



SOCIAL NETWORKING SITES USAGE PATTERNS AND ITS RELATIONSHIP WITH SELF-ESTEEM AMONG INDIAN COLLEGE STUDENTS

¹Ms. Surbhi Singhal, ²Dr. Nidhi Prakash

¹Research Scholar, ²Assistant Professor

Department of Psychology

University of Delhi, New Delhi, India

Abstract: The present study was conducted to assess the Social Networking Sites (SNSs) usage patterns among Indian college students, examine the differences in SNSs usage patterns based on gender, employment status and education levels and investigate the relationship between SNSs usage and self-esteem. Data were collected from 122 college students of age 18-28 years using purposive sampling method. SNSs usage and self-esteem were measured using Media and Technology Usage and Attitudes Scale and Rosenberg Self-esteem Scale respectively. Results showed low SNSs usage and high engagement on social media friendships among college students. The students preferred to use multiple SNSs primarily for maintaining existing relationships, academic/professional purposes, entertainment and leisure time. Significant differences on SNSs usage patterns based on gender, employment status and education levels were observed. Self-esteem was not significantly related with SNSs usage.

Index Terms: Social Networking Sites (SNSs), SNSs usage patterns, Media, Technology, self-esteem, Indian, college students, gender, education, employment.

I. INTRODUCTION

According to the Digital 2019 Global Digital Overview, 4.38 billion people are using the Internet and 3.48 billion utilize social media in the entire world. In India, according to India's Census 2011, one-fifth of the population comprises youth and the possibility of real-time interaction by connecting with others instantaneously through Internet at any place makes it an inescapable medium of social interaction, especially by college students (Kuss & Griffiths 2011).

Social Networking Sites (SNSs) are the most prominently used Internet-based applications that individuals use to create their account and update their profiles by sharing information and view others' information within the online community. People are adopting SNSs as a paramount medium of socialization and self-identity formation (Urista, Dong & Day 2009) causing an exponential increase in the number of active SNSs users.

Primarily, SNSs were used for making friends online, fostering interpersonal relationships and building business networks (V.K.J Utpal 2017). Lately, due to its enriching quality, greater reach and huge accessibility, youngsters began utilizing these websites for academic purposes, like sharing assignments and online discussions, extending their reach to mass gatherings for political propagandas, and voicing for social causes, and entertainment like streaming online, playing games and listening songs (Orchard, Fullwood, Galbraith, & Morris 2014; Shin & Shin 2011). However, excessive SNSs usage is also found to adversely affect their academic performance (Sharma & Shukla 2016) and interpersonal relationships (Kuss and Griffiths 2011).

Despite impact of SNSs usage, predominantly Facebook has been widely studied among adolescents; there is limited empirical evidence of young adults' SNSs usage patterns (Santarossa & Woodruff 2017). Also, SNSs usage levels have been assessed majorly in terms of the number of hours spent on these sites. This calls for an examination of recent SNSs usage such as Instagram, Whatsapp, Twitter and other patterns, to gain a comprehensive understanding of the students' SNSs engagement especially in a developing nation like India where different factors associated with SNSs usage like motives to use these social media platforms, most frequently used websites, general social media usage patterns, online friendships and more factors need to be considered besides the number of hours spent on these sites. Self-esteem is one important factor that has been studied extensively in this regard and is found to be negatively associated with SNSs usage (Jan, Soomro & Ahmed 2017). However, lesser empirical evidence is available in light of the association of SNSs use and self-esteem among college students in Indian context. Therefore, the present paper discusses the impact of SNSs usage patterns on young minds, investigates the differences in SNSs usage based on gender, employment status and different education levels of students, and association between self-esteem and SNSs usage with self-esteem.

1.1. Social Networking Sites (SNSs)

SNSs are web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system (2) articulate a list of other users with whom they share a connection (3) view and traverse their list of connections and those made by others within the system (Boyd and Ellison 2007). It is still a matter of debate whether SNSs are advantageous or detrimental to the mental health of youngsters. These sites can be profitable as it provides an opportunity for the youth to display their creative potential and get reinforcement for their productive activities and innovations, enhances accessibility to information sources, augment interactions with others thereby strengthening their interpersonal skills, develops their competence levels to perform better than others and reduces barriers in communicating with people from different ethnic backgrounds and varying socio-economic strata (Madaiah, Seshaiyengar, Suresh, Munipapanna & Sonnappa 2016). However, SNSs can be disadvantageous also depending upon how it is used by the youngsters. For instance, these sites can impede their academic performance if used recklessly (Kuss and Griffiths 2011); lower their learning capabilities due to divided attention and decreased concentration levels (Napolean 2016) and reduce face-to-face interactions with others as a result of huge accessibility of every minute update about their lives (Cummings, Butler and Kraut 2002) adds on to the negative impact of SNSs on young population.

1.2. SNSs Usage patterns and its impact on Youth

In India, Facebook is reported as the most accepted SNS among college students with Twitter as the second most preferred site, further revealing that SNSs are predominantly used for communication purposes (Lavanya & Karthikeyan 2016). Akakandelwa & Walubita (2018) investigated the use of social media and its perceived impact on social life of students in Zambia and reported that WhatsApp (83.3%) is the most famous SNS followed by Facebook (78.0%) and Twitter (12.8%).

Another study conducted on Indian medical college students reported that 67% participants use SNSs on regular basis, 78% participants utilize SNSs primarily for chatting and 40% students' academic grades were adversely affected. Also, greater than 30% of users expressed difficulty in passing their time without SNSs accessibility (Madhusudan, Chaluvraj, Suresh, Santhosh and Suresha 2016).

Cummings et al. (2002) stated that increased use of Internet and online networking has displaced the other means of communication leading to diminished quality of interpersonal relationships; especially friendships. Similar findings were reported by a qualitative analysis (Reema & Gopal 2014) showing individuals also prefer other activities on SNSs like watching videos, gaming and playing music. Also, mostly participants expressed SNSs use during night time, more interactions with opposite sex, and difficulties in carrying their routine activities. On the other hand, Wellman, Haase, Witte & Hampton (2001) reported that SNS usage for online interactions has supplemented the real-life interactions causing people to spend more time with others.

Eid & Al-Jabri (2016) reported that SNS tools are used for exchange of knowledge and association among students. Kindi and Alhashmi (2012) identified that the two most significant purposes behind regular utilization of SNSs among undergraduate students in Oman were discovering informational sources and sharing news with others. Students experiencing lower life satisfaction utilise SNSs to maintain existing relationships, expand their social networks and enhance their personal well-being (Ellison, Steinfield & Lampe 2007).

1.3. Gender Differences based on SNS Usage among College Students

The previous research studies have reported different trends of SNSs usage among males and females. Vijender and Bulbul (2015) identified that males and females differed insignificantly in SNSs usage depending on social connectivity, entertainment, recognition and information dimensions. Tham & Ahmed (2011) reported that female college students spend more time on SNSs than male students. However, no significant differences were found between males and females in regards to number of friends on Facebook (Biernatowska, Balcerowska & Bereznowski 2017).

Mazman & Usluel (2011) conducted a study to assess gender differences in social networks and found that females utilized facebook to remain in contact with existing people, accomplishing educational motives while males use SNS for establishing new social ties with others. Tüfekçi's (2008) also reported that females use SNSs for maintain bonds with school friends and other friends living nearby homes, on the other hand, males use these sites for finding new people and interact with those who share common interests.

1.4. Self-esteem

Self-esteem refers to the emotional evaluation that individuals make about themselves, which is generally in the form of approval or disapproval (Rosenberg 1989). Self-esteem is a relatively durable trait (Trzesniewski, Donnellan, & Robins 2003), indicating the extent to which individuals believe them to be capable, significant, successful, and worthy (Marsh 1996). Individuals possessing higher self-esteem report greater happiness feel a sense of adequacy and see their lives more optimistically. On the other hand, individuals having lower self-esteem perceive themselves to be inadequate, report negative self-evaluations, and have pessimistic view regarding their day-to-day lives.

1.5. Relationship between SNSs Use and Self-esteem

Self-esteem is a good predictor of Internet addiction and the hours spent on Internet weekly; however, the direction of the association is still not clearly understood as lower self-esteem may occur as a result of more Internet addiction rather than being its cause (Armstrong, Phillips & Saling 2000). Another study reported the similar conclusions further revealing that moral and social self-esteem were more relevant predictors for male students. On the other hand, self-esteem as a function of character predicts explosively problematic Internet use for female students (Cudo, Dobosz, Cudo & Basaj 2016).

Tartaglia (2016) reported three unique modalities related to Facebook use. (1) Social interaction i.e. communicating with others and expressing oneself, associated with enhanced self-esteem. (2) Simulating one's self-portrayal online is associated with lower self-esteem and (3) Seeking new relations was not related to self-esteem. Valkenburg, Peter and Schouten (2006) researched the influence of online networking sites (e.g., Friendster, MySpace) on Self-esteem and Well-being among adolescents revealing that positive responses on the profiles enhanced their self-esteem whereas adverse criticism diminished their self-esteem and well-being.

1.6. SNSs Usage and individuals with lower Self-esteem

Recent researches have reported dissimilar findings regarding association of Facebook usage with self-esteem. Some studies opined that lower self-esteem is a consequence of increased Facebook use (Andreassen, Pallesen, & Griffiths 2017; Forest & Wood 2012)

whereas other researches showed that self-esteem got enhanced as a result of receiving more “likes” on posted content (Burrow & Rainone 2017), and chatting on Internet with an anonymous person (Lindsay & Larry 2002).

Katie, Griffiths and Banyard (2005) conducted a study on British students and findings revealed that greater use of Internet leads to lower self-esteem and such students displayed more social dis-inhibition. Going through others’ “so-called happening” stories and life updates compel SNSs users to engage themselves in upward social comparison thus reducing their self-esteem levels (Vogel, Rose, Roberts, and Eckles 2014; Rosenberg & Egbert 2011).

Mehdzadeh (2010) reported that individuals possessing lower self-esteem stay online and post self-favourable content on their profiles. Furthermore, individuals having lower self-esteem tend to look for more social opportunities on Facebook which further creates scope for enhancing their self-esteem and social capital (Ellison et al. 2007).

1.7. SNSs Usage and individuals with higher Self-esteem

Individuals having higher self-esteem are less likely to indulge in negative experiences, for instance, cyber-bullying victimisation (Dredge, Gleeson, & de la Piedad Garcia 2014). In accordance with the Hyperpersonal Model, an experimental study demonstrated that updating and viewing one’s profile enhanced the participants’ self-esteem (Gonzales & Hancock 2011).

Faraon & Kaipainen (2014) stated that higher self-esteem of users encourages them to use SNSs propitiously leading to healthy interactions with others and such individuals will get similar advantages from SNSs use as they do from associating in real-life setting.

II. AIMS AND OBJECTIVES OF THE STUDY

The aim of the present research was to study SNSs usage patterns among college students. The specific objectives of the study were:

1. To study the levels of SNSs usage between two genders, different educational levels and employment status amongst the college students
2. To assess the relationship between SNSs usage and self-esteem among college students

III. HYPOTHESES

In consistence with the theoretical framework, following hypotheses were formulated:

Hypothesis 1: There will be a significant negative correlation between Self-esteem and Overall SNS Use

Hypothesis 2: There will be a significant negative correlation between Self-esteem and General Social Media Usage

Hypothesis 3: There will be a significant negative correlation between Self-esteem and Social Media Friendships

Hypothesis 4: There will be a significant negative correlation between Self-esteem and Online Friendships

IV. METHOD

The present research was a non-experimental study based on quantitative framework. Descriptive and exploratory research design was used to analyze the SNSs usage patterns and study the relationship between SNSs usage and self-esteem.

4.1. Participants

Purposive sampling technique was used for sample collection from Delhi-NCR region in India. 122 College students (54 males and 68 females) belonging to the age group of 18 to 28 years who were undergraduates, graduates and postgraduates constituted the sample because they are the significant SNSs users and the foremost adopters of social media applications and other technological resources (Manjunatha 2013). The sample comprised both males and females to assess the gender differences in SNSs usage. Also, individuals having an account on at least one SNS were chosen to assess the SNSs usage patterns (Geeta 2017).

4.2. Instruments

A self-developed questionnaire was used to gather demographic details like age, gender, educational qualification, residence and employment status. For SNSs usage levels, Media and Technology Usage and Attitudes Scale (MTUAS) developed by Rosen, Whaling, Carrier, Rokkum and Cheever (2013) were used. However, only three subscales i.e. General Social Media Usage, Online Friendships and Social Media Friendships, used as only these sub-scales were relevant to the specific objectives of the present study. For assessing global self-esteem levels, Rosenberg Self-esteem Scale (RSES) developed by Rosenberg (1989) was used.

4.3. Procedure

Google forms were used to prepare questionnaires for the study and sent through E-mail and personal messages over the phone. Participants were informed about the purpose of the study, assured that their responses will remain confidential and the information provided by them will be used strictly for the academic purposes. The SPSS ver.20 was used for statistical analysis and hypotheses testing. Product Moment Correlation method was determined to assess the relationship between SNSs use and self-esteem. Independent Sample t-test and one-way ANOVA analysis were used to compute the mean differences in SNSs usage among employed and unemployed college students, and undergraduates, graduates and post-graduate students respectively.

V. RESULTS

The demographic details of the sample are given as below (Refer to Table-1).

Table 1 Demographic details showing Gender, Employment Status, Education levels and Residential status of the participants

Demographic Factors	No. of Respondents	Percentage of Respondents
Gender		
Males	54	44
Females	68	56
Employment Status		
Employed	53	43
Unemployed	69	57
Education Levels		
Undergraduates	35	28.69
Graduates	38	31.15
Postgraduates	49	40.16
Residence Status		
Home	72	64.75
Hostel	24	19.67
Outside	19	15.58

For analysis of the recent trend of SNS usage, students were asked to state different SNSs they prefer to use in daily lives. Students reported 'WhatsApp' (95.08%), 'Instagram' (92.62%) and 'Facebook' (79.50%) as the most commonly used SNSs, with 'Twitter' (46.72%) and 'Snapchat' (38.52%) as less frequently used sites (Refer to Table-2).

Table 2 Different Social Networking Sites used by Indian College Students

Social Networking Sites	No. of Respondents	Percentage of Respondents
Whatsapp	117	95.08
Instagram	113	92.62
Facebook	97	79.50
Twitter	57	46.72
Snapchat	47	38.52

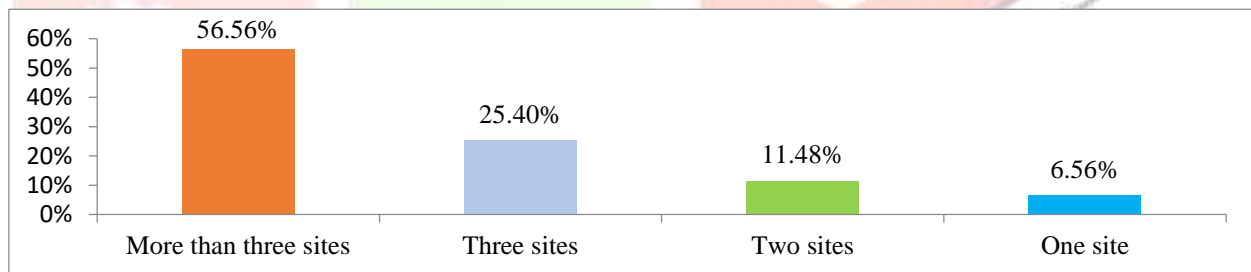


Fig. 1 Percentage of students using multiple Social Networking Sites

For analysis of SNSs preference amongst the students, 56.56% students expressed that they have accounts on 'More than three SNSs'- Instagram, Facebook, WhatsApp, Twitter and Snapchat, 25.40% students reported to use only 'Three SNSs' majorly- Instagram, Facebook and WhatsApp, 11.48% students opined that they use 'Two SNSs' primarily- Instagram and WhatsApp, and 6.56% students reported to use only 'One SNS', which is WhatsApp (Refer to Fig.-1).

Table 3 Purposes behind using Social Networking Sites by Indian College Students

S.No.	Purposes of using Social Networking Sites	No. of Respondents	Percentage of Respondents
1.	To remain in contact with others	102	86.60
2.	For academic/professional purposes	81	66.39
3.	To make new friends	26	21.31
4.	Entertainment	73	59.83
5.	Leisure time	66	54.09
6.	Dating	6	4.91
7.	Others	6	4.91

On the purpose of SNSs usage, 86.60% of the students expressed that they utilize SNSs 'To remain in contact with others', 21.31% for 'Making new friends', 66.39% for 'Academic or professional purposes', 59.83% for 'Entertainment', 54.09% for 'Leisure time' and 4.91% use SNSs for 'Dating' and another 4.91% for 'Other purposes' such as sharing news, helping others, and getting daily updates (Refer to Table-3).

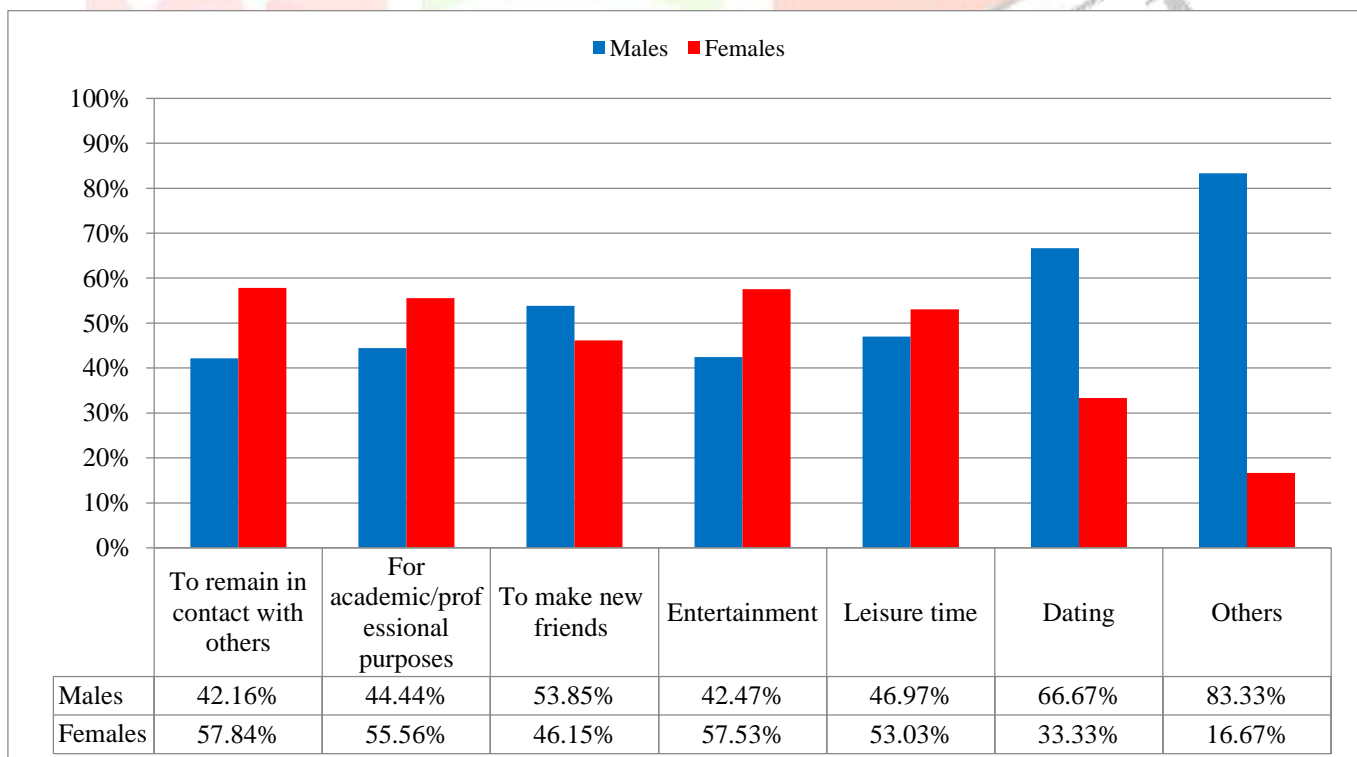
Table 4 Descriptive Statistics of Self-esteem and Social Networking Sites usage among Indian College Students

Variables	N	Mean	S.D.	Skewness	S.E.S	Kurtosis	S.E.K.	Min	Max
Self-esteem	122	29.25	4.72	-0.27	0.22	0.46	0.44	15	40
Overall SNSs Use	122	56.73	15.52	-0.27	0.22	1.08	0.44	13	111
General Social Media Usage	122	42.04	12.63	-0.35	0.22	0.11	0.44	9	78
Social Media Friendships	122	10.53	4.04	-0.00	0.22	-0.69	0.44	2	18
Online Friendships	122	4.16	2.31	2.63	0.22	10.84	0.44	2	18

On *Self-esteem and SNSs usage levels*, the students reported 'moderate' self-esteem levels ($M=29.25$, $SD=4.72$) whereas *overall SNSs use* ($M=56.73$, $SD=15.52$) and *general social media usage* ($M=42.04$, $SD=12.63$) were reported to be of 'low' level. However, students reported 'high' engagement in *social media friendships* ($M=10.53$, $SD=4.04$) whereas average *online friendships* scores were found to be of 'low' level ($M=4.16$, $SD=2.31$) (Refer to Table-4 and Table-5).

Table 5 Key showing scores of Self-esteem, Overall SNSs Use, General Social Media Usage, Social Media Friendships and Online Friendships

Variables	Scores
Self-esteem	High=more than 35 Normal=25-35 Low=10-24
Overall SNSs Use	High=66-126 Low=13-65
General Social Media Usage	High=46-90 Low=9-45
Social Media Friendships	High=11-18 Low=2-10
Online Friendships	High=11-18 Low=2-10

**Fig. 2 Purposes of using Social Networking Sites between Males and Females**

On *Gender differences*, male and female students differed in reporting the reasons for using SNSs in their routine lives (Refer to Fig.-2). Female students reported to use SNSs more 'for maintaining existing contacts' (57.84%), 'academic/professional purposes' (55.56%), 'leisure time' (57.53%) and 'entertainment' (57.53%) whereas male students reported to use SNSs more 'for making new friends' (53.85%), 'dating' (66.67%) and 'other purposes' (83.33%).

Table 6 Means, standard deviations, standard error means and t-values showing differences in scores between Gender on Social Networking Sites usage

Variables	Gender	N	Mean	Standard Deviation	Standard Error Mean	t-value	Sig.
General Social Media Usage	Female	68	41.54	12.38	1.50	-0.49	.628
	Male	54	42.67	13.04	1.77		
Social Media Friendships	Female	68	9.33	3.58	0.43	-3.87	.000**
	Male	54	12.04	4.12	0.56		
Online Friendships	Female	68	3.93	1.98	0.24	-1.23	.219
	Male	54	4.44	2.65	0.36		
Overall SNSs Use	Female	68	54.81	14.53	1.76	-1.54	.126
	Male	54	59.15	16.51	2.25		

**p<.01

Overall on *SNSs usage*, statistically significant differences in means were found on the subscale of *social media friendships* ($t = -3.87$, $p = .000$) between male and female students with males ($N_1 = 54$, $M_1 = 12.04$, $SD_1 = 4.12$) engaging themselves more in *social media friendships* than females ($N_2 = 68$, $M_2 = 9.33$, $SD_2 = 3.58$). However, no significant differences was found between male and female students on the *overall SNS use* ($t = -1.54$, $p = .126$), *general social media usage* ($t = -0.49$, $p = .628$) and *online friendships* subscale ($t = -1.27$, $p = .253$) (Refer to Table-6).

Table 7 Means, standard deviations, standard error means and t-values showing differences in scores between Employed and Unemployed students on Social Networking Sites usage

Variables	Employment Status	N	Mean	Std. Deviation	Std. Error Mean	t-value	Sig.
General Social Media Usage	Employed	53	44.54	11.34	1.56	1.94	.054*
	Unemployed	69	40.11	13.31	1.60		
Social Media Friendships	Employed	53	11.90	3.98	0.55	3.43	.001**
	Unemployed	69	9.48	3.79	0.46		
Online Friendships	Employed	53	4.58	2.81	0.39	1.82	.072
	Unemployed	69	3.83	1.78	0.21		
Overall SNSs Use	Employed	53	61.04	14.06	1.93	2.76	.007**
	Unemployed	69	53.42	15.87	1.91		

**p<.01, *p<.05

On differences between *employment status*, statistically significant differences in means were found on *overall SNSs use* ($t = 2.76$, $p = .007$), *general social media usage* ($t = 1.94$, $p = .054$) and *social media friendships* ($t = 3.43$, $p = .001$) among employed and unemployed students with employed students ($NE = 53$, $ME = 61.04$, $SDE = 14.06$) using more SNSs than unemployed students ($NU = 69$, $MU = 53.42$, $SDU = 15.87$). Employed students ($NE = 53$, $ME = 44.54$, $SDE = 40.01$) reported more *general social media usage* than unemployed students ($NU = 69$, $MU = 40.11$, $SDU = 13.31$). Also, employed students ($NE = 53$, $ME = 11.90$, $SDE = 3.98$) were shown to engage themselves in *social media friendships* to a greater extent as compared to unemployed students ($NU = 69$, $MU = 9.48$, $SDU = 3.79$). However, no significant differences was found between employed and unemployed students on the *online friendships* subscale ($t = -1.23$, $p = .072$) (Refer to Table-7).

Table 8 One-way ANOVA analysis showing significant differences in Social Networking Sites usage among Undergraduate, Graduate and Postgraduate students

Variables		Sum of Squares	Df	Mean Square	F	Sig.
Overall SNSs Use	Between Groups	1483.720	2	741.860	3.19	.045*
	Within Groups	27676.353	119	232.574		
	Total	29160.074	121			
General Social Media Usage	Between Groups	668.932	2	334.466	2.13	.123
	Within Groups	18647.863	119	156.705		
	Total	19316.795	121			
Social Media Friendships	Between Groups	149.269	2	74.634	4.86	.009**
	Within Groups	1827.100	119	15.354		

	Total	19316.795	121			
Online Friendships	Between Groups	1.471	2	0.736	0.14	.873
	Within Groups	642.570	119	5.400		
	Total	644.041	121			

**p<.01, *p<.05

On differences between different *education levels*, statistically significant differences in means were found on *overall SNSs use* [F (2,119) =3.190, p=.045] and *social media friendships* [F (2,119) =4.86, p=.009] with graduates reporting greater *overall SNSs use* (MG'=60.03, SDG'=13.11) than undergraduates (M'U'=51.40, SD'U'=17.07). Also, graduates (MG'=11.68, SD=3.49) scored more on *social media friendships* than undergraduates (M'U'=8.89, SD'U'=3.98). However, education levels of college students had no significant effect on the *general social media usage* [F (2,119) =2.134, p=.123] *online friendships* subscale [F (2,119) =0.14, p=.873] (Refer to Table-8 and Table-9).

Table 9 Means and standard deviations showing differences in Overall Social Networking Sites use, General Social Media Usage, Social Media Friendships and Online Friendships among Postgraduate, Graduate and Undergraduate Students

Variables	N	Mean	Std. Deviation
Overall SNSs Use			
Postgraduates	49	57.98	15.42
Graduates	38	60.03	13.11
Undergraduates	35	51.40	17.07
General Social Media Usage			
Postgraduates	49	43.10	12.22
Graduates	38	44.03	11.50
Undergraduates	35	38.40	13.91
Social Media Friendships			
Postgraduates	49	10.81	4.18
Graduates	38	11.68	3.49
Undergraduates	35	8.89	3.98
Online Friendships			
Postgraduates	49	4.06	2.79
Graduates	38	4.32	1.76
Undergraduates	35	4.11	2.19

Table 10 Relationship between Self-esteem and Social Networking Sites usage using Bivariate Correlation Coefficients (r)

Variables	Overall SNS use	General Social Media Usage	Social Media Friendships	Online friendships	Social Media Friendships	Self-esteem
Overall SNSs Use	---					
General Social Media Usage	.95**	---				
Online Friendships	.45**	.25**	---			
Social Media Friendships	.62**	.38**	.36**	---		
Self-esteem	.12	.09	-.08	.16	---	---

**Correlation is significant at the .01 level.

Inter-correlation matrix revealed that no significant relationship existed between *SNSs use and self-esteem*. Self-esteem was not found to be significantly correlated to *overall SNSs use* (r=.12, p>.05), *general social media usage* subscale (r=.09, p>.05), *online friendships* subscale (r= -.08, p>.05) and *social media friendships* subscale (r=.16, p>.05), and therefore hypotheses 1, 2, 3 and 4 were rejected (Refer to Table-10).

VI. DISCUSSION

The current study was conducted to assess the SNSs usage patterns among Indian college students and to examine the differences between two genders, different educational levels and employment status on this usage pattern. The results showed that the college students reported 'low' level of *overall SNSs use*, *general social media usage* and *online friendships* implying that students utilized social media platforms less frequently, maintained less number of unknown contacts on SNSs and lesser online interactions with people whom they never met in person. Low level of SNSs usage among college students can be attributed to the academic pressure, engagement in extra-curricular activities, pursuance of internships, extra qualifications in addition to their scheduled classes, and restrictions on usage of smartphones at academic institutions and workplaces. The lesser need for self-presentations on these online platforms, disinterest in other people's lives due to one's own personal and professional concerns, need for anonymity and privacy can be other probable reasons for low general social media usage among college students. Low engagement on online friendships among college students can be attributed to the adequate education levels of students, and awareness among them about pitfalls of disseminating personal information about self with unknown people on online platforms among college students. However, students' engagement on *social media friendships* was found to be of 'high' level implying that despite low SNSs usage in terms of time and frequency and low online friendships, students desired to make and keep friendships through social media. This is likely as many social media features such as its widespread

availability, easy accessibility (Akram 2018), assuring anonymity, personalization and privacy features allow its users to have multiple friends at the same time and maintain friendships with a greater ease and sense of control over privacy and self-disclosure issues during conversations (Tüfekçi's 2008).

Moreover, analysis on *recent trends of SNSs usage and preference* showed that most college students had accounts on 'more than three sites' with 'WhatsApp', 'Instagram' and 'Facebook' as the 'most commonly used platforms' in their daily routines, implying SNSs to be popular among them. Further analysis showed that the 'major purposes' of using SNSs by the students were 'to remain in contact with others', 'for academic/professional purposes', 'entertainment' and 'leisure time', supporting the 'Uses and Gratification Theory' (UGT) of Katz, Blumler & Gurevitch (1973), which implies users to have different professional, social and psychological needs such as seeking information from multiple sources, sharing information with others, establishing and maintaining new contacts, entertainment and many more (Gao, Abel, Houben & Yu 2012; Park, Kee & Valenzuela 2009) through social media (Ellison et al. 2007). Thus, the students may utilise each SNS platform for a specific purpose providing them a unique experience of using a different SNS platform explaining the students' preference for using multiple SNSs.

Analysis of SNSs usage patterns between the two genders showed that male college students reported higher engagement on *social media friendships* than female students implying that male students sought more friendships and interactions with people on social media compared to female college students. Male college students used SNSs primarily for 'searching new friends' and 'dating' whereas female college students used SNSs 'to remain in contact with others'. This is consistent with the Social Role Theory and many findings from the previous researches by Muscanell & Guadagno (2012), Mazman & Usluel (2011), Thelwall (2008), Tüfekçi's (2008) and Lenhart & Madden (2007). Social Role Theory explains that every society expects distinct role-beliefs causing them to learn different skills and abilities, such as men to be dominant and competitive, conditioning them to fulfil their desire to be powerful and authoritative in romantic relationships and women to be emotional and caring, hence motivating them to be nurturing their friendships and maintaining relationships (Bakan 1966), which gets manifested as distinct behavioural patterns in their daily lives. These gender role-beliefs further may get expressed in the decision-making process making males give more preference to the pursuance of their individual choices than exerting social influence and females to give more preference to the social impact they create on others than pursuance of their individual choices (Mazman, Usluel & Çevik 2009), explaining higher engagement in social media friendships by male students compared to female college students in the present study. Females prefer to maintain privacy in an online atmosphere that is they feel hesitant to disclose their identities to unknown people preventing females to initiate a conversation and make new friends on these sites; on the contrary males disclose their personal information more easily while interacting with others (Mazman & Usluel 2011). Females also reported using SNSs for 'entertainment' and 'leisure time' more than males which can be attributed to the exploration of their hobbies, fashion trends, and aesthetics. Therefore, the present research brings out distinct differences in motives of SNSs usage by male and female students wherein male students primarily use SNSs for social media friendships through SNSs and female students use SNSs to maintain existing relationships, for leisure activity and entertainment purposes.

Analysis of SNSs usage pattern on *employment status* showed that employed students reported greater *overall SNSs use, general social media usage and social media friendships* than unemployed students implying greater need to build online professional networks, exchanging career-related information online and connecting with friends and colleagues online on social media compared to unemployed students. This is likely as SNSs serve as a powerful platform for establishing contacts in the professional world, building informational communities (Akram 2018), communicating effectively and for extending one's professional networks (Hussain & Loan 2017). SNSs allow users to associate with organizations, receive updates regarding recent trends in the profession, maintain contact with organisations, and look for better career opportunities (Ansari & Hasan 2015). Students pursuing online part-time jobs such as online tutoring and training courses frequently use SNSs to complete their assignments, especially those in the fields of blogging (Yu, Tian, Vogel & Chi-Wai 2010) and content marketing to present their information with target audiences (Weinberg 2009) and academic research for data collection purposes (Redmond & Lillis 2010). Thus, employed students' need to use more SNSs for having more friends on social media than unemployed students seems reasonable as it provides them with an opportunity to accomplish their professional pursuits, build content-sharing communities and facilitate rapid communication with their colleagues.

Analysis of SNSs usage pattern on *different education levels*, the graduate students reported greater *overall SNSs use and social media friendships* than undergraduate students implying greater need among graduate students to engage them in using SNSs and maintaining friendships through social media. This is likely as the graduate students tend to use SNSs for many purposes such as engaging in education-related communication (Haneefa & Sumitha 2011) for enhancing their learning outcomes (Yu et al. 2010), creating public profiles (Boyd & Ellison 2007), seeking job opportunities through online portals and applications, and improving their qualifications more than undergraduate students. Furthermore, graduate students tend to have an extended social group due to spending more years in college consequentially having more friends on social media as compared to undergraduate students. Hence, SNSs acts as a tool for facilitating communication, information gathering and social connectedness for graduate students and enables them to accomplish their personal and professional goals.

The present research also investigated the *relationship between SNSs usage and self-esteem* among Indian college students. The findings indicated that the college students reported 'moderate' levels of self-esteem implying that the students had relatively stable and positive feelings of their overall self-worth (Rosenberg 1965). Moreover, there existed an insignificant relationship between self-esteem levels, overall SNSs use, general social media usage, social media friendships and online friendships implying that students' self-esteem is not related to social media use. This is consistent with the previous findings by Muench, Hayes, Kuerbis, & Shao (2015), Wu (2013) and Valkenburg et al. (2006). The insignificant relationship between self-esteem and SNSs usage among urban college students can be attributed to the their educational attainment, and stable and positive intrinsic perceptions about self leading to a more responsible use of SNSs- as an effective time alternative for remaining socially connected with others, to entertain, and remain cheerful in their routine lives (Nyagah, Stephen & Muema 2015), rather than indulging themselves in making any upward or downward social comparisons due to SNSs-mediated interactions, thus not necessarily affecting their self-esteem levels positively or negatively. Thus, the present findings are inconsistent many previous studies which indicated social media to be negatively affecting the self-esteem levels of the individuals (Hawi & Samaha 2016; Vogel et al. 2015) or enhancing its levels as in some other studies (Burrow & Rainone 2017; Sanfilippo 2015). Therefore, based on the current finding it can be said that education level and stable view about oneself can be considered as an important factor in deciding the impact of SNSs usage on self-esteem among Indian college students and should be further examined.

VII. CONCLUSION

The present study contributes to the growing body of existing literature exploring the recent trends of SNSs usage, preferences and social media friendships among Indian college students. Overall low usage of SNSs among college students suggests paucity of time due to their hectic routine life in urban landscape, academic and professional commitments. College students' desire to make more friends and maintain friendships on social media indicates their need to establish new relationships and remain socially relevant in their peer group. Analyses of the SNSs usage patterns by college students suggest students to have various professional, social and psychological needs such as maintaining existing relationships, academic/professional purposes, entertainment and leisure time. Moreover, academic/professional purposes stand out as one of the predominant motives for using SNSs which suggests that these platforms can be possibly used for augmenting students' learning processes. However, the utility of SNSs is perceived at the intersection of gender, employment status and educational background wherein male college students form new relationships on social media to satisfy their social desire for popularity and need for belongingness whereas female students utilize SNSs more for relationship maintenance and academic pursuits to satisfy their emotional needs and for academic fulfilment. More SNSs usage by employed students compared to unemployed students suggests that SNSs can be used as interactive platforms for extending their professional networks. Graduate students prefer to use more SNSs than undergraduates for education-related communication and social connectedness. The non-relatedness of self-esteem and SNSs usage among urban college students suggests that adequate education level, responsible use of SNSs, overall stable and positive feelings of self-worth can be the contributing factors in determining the relationship between SNSs usage and self-esteem.

The present findings of the study highlight the need to explore gender-wise preferences for SNSs, specific purposes and unique experiences associated with each SNS among Indian college students. Future studies can investigate the role of education level and different components of self-esteem such as social and academic self-esteem to gain a comprehensive understanding of the relationship between SNSs usage and self-esteem among college students. Further, other SNSs-related behaviours such as friendship quality, social comparison and social feedback processes can be explored using qualitative approach in future researches.

REFERENCES

- [1] Akakandelwa, Akakandelwa & Walubita, Gabriel. 2018. Students' Social Media Use and its Perceived Impact on their Social Life: A Case Study of the University of Zambia. *The International Journal of Multi-Disciplinary Research*.
- [2] Akram, Waseem. 2018. A Study on Positive and Negative Effects of Social Media on Society. *International Journal of Computer Sciences and Engineering*. 5. 10.26438/ijcse/v5i10.351354.
- [3] Andreassen, C. S., Pallesen, S., & Griffiths, M. D. 2017. The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287–293. <https://doi.org/10.1016/j.addbeh.2016.03.006>
- [4] Ansari, Aslam & hasan, Mehfoozul. 2015. Use of Social Networking Sites in Library and Information Centres. *paper presented at National Conference on Library Information Science and Information Technology for Education*, (pp. 84-89).
- [5] Armstrong, L., Phillips, J.G., & Saling, L.L. 2000. Potential determinants of heavier internet usage. *International Journal of Human-Computer Studies*, 53, 537–550.
- [6] Bakan, D. 1966. *The Duality of Human Existence: Isolation and Communion in Western Man*. Boston: Beacon Press.
- [7] Biernatowska, A., Balcerowska, J. M., & Bereznowski, P. 2017. Gender differences in using Facebook—preliminary analysis. In J. Nyćkowiak & J. Leśny (Eds.), *Badania i Rozwój Młodych Naukowców w Polsce – Społeczeństwo: psychologia i socjologia* (pp. 13–18). Poznań, Poland: Młodzi Naukowcy.
- [8] Burrow, A. L., & Rainone, N. 2017. How many likes did I get?: Purpose moderates links between positive social media feedback and self-esteem. *Journal of Experimental Social Psychology*, 69, 232–236. <https://doi.org/10.1016/j.jesp.2016.09.005>
- [9] Cudo, Andrzej & Dobosz, Mateusz & Jarzabek-Cudo, Agnieszka & Basaj, Łukasz. 2016. Problematic Internet use and intrapersonal and interpersonal attitudes in adolescents. *Postępy Psychiatrii i Neurologii*, 25. 10.1016/j.pin.2016.08.005.
- [10] Cummings JN, Butler B, & Kraut R 2002. The quality of online social relationships. *Commun. ACM*. doi:10.1145/514236.514242.
- [11] Dredge, R., Gleeson, J. F. M., & de la Piedad Garcia, X. 2014. Risk factors associated with impact severity of cyberbullying victimization: A qualitative study of adolescent onlinesocial networking. *Cyberpsychology, Behavior, and Social Networking*. 17, 287-291. <https://doi.org/10.1089/cyber.2013.0541>
- [12] Ellison, N.B., 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*. 12, 1143-1168. <http://dx.doi.org/10.1111/j.1083-6101.2007.00367.x>
- [13] Faraon, M., & Kaipainen, M. 2014. Much more to it: The relation between Facebook usage and self-esteem. Paper presented at the 2014 IEEE 15TH International Conference on Information Reuse and Integration (IRI), Redwood City, CA.
- [14] Forest AL, Wood JV. 2012. When social networking is not working: individuals with low self-esteem recognise but do not reap the benefits of self-disclosure on Facebook. *Psychol Sci*. 23, 295–302.
- [15] Gonzales AL. and Hancock JT. 2011. Mirror, Mirror on my facebook wall: Effects of exposure to Facebook on Self-esteem. *Cyberpsychology, Behavior, and Social Networking*. 14 (1-2), 79-83
- [16] Gross R, Acquisti A. Information revelation and privacy in online social networks. In: Proceedings of the 2005 ACM Workshop on Privacy in the Electronic Society. WPES '05. New York, NY, USA: ACM, 2005:71–80
- [17] Hawi, N. S., & Samaha, M. 2016. The Relations Among Social Media Addiction, Self- Esteem, and Life Satisfaction in University Students. *Social Science Computer Review*, 1-11. <https://doi.org/10.1177/0894439316660340>
- [18] Hootsuite & We Are Social (2019), "Digital 2019 Global Digital Overview," retrieved from <https://datareportal.com/reports/digital-2019-global-digital-overview/>
- [19] Hussain, Dr & Loan, Fayaz. 2017. The use of social networking sites (sns) by the post-graduate students. 7. 72-84.
- [20] Jan, M., Soomro, S.A., & Ahmad, N. 2017. Impact of Social Media on Self-Esteem. *European scientific journal*, 13, 329.
- [21] Katz, E., Blumler, J. G., & Gurevitch, M. 1973. Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509–523.
- [22] Kindi, S., & Alhashmi, S. M. 2012. Use of Social Networking Sites among Shinas College of Technology Students in Oman. *Journal of Information & Knowledge Management*, 11(1), 1250002-1-1250002-9.
- [23] Kross E, Verduyn P, Demiralp E, Park J, Lee DS, Lin N, et al. 2013. Facebook Use Predicts Declines in Subjective Well-Being in Young Adults. *PLoS ONE* 8(8): e69841. <https://doi.org/10.1371/journal.pone.0069841>

- [24] Kuss, D. J., & Griffiths, M. D. 2011. Online social networking and addiction – A review of the psychological literature. *International Journal of Environmental Research and Public Health*. 8(9), 3528–3552.
- [25] Lane, J., Lane, A. M., & Kyprianou, A. 2004. Self-efficacy, self-esteem and their impact on academic performance. *Social Behavior and Personality*. 32, 247–256. <https://doi.org/10.2224/sbp.2004.32.3.247>
- [26] Lavanya, R. & Karthikeyan, Parthasarathy 2016. A Study on the Usage of Social Networking Sites among College Students with reference to Erode District. *Asian Journal of Research in Social Sciences and Humanities*. 6. 1230. 10.5958/2249-7315.2016.00280.X.
- [27] Lenhart, M., & Madden, M. 2007. Teens, Privacy and Online Social Networks. How teens manage their online identities and personal information in the age of MySpace. *Pew Internet & American Life Project Report*. Retrieved from http://www.pewinternet.org/~media/Files/Reports/2009/PIP_Adult_social_networking_data_memo_FIN_AL.pdf.pdf.
- [28] Lindsay HS. & Larry MG. 2002. In Defense of the Internet: The Relationship between Internet Communication and Depression, Loneliness, Self-Esteem, and Perceived Social Support. *CyberPsychology & Behavior*. 5(2), 157-171
- [29] Madaiah, M., Seshaiyengar, C., Suresh, P., Munipapanna, S., & Sonnappa, S. 2017. Study to assess the effects of social networking sites on medical college students. *International Journal Of Community Medicine And Public Health*, 3(5), 1204-1208. doi:<http://dx.doi.org/10.18203/2394-6040.ijcmph20161385>
- [30] Madhusudan M, Chaluvaraj TS, Preethi Suresh, Santhosh M, Suresha DS. 2016. Study to Assess the Effects of Social Networking Sites on Medical College Students. *International Journal of Community Medicine and Public Health*. 3, 1204-8.
- [31] Manjunatha, S.R. 2013. The Usage of Social Networking sites Among the College Students in India. *International Research Journal of Social Sciences*. 2(5), 15-21.
- [32] Marsh, H.W. 1996. Positive and negative global self-esteem: A substantively meaningful distinction or artifactors? *Journal of Personality and Social Psychology*, 70, 810-819.
- [33] Mazman, S.G. and Usluel, Y.K. 2011. Gender Differences in Using Social Networks. *The Turkish Online Journal of Educational Technology*, 10, 133-139.
- [34] Mazman, S.G., Usluel, Y.K., & Çevik, V. 2009. Social influence in the adoption process and usage of innovation: Gender differences. *International Journal of Behavioral, Cognitive, Educational and Psychological Sciences*, 1(4). 229-232.
- [35] Moenizadeh M, Kumar K. 2010. Well-being therapy (WBT) for depression. *International Journal Psychology Study*. 2(1):107-115.
- [36] Muench, Fredrick & Hayes, Marie & Kuerbis, Alexis & Shao, Sijing. 2015. The independent relationship between trouble controlling Facebook use, time spent on the site and distress. *Journal of Behavioral Addictions*. 4. 163-169. 10.1556/2006.4.2015.013.
- [37] N. L. Muscanell and R. E. Guadagno 2012. Make new friends or keep the old: Gender and personality differences in social networking use, *Computers in Human Behavior*, 28, 107-112.
- [38] N. Park, K. F. Kee and S. Valenzuela. 2009. “Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes,” *CyberPsychology & Behavior*, 12(6), 729-733.
- [39] Napoleon E. 2013. The effect of social networking sites on students' academic performance in girne American university, North Cyprus.
- [40] Niemz, Katie & Griffiths, Mark & Banyard, Phil. 2006. Prevalence of Pathological Internet Use among University Students and Correlations with Self-Esteem, the General Health Questionnaire (GHQ), and Disinhibition. *Cyberpsychology & behavior : the impact of the Internet, multimedia and virtual reality on behavior and society*, 8. 562-70. 10.1089/cpb.2005.8.562.
- [41] Nyagah, Stephen & Nyagah, Virginia & Asatsa, Stephen & Mwanja, Jonathan. 2015. Social Networking Sites and Their Influence on the Self Esteem of Adolescents in Embu County, Kenya. 2. 2408-770.
- [42] Orchard, L. J., Fullwood, C., Galbraith, N., & Morris, N. 2014. Individual differences as predictors of social networking. *Journal of Computer-Mediated Communication*. <http://dx.doi.org/10.1111/jcc4.12068n/a-n/a>.
- [43] Q. Gao, F. Abel, G. J. Houben and Y. Yu. 2012. “A comparative study of user’s microblogging behavior on sina weibo and twitter,” *Proc. of User Modeling, Adaptation, and Personalization Lecture Notes in Computer Science*, vol. 7379, pp. 88-101.
- [44] Rai, G. 2017. Impact of Social Networking Sites (SNSs): Are Youth affected by its usage?. *Issues and Ideas in Education*. 5, 11-24.
- [45] Redmond, F., & Lillis, D. 2010. Social Networking Sites: Evaluating and Investigating Their Use in Academic Research. *International Conference of Education, Research and Innovation*, 15-17.
- [46] Reema & Gopal 2014. A qualitative analysis of social networking usage, *Int J Res Dev Health*. 2(1), 34-44 www.ijrdh.com ISSN: 2321 - 143
- [47] Rosen, L., Whaling, K., Carrier, L., Cheever, N. and Rökkum, J. 2013. The Media and Technology Usage and Attitudes Scale: An Empirical Investigation. *Computers in Human Behavior*, 29, 2501-2511. <https://doi.org/10.1016/j.chb.2013.06.006>
- [48] Rosenberg, J., & Egbert, N. 2011. Online impression management: Personality traits and concerns for secondary goals as predictors of self-presentation tactics on Facebook. *Journal of Computer-Mediated Communication*, 17, 1–18. <https://doi.org/10.1111/j.1083-6101.2011.01560.x>
- [49] Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. 1995. Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 60(1), 141-156.
- [50] Rosenberg, M. 1989. *Society and the adolescent self-image* (Rev. ed.). Wesleyan University Press.
- [51] Santarossa, S. 2015. Social Media: Exploring the Associations of Social Networking Sites and Body Image, Self-Esteem, Disordered Eating and/or Eating Disorders and the Impact of a Media Literacy Intervention. *Electronic Theses and Dissertations*. 5508. <https://scholar.uwindsor.ca/etd/5508>
- [52] Sanfilippo, J. S. 2015. It’s All about the Social Media. *Journal of Pediatric and Adolescent Gynecology*, 28(1), 1. <https://doi.org/10.1016/j.jpag.2014.11.006>
- [53] Sharma, A. & Shukla, A.K. 2016. Impact of Social Messengers Especially WhatsApp on Youth: A Sociological study. *International Journal of Advance Research and Innovative Ideas in Education*, 2(5), 367-375.
- [54] Shin, D.-H., & Shin, Y.-J. 2011. Why do people play social network games? *Computers in Human Behavior*, 27(2), 852–861.
- [55] Tartaglia, S. 2016. Different modalities of using Facebook: The influence of actual social relations, wellbeing, and attitude towards the medium. *Studia Psychologica*, 58(1), 3-17. doi:10.21909/sp.2016.01.703

- [56] Tham, J., & Ahmed, N. 2011. The usage and implications of social networking sites: A survey of college students. *Journal of Interpersonal, Intercultural and Mass Communication*, 2(1), 1-11.
- [57] Thelwall, M. 2008. Social Networks, Gender and Friending: An Analysis of MySpace Member Profiles. *Journal of the American Society for Information Science and Technology*, 59(8), 1321-1330.
- [58] Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. 2003. Stability of self-esteem across the life span. *Journal of Personality and Social Psychology*, 84, 205–220. <http://doi.org/10.1037//0022-3514.84.1.205>
- [59] Tüfekci, Z. 2008. Gender, Social Capital And Social Network(ing) Sites: Women Bonding, Men Searching. *Paper presented at the annual meeting of the American Sociological Association Annual Meeting, Sheraton Boston and the Boston Marriott Copley Place, Boston, MA*, Retrieved June, 6, 2009, from http://www.allacademic.com/meta/p242696_index.html.
- [60] Upadhayay, V. 2018. 'Social Media Usage and Psychological Wellbeing among Indian Youth'. *International Journal of Stress Prevention and Wellbeing*, 2, 4, 1-12. Retrieved from: <http://www.stressprevention.net/volume/volume-2-2018/volume-2-article-4/>
- [61] Urista, M.A., Dong, Q., & Day, K.D. 2009. Explaining why young adults use myspace and facebook through uses and gratifications theory. *Human Communication*, 12(2), 215–229.
- [62] Utpal, V.K.J.. 2017. A study on the engagement of Indian students on social media. *Journal of Content, Community and Communication*. 6, 50-55.
- [63] Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. 2014. Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3, 206–222. <https://doi.org/10.1037/ppm0000047>
- [64] Weinberg, T. 2009. *The new community rules: Marketing on the social web*. Sebastopol, CA: O'Reilly.
- [65] Wu, Y. 2013. *The use of social networking services, subjective well-being and self-esteem of Asian international students in the U.S*, a PhD thesis at State University of New York at Buffalo, Ann Arbor, pp. 49.
- [66] Yu AY, Tian SW, Vogel D, Chi-Wai KR 2010. Can learning be virtually boosted? An investigation of online social networking impacts. *Computers and Education* 55(4):1494-1503. <https://doi.org/10.1016/j.compedu.2010.06.015>.

