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Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging

Anabel Quan-Haase[1] and Alyson L. Young[2]

Abstract

Users have adopted a wide range of digital technologies into their communication repertoire. It remains unclear why they adopt multiple forms of communication instead of substituting one medium for another. It also raises the question: What type of need does each of these media fulfill? In the present article, the authors conduct comparative work that examines the gratifications obtained from Facebook with those from instant messaging. This comparison between media allows one to draw conclusions about how different social media fulfill user needs. Data were collected from undergraduate students through a multimethod study based on 77 surveys and 21 interviews. A factor analysis of gratifications obtained from Facebook revealed six key dimensions: 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. The authors discuss differences in the two technologies and outline a framework based on uses and gratifications theory as to why young people integrate numerous media into their communication habits.

Keywords

instant messaging, university students, uses and gratifications, social network sites, Facebook

Understanding Uses and Gratifications in Social Media

The use of social media has diffused widely in society with recent statistical data showing high penetration rates (Lenhart, 2009; Lenhart & Madden, 2007a; Lenhart, Madden, Smith, & McGill, 2007; Madden, 2009; Statistics Canada, 2010). Based on a review of the literature, we identified two important trends. First, users do not embrace a single form of social media but, tend to employ a range of tools for communication (Quan-Haase et al., 2002). This trend shows that one type of social media does not replace another but, rather, becomes integrated into a bundle of media use that includes online and offline forms of communication (Baym, Zhang, & Lin, 2004; Quan-Haase, 2007; Squires, 2003). Second, users tend to embrace new tools and adopt them as part of their communication repertoire. For example, the use of social network sites (SNSs) has become widespread; the Pew reports that 55% of American online teens have a MySpace or Facebook profile, two of the most popular SNSs in North America (Lenhart & Madden, 2007a). This suggests that the adoption and use of digital technologies follows social trends, where one medium becomes popular among users and reaches a peak of high penetration, and then daily use becomes steady, or even diminishes, as other media start gaining popularity. For example, instant messaging (IM) use decreased as users relied more heavily on SNSs for communication. This occurred without SNSs completely replacing IM but, rather, with IM slowly becoming of secondary relevance for communication.

What these two trends suggest is that each form of social media has its own biases in terms of the kinds of communication it facilitates and the social consequences and rewards it has for users (Innis, 1951; McLuhan, 1964; McLuhan & Powers, 1989). It also suggests that users do not completely replace one form of social media with another because each form supports unique communication needs that the other cannot completely fulfill. To examine the extent to which different types of social media fulfill different user needs, the present study compares the gratifications obtained from Facebook with those obtained from IM. Although recent studies

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have provided insight into how different forms of computer-mediated communication are used (Baym et al., 2004) and what gratifications they provide (Leung, 2001), little comparative work has been conducted. This comparative work will help us understand the use of one type of social media in relation to another and, in addition, allow us to extrapolate reasons that explain why users employ both technologies concurrently. This study will add to the existing literature on university students' use of Facebook by examining what motivates students to participate in the Facebook phenomenon and reveal personal information.

One of the more successful theoretical frameworks from which to examine questions of "how" and "why" individuals use media to satisfy particular needs has been the uses and gratifications (U&G) theory. Although U&G theory was originally developed to examine traditional media (Katz, Blumer, & Gurevitch, 1974; Katz, Gurevitch, & Haas, 1973), such as newspapers and television (Kippax & Murray, 1980; Palmgreen & Rayburn, 1979; Rubin, 1983), recent studies have applied the framework to new media (Flanagin, 2005; LaRose, Mastro, & Eastin, 2001; Leung, 2001).

The present study employs a U&G approach to understand what motivated university students' to join Facebook and the gratifications received from ongoing use. We focus on Facebook because it is by far the most popular SNS in Canadian universities (comScore, 2008), and it has received considerable attention in the scholarly literature (boyd, 2008; Tufekci, 2007). A second goal of the study is to compare university students' gratifications obtained on Facebook with those obtained from IM. This kind of comparative research will provide important insight into users' motivations for employing Facebook in comparison to another medium, in this case IM. This will not only expand our understanding of Facebook use as a social tool but will also add to our understanding of why young people integrate different forms of social media on the basis of the gratifications those media fulfill. Finally, this comparative analysis also illustrates the commonalities between the two technologies, suggesting features potentially inherent in the structure of social media.

We employed a mixed-methods approach consisting of surveys and interviews. The results show that university students joined Facebook primarily because a friend suggested it. A second reason was to keep in touch with friends and family in a convenient manner. This highlights how social networks and peer pressure play a key role in the technology adoption process. The findings of the Facebook gratification structure are similar to findings from other studies and emphasize the social needs fulfilled by Facebook use. In the present study, the main reasons to use Facebook are to learn about social events and keep in touch with friends and as a diversion from school work. The comparison between Facebook and IM showed that the gratification structure of the two tools was similar, with both serving as a means to stay in touch with contacts, to coordinate events, and to keep up-to-date with the activities of friends and family. Despite the similarities, IM's gratifications consisted in a deeper involvement with contacts, such as sharing and discussing problems, whereas Facebook served as a tool to learn about social events and coordinate get-togethers. We discuss the two tools in terms of their different features and gratification structures. We also draw conclusions about why university students rely on multiple social media to stay in touch with their contacts.

Uses and Gratifications Theory

Early theories of mass communication (e.g., the hypodermic needle theory) viewed the mass media as having a uniform and immediate influence on individuals, whom they perceived as easily susceptible to influence and unable to form their own opinions (McQuail & Windahl, 1993). The assumption was that the exposure to standardized cultural goods caused audience members to become a homogenous, uncritical, and passive mass with little willpower to resist the appeal and influence of the mass media. The goal directedness of audience members is what distinguishes U&G from early communication theories: The audience is characterized as active, discerning, and motivated in their media use. The focus of the theory is on what people do with the media rather than the influence or impact of the media on the individual (Katz et al., 1974). By conceiving of the audience as actively choosing and using media in response to specific needs, the foundations for examining gratifications obtained from the media are put in place. For instance, when an audience member has a need for escape, there are specific media available to gratify this need in a satisfactory manner.

Much of the past research on U&G has focused on television (e.g., Bantz, 1982; Bryant & Zillmann, 1984; Cazeneuve, 1974; Dobos, 1992; Eastman, 1979; Mcilwraith, 1998; Rubin, 1983; Schramm, Lyle, & Parker, 1961) and other traditional media (e.g., Armstrong & Rubin, 1989; Dimmick, Sikand, & Patterson, 1994; O'Keefe & Sulanowski, 1995). With the widespread adoption of new media, such as virtual worlds, IM, and SNSs, important new research from the U&G perspective is emerging. This research sheds light on what motivates individuals to switch from traditional media to new media and what kinds of gratifications these are providing (Eighmey & McCord, 1998; LaRose et al., 2001; Lee, 2008; Papacharissi & Rubin, 2000; Stafford, Stafford, & Schkade, 2004). A key distinguishing feature of new media is interactivity, which describes the ability of users to provide content in response to a source or communication partner (Ha & James, 1998). In new media, the distinction between consumer and producer tends to blur, which has led to the introduction of the term *prosumer* to describe users' ability to take control over the production and distribution of content (Toffler, 1980). This provides audience members control over content and its use, making it important to examine the gratifications new media provide to users in comparison to traditional media (Lin, 2001). Focusing on social media is important because we need to

understand what motivates users to switch from one tool to another. Moreover, the concurrent use of various tools suggests that each fulfills a distinct need making an analysis of U&G essential.

An Overview of Facebook

Facebook is an SNS developed in 2004 by former Harvard undergraduate student Mark Zuckerberg, which allows users to add friends, send messages, and update personal profiles in order to notify friends and peers about themselves. Facebook users can also form and join virtual groups, develop applications, host content, and learn about each others' interests, hobbies, and relationship statuses through users' online profiles. Students, in particular, are heavy users of Facebook. Ellison, Steinfield, and Lampe (2007) found that 94% of undergraduate students at Michigan State University were Facebook users who spent approximately 10 to 30 minutes on the site per day and who had between 150 and 200 friends on average listed on their profile.

Research into Facebook usage patterns suggests that Facebook is used and adopted primarily to maintain contact with offline connections rather than to develop new relationships (Ellison et al., 2007; Lampe et al., 2006). In a study of 2,000 students, Lampe et al. (2006) found that Facebook is used by students for purposes related to "social searching"—that is, to learn more about someone they know offline, rather than for "social browsing"—the use of Facebook to develop new connections. Students reported using Facebook to "keep in touch with an old friend or someone I knew from high school" (Lampe et al., 2006, p. 168).

Ellison et al. (2007) found similar results, indicating that students use Facebook for both maintaining preexisting close relationships (bonding social capital) and keeping in touch with high school acquaintances and classmates (maintaining social capital). In terms of bonding social capital, Ellison et al. suggest that Facebook may provide a low-maintenance way for users to keep up-to-date on friends' activities, citing the birthday notification as an example of a feature that requires minimal effort to keep in contact with friends. In terms of maintaining social capital, Ellison et al. suggest that Facebook allows users to maintain a connection to "weak ties," for example, high school acquaintances who may be able to provide valuable new information and resources. In summary, these studies indicate that Facebook serves a sociability function—one that enables users to maintain relationships with offline connections both near and far.

Motivations for Joining Facebook

In U&G a key distinction is made between gratifications obtained and gratifications sought (Greenberg, 1974; Katz et al., 1973; Palmgreen, Wenner, & Rayburn, 1980). Gratifications obtained refer to those gratifications that audience

members actually experience through the use of a particular medium. By contrast, gratifications sought (also often referred to as "needs" or "motives") refer to those gratifications that audience members expect to obtain from a medium before they have actually come into contact with it. Central to this theory is that obtained gratifications may differ from those sought and the resulting gap can predict the level of satisfaction/dissatisfaction that individuals experience from the usage of a particular medium (Palmgreen et al., 1980; Palmgreen & Rayburn, 1979). Palmgreen and Rayburn (1979) argue that when a medium provides or surpasses the expected gratifications initially sought, this leads to recurrent use of the medium and ultimately to predictable consumption habits. In cases where a medium does not fulfill the sought-after gratifications, audience members will often become disappointed and will predictably cease utilizing the specific medium. This will lead audience members to seek out a different medium that can provide the kinds of gratifications they are seeking. Understanding the gap between these two types of gratifications is important for analyzing how different audience members use various kinds of media, the expectations that they bring to their media habits, and the gratifications they actually obtain from their exposure to a diverse array of media products (Palmgreen & Rayburn, 1979).

The kind of analysis undertaken by Pamgreen and Rayburn (1979) also helps explain the development of media habits and the role of media in the individual audience member's everyday life. Most research in the U&G tradition has focused on obtained gratifications and has neglected to investigate motivations to start using a new medium. In our review of the SNS literature, we were able to identify only a few studies examining gratifications obtained (e.g., DiMicco et al., 2008; Joinson, 2008), but no study had examined the motivations for joining. An investigation of the motivations for joining an SNS is relevant because it could shed light into what factors influence adoption. What kinds of gratifications did users hope to obtain from a medium before they started using it? Was there one kind of reason that motivated most users? Or were there multiple reasons that led them to adopt? To fill this void in the literature, our first research question is the following:

> *Research Question 1:* What motivations did undergraduate students have for joining Facebook?

Gratifications for Facebook Use

Instead of focusing solely on the gratifications that students hope to obtain from joining an SNS, research can also examine the types of gratifications that users have obtained following their adoption of the site. Most research employing a U&G approach focuses on gratifications obtained because they provide insight into what motivates continued use of the medium (Blumler & Katz, 1974). Although few studies have systematically investigated gratifications obtained from Facebook, a number of studies provide important insight into the wide range

of gratifications that users obtain from employing SNSs. Ellison et al. (2007) found, in an investigation of the effects of Facebook on social capital, that Facebook use was motivated primarily by social gratifications, which include maintaining existing social ties and being able to reconnect with friends from the past. Similarly, boyd and Heer (2006) found that Friendster provides a space for users to converse with their friends and peers and to share digital artifacts. Lampe et al. (2006) found that Facebook was used primarily to help university students keep in touch with high school friends, who are often geographically distant, and to learn more about new people they have met offline. Corroborating these studies, one of the few investigations that systematically employed the U&G theory found that Facebook was used to build and maintain university students' social networks, as well as to learn about social events (Raacke & Bonds-Raacke, 2008). However, no factor analysis was conducted in this article to further examine the structure of motivations. In another study, Joinson (2008) suggests that the "keeping in touch" dimension of Facebook comprises two functions: (a) surveillance—the desire to see what old contacts and friends are up to, how they look, and how they behave; and (b) social searching, that is, the desire to maintain and reconnect with offline connections. We build our second research question on the existing literature and investigate the key gratifications university students obtain from their use of Facebook:

> *Research Question 2:* What gratifications do university students obtain from their use of Facebook?

When a medium fulfills the expected gratifications, this leads to persistent use of the medium (Palmgreen & Rayburn, 1979). Hence, gratifications obtained are an important predictor of an individual's media habits. Leung (2001) found in his study of IM that the two gratification dimensions of affection and sociability were positively associated with frequent use of IM, whereas the use of IM for being fashionable (i.e., following the latest trend) was negatively associated with IM use. Hence, individuals who used IM to seek affection and to socialize used IM more often. Those who used IM solely to be fashionable, by contrast, tended to use IM much less. In the same study, the gratification dimension of entertainment predicted the time spent on each IM session. The more individuals were employing IM for entertainment purposes, the more likely they were to spend a lot of time on IM. Joinson (2008) in his investigation of Facebook found that gender, visits to friends' photo albums, and frequency of status updates predicted the number of times users visited the site. By contrast, age and scores on the content gratification scale predicted the amount of time spent on the site. To continue this line of research, we formulated the following research question:

> *Research Question 3:* What is the association between the gratifications obtained from Facebook and Facebook use?

Facebook Versus Instant Messaging Gratifications

Katz et al. (1974) argue that each medium offers a unique blend of characteristics that distinguish its gratifications from other media. In terms of content, each medium provides content that is characteristic of its format. Media diverge in terms of the kinds of attributes they have as some media only provide text, other media provide only sound, and yet other media are able to blend different formats. Finally, each medium provides different kinds of exposure situations that also affect the gratifications it provides. Even though all social media are characterized as "interactive," there are differences between them in terms of the nature of interactions they support, which then leads to different types of gratifications. Central to understanding the gratifications obtained from one medium is a comparison with those obtained from another medium. For example, Huang and Yen (2003) found that IM was preferred to e-mail and telephone for maintaining and supporting relationships primarily with distant others, whereas the telephone was preferred to e-mail and IM for fulfilling affectively oriented sociability needs, for example, companionship, to give or receive advice, and to resolve conflicts. To expand on this literature, the gratifications obtained from various forms of social media could be compared. This would provide insight into two key phenomena: Why switching occurs from one social medium to another and what motivates users to continue using an existing tool. Past findings suggest that IM is used primarily to fulfill needs including: affection, such as offering help and showing concern for others; entertainment, to have fun and to kill time; and relaxation, to get away from pressures and responsibilities (Leung, 2001). By contrast, Facebook is used primarily to keep in touch with old and current friends, to post/look at photographs, and to locate old friends (Raacke & Bonds-Raacke, 2008). To investigate the differences in gratifications between IM and Facebook, we formulate the following research question:

> *Research Question 4:* How do gratifications obtained from Facebook compare with those obtained from IM?

Method

Participants

Eighty-five participants were initially recruited from undergraduate courses in communications at a large, research-intensive university in Canada. The sample was reduced to 77 after Facebook nonusers were removed. We excluded nonusers (8.2%) because the focus of the study was on the gratifications derived from the use of Facebook. The final survey sample had a mean age of 19.68 years ($SD = 1.26$), ranging from 18 to 23 years. Seventy-three percent of the respondents were female, which is 15.7% higher than the proportion of female university students in Canada in the 2005-2006 academic year (Statistics Canada, 2005) but representative of the proportion of female students enrolled in communications

at the university under study in the 2006-2007 academic year. The interview sample consisted of 21 undergraduate students, of whom 16 were females.

There are two reasons for examining gratifications in Facebook in a university student population. First, investigating the U&G of Facebook in a university student population is ideal because university students are early adopters of SNSs and of Facebook more specifically. Second, previous research has investigated the gratifications of university students' use of IM (Leung, 2001), providing a good baseline from which to compare Facebook use.

Procedures

Ethics approval was obtained prior to commencing the study. Participation was voluntary. Participants for the survey were recruited from two communication courses. Participants were given a paper-and-pencil self-administered questionnaire. Twenty-one participants were recruited for the interviews through posters, which were displayed on bulletin boards across campus. Nineteen respondents participated in a face-to-face interview, and two respondents opted for an e-mail-based interview. All interviews conducted face-to-face were recorded and transcribed with participants' consent. Data collection took place between October 2007 and February 2008.

Measures

Background information on age and sex was collected for each respondent to provide an overview of demographic characteristics and to use as controls in the regression models. The questionnaire included two measures of Facebook usage, which were employed in the regression models as dependent variables. The first measure was adopted from the Pew Internet and American Life Project's "Social Networking Websites and Teens Survey" (Lenhart & Madden, 2007a) and was used to examine the frequency of respondents' Facebook visits on an 8-point scale ranging from 1 = *never* to 8 = *several times a day*. The second measure asked respondents how often they updated their Facebook profile on an 8-point scale ranging from 1 = *never* to 8 = *several times a day*. This yielded a measure of their commitment to the site and to conveying up-to-date information to others in their social network. In order to obtain a measure of participants' experience with the site, they were asked also how long they had been using Facebook.

We measured what motivated students to join Facebook from a retrospective standpoint. As no prior scale of gratifications sought was located in the literature, we developed a measure covering gratifications that users sought from their use of Facebook prior to actually using it. Our measure included 11 items, which covered a wide range of motivations that respondents could choose from (see Table 1 for item wording and frequencies).

Gratifications obtained measured the range of benefits users obtained from their use of the site. To assess respondents'

Table 1. Gratifications Sought (Percentage)

Individual Items	Questionnaire Data[a]
Friend suggested it	85
Everyone I know is on Facebook	49
Help others keep in touch with me	46
Find classmates	18
Received a promotional e-mail	7
Get to know more people	7
Network in general	7
Find course information	3
Find dates	3
Find people with mutual interests	1
Find jobs	0

Note: N = 77.
[a]Percentage of participants in the questionnaire who responded "yes" to the item.

motivations for using Facebook, we adopted 25 items from Leung's (2001) list of gratifications obtained from using IM. The respondents were asked, "What are the different reasons why you use Facebook?" and they could rate each item on a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*). Table 2 depicts wording, means, and standard deviations for each item. The items used by Leung are applicable to the present study because both IM and Facebook are used for social purposes and therefore similar gratifications are expected to motivate their use. Moreover, there are three advantages of using the preexisting items in the context of this study. First, the items employed in Leung's study resulted from integrating items from previous studies on the U&G of traditional (Rubin, 1979, 1983) and new media (Leung & Wei, 1999, 2000) and in addition had been tested extensively through focus group research and pilot testing of items. Second, by employing Leung's (2001) items, direct comparisons can be made between the gratifications underlying the use of IM and of Facebook. Addressing this goal will enable us to work toward developing overarching methods and theories in the field of social media.

Data Analysis

Frequency analyses were employed to examine gratifications sought. A principal components factor analysis with varimax rotation was conducted to examine the dimensions of gratifications obtained and to test the overlap between Facebook and IM. A total of 25 gratification statements were included in the first analysis. Because one of the items did not load in the factor analysis, it was dropped. Missing values were excluded listwise, yielding a sample size of 72. Following the results of the factor loadings, means, standard deviations, and Cronbach's alpha were computed for each factor. *T-tests* were employed to examine gender differences in the factors. Finally, ordinary least squares regression analyses were conducted to examine the relationship between gratifications obtained and Facebook use.

To code the interviews, a grounded theory approach was employed (Glaser, 1978) that combined a deductive and inductive component (Berg, 2005). The deductive component consisted of coding the interview data using the six gratifications identified from the factor analysis and then counting the number of occurrences across interviews. The inductive component consisted of coding the data for emergent themes consisting of gratifications that could not be categorized under any of the available factors. By employing both deductive and inductive components, we could add information about the factors obtained in the quantitative analysis as well as expand on these factors.

Results

Facebook Use

Respondents are heavy users of Facebook: In the questionnaire, 82% reported logging into their Facebook account "several times a day." The data showed also that students had been using Facebook for approximately one and a half years ($M = 18.28$, $SD = 7.36$). Five percent of respondents update their profile at least once a day, 22% update it at least once a week, 42% update it at least once a month, and 30% update it very rarely. The interview data show that respondents use Facebook extensively, logging into their accounts between two and five times per day. Each session lasts approximately 5 to 15 minutes and is used to check for and respond to messages, view photographs, check up on the activities of friends, and access information on upcoming social events. A few respondents reported spending longer periods of time on Facebook when they wanted to procrastinate.

Motivations for Joining Facebook

Eighty-five percent of questionnaire participants reported that their primary motivation for joining Facebook was that "A friend suggested it" (see Table 1). It is not surprising that friendship networks play an important role in the adoption of Facebook, considering that SNSs' primary purpose is social connectivity (boyd, 2006; boyd & Heer, 2006; Donath & boyd, 2004). Once a person has joined, he or she feels a need to communicate with his or her friends over Facebook and hence suggests it to others. This also corroborates research in the diffusion of innovations tradition, which has shown that information regarding an innovation often comes through social networks (e.g., family members, friends, and coworkers; Rogers, 1962). The second motivation chosen frequently by 49% was "Everyone I know is on Facebook." Facebook is perceived as having a high degree of popularity among peers; its adoption then results from a need to be fashionable, that is, to be part of the peer group as well as a larger societal trend. Not adopting Facebook would mean being excluded from this network of friendship connections. The third item respondents

chose most often (46%) was "Help others to keep in touch with me." This item was followed by "Find classmates," with 18%. These two items reflect a need for social connectivity that is met through Facebook and allows its users to stay loosely connected with friends and family and to be part of the larger Facebook community. Table 1 shows that all other motivations were chosen much less frequently by respondents as reasons for joining Facebook.

Gratifications Obtained From Facebook Use

When examining what motivates students to use Facebook, six factors were identified based on the factor analysis with eigenvalues greater than 1.0, explaining 77% of the variance (see Table 2). Factor 1, *pastime*, comprises nine items measuring university students' use of Facebook as a means for getting away from responsibilities and pressures and providing a form of entertainment. The eigenvalue is 6.40 and the factor explains 27% of the total variance. The mean for most of these items was high, suggesting that these represented key gratifications obtained by university students. Two key gratifications were "To kill time" ($M = 4.14$, $SD = 1.26$) and "Because it is entertaining" ($M = 4.04$, $SD = 1.13$), showing how university students see Facebook as a diversion from other tasks and as a way to have fun. Factor 2, *affection*, comprises five items measuring how Facebook provides a venue for expressing concern and friendship toward others (eigenvalue = 4.53, variance explained = 19%). *Fashion* was the third factor identified (eigenvalue = 2.71, variance explained = 11%) and consists of three items measuring the extent to which Facebook helps its users appear fashionable and stylish to others. Factor 4, *sharing problems* (eigenvalue = 1.64, variance explained = 7%), includes three items measuring the extent to which students use Facebook to talk to others about their concerns. *Sociability* was the fifth factor (eigenvalue = 1.24, variance explained =5%) and encompasses three items that measure an individual's willingness to use technology as a means to meet new people and overcome social inhibitions. Factor 6, *social information* (eigenvalue = 1.02, variance explained = 4%), consists of a single item, with a mean of 3.35 ($SD = 1.24$) and measures the extent to which respondents feel involved with what is going on with others. The high mean suggests that for students, being in the "social know" is important because social information is key to being part of the peer network. Social information includes information about what activities and events peers are involved in, who is dating whom, what their friends' current status is, and what general news is important in the community (including gossip).

Comparing Facebook and IM Gratifications

There was considerable overlap between the factors identified by Leung (2001) in his study of gratifications of IM use and the factors identified in the present study. As identified in this

Table 2. Factor Loadings (Principal Components, Varimax Rotation) of 24 Gratifications Obtained (*N* = 72)

I use Facebook . . .	Mean	SD	Factors					
			1	2	3	4	5	6
Pastime								
To kill time	4.14	1.26	.718	−.036	−.189	.052	−.103	.294
Because it is entertaining	4.04	1.13	.850	.084	−.208	−.063	.019	.253
Because I enjoy it	3.74	1.14	.824	.115	−.121	−.265	.101	.054
Because it is fun	3.68	1.06	.882	.129	−.011	−.241	−.018	−.011
Because it is a pleasant rest	3.33	1.20	.756	.163	−.093	−.028	.244	−.164
Because it relaxes me	2.94	1.21	.745	.185	.076	.133	.141	−.264
To get away from pressures and responsibilities	3.36	1.27	.761	.015	.068	.248	−.145	−.207
To get away from what I am doing	3.67	1.22	.716	−.040	−.272	.427	−.064	.046
To put off something I should be doing	3.92	1.23	.767	.036	−.159	.319	−.213	.115
Affection								
To thank people	2.86	1.07	.345	.531	.116	.073	−.309	−.389
To let people know I care about them	3.08	1.14	.039	.762	.023	−.057	−.124	.172
To show others encouragement	2.93	1.10	.140	.830	.124	.020	−.084	−.038
To help others	2.83	1.16	.117	.765	−.086	.130	.129	−.215
To show others that I am concerned about them	2.82	1.14	.005	.842	−.006	.066	.234	.030
Fashion								
To not look old-fashioned	1.57	0.853	−.129	.098	.729	.105	.288	−.017
To look stylish	1.61	0.912	−.227	.035	.875	.255	.120	.118
To look fashionable	1.63	0.941	−.166	−.044	.878	.266	.085	.028
Share problems								
Because I need someone to talk to or be with	2.10	1.13	.061	.156	.238	.698	.298	.307
Because I just need to talk about my problems sometimes	1.61	1.04	−.096	.043	.343	.665	.351	.036
To forget about my problems	2.36	1.13	.204	.069	.322	.693	.104	.031
Sociability								
To make friends of the opposite sex	1.88	1.10	−.158	−.003	.106	.324	.497	.084
To be less inhibited chatting with strangers	1.63	0.941	.085	−.103	.119	.345	.794	−.211
To meet people (new acquaintances)	1.83	0.988	.121	.109	.279	.005	.802	.007
Social information								
To feel involved with what's going on with other people	3.35	1.24	.095	−.043	.127	.224	−.083	.829
Eigenvalue			6.400	4.529	2.715	1.641	1.246	1.020
Variance explained (%)			26.667	18.873	11.312	6.839	5.192	4.250
Cronbach's α			.92	.84	.90	.79	.70	—

Note: The scale used ranged from 1 = *strongly disagree* to 5 = *strongly agree*.

study, Factors 2 (affection), 3 (fashion), 4 (share problems), and 5 (sociability) largely overlapped with Leung's factor structure. One key distinction was that Leung's Factors 2, 3, and 7 all loaded in the present study on a single factor (Factor 1, pastime). In addition, one of the items that loaded on Factor 5 (inclusion) in Leung's study, loaded into a single factor in the present study (Factor 6, social information). This suggests that a similar underlying gratification structure exists for both types of social media with some differences resulting from their diverse usage. We discuss next these similarities and differences in more detail and focus on the relevance of particular items in each of the two studies.

Factor 1, *pastime*, comprises Leung's (2001) original "entertainment," "relaxation," and "escape" factors. Although key gratifications for both IM and Facebook are entertainment, relaxation, and escape, these seem to be more prominent

in Facebook than IM. Students see Facebook primarily as a form of pastime; it is almost a hobby in their busy routines.

Factor 2, *affection*, comprises five items measuring how Facebook provides a venue for expressing concern and friendship toward others (eigenvalue = 4.53, variance explained = 19%). This factor also completely overlapped with Leung's (2001) affection factor and showed how Facebook serves to reach out to others. However, the means are considerably lower in the present study than in Leung's study and the factor does not explain as much variance, suggesting that Facebook is used less for expressing affection than is IM. This reflects clear differences in gratifications obtained from each type of social media. IM is usually dyadic and allows for interactive conversations in real time that are somewhat comparable to face-to-face interactions. IM exchanges are linked to feelings of intimacy and the development of close ties (Hu, Wood, Smith,

& Westbrook, 2004). By contrast, at the center of Facebook are a user's profile and a series of asynchronous messages exchanged via private e-mail or left on a user's wall. Hence, the communications on Facebook are less prone to support deep conversations than those on IM but, rather, serve as a way of entertainment and having fun.

Fashion was the third factor identified (eigenvalue = 2.71, variance explained = 11%) and consists of three items measuring the extent to which Facebook is fashionable. This factor overlapped with Leung's (2001) factor, even though the means were lower in the Facebook study than in Leung's study of gratifications of IM. This is a bit surprising for two reasons. First, many respondents reported that a key reason for joining Facebook was that everybody else had it and they wanted to be part of this social trend. This suggests that although it is a motivation for joining, it is not a gratification motivating their continued use of the system. Second, we expected that Facebook rather than IM would be used for gratifying fashion needs because IM is more private and less open than Facebook, where one's membership and profile could be seen much more as a display of trendiness.

S*ociability* was identified as the fifth factor and completely overlaps with Leung's (2001) "sociability" factor (eigenvalue = 1.24, variance explained = 5.19%). It encompasses three items that measure an individual's willingness to use technology as a means to meet new people and overcome social inhibitions. Similar to Leung's findings, the means for these items are fairly low, indicating that Facebook, similar to IM, is not used to meet new people and overcome inhibitions but, rather, to maintain existing social ties (Ellison et al., 2007).

Factor 4, *sharing problems* (eigenvalue = 1.64, variance explained = 7%) includes three items measuring the extent to which students use Facebook to talk to others about their concerns. Whereas two items loaded in the same manner as in Leung's (2001) study, the third item included in the factor was different in that it also revolved around sharing problems and not "inclusion" as in the IM study. An important difference was also that the means in Leung's study were much higher for these items than in the present study. This is probably a result of different forms of exchange that each technology facilitates. IM's interactive, real-time nature supports exchanges, where users can discuss their problems and concerns, whereas Facebook's open and playful nature does not encourage the sharing of complex messages and more intimate feelings. These differences explain why students do not use Facebook as much to share personal problems but, rather, for entertainment and enjoyment.

Social information is a factor that did not emerge as important in the IM gratifications study but is central in the analysis of the Facebook gratification structure. This is a new factor and consists of a single item "To feel involved with what's going on with other people," which originally was part of the "inclusion" factor in Leung's (2001) study. Facebook provides not only more extensive information about users than IM but also qualitatively different information through the pictures section, the profile information, and the wall. Interviewee 3 explains that Facebook is valuable: "To stay on top of news and to find out about parties." This item has a mean of 3.35 (*SD* = 124) and measures the extent to which respondents feel involved with what is going on with others. The high mean suggests that for students, being in the "social know" is important because social information is key to being part of the peer network. Social information includes information about what activities and events peers are involved in, relationship status, what their friends' current status is, and what general news is important in the community (including gossip). This item reflects an interest that is gratified in both IM and Facebook: Students' desire to be kept up-to-date on important information about their friends and peers.

Findings From Interviews

In the interviews, participants mentioned three key motivations for joining Facebook. The first motivation is *peer pressure*, which overlaps with the items "Friend suggested it" and "Everyone I know is on Facebook." For 8 of 21 participants, this was their primary reason for joining as exemplified by Interviewee 9: "To find out what everyone was talking about, like What is this? What is a Facebook?" The second motivation, *social connectivity*, overlaps with the item included in the questionnaire: "Help others to keep in contact with me" and shows how Facebook is used as a social space for maintaining already existing social networks. Seven of 21 interviewees mentioned social connectivity as a key reason for joining. For example, Interviewee 2 states, "Because I wanted to keep in contact with people." The third motivation was *curiosity*, 4 of 21 participants mentioned this as a reason to create a profile, as the following quote from Interviewee 6 shows: "Just sort of wanting to know what the hype was about, like curiosity I guess." It also encompasses a *utilitarian need* consisting of wanting to know what people are posting on their profiles, finding out about events, and looking at photos. Interviewee 4 reports, "To stay on top of news and if there's a party somewhere then people usually . . . that is how people find out about the party." In summary, the data suggest that gratifications sought from Facebook reflect a need for social inclusion: to be part of a space where social interactions among one's peers take place. There is also a utilitarian need that students expect to fulfill, where Facebook allows them to find valuable information about their friends, past and future social events, and other activities in which their peers are involved.

In terms of gratifications obtained, participants in the interviews mentioned two key reasons for their continued use of Facebook. The first reason is *social connectivity*—that is, the desire to keep in touch with friends and peers located both near and far. As Interviewee 5 mentions, "Keeping in contact with people I know who live far away from me and sending practical messages and joking messages to people I see every day."

This shows that even after adoption, Facebook continues to serve as a space for users to connect to and interact with offline contacts. The second reason participants mentioned for their continued use of Facebook is *social information*. In conjunction with maintaining contact with friends and peers, Facebook acts as a space for users to obtain information about the activities and events peers are involved in (i.e., through wall posts, photos, videos, etc.), to find out general news important to the community, and to learn about users' relationship status. It is important to note that this typically occurs without users directly interacting with each other. Rather, users obtain information by viewing others' profiles and posted content. For example, Interviewee 19 indicates that he continues to use Facebook primarily to "[Check] out pictures of past events and [look] up events," and Interviewee 6 says, "To know exactly what's going on." In this way, the data suggest that similar to participants' motivations for joining Facebook, the gratifications obtained from Facebook revolve around issues of social inclusion: Users continue to use Facebook because it enables them to both maintain contact with offline friends and peers and to keep up-to-date on their friends' activities and events.

Gratifications Obtained and Facebook Use

We ran two ordinary least squares regression models to test the association between the six gratification factors and the use of Facebook (see Table 3). Gender and age were control variables in both models. The first model included frequency of Facebook use and the second model included frequency of profile updates as the dependent variable. Regression Model 1 shows no association of gender but an association of age. Younger users of Facebook tend to use the service more frequently. In this model, pastime activity ($\beta = .244$, $p < .05$), sociability ($\beta = .308$, $p < .05$) and social information ($\beta = .236$, $p < .05$) are positively associated with frequency of Facebook use. The model accounts for 19% of variance in frequency of Facebook use.

The second regression model shows no association of gender and age with profile updates. Pastime ($\beta = .352$, $p < .01$), affection ($\beta = .253$, $p < .05$), and social information ($\beta = .248$, $p < .05$) are positively associated with Facebook profile updates. Pastime and social information are the same two predictors as in the model with frequency of Facebook use as the dependent variable. The independent variables explain a total of 28% of variance in profile updates. The gratifications obtained explain more variance in profile updates than in frequency of Facebook use.

Discussion

The widespread diffusion of social media has drawn the attention of researchers, leading to a wide range of studies focusing on uses and social implications of social media. Despite the increased interest, most studies have focused on a single tool

Table 3. OLS Regression Predicting Frequency of Use and Profile Update ($N = 77$)

	Frequency of Facebook Use	Facebook Profile Updates
Demographics		
Age	−.121*	−.117
Females	.252	.073
Gratifications		
Pastime	.244*	.352**
Affection	.039	.253*
Fashion	.064	.210
Share problems	−.213	−.099
Sociability	.308*	−.021
Social information	.236*	.248*
Adjusted R^2	.192*	.278**

Note: OLS = ordinary least squares. Table depicts standardized coefficients from Regression Models 1 and 2.
*$p < .05$. **$p < .01$.

or site, neglecting to compare different types of social media. The present study fills this void by comparing IM and Facebook in terms of the different gratifications each medium provides to university students. The most striking finding from the analysis is that both IM and Facebook possess a similar factor structure, suggesting that they have very similar uses and fulfill similar communication and socialization needs. Both tools are used primarily as a pastime activity: to have fun, to kill time, to relax, and to provide a form of escape from everyday pressures and responsibilities.

If both tools fulfill similar kinds of needs, why do users employ Facebook as a substitute form of social contact to IM? In order to understand users' motivations, it is important to note that the study findings show some differences in the gratifications obtained from each type of social media. Even though these differences are small, they are central to the way in which users experience the two tools and use them. In Facebook, social information emerged as a key factor that was not present in the IM factor analysis. Facebook is used to find out about social events, friends' activities, and social information about peers. Although IM allows users to be in the "social know," it is not as effective as Facebook because users have to communicate with each friend separately to find out about plans. In Facebook, this information is broadcast to their entire network. Moreover, Facebook allows for asynchronous communication via the personal wall and does not necessitate users to be online simultaneously as IM does. Therefore, social information emerges as a key difference between the two tools with Facebook fulfilling a unique social need by allowing users to conveniently broadcast social information asynchronously via the wall.

A second key distinction is how the two tools support users in sharing problems and showing affection. In IM, users can engage in more intimate conversations, allowing them to share

their problems with communication partners more easily. IM is used to provide and receive social and emotional support from friends. In this way, exchanges over IM emulate in-person conversations, allowing for intimacy and a sense of connection (Hu et al., 2004), whereas Facebook exchanges are primarily asynchronous, focusing more on the exchange of information. Although there is no doubt that Facebook interactions also provide a sense of connection, they more closely resemble a mix of e-mail (writing private messages) and an online forum (e.g., listserve), where messages are visible to the entire community. This is a key distinction in the use of Facebook and IM. The near-synchronous nature of the IM exchange allows communication partners to engage in deeper exchanges with affection, whereas Facebook tends to support the exchange of short messages via a public wall. Although messages can be exchanged privately via Facebook, this feature is similar to e-mail and hence does not really support emotional closeness. These two key differences, although minor, are central to users' experience.

Where IM and Facebook intersect is on the inclusion dimension: Both Facebook and IM are seen as important tools for feeling involved with friends' lives and keeping up-to-date with their activities. This creates a sense of membership in the peer community. A potential reason why IM users switch from IM to Facebook may be because the latter allows users to support much larger networks with less effort, whereas IM can quickly become overwhelming when the network size grows exponentially. In this way, Facebook supports larger volumes of exchanges with each exchange being much shorter and less involved and therefore easier to manage. Overall, we can conclude that sociability is a central gratification obtained from both forms of social media. However, the kinds of needs that each medium fulfills are different in nature and directly linked to their functionality.

We were also interested in undergraduate students' motivations for joining Facebook. The results identified peer pressure, social connectivity, and curiosity as the three key gratifications students sought from joining the site. This corroborates with social network models of the diffusion of innovations, which show that innovations often diffuse through society via people's connections (Valente, 1995). We conclude that, in particular for young users, the peer network is an important source of information about adoption trends. Moreover, the peer network not only provides information about the innovation, but also exerts social pressure to adopt. These findings are similar to Jung, Kim, Lin, and Cheong (2005) who found a link between peer group Internet usage and adolescent adoption of the Internet. Based on our findings on gratifications sought, we conclude that social gratifications lead to adoption with university students wanting to be active members of their community by reaching out to their peer network.

The present study has a number of limitations that provide opportunities for future research. With regard to the assessment of gratifications sought, there were only a limited number of items included in the present questionnaire. The gratifications sought measure could be expanded by adding a wider range of items and by including the same items used in the gratifications obtained measure. The study on television by Palmgreen et al. (1980) is a good example of including the same items in order to be able to compare directly gratifications sought with gratifications obtained. In addition, gratifications sought from Facebook could be compared with those obtained from other SNSs, such as those geared toward dating, as well as with other similar technologies, such as photo tagging. This kind of comparative analysis would provide a comprehensive picture of the motivations leading users to adopt various tools, as well as highlight commonalities in the structure of social media in order to assist in building an overarching theory of social media practice.

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