# USAGE PATTERN OF FACEBOOK AND NEEDS GRATIFICATION OF THE USERS: A GENDER BASED STUDY 

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#### Abstract

Social media has changed consumption behaviour of the users. People who used to look forward to traditional mass media to satisfy certain needs have switched over to social networking media for their needs gratification. This paradigm shift forced researchers to undertake studies to find out consumption styles of social media in line with needs gratification and its corresponding effects. This research work investigated the patterns of Facebook usage and needs gratification of the youth of Pakistan. The key objectives of the study included finding of Facebook usage patterns and needs gratification of male and female separately. The theory of Uses and Gratification was employed as theoretical foundations for this research paper. The study was quantitative in approach and made use of survey as research instrument. In total, 673 students participated in the survey. The data collected was analyzed in terms of frequencies and percentages by making use of statistical tools like SPSS. It was concluded that student's majority had Facebook account. The study found differences between male and female students with respect to consumption patterns and needs gratification.


Keywords: Facebook, Usage Pattern, University Students, Needs Gratification, Gender

## INTRODUCTION

Social Networking Sites (SNSs) are among latest technologies in arena of mass communication. This new technology has changed the traditional mass media trend of communication of one to many to communication of many to many. The passivity at the recipient end in traditional mass media settings has been changed to activity at the user end in the new media system. In the past, people looked solely to traditional mass media to gratify certain socio-psychological needs but today, people, especially youth are opting for Social Media (SM) to satisfy their desired needs. The new media thus over ran traditional mass media in terms of popularity in short span of time. The fact that the first SNS "Sixdegree.com" was created in 1997 and today they are in thousands, testifies its popularity (Boyd \& Ellison, 2007). The most distinctive feature of SM is its popularity among the youth. The socio-political activism of youth on SM and consequent changes in the socio-political arena in a short time period brings testimony to the fact. The Arab spring is a good example to reckon with. The emergence of digital media brought a revolution in the uses and gratification approach. This new media let its users to share their self-generated material in no time. SM caters to different aspects of human social and psychological needs.

Digital media freely satisfy needs like entertainment, surveillance, information, diversion, escape, social interaction, identity, pastime and companionship (Stone, Singletary \& Richmond, 1999). There are hundreds of SNSs with every one of them has a different interface and specific features for its users (Negussie \& Ketema, 2014). SM consumers do not confine themselves only to a particular type but they use a variety of networking sites as apparatus for communicating with each other (Baym, Zhang, \& Lin, 2004). There are numerous SNSs but the most popular among the users across the globe are Facebook, Twitter, MySpace and LinkedIn (Haridakis \& Hanson, 2009). Facebook is the most popular site with more than 350 million users in the planet (Kirschner \& Karpinski 2010; Hargittai, 2008). Facebook is also found to be most popular SNS among the youth in Pakistan with more than $87 \%$ of SM users have accounts in the site (Haq \& Chand, 2012). Given the popularity of Facebook in this part of the world, a number of studies have been undertaken in Pakistan with regard to Facebook usage patterns and its corresponding effects. This research is an attempt to explore the ways in which youth of KP, Pakistan make use of Facebook and to probe how they satisfy their various needs like information, social interaction and entertainment through Facebook use.

## LITERATURE REVIEW

According to Urista, Dong and Day (2009) SM provides the easiest way of connecting and communicating family members and friends. Martinez and Wartman (2009) noted that SNSs are very useful devices of mutual interaction in line with discussing purpose, extending moral and social support for new members, the fulfilling different socio-psychological needs. Pempek, Yermolayeva and Calvert (2009) concluded that social networking with friends and peers on Facebook is one of needs of college students. The same researchers examined that the daily time spent on SM varied from user to user. But majority of participants spent about 30 minutes per day. However, for Facebook use, the average time spent a day was 47 minutes for fulfilling their needs. According to Al-Tarawneh (2014) students are found to be the heavy users of SM and the largest community of the users. Islam and Mamun (2015) noted that majority of the university students have Facebook accounts. They further mentioned that personality features, gender, level of educational, locale and age have bearing on student's perceptions about Facebook and their usage styles. Hargittai (2008) indicated that among 80\% of Facebook users, $50 \%$ used it frequently. According to study of Quan-Haase and Young (2010) SM are important for gratifying various needs of the users.

Online communication let them connect with their friends and family members conveniently. The same researchers pointed out that $82 \%$ of the students used to login Facebook several times a day for satisfying different needs. They concluded that one is not supposed to meet new people on Facebook but to maintain pre-existing social relationship. According to Nielsen (2015) Facebook has become very pervasive amongst the youth across the world. Most of the young people have been using site on daily basis. Some researchers like Junco \& Cotten (2012), Tess (2013), Rouis,

Limayem \& Salehi-Sangari (2015), Saha \& Karpinski (2016) and Kitsantas, Chirinos, Hiller \& Kitsantas (2016) have found both significant positive and negative relationships of SM usage patterns and a variety of educational effects. Ivan and Frunzaru (2014) for example, found the use of SM for academic purpose as positively correlated with academic performance of the students. According to Aghazmani (2010) male students spend more time on Facebook than female students with friendship as the top most activity among male undergraduate students. Likewise, some explored that male students were interested to have accounts in Facebook as compared to female students. They further explored that male students were spending more time on Facebook during study hours than female students.

Similarly, a research study of Lenhart, Purcell, Smith \& Zickuhr (2010) concluded that 57\% of users of SM are between ages of 18-29 years and they gratify their needs by using more than one SNS. Gender was investigated as most significant variable in terms of differences in consumption patterns of SM. Women were found to be more interested as compared to men in developing their own profile on Facebook for their needs gratification. However, men were more involved than women to have a LinkedIn profile for the same purposes. Sheldon (2008) found that over $50 \%$ of the college students use SM several times a day. He further stated that women use SM for social interaction with family members and friends, for pastime, and entertainment. Sheldon concluded that men were found more interested to search and meet new people and extend their social networking. According to Baker and Oswald (2010) Facebook effectively gratifies user's relationship needs. Likewise, West, Lewis, \& Currie (2009) found that $80 \%$ of the SM users establish friendship in the same age group.

A similar study of Lui \& LaRose (2008) explored that SM assist users in maintaining their existing relationships. Papacharissi and Rubin (2000) found that SM is mainly used by the youth for social interaction. Parker and Plank (2000) viewed that SM users mainly satisfy escape and relaxation need through its use. The research studies reviewed for this paper have addressed the matter with different angles. But most of them focused on investigating the patterns of SM use, needs gratification and corresponding effects. This research paper more or less aimed at looking the issue with the same spectacles. However, the study tries to explore the approaches of male and female users separately with regard to the same issue. The conceptual framework of the study thus integrates two key notions:
> The usage pattern of Facebook and
$>$ Needs gratification of Facebook users

## Objectives of Study

$>$ To investigate gender differences with regard to consumption pattern of Facebook
$>$ To explore gender differences in relation to needs gratification

## Hypothesis

H1: Gender differences befall with respect to usage pattern of Facebook
HiI: Gender differences exist with regard to satisfaction of needs through Facebook use

## RESEARCH DESIGN

## Method

A survey was carried out for collection of data from the students of two public sector universities, Hazara University Mansehra and University of Peshawar. Heavy usage of Facebook among the university students was one of the reasons for selecting the sample. The questionnaire was aimed at SM users. In total, 800 questionnaires were distributed among the sample in which 690 were returned. Incomplete and wrongly filled 17 questionnaires were excluded from the survey. In the remaining 673 respondents, 460 were male while 213 were female.

## Measures

A structured questionnaire was used for gathering data. Demographics aside, there were two main sections of the questionnaire. The questions in every section invited closed-ended responses. Section one of the instrument asked questions about consumption pattern of Facebook use. There were five items in this section; Facebook accounts, login frequency, average time spent, Facebook profile and motives of Facebook use. Three items were incorporated in the sub-section of Facebook profile; display of name, display of gender and display of own picture. Reliability test for these three items was satisfactory (Cronbach's Alpha $=.78$ ). The motive sub-section also included three items: the use of Facebook for the motive of information, social interaction and entertainment (Cronbach's Alpha $=.75$ ). Second part of questionnaire encompassed three items regarding gratification of information need, social interaction need and entertainment need (Cronbach's Alpha $=.61$ ). Descriptive statistics were used to find out frequencies and percentage. While, independent samples $t$-tests were run to investigate association of variable.

## RESULTS OF STUDY

Data analysis was undertaken by making use of statistical techniques. Data was analyzed in terms of frequencies and percentage. Independent sample t-tests were administered to establish relationship of gender with frequency of Facebook usage, time spent online, Facebook profiles, motives of Facebook use and gratification of different needs. The whole research data was divided into parts according to its objectives.

## Consumption Patterns of Facebook

Before having exploration on the usage patterns of Facebook, it was deemed necessary to ask respondents about the use of internet. Table 1 shows results of the asking. Results reveal that more than $99 \%$ respondents were using internet in which $69 \%$ were male while $31 \%$ were female.

Table 1: Statistics about internet use

| Do you use internet? | Frequency | Percent | Valid percent |
| :--- | :---: | :---: | :---: |
| Male | 456 | 67.7 | 69.0 |
| Female | 205 | 30.5 | 31.0 |
| Total | 661 | 98.2 | 100.0 |
| Missing | 12 | 1.78 |  |
| Total | 673 | 100 |  |

Table 2 shows the number of male and female students who have Facebook accounts - $67 \%$ male and $30 \%$ female.

Table 2: Statistics about Facebook Accounts

| Do you have Account in Facebook? | Frequency | Percent | Valid percent |
| :--- | :---: | :---: | :---: |
| Male | 450 | 66.9 | 69.2 |
| Female | 200 | 30.4 | 30.8 |
| Total | 650 | 96.9 | 100.0 |
| Missing | 23 | 2.22 |  |
| Total | 673 | 100 |  |

Likewise, data in table 3 show that majority of the students ( $58 \%$ ) login to Facebook once a day followed by ( $18 \%$ ) who login to it more than two times a day, ( $12 \%$ ) once a week and (11\%) twice a week.

Table 3: Frequency of login to Facebook

|  | Frequency | Percent | Valid percent |
| :--- | :---: | :---: | :---: |
| Once a week | 80 | 11.9 | 12.4 |
| twice a week | 75 | 11.1 | 11.4 |
| Once a day | 388 | 57.7 | 58.4 |
| More than 2 times a day | 120 | 17.8 | 18.2 |
| Total | 663 | 98.5 | 100.0 |

Similarly, table 4 indicates data with regard to time spent using Facebook. Results reveal that ( $53 \%$ ) respondents spend $2-3$ hours daily, ( $33 \%$ ) spend more than three hours a day, and (15\%) spend 1-2 hours a day using Facebook.

Table 4: Daily time spent using Facebook

|  | Frequency | Percent | Valid percent |
| :--- | :---: | :---: | :---: |
| less than one hour | 56 | 8.72 | 8.90 |
| $1-2$ hour | 95 | 14.11 | 14.8 |
| $2-3$ hours | 352 | 52.3 | 53.9 |
| More than 3 hours | 150 | 32.5 | 33.1 |
| Total | 653 | 97.0 | 100.0 |

The succeeding tables reflect data obtained from an independent sample $t$-test. This test was administered to ascertain whether any differences exist between male and female respondents with regard to frequency of SM usage and the time spent using Facebook. Table 5 shows the number of male and female respondents, whereas table 5.1 reflects relationship of gender with login frequency and the time spent using Facebook. Results indicate insignificant relationship (insignificant difference between means of male and female) between gender and login frequency ( $\mathrm{P}>0.05$ and $\mathrm{t}<1.96$ ). It means that no significant differences exist between male and female respondents with regard to login frequency of SM use. However, the results of the t-test with respect to gender and time spent on SM usage was found significant ( $\mathrm{P}<0.05$ and $\mathrm{t}>1.96$ ). It means there was significant difference between means of male (2.39) and female (2.12) regarding the time spent on Facebook usage. In other words, male respondents were spending more time using Facebook than female.

Table 5: T-test: Gender and Login frequency - time spent using Facebook

| Group Statistics | Gender | N | M | SD |
| :--- | :--- | :---: | :---: | :---: |
| Frequently of login to SM | Male | 431 | 3.06 | 1.28 |
|  | Female | 209 | 2.85 | 1.36 |
|  | Male | 431 | 2.39 | 1.29 |
|  | Female | 209 | 2.12 | 1.21 |

Note: Number= N, Mean=M, Standard Deviation=SD

Table 5.1: Gender and Login frequency - time spent using Facebook

| Independent Sample Test |  | EV |  | EM |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | T | Df | Sig |
| Frequently of login to SM | EVA | 2.78 | 0.09 | 1.90 | 638.0 | 0.06 |
|  | EVNA |  |  | 1.86 | 391.2 | 0.07 |
| Time spent using SM | EVA | 4.48 | 0.03 | 2.49 | 638.0 | 0.01 |
|  | EVNA |  |  | 2.44 | 391.2 | 0.02 |

Note: Levene's Test for Equality of Variances= EV, t-test for Equality of Means=EM, Equal variances assumed=EVA, Equal variances not assumed=EVNA

## Profile information (Three items with Cronbach's Alpha = .78)

In the same manner, table 6 shows the number of male and female students who responded to the item of displaying name, gender and own picture in Facebook profiles. While data in table 6.1 represent relationship of gender with display of name, gender and picture in their online profiles. The findings reveal significant relationship of gender with display of name, gender and own picture in the online profiles ( $\mathrm{P}<0.05$ and $\mathrm{t}>1.96$ ). Therefore, the said hypothesis is accepted and substantiated.

Table 6: Gender and display of information in Facebook Profile

| Group statistics |  | N | M | SD |
| :--- | :--- | :---: | :---: | :---: |
| Display of Name in profile | Male | 431 | 1.19 | .297 |
|  | Female | 209 | 1.32 | .469 |
| Display of Gender in profile | Male | 431 | 1.23 | .425 |
|  | Female | 209 | 1.32 | .469 |
| Display of own Picture in profile | Male | 431 | 1.36 | .481 |
|  | Female | 209 | 1.34 | .365 |

Table 6.1: Gender and display of information in Facebook Profile

| Independent Samples Test |  | EV |  | EM |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | F | Sig. | T | Df | Sig. |  |
| Display of Name in profile | EVA | 205.2 | .000 | 7.4 | 637 | .000 |
|  | EVNA |  |  | 6.4 | 291.5 | .000 |
| Display of Gender in profile | EVA | 19.9 | .000 | 2.39 | 638 | .017 |
|  | EVNA |  |  | 2.30 | 377.6 | .021 |
| Display of own Picture in <br> profile | EVA | 171.5 | .000 | 12.76 | 638 | .000 |
|  | EVNA |  |  | 13.9 | 525.6 | .000 |

Reasons/Motives of SM use (Three items with Cronbach's Alpha = .75)
Likewise, table 7 indicates the number of male and female students who responded to these items whereas data in table 7.1 show the relationship of gender with the motives of information, social interaction and entertainment. The study found significant relationship of gender with motive of social interaction, and entertainment ( $\mathrm{P}<0.05$ and $\mathrm{t}>1.965$ ). The same results, however, found insignificant relationship of gender with motives of information ( $\mathrm{P}>0.05$ and $\mathrm{t}<1.965$ ). Therefore, the said hypothesis is accepted and substantiated.

Table 7: Gender and motives of SM use

| Group Statistics | Gender | N | M | SD |
| :--- | :---: | :---: | :---: | :---: |
| Information | Male | 431 | 3.15 | 1.49 |
|  | Female | 208 | 2.99 | 1.54 |
| Social interaction | Male | 423 | 3.35 | 1.15 |
|  | Female | 205 | 3.09 | 1.22 |
| Entertainment | Male | 425 | 3.73 | 1.27 |
|  | Female | 206 | 3.49 | 1.33 |

Table 7.1: Gender and motives of SM use

| Independent Sample Test |  | EV |  | EM |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | Df | Sig |
| Information | EVA | 0.15 | 0.69 | 1.25 | 637 | 0.21 |
|  | EVNA |  |  | 1.23 | 396.9 | 0.21 |
| Social interaction | EVA | 0.96 | 0.32 | 2.53 | 626 | 0.01 |
|  | EVNA |  |  | 2.48 | 383.2 | 0.01 |
| Entertainment | EVA | 2.71 | 0.10 | 2.21 | 629 | 0.02 |
|  | EVNA |  |  | 2.18 | 390.5 | 0.02 |

## Needs Gratification (Three items with Cronbach's Alpha = .61)

The last two tables represent data regarding genders and needs gratification of SM users. Results in table 8 show the number with means of male and female respondents who attempted this item of SM use and gratification of information, social interaction and entertainment needs. Whereas data in tables 8.1 reflect relationship of gender with needs gratification of SM users. The study found insignificant relationship of male and female with the needs of information, social interaction and entertainment ( $\mathrm{P}>0.05$ and $\mathrm{t}<1.965$ ).

Table 8: Gender \& Needs Gratification

| Group Statistics | Gender |  | N | M | SD |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Information need | Male | 430 | 4.74 | 0.74 |  |
|  |  | Female | 207 | 4.69 | 0.87 |
| Social Interaction need |  | Male | 428 | 4.30 | 1.31 |
|  |  | Female | 208 | 4.50 | 3.75 |
| Entertainment need |  | Male | 429 | 4.19 | 1.24 |
|  |  | Female | 208 | 4.18 | 1.17 |

Table 8.1: Gender \& Needs Gratification

| Independents Sample Test |  | EV |  | EM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | T | Df | Sig. |
| Information need | EVA | 2.79 | 0.09 | 0.87 | 635.0 | 0.38 |
|  | EVNA |  |  | 0.82 | 354.7 | 0.41 |
| Social Interaction need | EVA | 0.73 | 0.39 | -1.02 | 634.0 | 0.30 |
|  | EVNA |  |  | -0.77 | 232.1 | 0.43 |
| Entertainment need | EVA | 1.46 | 0.22 | 0.03 | 635.0 | 0.97 |
|  | EVNA |  |  | 0.03 | 434.7 | 0.97 |

## DISCUSSION

This research was undertaken to investigate the usage pattern of Facebook and gratification obtained by the university students of Khyber Pakhtunkhwa, Pakistan. The key objectives of the paper were to find out the approach of both genders with regard to the issue. The number of male respondents was far more than those of female respondents. This difference in number of male and female respondents was consistent with their population ratio in the respective universities and socio-cultural conditions of Pakistani society. It was also matching that of Aghazmani (2010) who found that male students spend more time on Facebook than female students with friendship as the top most activity among male undergraduate students. Among $98 \%$ internet users $93 \%$ have accounts in Facebook which reflects popularity of Facebook in this part of the world. This result is a bit consistent with Hargittai (2008) who found Facebook users as $80 \%$. Majority of those having Facebook accounts ( $67 \%$ ) were male while only ( $30 \%$ ) were female students. Results indicate that female folk in this part of the world are not as much interested in having online accounts than their male counter parts.

Majority of the respondents who used to display their names, gender, own pictures in Facebook profiles were found to be males. Female respondents on the other hand were reluctant to display the same in their respective Facebook profiles. These results indicated that female students are relatively more conscious of their privacy than male. This may be for the reason to avoid any sort of harassment or socio-psychological concerns. The study found that majority of the students' login to Facebook once a day. This finding is incompatible with the results of Quan-Haase \& Young (2010) which found that $82 \%$ of the students used to login Facebook several times a day and that of Sheldon (2008) who explored that over $50 \%$ of the college students use SM (Facebook) several times a day. Likewise, majority of the respondents spent 2-3 hours using Facebook. This result also testifies the fact that university students need to spend time in using internet facilities as they are supposed to do different academic assignments and carrying out research projects. However, this result is inconsistent with that of Pempek, Yermolayeva, \& Calvert, (2009) who found that majority of the participants spent 47 minutes using Facebook.

Likewise, the study found no significant differences in the mean scores of the two genders with respect to login frequency of Facebook. Whereas the study found significance difference between the mean scores of males and females regarding time spent using Facebook. The study investigated that majority of the respondents made use of Facebook for the motive of information. These findings, however, are not matching those of Ito, et al, (2008) who found that majority of the young folk make use of Facebook to interact with offline friends - and that of Papacharissi \& Rubin (2000) who found that SM (Facebook) is mainly used by the youth for social interaction. Results indicated significant relationships of gender with the motives of social interaction and entertainment. For both the motives, the means scores of males were more than those of females. However, gender had insignificant relationship with the motive of information. This result also testifies the fact that university students make use of all internet facilities for research purposes irrespective of any gender divide.

In line with Facebook usage and satisfaction of needs, the study found that highest percentage (94\%) of the students was using Facebook to satisfy their information need. In which $64 \%$ were males and $31 \%$ were females. This result is inconsistent with that of Sheldon (2008), who investigated that females make use of Facebook to satisfy their needs of social interaction, pastime and entertainment. However, the context of the Sheldon's research was different from the one in hand. Results of this particular study are very much compatible to our social values of restricting females not to have social interaction as widely as those of males. In traditional societies like Pakistan, female tries to interact with their existing friends preferably in the same sex and discourage new friendship, especially with those in the opposite gender.

## CONCLUSION

This exploratory study tends to be of some value in adding something to the existing field of knowledge. This research was undertaken in Pakistani context with focus on addressing the issue of Facebook usage patterns and satisfaction of needs with respect to gender divide. Findings of the study indicated differences between male and female with regard to Facebook usage patterns and needs gratification. Most of the findings of this study were found incompatible with those of previous research studies. The main reason behind this disparity seems to be the context. Most of the mentioned studies originated in western socio-cultural conditions which cannot be generalized and held true for that of the traditional societies like Pakistan. However, some of the studies like Sheldon (2008), Haq \& Chand (2012), Al-Tarawneh (2014), Islam and Mamun (2015) have produced much similar results with respect to the usage pattern of Facebook. So far as needs gratification is concerned, results of the current study seem consistent with those of Baker and Oswald (2010), West, Lewis, \& Currie (2009), Lui \& LaRose (2008).

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