid). The study endorses the premise that Facebook is a vital reference point in the life of the students by constructing identity, profile building and realising selfhood.

TABLE 5

Building Friendship in Facebook

	Description of the Item	Often		Rarely		Never	
		f	%	f	%	f	%
1.	How often do you initiate friendship with others in your real life outside Facebook?	61	37.2	90	54.9	13	7.9
2.	Do you accept friend requests from unknown persons?	12	7.3	80	48.8	72	43.9
3.	Do you search for people on Facebook whom you have met in person?	36	22.0	104	63.4	24	14.6
4.	When using the INTERNET, are you usually logged on to FACEBOOK all the time	46	28.0	106	64.6	12	7.3

TABLE 6
Why do College Students Use Facebook?

	Description of the Item	Agree		Neither Agree nor Disagree		Disagree	
		f	%	f	%	f	%
1.	Gives greater visibility to friends	103	62.8	49	29.9	12	7.3
2.	Allows me to present image of myself I desire	96	58.6	43	26.2	25	15.2
3.	Makes me look cool	69	42	49	29.9	46	28.1
4.	Entertaining	114	69.6	34	20.7	16	9.7
5.	Become an extension of my personality	68	41.4	48	29.3	48	29.3
6.	Helps me to keep up with my friend circle	132	80.5	22	13.4	10	6.1
7.	Get to know latest updates from friends	133	81.1	19	11.6	12	7.3
8.	Enjoyable	122	74.4	29	17.7	13	8
9.	Because everybody uses Facebook these days	97	59.2	33	20.1	34	20.7
10.	It is fun	103	63.4	40	24.4	20	12.2
11.	Helps to express my individual character	80	48.7	55	33.5	29	17.7
12.	Helps me relax	82	50	43	26.2	39	23.8
13.	I Can keep myself informed about events happening around me	121	73.8	28	17.1	15	9.1
14.	My friends asked me to join	81	49.4	29	17.7	54	32.9
15.	My friends use it, so do I	55	33.5	34	20.7	75	45.8
16.	Update myself about people and places of my interest	93	56.7	45	27.6	26	15.9
17.	To be friends with people who are far away	122	54.2	23	14.0	19	11.6
18.	It is a medium to connect with friends with whom I had lost touch	134	81.7	22	13.4	8	4.9
19.	I get to know what are ongoing events so that I can be part of it	124	75.6	33	20.1	7	4.2
20.	Helps keep up with friends and family members	129	78.6	22	13.4	13	7.9

TABLE 7
Facebook and Privacy

	Description of the Item	Yes		No		Don't Know	
		f	%	f	%	f	%
1.	While making friends on Facebook, does the gender of the person matter to you?	53	32.3	111	67.7		
2.	Have you ever read Facebook's Privacy Policy in full?	57	34.8	82	50	25	15.2
3.	Does Facebook's privacy policy allow Facebook to disclose information about you to third parties	51	31.1	48	29.3	65	39.6
4.	Does Facebook's privacy policy allow you to have more than one Facebook account/profile?	52	31.7	45	27.4	67	40.9
5.	Does Facebook's privacy policy allow you to tag other users without their permission?	56	34.1	52	31.7	56	34.1
6.	Does Facebook's privacy policy allow you to create an account for anyone other than yourself?	54	32.9	49	29.9	61	37.2
7.	I do not subscribe to applications and games so that my profile doesn't become public	90	54.9	74	45.1	-	-
8.	I search for any unwanted content in my account and report or delete it	111	67.7	53	32.3	-	-
9.	I have not uploaded my 'Profile Picture' to protect my privacy	50	30.5	114	69.5	-	-
10.	I have given fake information about myself in my profile to protect my privacy	33	20.1	131	79.9	-	-
11.	I have put in limited information about myself on Facebook	121	73.8	43	26.2	-	-
12.	Do 'YOUR' pictures on Face book present your strong characteristics/points related to your personality and skills?	106	64.6	58	35.4	-	-
13.	Have you mentioned your real date of birth on Facebook?	146	89	18	11	-	-

TABLE 8
Use of Privacy Settings on Facebook by the College Students

	Description of the Item	All friends		Specific people/ friend list		Friend's friends		Anyone/ Public		Only me	
		f	%	f	%	f	%	f	%	f	%
1.	Photo/Video albums	71	43.3	25	15.2	38	23.2	27	16.5	3	1.8
2.	Profile	59	36	25	15.2	29	17.7	44	26.8	7	4.3
3.	Wall posts	67	40.9	24	14.6	29	17.7	37	22.6	7	4.3
4.	Status updates	67	40.9	25	15.2	36	22	29	17.7	7	4.4
5.	Apps activity	62	37.8	20	12.2	21	12.8	34	20.7	27	16.5
6.	Friend's posts on your wall	69	42.1	28	17.1	33	20.1	27	16.5	7	4.4

TABLE 9

Attitude of College Students towards Privacy

	Description of the Item	Agree		Neither Agree nor Disagree		Disagree	
		f	%	f	%	f	%
1.	I am not bothered about privacy on Facebook	44	26.8	44	26.8	76	46.4
2.	I believe nothing is really private once you enter your personal details on Facebook	74	45.1	43	26.2	47	28.6
3.	I believe that Facebook's policy of sharing information about its users with third parties	51	31.1	53	32.3	60	36.6

Table 10

Communicating with Others in Real Life & Outside Facebook

	Description of the Item	Agree		Neither Agree nor Disagree		Disagree	
		f	%	f	%	f	%
1.	I am afraid to speak up in conversations	54	32.9	35	21.3	75	45.7
2.	I talk less because I am shy	53	32.3	38	23.2	73	44.6
3.	I talk a lot because I am not shy	57	34.7	51	31.3	56	34.2
4.	I like to get involved in group discussions	89	54.3	48	29.3	27	16.5
5.	I feel nervous when I have to speak to others	39	23.8	41	25	84	51.2
6.	I have no fears about expressing myself in a group	88	53.7	42	25.6	34	20.8
7.	I am afraid to express myself in a group	41	25	42	25.6	81	49.4
8.	I avoid group discussions	44	26.8	39	23.8	81	49.4
9.	During a conversation, I prefer to talk rather than listen	45	27.5	73	44.5	46	28.1
10.	I find it easy to make conversation with strangers	49	32.3	55	33.5	56	34.1
11.	I do not think my friends are honest in their communication with me	54	32.9	59	36	51	31.1
12.	My friends and family do not listen to my ideas and suggestions	30	18.3	48	29.3	86	52.5
13.	I think my friends are truthful with me	80	48.7	59	36	25	15.2
14.	I do not ask for advice from family or friends when I make decisions	42	25.6	41	25	81	49.4
15.	I believe my friends and family understand my feelings	105	64	45	27.4	14	8.5
16.	My family does not enjoy discussing my interests and activities with me	37	22.6	35	21.3	92	56.1
17.	My friends and family listen to my ideas and suggestions	111	67.6	45	27.4	8	2.9
18.	My friends seek my opinions and advice	102	62.2	52	31.7	10	6.1
19.	Other people are friendly only because they want something out of me	62	37.8	60	36.6	42	25.6
20.	Talking to other people is just a waste of time	41	25	44	26.8	79	48.2

TABLE 11

Behavior on Facebook towards Identity Building

	Description of the Item	Agree		Neither Agree nor Disagree		Disagree	
		f	%	f	%	f	%
1.	I generally put funny or sarcastic pictures on my Facebook profile	53	32.3	44	26.8	67	40.8
2.	Sometimes I edit my pictures to present myself in different ways	67	40.9	39	23.8	58	35.3
3.	I pretend to be more global on Facebook	48	29.3	53	32.3	63	38.4
4.	I usually do not reveal right information to people on Facebook whom I know only through Facebook	60	36.6	58	35.4	46	28.1
5.	Generally, I avoid uploading my profile picture on Facebook in which I do not look good.	100	61.0	39	23.8	25	15.2
6.	My profile and other information on Facebook is authentic	99	60.4	44	26.8	21	12.8
7.	There is no difference between me in real space and me in virtual space	92	56.1	40	24.4	32	19.5
8.	Facebook reflects my external 'me'	77	46.9	43	26.2	44	26.8
9.	I share genuine events and happenings of my life on Facebook	97	59.1	43	26.2	24	14.6
10.	All my pictures in my Facebook album represent my true appearance	122	74.3	30	18.3	12	7.3

TABLE 12

Behaviour on Facebook Revealing their Self

	Description of the Item	Agree		Neither Agree nor Disagree		Disagree	
		f	%	f	%	f	%
1.	Facebook does not reflect my emotional self	86	52.4	45	27.4	33	20.1
2.	At times, I fake about my personality, past life and self confidence on Facebook	36	22	37	22.6	91	55.5
3.	Some of my personal information on Facebook is false	33	20.2	29	17.7	102	62.2
4.	Though I don't cheat but, I do fake some information on Facebook	28	17.1	32	19.5	104	63.4
5.	I try to portray myself as a positive thinking person on Facebook	68	41.4	57	34.8	39	23.8
6.	I try to present myself as a simple person on Facebook	84	51.2	46	28	34	20.7
7.	Facebook has become an extension of myself	53	32.3	52	31.7	59	36
8.	Anyone viewing my Facebook profile would get to know who actually I am	75	45.8	53	32.3	36	22
9.	My Facebook posts that are related to my real life, are all true	108	65.9	35	21.3	21	12.8
10.	My Facebook profile reflects my personality	76	46.3	59	36	29	17.7
11.	While commenting on friends' posts and pictures on Facebook, I write what I actually feel at that time	119	72.5	32	19.5	13	7.9
12.	I try to portray myself in a presentable manner in Facebook	85	51.8	55	33.5	54	14.6
13.	I try to portray myself different from others in Facebook	58	35.3	54	32.9	52	31.7

REFERENCES

1. Arnaboldi Valerio, Passarella Andrea, Tesconi Maurizio, Gazze Davide, Towards a characterization of egocentric networks in online social networks, OTM2011Workshops, LNCS 7046, pp. 524–533, 2011.Springer-Verlag Berlin Heidelberg 2011

2. Baym, N. K., Zhang, Y. B., & Lin, M.-C. (2004). Social interactions across media: Interpersonal communication on the internet, telephone and face-to-face. New Media & Society, 6, 299-318.

3. Bantz, C. R. (1982). Exploring uses and gratifications: A comparison of reported uses of television and reported uses of favorite program type. *Communication Research, 9,* 352–379.

4. Bryant, J.,&Zillman, D. (1984). Using television to alleviate boredom and stress. *Journal of Broadcasting, 28*, 1–20.

5. Burkell Jacquelyn, Fortier Alexandra, Wong Lorraine yeung Cheryl, Simpson Jennifer Lynn, Facebook: public space or private space?, Information, Communication & Society, Vol.17, Iss,8, 2014.

6. Cazeneuve, E. (1974). Television as a functional alternative to traditional sources of need satisfaction. In J. G. Blumler&E. Katz (Eds.), The uses of mass communications: Current perspectives on gratifications research (pp. 213–224). Beverly Hills, CA: Sage.

7. Chen Yi-Fen, See you on Facebook: exploring influences on Facebook continuous usage, Behaviour & Information Technology, Vol.33, Iss,11, 2014

8. Dobos, J. (1992). Gratification models of satisfaction and choice of communication channels in organizations.*Communication Research, 19,* 29–51.

9. Eastman, S. T. (1979). Uses of television viewing and consumer life styles: A multivariate analysis. *Journal of Broadcasting, 23,* 491–500.

10. Farooqi Hassan, Patel Hamza, Aslam Hafiz Muhammad, Ansari Iqra Qamar and others, Effect of Facebook on the life of medical university students, Farooqi et al. International Archives of Medicine 2013, 6:40

11. Ferrara Emilio, A large-scale community structure analysis in Facebook, EPJ Data Science,- a Springer Open Journal, 2012

12. Flanagin, A. (2005). IM online: Instant messaging use among college students. Communication Research, 22, 175-187

13. Giannakos N.Michail et.al., Using Facebook out of habit, Behaviour & Information Technology, Vol.32. Iss.6,2013.

14. Hilsen Anne Inga, Helvik Tove, The construction of self in social medias, such as Facebook, Published online: 5 May 2012. Springer-Verlag London Limited 2012

15. Jiang Yifan, Bruijn Oscar de, Facebook helps: a case study of cross-cultural social networking and social capital, Information , Communication & Society, Vol.17, Iss.6, 2014.

16. Johnston Kevin, Tanner Maureen, Laila Nishant, Kawalski, Social capital: the benefit of Facebook friends, Behaviour & Information Technology, Vol.32, Iss,1,2013.

17. Katz, Elihu, Jay Blumler and Michael Gurevitch. The Use of Mass Communication. Beverly Hills, California: Sage, 1974.

18. Katz, E., Blumler, J., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. Blumler & E. Katz (Eds.), The uses of mass communication: Current perspectives on gratifications research (pp. 19–34). Beverly Hills, CA: Sage

19. Eighmey, J., & McCord, L. (1998). Adding value in the information age: Uses and gratifications of sites on the world wide web. Journal of Business Research, 41, 187-194.

20. LaRose, R., Mastro, D., & Eastin, M. S. (2001). Understanding Internet usage: A social-cognitive approach to uses and gratifications. Social Science Review, 19, 395-413.

21. Lee, S.-E. (2008). The uses and gratifications approach in the Internet age. Paper presented at the Annual Meeting of the International Communication Association, New Orleans, LA.

22. Leenes Ronald E., Who needs Facebook Anyway – privacy and sociality in social network sites, B. de Decker et al. (Eds.): CMS 2011, LNCS 7025, p. 254, 2011.IFIP International Federation for Information Processing 2011

23. Lenhart, A. (2009). Adults and social network websites. Washington, DC: Pew Internet and American Life Project. Retrieved from http://www.pewinternet.org/Reports/2009/Adults-and-SocialNetwork-Websites.aspx

24. Lenhart, A., & Madden, M. (2007). Social networking websites and teens: An overview. Washington, D. C.: PEW Research Center. <http://www.pewinternet.org/PPF/r/198/report_display.asp. Accessed February 2015>.

25. Lenhart, A., Madden, M., Smith, A, & McGill, A. (2007, December 19). Teens and social media: The use of social media gains a greater foothold in teen life as they embrace the conversational nature of interactive online media. Washington, DC: Pew Internet and American Life Project. Retrieved from http://www.pewinternet .org/PPF/r/230/report_display.asp

26. Leung, L. (2001). College student motives for chatting on ICQ. New Media & Society, 3, 483-500.

27. Lin, C. A. (2001). Audience attributes, media supplementation, and likely online service adoption. Mass Communication & Society, 4(2), 19-38.

28. Liu Gengdai, Choudhary Shantanu, Zhang Juzheng et.al., Let's keep in touch online: a Facebook aware virtual human interface, Springer-Verlag Berlin Heidelberg 2013, Published online, 30 May 2013.

29. McIlwraith, R. D. (1998). "I'm addicted to television": The personality, imagination, and TV watching patterns of self-identifiedTVaddicts. *Journal*

of Broadcasting&Electronic Media, 42, 371–386.

30. Palmgreen, P., & Rayburn, J. D., II. (1979). Uses and gratifications and exposure to public television. *Communication Research, 6*, 155–180.

31. Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet use. Journal of Broadcasting & Electronic Media, 44, 175-196

32. Quan-Haase, A. (2007). Instant messaging on campus: Use and integration in students' everyday communication. The Information Society, 24, 105-115

33. Quan-Haase, A and Young L.Alyson (2010), Uses and Gratifications of Social Media: A Comparison of Facebook and Instant MessagingBulletin of Science, Technology & SocietyOctober 2010 30: 350-361,

34. Rubin, A. M. (1983). Television uses and gratifications: The interactions of viewing patterns and motivations. *Journal of Broadcasting, 27,* 37–51.

35. Seligman Molly, Facebook: Friend or Faux, Journal of Infant, child and Adoloscent Psychotherapy, Vol.10, Iss,4, 2011

36. Shiu Herbert, Fong Joseph, and Lam Jeanne, Facebook –education with social networking websites for teaching and learning, P. Tsang et al. (Eds.): ICHL 2010, LNCS 6248, pp. 59–70, 2010. Springer-Verlag Berlin Heidelberg 2010.

37. Squires, L. (2003). College students in multimedia relationships: Choosing, using, and fusing communication technologies. Paper presented at the Association of Internet Researchers (AoIR), Toronto, Ontario, Canada

38. Stafford, T., Stafford, M., & Schkade, L. (2004). Determining uses and gratifications for the Internet. Decision Sciences, 35, 259-288.

39. Suki Norazah Mohd, Ramayah T, Empirical investigation on factors influencing the behavioural intention to use Facebook, Springer-Verlag 2011, Published online, 7 September 2011.

40. Tang Cong et.al, What's in a name: a study of names, gender inference, and gender behavior in Facebook. Xu et al. (Eds.): DASFAA Workshops 2011, LNCS 6637, pp. 344–356, 2011. Springer-Verlag Berlin Heidelberg 2011

41. Toffler, A. (1980). The third wave. New York, NY: Morrow.

42. Uimonen Paula, Visual Identity in Facebook, Visual Studies, Vol.28, Iss.2, 2013.

43. West R. & L. H. Turner, *Introducing Communication Theory: Analysis and Application*, 2nd. ed.. 2004, NY: McGraw-Hill, NY

44. Wong Kenneth, Kwan Reggie, and Leung Kat, An exploration of Using Facebook to build a virtual community of practice, Springer-Verlag Berlin Heidelberg 2011ICHL 2011, LNCS 6837, pp. 316–324, 2011.

45. Zhang Yan, He Dan, Sang Yoonmo, Facebook as a platform for health information and communication: a case study of a Diabetes group, Springer Science+Business Media, Published online; 16 April 2013

46. Zimmer Michael, But the data is already public: on the ethics of research in Facebook, Springer Science+Business Media, Published Online, 4 June 2010.