# Relationship between Facebook Intensity and Perceived Stress among college students

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*Abstract:* Social media has changed human life style in present era. It provides users an opportunity to communicate and share information across multiple platforms around the world. Facebook is one of the most popular site used by teenagers. The present study aims to find out the relationship between Facebook intensity and perceived stress among Engineering college students. 60 participants were selected for this study. Facebook intensity scale developed by Ellison, Steinfield and Lampe (2007) and perceived stress scale constructed by Sheldon Cohen were administered on the students. The obtained data was analyzed by calculating M, SD and 't' value to test the significance of the hypotheses of the study. Also Pearson correlation was used to find the relationship. Result revealed that there is positive correlation between Facebook intensity and perceived stress among students. Male students showed higher level than female students with respect to Facebook intensity and perceived stress.

*Keywords:* Social media, Facebook use, stress, students.

**I. INTRODUCTION:** Social networking sites (SNS) have become popular with the help of digital technologies (tablet, smartphone, notebook, etc.). Social media is a virtual platform. There are many popular social networking sites around the world such as Facebook, Twitter, LinkedIn, My Space, Friendster, Google+, You tube, Instagram, WeChat, Snapchat etc. The uniqueness of social networking sites is providing users with the features to present themselves using their profile picture and personality information. It also allows users to express their feelings with friends on the network. Users can also share photos, videos or interesting links with friends to show their kindness. Social networking sites are only useful when people are really using them as application to stay connected with friends and family to share experiences, memories, happiness and sadness. However, it is also dangerous when people are addicted to it.

Facebook is one of the most popular site. It is being equally loved by adults, young and teens. It has become an important part of students' life. The statistical data showed that there are more than 500 million people with Facebook membership and the majority of them are members of other social networking sites besides approximately 250 million of these memberships visit Facebook site in each day at least one time (Boyd & Ellison, 2007). In India the highest number of Facebook users are between age group of 18 to 24 years with more male users (73.8 millions) as compared to female users (23.4 billions) (Statistic, 2108). The most social networking site users are students from high schools and colleges (Kalpidou, Costin & Morris, 2011). Kim & Davis (2008) found that college-age users (between 18 and 25 years old) constitute the biggest age group (accounting for approximately 30%) of the total user population. Labrague (2014) found that the intensity of Facebook use is not directly related to negative emotional states, however, time spent on Facebook did increase depression, anxiety and stress scores in college students. De Vries et al (2012) found Facebook use was related to a greater degree of negative social comparison, which is negatively related to self-perception and self-esteem. The relationship between Facebook use and negative social comparison was stronger in unhappy individuals when compared to happier individuals, suggesting those with low levels of self-perception and self-esteem are prone to more intense Facebook use.

Stress is general term applied to various psychological and physical pressure experienced by people throughout their lives. It is good when the situation offers an opportunity to a person to gain something. It acts as a motivator for peak performance. It is negative when a person faces social, physical, organizational and emotional problems.

Facebook can also be a generator of stress. Studies have found that students are using Facebook for up to 8 hours a day and checking it up to 20 times. Schwartz (2000) stated that  anxiety, worry and stress are all afflictions of life in the modern world. Anderson et al (2012) found that people who are anxious and socially insecure use Facebook more, possibly because those who are anxious find it easier to communicate via social media than face to face. London (2012) study found over a third (38 %) of young adults admit to worrying about being tagged in unflattering photos. Worry can be a form of stress or anxiety. Charles (2011) observed that stress from Facebook updates triggered an asthma attack in a 17 years old girl. According to Chen, Wong, Ran and Gilson (2009) male students reported higher levels of stress, worse psychological well-being, and having fewer inclinations towards using positive coping strategies. Sitz and Poche (2006) found out that women displayed more optimism than men and have lower levels of perceived stress compared to men. From the reviewed studies therefore, there is inconsistent findings regarding the levels of stress among males and females, prompting further investigation of this phenomenon.

Various studies show that gender differences associated with use of Facebook. Anderson et al  (2012) explored that females tend to be more at risk of developing Facebook addiction. Revoir (2008) examined that women are at greater risk than men to developing the potential addiction of social networking sites. Shen et al (2015) studied gender differences in intensity of Facebook usage among Arab and non-Arab students. An outcome of the study shows that male users have more Facebook intensity as compared to female users. Women spend higher percentage of their daily Internet time on Facebook which is not visible when they are asked about amount of minutes spent on the social media (Thompson & Lougheed 2012). Further, women

report that they are more likely than men to spend more time than intended on Facebook, lose sleep because of Facebook, create negative body image after seeing pictures posted by others, feel stressed while using Facebook, feel anxious when they cannot access Facebook and sometimes feeling addicted to it (Thompson & Lougheed 2012). In contrast, men more often use social media for dating purposes, making friends, playing games, learning about events and discuss via Internet (Raacke & Bonds-Raacke 2008; Muscanell & Guadagno 2012; Joiner et al. 2012).

These research findings revealed the importance and disadvantages of Facebook use in male and females. Keep this view in mind researcher decided to find out the relationship between Facebook use and perceived stress among engineering college students.

**1.1 Objectives:**
1. To assess level of Facebook intensity among male and female students.
2. To find out level of perceived stress among students.
3. To study gender difference between level of Facebook intensity and level of perceived stress.
4. To explore relationship between use of Facebook and perceived stress.

**1.2 Hypotheses:**
1. Male students would be higher level of Facebook intensity than female students.
2. Male students would be higher level of perceived stress than female students.
3. There would be positive correlation between Facebook intensity and perceived stress among students.

## II. RESEARCH METHOD:

**Sample:**
60 engineering college students from Jaysingpur volunteered to participate in the study were selected. Out of them 30 male and 30 female students. The age range of the participants was from 19-21 years. Only those students were selected who use Facebook.

**Measures:**

**1. Facebook Intensity Scale developed by Ellison, Steinfeld and Lampe (2007):**
Facebook intensity scale developed by Ellison et al was used to collect the data. It has eight questions designed to measure active engagement and emotional connection with Facebook. Participants answered each question from these scales on a five point Likert scale with 1=strongly disagree and 5=strongly agree. Other FB variables were also included in the questionnaire such as the number of Facebook friends and time spent online on a typical day. The questionnaire was validated for its reliability resulting in statistical value of 0.90 (Cronbach's alpha).

**2. Perceived Stress Scale constructed by Sheldon Cohen (1994):**
Perceived stress scale developed by Sheldon Cohen was used for measuring perception of stress of participants. It comprises of 10 questions which ask about feelings and thoughts during the last month. Every question has answering five responses like never, almost never, sometimes, fairly often and very often. Reliability and validity of the scale was found satisfactory.

**Procedure:**
Prior permission was taken from principal of the respective college. At first, participants were informed about importance and objectives of the study and they were requested to give the responses as per the instruction given on the scale. After giving the instruction Facebook intensity scale and perceived scale were administered on students. The group of 10-15 students directed at a time.   Finally, they were thanked for their cooperation.

## III. DISCUSSION AND RESULT:

**Table No. 1 Showing mean, SD, t value of Male and Female students with respect to intensity of Facebook use.**

| Group | N | Mean | SD | df | t value | p value | Sig. |
|-------|---|------|-----|-----|---------|---------|------|
| Male | 30 | 19.63 | 3.95 | 58 | 2.55 | .0067 | .05 level |
| Female | 30 | 16.70 | 4.92 | | | | |

*P < .05

Table No.1 presents mean and standard deviation scores obtained by male and female students on Facebook intensity scale and their corresponding t- value obtained. It indicates that the mean and standard deviation score on Facebook intensity scale of male students is 19.65 and 3.95 and 16.70 and 4.92 of female students. Difference between mean scores shows that male students have higher level of Facebook intensity than female students. Hence, hypothesis no. 1 is accepted.

**Table No.2 Showing mean, SD, t value of Male and Female students with respect to perceived stress.**

| Group | N | Mean | SD | df | t value | p value | Sig. |
|-------|---|------|-----|-----|---------|---------|------|
| Male | 30 | 24.87 | 4.10 | 58 | 2 | .0250 | .05 level |
| Female | 30 | 22.44 | 5.23 | | | | |

*P < .05

Table no.2 depicts mean and SD scores gained by participants on perceived stress and their corresponding t value obtained. It shows mean score of male students is 24.87 and SD score is 4.10 while female students mean score is 22.44 and SD score is 5.23

with respect to perceived stress. The obtained t value is 2 which is significant at .05 level. Therefore, hypothesis no. 2 is accepted.

**Table No.3- Correlation score between Facebook intensity and perceived stress :**

| | | Facebook Intensity | Perceived   Stress |
|---|---|---|---|
| Facebook Intensity | Pearson Correlation | 1 | .464** |
| | Sig.(2-tailed) | | 000 |
| | N | 30 | 30 |
| Perceived Stress | Pearson Correlation | .464** | 1 |
| | Sig.(2-tailed) | 000 | |
| | N | 30 | 30 |

Table no.3 shows the correlation score between Facebook intensity and perceived stress is 0.46 and it is significant. This indicates that correlation between Facebook intensity and perceived stress is positive. It shows that higher level of Facebook intensity increases the level of stress. .Here, hypothesis no.3 is accepted.

**Discussion:**

The purpose of the study was to find out the relationship between Facebook intensity and perceived stress among engineering college students. A Pearson correlation coefficient was applied for data analysis. Table no.3 illustrates the results of the study. A significant positive relationship is found in between Facebook intensity and perceived stress. Result shows that Facebook intensity and high level of perceived stress are related. This finding supported the former studies of Schwartz (2000), Anderson (2012) and Charles (2011).

Another aim of the study was to find out gender difference between level of Facebook intensity and level of perceived stress. Descriptive statistics was used for investigation. Table no.1 explains the results of the study. Difference between mean scores shows that male students have higher level of Facebook intensity than female students. This finding supported the previous conclusion of Shan et al (2015). However, former results of Anderson (2012), Revoir (2008) does not support this research findings. One probable clarification is that from childhood girls developed a rational style of interaction whereas boys develop a competitive style of interaction (Mohindra and Azhar,2012). This shows that they are socialized differently and this might also reflect in their preferences for ways and styles of communication. Girls are expressed their feelings openly while boys don't share their views and emotions. This may result in women desiring face-to-face communication whereas men preferring online communication.

The study also aims to find out the level of perceived stress among male and female students. Table no.2 describes outcomes of the study. It clearly indicates that male students have higher level of perceived stress than female students. This finding is consisted with previous studies which states males reported higher level of stress than females (Chen et al 2009, Sitz & Poche 2006, Labrague 2014). Females are more emotional as compared to males; thus share feelings more freely and readily with friends and family members, whereas males are expected to live up to certain social expectations that have been set and that sharing and feeling is a sign of weakness. Males are more reserved than females in expression of feelings. Female also acquire social support from others and expressed their emotions, as a result they have lower level of stress.

**Limitations:**

The limitation of the present study is that sample is small and drawn only from one college and hence, the finding cannot be generalized and further research should be carried out with large sample.

**IV. CONCLUSION:**

Male students have higher level of Facebook intensity and perceived stress than female students. A positive relationship is found in between Facebook Usage and perceived stress.

**V. REFERENCES:**

Anderson, B., Fagan P., Woodnutt T., Chamorro-Premuzic,T.(2012) : Facebook Psychology: popular questions answered by research. *Psychology of Popular Media Culture*, 1(1), 23-37,doi :10.1037/a0026452.

Chen, H. Wong, Y. Ran, M., Gilson, C. (2009). Stress among Shanghai University Students. *Journal of Social Work*. 9(3) 323-344.

Charles K. (2011) : University of Edinburgh Research.

De Vries D, Kühne R (2015) Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook. *Personality and Individual Differences* 86: 217-221.

Ellison NB, Steinfield C, Lampe C. ( 2007) The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*; 2(4):1143-1168.

Joiner R, Gavin J, Brosnan M, Cromby J, Gregory H, Guiller, J, Moon, A. (2012) Gender, internet experience, internet identification, and internet anxiety: a ten-year follow-up. *Cyber psychology, Behaviour, and Social Networking* 15(7): 370–372.

Kalpidou, M., Costin, D. and Morris, J.( 2011) The relationship between Facebook and the well- being of undergraduate college students. *Cyber psychology, Behaviour and Social Networking*, 183-188.

Kim, H. and Davis, K. Correlates of problematic internet use: Self-esteem, sensation seeking, subjective values and unrealistic optimism. Paper presented at the annual meeting of the *International Communication Association*, TBA, Montreal, Quebec, Canada Online. Retrieved from http://www.allacademic.com/ meta/p231900_index.html, 2008

Labrague L J (2014) Facebook use and adolescents' emotional states of depression, anxiety, and stress. *Health Science Journal* 8: 80-89.

Lampe C, Ellison N, Steinfield C. A Facebook in the crowd: Social searching vs. social browsing. Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work (pp. 167–170). New York: ACM Press.

Mohindra, V. & Azhar, S. (2012). Gender Communication: A comparative analysis of communicational approaches of men and womwn at workplaces. *Journal of Humanities and Social Science,* 2(1), 18-27.

Muscanell NL, Guadagno RE (2012) Make new friends or keep the old: Gender and personality differences in social networking use. Computers in Human Behaviour 28(1): 107–112.

Raacke J, Bonds-Raacke J (2008) MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyber Psychology & Behaviuor* 11(2): 169–174.

Revoir P. (2008) Facebook to blame for friendship addiction. Associated newspapers Ltd. London http://www.dailymail.co.uk/scientech/article-1079633.

Schwartz M. (2010). The usage of Facebook as it relates to narcissism, self-esteem and loneliness (Unpublished doctoral dissertation). Pace University, NewYork, NY.[Internet] Retrieved January 17, 2019, from http://www.proquest.com/en-US/products/dissertations/

Shen,K., Vodanivich,S. & Khalifa, M. (2015). The role of intensity of Facebook usage in social capital development: An example with Arab students'. In Lambrrinoudakis, K., Morabito, V. & Themistocleous (eds), EMCIS 2015: *European Mediterranean & Middle Eastern Conference on Information Systems,* 1-14.

Sitz, E.H., Poche, N., (2006). Gender Differences in Relationship between Optimism and Perceived Stress. National Undergraduate Research Clearing house,5. Available online at http:www.webclearinghousenet/volume/.Retrived February 4,2019.

Statistica (2018). Retrived from https://www.statista.com › Internet › Social Media & User-Generated Content on 26/1/2019

Statistica (2018). Retrived from https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/ on 26/1/2019.

Thompson SH, Lougheed E (2012) Frazzled by Facebook? An exploratory study of gender differences in social network communication among undergraduate men and women. *College Student Journal* 46(1): 88–98.