Gratifications from New Media

Gender Differences in Internet Use in Cybercafes

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Abstract

Several uses and gratification (U&G) studies provide bases for understanding motivations for the uses of traditional mass media such as television and radio. As a new medium, U&G research on Internet has tended to rely on studies of such traditional media. This article assumes that Internet is a unique medium and offers a set of gratifications different from those offered by traditional mass media. This study, therefore, sought to first identify motivations for using the Internet and then extract the structure of gratifications. In addition, it determined the gratifications of male and female respondents separately assuming that access to and use of any new and emergent media tends to favour the male gender. The study identified an eight-factor gratification structure. The study concludes that the underlying motivations for the use of Internet for the entire sample as well as the male and the female sample, separately, varies slightly but is largely stable and consistent.

Keywords

New media, Internet usage, gratification structure, gender difference

Introduction

New media like Internet can be said to satisfy new needs or the same needs in new ways. The Internet has something to offer to almost everyone who derives any gratification from other media. A variant of the content of most other media is generally accessible on the Internet. In many cases, it offers the same, in a more interactive way—e-mail, chat, net-conferencing, e-libraries, voicemail/net2phone, social forums, Internet radio, MP3 music, movies in real time (with possibilities of increased bandwidth), movies on demand, streaming video, online newspapers, magazines and e-books—to name a few.

Consequently, the uses and gratification approach is a viable logical starting point for this emergent medium (Katz & Rice 2002; Perse & Greenberg 1998). The recurrent theme of the theory is that people consciously seek media for obtaining specific gratifications. In simple terms, the theory suggests that the choices people make when consuming media are motivated by their desire to gratify a range of needs. An early theoretical formulation stresses that UG presupposes an active, conscious audience and is ideology-neutral, that is, it doesn't seek so much to take a critical stance about media, but explains how and why they serve human needs (Katz et al. 1974).

The active audience approach is very consistent with the nature of Internet users, which has vast choices of content and different usage patterns. The medium of Internet, relative to traditional mass media, is much more interactive. Web pages require continuous interaction from users, in the choice of hyperlinks to be clicked or search criteria to be specified or URLs to be typed in the browser window. Its basic design requires the user to exercise choice. The medium offers users the choice of exercising control over the selection of sites and content, of re-visiting sites, and saving and downloading content and even responding to it, if they wish to.

The notion of an 'active' audience and Internet's inherent characteristic of interactivity make UG a particularly important theoretical perspective to interrogate the use and motivation obtained from the medium.

One can broadly identify two major research strands while investigating Internet use and motivations. The first strand tends to employ more or less the same set of gratification that properly relates to traditional mass media such as television. Such studies show that information seeking, amusement, surveillance, personal relationship, identity, establishing status and acquisition are the recurrent set of gratifications obtained (Charney & Greenberg 2002; Papacharissi & Rubin 2000). The limitation of such line of investigation is that it assumes Internet similar to any traditional mass media ignoring the characteristic of interactivity that may potentially offer a different set of gratifications.

The second research strand attempts to address this limitation. Methodologically different, researchers first qualitatively explore and identify reasons for using Internet that are unique to it and follow up with a quantitative survey. In a recent study Papacharissi and Rubin (2000) identified three factors which they believe influence Internet usage, namely, *contextual age*, *unwillingness to communicate* and *media perceptions*. Ferguson and Perse (2000) study found five important motivational factors for web usage: *entertainment*, *passing time*, *relaxation*, *escape* and *social information*.

Other studies have found that personality and social environment influence needs and choices of a particular medium. Papacharissi and Rubin (2000) found that perceptions, socialization, psychological characteristics and attitudes influence behaviours and motives, and thereby can influence choices of media. Krcmar and Greene (1999) considered 'sensation seeking' to be one of the more relevant variables in the U&G study. This concept is of importance for online studies because it has direct relation to the need for stimulation.

Weiser (2001) classifies the reasons for Internet use into two broad categories and labels them 'social' or 'affiliative orientation' and 'utilitarian' or 'practical orientation'. However, Stafford, Stafford and Schkade (2004) identify three types of gratifications for Internet use—process, content and social. By social gratification, the researchers refer to gratification Internet users derive from chatting and interaction with friends and others.

In this article we posit that a relatively new communication medium such as Internet has a clear gender dimension (a 'gender divide' as it were). Wajcman (1991) argues that traditionally technology has been designed to match skills with men in mind. The history of media use and access shows that men not only have early access to technology, but also have tended to use and appropriate it. McQuillan and O'Neill (2009) argue that gender remains a salient factor in researching the complexity of young people's Internet use and call for multiple theoretical perspectives to contribute to further research on this topic. And although Rideout and Hamel (2006) found no gender difference in computer time, they found differences in how young people use computers.

Gender differences have been found in the way males and females use the remote control device (Bellamy & Walker 1996). Skog (2002) has shown that gender influences the choice of a mobile phone with girls preferring colour and design and boys preferring performance, logo and brand. Leung and Wei (2000) have shown that mobile use patterns can be explained by gender differences with male users tending to use the mobile as an instrument to do business and female users tending to make longer calls while on the go. Literature that has focused on gender has mostly found consistent differences in men and women players' game-playing gratifications and game feature preferences (Krsithen & Sherry 2004).

Gender differences have been found in Internet use and access. Korgaonkar and Wolin (1999) cite findings from four leading national research companies in the US that show that a typical Web user is more likely to be a male. Reviewing the literature on Internet use and access among Americans, Odell, Korgen, Schumacher and Delucchi (2000) concluded that female college students use the Internet less than males, but that this gap is closing rapidly. In the case of cybercafe use in the city of our study, discussion with cybercafe managers showed that women do not use cybercafe as much as men do and that the number of women visiting cybercafe is less and dwindles further in the evening (or later). Motivated by such usage patterns, we were interested in finding whether the gratifications obtained from Internet use were different for male and female student groups in any meaningful way. The research question we attempt to answer is: Is there a difference in the gratification structure based on gender of the respondent?

Methodology

This study was designed to find out the gratifications college-going youth derives from using Internet in cybercafes. The list of gratifications items was developed by asking 193 college students to write an essay on the topic, 'why I use Internet'. Content analysis of the essays yielded an initial pool of over 220 independent reasons (perceived advantages) for using Internet. Two communication students working independently grouped similar statements into a smaller number of categories. Two of the authors sorted out discrepancies in classification between the coders. This procedure yielded 20 motivational categories or sets of gratification types. Since the number was large, categories that appeared to fall in a broad thematic area were combined into one. This step reduced the number of categories to six (seven, if the last category, miscellaneous, is also included). The initial and final categories of perceived advantages of using Internet derived from content analysis are shown in Table 1.

Next, the reasons cited most frequently within the six categories were identified and reviewed in the broader context of gratifications found in the U&G literature. This procedure resulted in developing an inventory of 37 statements from six categories. These statements, measured on a 4-point scale (4 = strongly agree, 1 = strongly disagree), constituted the gratifications (or motivations) scale for using Internet in cybercafes. Later, a structured questionnaire was developed and administered to 350 college-going youth using cybercafes in a north Indian city. 318 questionnaires were found to be valid for analysis (male = 213; female = 105). Prior permission of the cybercafe/Internet parlour owners/managers was taken for administration of the questionnaire.

Table 1. Content Analysis: Initial and Final Categories of Perceived Advantages of the Internet

Initial Categories (numbers in bracket indicate number of items):

- Techno-Competence (20)
- Global Exchange (19)
- Information Access (17)
- Educative (14)
- E-Mail Facility (10)
- Admissions and Educational Information (10)
- Global Bonding (9)
- Easy and Cheap (Convenient) (9)
- Developing Interests (9)
- Relaxing (9)
- Commercial Possibilities (8)
- Career Building (8)
- Broadening (7)
- Productive (6)
- Creative Urge (6)
- Inter-Cultural Relations (5)
- Research (5)
- Speedy and Paperless (5)
- Keeping Up-To-Date (4)
- Miscellany (14)

Final Categories:

- Growth and Development (80)
- Global Bonding (33)
- Advantage of Medium (24)
- Professional/Educational Opportunity (18)
- Broadening of Horizons (16)
- Relaxation (9)
- Miscellany (14[1])

Source: Author's research.
Note: [1] Items deleted at round 1:
It introduces me to peer groups apart from any own
It prepares me for the global economy and workplace
I can search for a good job
It helps me work faster
It is a wonderful medium to display creativity
It exposes me to latest technology
It facilitates familiarity with technology
It is modern and technology oriented
One can send e-mails instead of writing letters
One gets to learn about other colleges and institutions of higher education
One can gather enough information about educational opportunities.

Selection of Cybercafes

The city was divided into three broad zones depending on the socio-economic profile. Each zone in turn contained one or more locality in it. Zone 1 comprised of locations where senior government officials (IAS, IPS only), business and industry executives reside. Zone 2 comprised of locations where middle

class government officers reside. Zone 3 comprised of locations where traders, shop owners and other lower level government employees reside. Cybercafes were purposively selected from each zone. Twenty cybercafes located in different parts of the city were chosen for the study. Twenty college-going boys and girls were selected as respondents on three consecutive days (Sunday through Tuesday) of a week. This ensured that students who visited cybercafe on holidays and work days were included in the sample.

A two-step data analyses strategy was adopted to understand student motivations for using the Internet. At the first stage, factor analysis was performed to determine the structure of gratifications obtained by the entire sample. At the second stage, the sample was split into two groups based on gender. Factor analyses were performed to derive the gratifications obtained by male and female groups separately and observe differences, if any, between the structures of gratifications of the two groups. Finally, the gratifications derived for the three groups (entire sample and the sample of male and female students separately) were contrasted to not only establish the stability of the factor structure but also examine differences in motivations for Internet use among the three groups.

Data Analysis

The structure of gratifications obtained from Internet use was identified through exploratory factor analysis using SPSS 12.0. At the first step, all the 37 items of the gratification scale were factor analyzed. This step yielded 10 factors. However, some of the items had loadings greater than .30 on more than one factor and the difference between the loadings was less than .10. These items, 11 in all, were deleted from the analysis because they did not help in unambiguously explaining the factor structure. Subsequently, a second round of factor analysis was run with 26 items that yielded eight factors, as shown in Table 2.

Using principal component analysis with varimax rotation an eight factor gratification structure was obtained for the group comprising male and female students. The eight factors cumulatively explained 70 per cent of the variance. We briefly describe the factors obtained for the entire sample.

Convenience I

Three of the four items loading on the factor relate to convenience afforded by the Internet. The respondents felt that Internet is economical (way to know the world) and easy (to download information). They also found it user friendly. This factor accounted for 11 per cent of the variance and its reliability was 0.85.

Technology Advantage

Two of the four items loading on this factor relate to use of computer and its applications. The remaining items relate to perceived advantages from Internet use ('edge over others' and 'gives me control of things'). It appears that Internet not only makes students experts in computer use but in doing so gives them advantages of being better than others and in control of things. This factor accounted for 10 per cent of the variance and its reliability was 0.82.

Educational Advantage

The items loading on this factor relate to the ease of seeking educational opportunities, filling and sending application forms (for admissions), and accessing and practicing Internet-based tests. Together the items explain the specific advantages the medium offers with regard to education. Hence, this factor has been labeled educational advantage. This factor accounted for 10 per cent of the variance and its reliability was 0.84.

Table 2. Motivational Structure of College Internet Users' Group

Factors	Items	Factor Loading	Reliability
Convenience I	Economical way to know the world	0.85	
	Easy to download information	0.80	
	Integration with world	0.74	
	It is user friendly	0.71	**.85**
Technology advantage	Become expert in computer use	0.81	
	Gives edge over others	0.76	
	Learn many Web applications	0.74	
	Feeling I am in control of things	0.68	**.82**
Educational advantage	Can fill admission forms	0.77	
	Cost effective to send filled application forms	0.77	
	Able to access and practice Internet-based test	0.72	
	Access to career and job	0.53	**.84**
Convenience II	Save money on phone bills	0.88	
	Communicate with near and dear	0.76	
	Can send mails in a matter of minutes	0.69	**.81**
Self-growth	Gives freedom to express opinion	0.81	
	Inspires me to excel	0.78	
	Charges to do something new	0.69	**.80**
Wide exposure	Provide wider range of exposure	0.85	
	Relieves stress through entertainment	0.73	
	Broaden the outlook	0.62	**.73**
Global exchange	Answers to questions from all over the world	0.83	
	Share views with people of world	0.82	
	Chat with anyone	0.59	**.66**
Relaxation	Helps me relax	0.85	
	Provide many hours of leisure	0.81	**.77**
Total variance explained (per cent)		**70**	
Principal component analysis with varimax rotation			

Source: Author's research.

Convenience II

The convenience factor split into two. This (second) factor relates to perceived benefits of money saved and time saved from using Internet (unlike the factor 1 which relates to convenience due to ease and economy). In addition, Internet helps college youth in communicating with their near and dear ones. This factor accounted for 9 per cent of variance and its reliability was 0.80.

Self-growth

The items loading on this factor relate to motivation the medium provides to college youth. However, unlike other motivations that are instrumental in nature (technology and educational advantage factors, for example), the motivation here appears to be intrinsic adding to the personality of the user. The respondents feel that Internet inspires them to excel, charges them to do new things and also gives them freedom to express opinion. Taken together, the three items appear to emphasize self-growth. This factor explained 9 per cent of variance and its reliability was 0.81.

Wide Exposure

Two of the three items loading on this factor relate to expansion of mental horizon through Internet. The respondents said that browsing Internet provides wider range of exposure and broadens their outlook. We expected the remaining item 'relieves stress through entertainment' to load on the 'relaxation' factor. This factor accounted for 8 per cent of variance and its reliability was 0.73.

Global Exchange

Another perceived benefit that emerges from using Internet is holding conversations with people, far and near, unhindered by constraints of space. The three items loading on the factor (means of getting answers to questions, sharing views and generally chatting with others on the net) suggest exchange of views and information at a global level. This factor accounted for 7 per cent of variance and its reliability was 0.66.

Relaxation

A recurring factor in several media gratification studies, this factor explained the least amount of variance in our study. Respondents said they browsed Internet because it provided many hours of leisure and helped them relax. This factor accounted for 7 per cent of the common variance. And its reliability was 0.77.

Overall the gratifications structure of Internet use in cybercafes indicates utilitarian benefits such as conveniences. Although conveniences related to time and money appear to be important, other motivations appear to relate to content (wide exposure, learning applications, etc). In addition, the factor 'global exchange' indicates that the medium is also used for social purposes. Factors such as 'relaxation' appear to be common to both conventional and new media. However, in a cybercafe context, it explains least variance. Having examined the motivations for Internet use among college-going youth, we attempted to identify whether the gratification structure for the male and the female students for Internet use in cybercafe was similar or not. For this purpose, we split the sample two groups based on gender and conducted two factor analyses.

Table 3 presents the results of factor analysis of responses of the male Internet users' group.

Using principal component analysis with varimax rotation an eight factor gratification structure was obtained for the male student group. The eight factors cumulatively explained 70 per cent of the variance. Overall, the number of factors obtained and the percentage of variance explained is similar for the entire sample and the sample of male Internet users' group.

Table 4 presents the results of factor analysis of responses of the female Internet users' group.

Using principal component analysis with varimax rotation an eight factor gratification structure was obtained for the female Internet users' group. The eight factors cumulatively explained 73 per cent of the variance.

Overall, the number of factors obtained from factor analyses of the three groups yields an eight-factor solution. However, differences can be observed between the male and female groups in terms of the order of factors and loadings of items.

Discussion

This study attempted to understand the underlying gratification structure derived from Internet use by a large and important segment—the college youth. Towards this end, we asked college students to write an

Table 3. Motivational Structure of Male Internet Users' Group (*n* = 213)

Factors	Items	Factor Loading	Variance Explained	Reliability
Convenience I	Economical way to know the world	0.82	10.5	**0.82**
	Easy to download information	0.74		
	Integration with world	0.67		
	Is user friendly	0.65		
Educational advantage	Cost effective to send application forms	0.77	10.3	**0.83**
	Can fill admission forms	0.76		
	Able to access and practice Internet-based test	0.71		
	Access to career and job	0.51		
Technology advantage	Learn many Web applications	0.77	10.2	**0.79**
	Become expert in computer use	0.77		
	Gives edge over others	0.73		
	Feeling I am in control of things	0.68		
Self-growth	Inspires me to excel	0.76	9.3	**0.78**
	Gives freedom to express opinion	0.75		
	Charges to do something new	0.75		
Convenience II	Save money on phone bills	0.85	8.8	**0.71**
	Communicate with near and dear	0.77		
	Can send mails in a matter of minutes	0.60		
Wide exposure	Provide wider range of exposure	0.84	7.8	**0. 70**
	Relieves stress through entertainment	0.72		
	Broaden the outlook	0.56		
Global exchange	Share views with people of world	0.81	6.9	**0.71**
	Answers to questions from all over the world	0.78		
	Chat with anyone	0.49		
Relaxation	Helps me relax	0.86	**6.5**	**0.75**
	Provide many hours of leisure	0.76		
Total variance explained (per cent)			**70**	
Principal component analysis with varimax rotation				

Source: Author's research.

essay on why they use Internet. The content analysis of the scripts generated a list of gratification items that were grouped into six categories (see Table 1). However, factor analysis yielded an eight-factor motivation structure. Examination of the factor structure shows that the factor labeled 'Convenience', split into two (labeled Convenience I and II respectively), thus resulting in an eight-factor structure.

The eight-factor structure is relatively consistent across the sample of male, the sample of female and the total sample, indicating that the gratifications obtained are almost the same across gender categories. The total variance explained by the eight factors in the three samples is near 70 per cent. However, there

Table 4. Motivational Structure of Female Internet Users' Group (*N* = 105)

Factors	Items	Factor Loading	Variance Explained	Reliability
Convenience I	Economical way to know the world	0.88	12.43	0.85
	Integration with world	0.84		
	Easy to download information	0.83		
	It is user friendly	0.77		
Technology advantage	Gives edge over others	0.83	10.27	0.82
	Become expert in computer use	0.83		
	Feeling I am in control of things	0.79		
	Learning many Web applications	0.53		
Educational advantage	Cost effective to send filled application forms	0.80	9.50	0.84
	Can fill admission forms	0.80		
	Able to access and practice Internet-based test	0.74		
	Access to career and job	0.53		
Global exchange	Answers to questions from all over the world	0.87	8.81	0.66
	Share views with people of world	0.84		
	Chat with anyone	0.77		
Convenience II	Save money on phone bills	0.90	8.79	0.81
	Communicate with near and dear	0.73		
	Can send mails in a matter of minutes	0.71		
Wide exposure	Provide wider range of exposure	0.83	8.13	0.73
	Relieves stress through entertainment	0.76		
	Broaden the outlook	0.64		
Self-growth	Inspires me to excel	0.82	8.02	0.80
	Gives freedom to express opinion	0.75		
	Charges to do something new	0.65		
Relaxation	Helps me relax	0.87	7.36	0.72
	Provide many hours of leisure	0.79		
Total variance explained (per cent)			**73**	
Principal component analysis with varimax rotation				

Source: Author's research.

are variations in the structure of each factor (including both the items and the factor scores of items), the variance explained by the factors and their relative importance for each of the groups. An analysis of these differences offers useful information about the gratification obtained from Internet use for the three sets of samples. Table 5 summarizes the gratification factor structure for the three samples (total, and male and female Internet users' groups).

The U&G literature shows that users derive three sets of gratifications from mass media: content, process and social (Stafford et al. 2004). This study corroborates the existence of the three sets of gratifications. Internet content motivations in this study primarily relate to the *technology* and *educational advantages*. In traditional U&G studies of mass media, content is typically represented by information,

Table 5. Motivational Factor Structure for the Three Internet Users' Group

S. No.	Factor Label	Variance Explained	α	Factor Rank	Summary
1	2	3	4	5	6
1	**Convenience I**	Total sample = 11%	0.85	1	*Convenience* is the most important factor explaining the largest amount of variance for all three groups. The same four items load on the factor for the three groups.
		Male = 10.5%	0.82	1	Moreover, the order of the items is identical for the male and the total sample. For the female group the
		Female = 12.4%	0.85	1	second ('*easy to download information*') and the third item ('*Integration with the world*') swap positions.
2	**Technology advantage**	Total sample = 10%	0.82	2	*Technology advantage* ranks second for the total sample and the female group. The order of items, however, tells a different story. For both men and women '*becoming an*
		Male = 10.2%	0.79	3	*expert in computer use*' has the largest loading. Women, however, think that the Internet gives them an '*edge over others*' more than men do, and for men, '*learning Web*
		Female = 10.3%	0.82	2	*applications*' seems more important. '*Feeling in control*' seems least important for men while '*learning Web applications*' seems least important for women.
3	**Educational advantage**	Total sample = 10%	0.84	3	*Educational advantage* is the third important factor for the total sample and the female group. The item order is identical for the male and female group but different from
		Male = 10.3%	0.83	2	that of the total sample. 'Cost effectiveness' is the most important educational advantage for men and women
		Female = 9.5%	0.84	3	followed by '*filling out forms*'. This order is reversed for the overall sample.

#	Factor	Share	Loading	Rank	Description
4	**Convenience II**	Total sample = 9%	0.81	4	*Convenience* factor is split into two for the three groups. Although both men and women rank this factor in the fifth place, it falls in the fourth place for the total sample. The item structure is exactly the same for the three groups.
		Male = 8.8%	0.71	5	
		Female = 7.9%	0.81	5	
5	**Self-growth**	Total sample = 9%	0.80	5	Using the Internet for *self-growth* appears to be more important for men than women. However, the order of items is identical in both the groups.
		Male = 9.3%	0.78	4	
		Female = 8.0%	0.80	7	
6	**Wide exposure**	Total sample = 8%	0.73	6	*Wide exposure* ranks sixth for the three groups. In addition, the order of items is identical in the three groups.
		Male = 7.8 %	0.70	6	
		Female = 8.1%	0.73	6	
7	**Global exchange**	Total sample = 7%	0.66	7	Using the Internet for *global exchange* (sharing views and chatting) appears to be more important for the female group than the male group. The order of items is identical for the female group and the total sample. 'Chatting' shows the least loading for all the three groups.
		Male = 6.9%	0.71	7	
		Female = 8.8%	0.66	4	
8	**Relaxation**	Total sample = 7%	0.77	8	This factor is stable. It not only occupies the same position (8th) but its item structure is the same for the three groups. Internet 'helps relax' and 'provides many hours of leisure'.
		Male = 6.5%	0.75	8	
		Female = 7.4%	0.72	8	

surveillance and entertainment; our study indicates that the content gratifications are related not so much to information as to perceived benefits arising from acquiring information such as learning Web applications, practicing Internet-based tests, widening exposure and integrating with the rest of the world. Moreover, it appears that much Internet content inspires people to excel and gives them freedom to express opinions (self-growth).

In this study, Internet process motivations primarily relate to ease of use, user friendliness, cost saving and speed of communication. Students value Internet's ability to offer these *conveniences*. Process-related motivations tend to relate to the attributes of the medium or the benefits that users experience from using the medium. Internet social motivations primarily relate to chatting and interacting with people. What is unique about social gratifications from the Internet is its ability to develop acquaintances (chat with anyone) and sharing views with people anywhere and anytime. Unlike telephone, where gratifications are obtained from existing social networks, Internet tends to create new networks.

This study examined gratification obtained from Internet use in cybercafes. It would be interesting to explore whether the gratification dimensions obtained would remain the same for Internet use in non-public, non-paying spaces such as home.

Note

1. Correspondence to be directed to the first author.

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