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Impact of Social Networking Sites on Academic Performance and Career through Collaborative Learning (with Reference to Students of Self-financing Engineering Colleges in Tiruchirappalli)

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ABSTRACT

Use of Social Networking Sites (SNSs) is having a growing importance among students in their everyday life. It acts as an essential tool for them in higher level education. Among the social networking sites Facebook, WhatsApp, Twitter, LinkedIn is gaining more support from the student community. It helps the students to communicate each other directly like face to face interaction. SNSs are having an ability to induce students' decision making capability. Based on this, the study tries to emphasize the ability of the SNSs to induce the student's academic performance using collaborative learning among various groups in which they belong. The result reveals that collaborative learning will have a major impact on academic performance, i.e. 49.6% of the respondents stated that they are using SNSs for academic purpose. They use SNSs for sharing of information and study materials with their peers. SNSs help them to be interacting with their peers and teachers.

Keywords: Social Networking sites, Collaborative Learning, Academic Performance, Interactive.

1. INTRODUCTION

Social Networking site usage is becoming very essential in every aspect of life. It provides communication among the people apart from a distance. It acts as a platform to share information, pictures, and videos, send messages and organize group conversation. SNSs help to make communication with peers and faculty members in a face to face manner. It increases the healthy relationship among the groups. Facebook, Twitter,

LinkedIn, WhatsApp has been the most frequently used SNSs by most of the people. SNSs induces major role in worldwide decision making. The main reason for usage of SNSs is easy accessibility, flexibility of technology usage.

There are four major advantages in using SNSs are inducing group relationship, offering modified course material, motivate to learn, cultivate the collaborative capacity of the students. Thus SNSs have the opportunity to develop communication among their contacts and also improve their class participation. The students used to involve in an online group learning which will reduce their unease to collaborate with peers and faculty.

1.1. Objectives of the Study

- To understand the usage pattern of social networking sites among the students.
- To find out the whether they are using SNSs for academic purpose.
- To find out that usage of SNSs will helps them to collaborate with their peers and faculty and this will enhance their academic performance and career.

2. LITERATURE REVIEW

Noshia (2011) in her study found that most frequently used SNSs are Facebook followed by twitter, LinkedIn, Orkut, Google and yahoo. 52% of students states that Facebook as dais to avoid cross border barriers.

Kumar and Kumar (2013) attempt to study the usage of SNSs and found out that post graduates use SNSs mainly for academic purpose. Most popular SNSs used by the students are Facebook, LinkedIn followed by twitter. 73.33% and also found that students use SNSs through mobile phones.

Arun K.Gupta (2015) in his study states that the popular social networks used by the students are Facebook, Twitter, you tube and LinkedIn to share their ideas related to academics.

Adam Mahamat Helou and Nor ZairahAb.Rahim (2014) attempts to capture the students' perceptions on SNSs have an impact over academic performance. There are 37 % male and 63 % female in respondents of that, 43% are undergraduates and 57 % are postgraduates. The study reveals that the students felt that SNSs have a positive impact on their academic performance. They use SNSs for various academic activities like communicating with teachers, supervisors and university authorities and also discussing academic related topics of educational interest with their classmates, they felt that this will enhance their academic performance.

Beth L. McGough, Danielle Salomon (2013) stated that in social students look for obtaining information and collaborates with their classmates and also helps students to organizing academic activities and sharing it with others. They also stated that only 39% of students use social media for academic purposes comparatively less number of students use social media to interact with teachers, instructors and librarians because they use other means such as email, live chat and niche sites to interact with them.

ManjunathaS.(2013)stated that in usage of social networking sites (SNSs) among Indian students are drastically increased and it will have an impact on academic activities, 95% of students have a constructive view that SNSs act as a platform to reconnecting the lost friends and also keep the existing network with that

they share their knowledge and opinions with others. They recognize that SNSs is a quick and convenient way to interact with others.

Junco et. al., (2010) in their study reveals that twitter is used to encourage the academic activities and help for psychological development and best practices under graduation it also develop a student-teacher relationship and peer-peer relationship as well.

Daalsgard(2008) states that students use SNSs as a manner to help clearness between them a way in which they get input into each others ideas. They have comparatively less interest in peer to teacher interaction than peer to peer interaction

Hamat Embi and Hassan(2012) conducted a nationwide survey in Malaysia. The study reveals that students spent most of their time on social networking and learning. They use SNSs for the informal learning purpose. Only(50.3%)used these SNSs to interact with teachers. Another study by Reynol Junco(2012)) also supports this view that faculty and staff have a chance to help students use Facebook, which gave benefit to their engagement with the extension to their overall academic performance.

Mazer et. al.,(2007) states that students who have approached the Facebook profile of a teacher inculcate large amount of information and get higher levels of motivation this will have a positive impact on academic activities. Another study also support that Lipka (2007) affirmed that students felt more comfortable in approaching teachers, who are presentable and friendly (casual) for interaction using social media and which gives them encouragement they need.

Rebecca Vivian et. al., (2016) they conducted the study on 70 university students over 22 week university study period regarding the use of SNSs for academic purpose. The study reveals that there is an increase in the academic related activity during exams and major assessment periods implies that they probably look for or want to share their academic experience with and also want to get benefit from having opportunity to connect with their peers.

Bateman and Willams (2012) study states that students create groups and discussion spaces, in that all members were in the practice of “peer tutoring” they were supporting each other in the learning process and impart help wherever necessary.

Means et. al., (2015) did a meta-analysis of more than 1000 studies evaluate the traditional classroom learning with online learning. They found that students who take-up the online learning perform better than face to face learning. It was the combination of elements (collaboration) for learning and concludes that online learning is much more effective than face to face learning.

Hovorka and Rees (2014) in their study, they found that the student use number of social media technologies in an information system course. It not only induces them more interesting, but also educate them more valuable and credible workplace skills (communication, collaboration, community, convergence and creativity)

Bernad et. al., (2013) did a meta-analysis of the distance education literature and scrutinize three types of interaction: (i) student to student, (ii) student to teacher (iii) student to content. He found that all the three types of interaction are significant and have a positive impact on academic performance and also enhance satisfaction.

M.D. Roblyer et. al., (2010) conduct a study on comparison of usage of SNSs among students and faculty with special reference to Facebook. The study reveals that students are using SNSs than faculty for academic purpose. Faculty members use traditional tool such as email.

Selwyn(2014) in his study reveals that how SNSs can be used for academic purpose to induce communication between student to student interactions as well as tutor to peer dialogue. SNSs provide a platform to an informal and unstructured form of learning. He suggests that the informal and collaborative capability of SNSs can be used for academic purpose.

M.R. (Ruth) de Villiers(2010) states that usage of Facebook is largely for social purpose, but the group and discussion Facebook facilitates grasping possible for academic use. It also states that distance learning students joined SNSs group for the aim of discussion on academic, content related topics mostly commence by students themselves. Due do this, the student gets benefited by contact with peers this will enhance their academic performance.

Abdullah Al-Bahrani and Darshak Patel (2016), states that the students would appreciate faculty relationship on SNSs, but they wish two way communications. Faculties also interested to use SNSs for academic purpose. It will help the faculty to communicate the academic related topics in a better way than the traditional tools like email.

3. RESEARCH METHODOLOGY

The population for the study is college going graduates and the sample size got scientifically estimated using.

$$N = ((\text{Standard Deviation} \times 1.96) / .05)^2$$

The data for the study was collected by the way of survey questionnaire administered to 448 undergraduates and 215 post graduates students during the 2016 – 2017 academic session. The age range of the respondents is 18 to 24 & above. The sample consists of 297 males and 366 females. Students were instructed in the survey to offer their experiences and the impact of using social media on academic performance and career through collaborative learning. A descriptive research design with quantitative approach and the questionnaire is provided to the students of the self-financing engineering colleges in and around Tiruchirappalli area of TamilNadu, India, which is affiliated to Anna University, Chennai, TamilNadu, India were used to draw the data for the study. In this research 700 sets of questionnaires were randomly distributed to undergraduate and postgraduate students of the selected self-financing engineering colleges affiliated to Anna University Chennai, TamilNadu.

SPSS-IBM application (version 20) was used to analyze the data for meaningful statistical inferences. The instrument/questionnaire for the study were designed based on the objective of the study. Before collecting the main survey the instrument was piloted with 105 respondents and the Cronbach's alpha (.806) of the reliability and the validity such as content validity, face validity was tested. The content validity met the content requirements and the instruments, thus met the reliability requirements for the study.

After the pilot study the questions in the instrument, which are easy to understand and the answers are divided into two sections, namely demographic variables and conceptual variables make it clearer for the respondents. The data collection procedure in which 5 point Likert's scales (5-strongly agree, 4-Agree,

3-Neither agree nor disagree, 2-Disagree, 1-Strongly disagree) was applied in the study. The questionnaire is fine-tuned with the help of a pilot study carried out by the piloted students, which is tested before and examines the student opinion about the use of social media for academic purpose through collaborative learning in Indian higher education. A questionnaire consists of 16 demographic and 20 conceptual items was designed following minor revisions to the contents, the survey was admitted at the end of the semester (December – January). Each respondent was provided with a questionnaire and brief background to the study.

The table in the appendix consists of 20 conceptual items used to measure the construct included in our conceptual framework. Interactivity with peers was measured using the subset of 5 items. Interactivity with teachers was measured using 5 items. Collaborative Learning was measured using 5 items. Students' academic performance is measured using 4 items and Engagement is measured using 1 items. Statistical test used are descriptive statistics, Multiple Regression, and Factor Analysis

4. RESULTS AND FINDINGS

The above Table 1 one describes the demographic profile of customer who does social networking.

Table 1
Demographic analysis

Age (Frequency/percent)	17 &below 17(10/1.5%)	18 to 24(648/97.7%)	Above 24(5/.8%)			
Gender (frequency/percent)	Male (297/44.8%)	Female (366/55.2%)				
Education (frequency/percent)	School is studying(0)	Undergraduate (448/67.6%)	Postgraduate (215/32.5%)			
Parent's Annual income (frequency/percent)	Below 2,00,000P.A (354/53.4%)	2,00,001- 5,00,000P.A (235/35.4%)	5,00,001- 10,00,000P.A (58/8.7%)	Above 10,00,000P.A (16/2.4%)		
Location (frequency/percent)	Urban(334/50.4%)	Semi-urban (159/24.0%)	Rural (168/25.3%)			
A/C opened on Facebook, Twitter, LinkedIn	Year	Facebook	Twitter	LinkedIn		
Frequency & percent	2006-2009	65(9.8%)	9(1.4%)	8(1.2%)		
	2010-2011	251(37.9)	53(8.0%)	15(2.3%)		
	2012-2013	252(38.0%)	208(31.4%)	135(20.4%)		
	2014 & above	84(12.7%)	156(23.5%)	164(24.7%)		
	Don't have A/c	11(1.7%)	237(35.7%)	341(51.4%)		
Mode of using SNSS (frequency/percent)	Mobile(406/61.2%)	Tab (13/2.0%)	Computer (240/36.2%)	Others(4/.6%)		
Most Frequently used SNSs (frequency/percent)	Facebook (522/78.7%)	Twitter (27/4.1%)	LinkedIn (2/.3%)	Whatsapp (110/16.6%)	Others (2/.3%)	
SNSs for academic purpose (frequency/percent)	Yes(329/49.6%)	No(331/49.9%)				
Usage Rate of SNSs (frequency/percent)	I don't visit every day (206/31.1%)	5min (42/6.3%)	15-30min (149/22.5%)	30-60 min (107/16.1%)	1-2 hrs. (72/10.9%)	More than 2 hrs. (87/13.1%)

5. MULTIPLE REGRESSION ANALYSIS

The above Table 2 multiple correlation coefficient (R = .609) is the correlation between the observed and predicted values of the dependent variable (overall satisfaction of the students who use the SNSs for enhancing their career).

Table 2
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609(a)	.370	.351	.929

Table 3
ANOVA(b)

Model	Particulars	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	324.548	20	16.227	18.819	.000(a)
	Residual	551.866	640	.862		
	Total	876.415	660			

A. Predictors: (Constant).

B. Dependent Variable: Overall, I am extremely satisfied with the usage of SNSs for enhancing my career.

The above Table 3 summarizes the results of the analysis of variance

Table 4
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.416	.210		1.986	.047
	INTP1- S.M facilitates interaction with peers	.004	.040	.004	.097	.923
	INTP2- S.M gives me the opportunity to discuss with peers	.010	.046	.011	.225	.822
	INTP3- S.M facilitates dialog with peers	.120	.047	.111	2.542	.011
	INTP4- S.M allows exchange of information with peers	.183	.043	.186	4.304	.000
	INTT1- S.M facilitates interaction with teacher	-.033	.044	-.035	-.754	.451
	INTT2- S.M gives opportunity to discuss with the teacher	-.037	.047	-.037	-.783	.434
	INTT3- S.M facilitates dialogue with the teacher	.095	.041	.093	2.306	.021
	INTT4- S.M allows the exchange of information with the teacher	-.016	.025	-.022	-.632	.528
	ENG1- S.M favoured my personal relationships with my peers and teachers	-.033	.016	-.069	-2.048	.041
	INTT5- S.M my peer and faculty interactions made me feel valuable	-.028	.040	-.026	-.688	.492
	INTP5- S.M felt that my opinions have been taken into account in this class	-.011	.041	-.011	-.278	.781
	CL1- Using S.M for collaborative learning in my group was effective	-.047	.042	-.042	-1.136	.257

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>T</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
CL2- S.M develop research skills through peer collaboration	.187	.041	.183	4.591	.000
CL3- S.M develop new skills and knowledge from other members in my group	-.119	.045	-.112	-2.625	.009
CL4- S.M better than in a face to face learning environment	.055	.034	.057	1.598	.111
CL5- S.M facilitate academic activities and coordinate with peers	.244	.042	.228	5.752	.000
SAP1- S.M facilitate academic activities and coordinate with teachers	-.018	.039	-.018	-.470	.639
SAP2- Group discussions in S.M and will improve my academic performance	-.004	.015	-.009	-.279	.780
SAP3- S.M build student-lecturer relationship with my lecturers and this improves my academic performance	.270	.042	.272	6.390	.000
SAP4- S.M improves my interaction with classmates and lecturers, thus help me to improve my academic performance	.140	.043	.143	3.263	.001

^aDependent Variable: overall Iam extremely satisfied with the use of SNSs for enhancing my career

Multiple R = 0.609, F value = 18.819, d.f (20,640), p value < 0.01, R square = 0.370

$$\hat{Y} = .416 + (.004)x_1 + (.010)x_2 + (.120)x_3 + (.183)x_4 + (-.033)x_5 + (-.037)x_6 + (.095)x_7 + (-.016)x_8 + (-.033)x_9 + (-.028)x_{10} + (-.011)x_{11} + (-.047)x_{12} + (.187)x_{13} + (-.119)x_{14} + (.055)x_{15} + (.244)x_{16} + (-.018)x_{17} + (-.004)x_{18} + (.270)x_{19} + (.140)x_{20}$$

where, \hat{y} is the estimated overall satisfaction of students who use the SNSs in enhancing their career.

The above equation shows the impact of social media usage on the overall satisfaction of the students towards the career enhancement. From the above Table 4, on an average, if the factor 1 changes by one unit, there will be a 0.004 unit increase in the overall satisfaction of the students with the use of SNSs for enhancing the career. The result of the t test reveals that the calculated significance of the partial regression co-efficient (.120), (.183), (.095), (-.033), (.187), (-.119), (.244), (.270), (.140) are valid at 1 and 5 percent level respectively. The multiple R found to be 0.609 which reveals that there exist a relationship of 60.9 percent between the factors of social media usage and overall satisfaction of students towards the career enhancement.

The R square value of 0.307 confirms that the explanatory factors explain only 30.7 percent of variation in the overall satisfaction of the students who use the SNSs for enhancing the career. The F-test shows that the explained variation was highly significant at 1 and 5 percent level. From the above co-efficient table, it has been concluded that the factors of using SNSs which enhancing the career are using the social media in class facilitates dialog with peers, using the social media in class allows exchange of information with peers, facilitates dialogue with the teacher, favored my personal relationships with my peers and teachers, Develop the research skills through peer collaboration, Developed new skills and knowledge from other members in my group, using social media to facilitate academic activities and coordinate with peers, using social media to build a student-lecturer relationship with my lecturers and this improves my academic

performance, using social media improves my interaction with classmates and lecturers, thus help me to improve my academic performance.

The factors which dominate more are using social media to build a student-lecturer relationship with my lecturers and this improves my academic performance (.270), using social media to facilitate academic activities (.244), Develop the research skills through peer collaboration (.187)

Table 5
Factor Analysis

<i>KMO and Bartlett's Test</i>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.789
Bartlett's Test of Sphericity	Approx. Chi-Square	4044.116
	Df	190
	Sig.	.000

From the above Table 5, Bartlett's Test denotes the identity matrix and KMO indicate sampling adequacy.

Table 6
Extraction Method: Principal Component Analysis

<i>Component</i>	<i>Initial Eigenvalues</i>			<i>Rotation Sums of Squared</i>		
	<i>Total</i>	<i>Percentage of Variance</i>	<i>Cumulative percentage</i>	<i>Loadings</i>		
				<i>Total</i>	<i>Percentage of Variance</i>	<i>Cumulative percentage</i>
1	4.851	24.256	24.256	3.075	15.374	15.374
2	2.291	11.457	35.713	2.601	13.004	28.378
3	2	9.999	45.712	2.5	12.499	40.876
4	1.207	6.036	51.748	2.039	10.195	51.072
5	1	5.001	56.748	1.135	5.676	56.748
6	0.923	4.616	61.364			
7	0.886	4.431	65.795			
8	0.822	4.109	69.904			
9	0.767	3.834	73.738			
10	0.733	3.664	77.402			
11	0.678	3.388	80.791			
12	0.62	3.099	83.89			
13	0.58	2.901	86.791			
14	0.54	2.702	89.493			
15	0.477	2.386	91.88			
16	0.428	2.138	94.018			
17	0.371	1.854	95.872			
18	0.309	1.543	97.415			
19	0.299	1.495	98.909			
20	0.218	1.091	100			

The above Table 6 depicts the rotation sums of squared loadings of the extracted factors.

Table 7
Factors, Variable loadings and percentage of variance

<i>Factors</i>	<i>Loaded variables</i>	<i>Factor loading variables</i>	<i>%of variance of factor</i>
Factor 1 (Interactivity with peers)	INTP1- S.M facilitates interaction with peers	.805	15.374
	INTP2- S.M gives me the opportunity to discuss with peers	.845	
	INTP3- S.M facilitates dialog with peers	.794	
	INTP4- S.M allows exchange of information with peers	.739	
	INTP5- S.M felt that my opinions have been taken into account in this class	.402	
Factor 2 (Interactivity with teachers)	INTT1- S.M facilitates interaction with teacher	.746	13.004
	INTT2- S.M gives opportunity to discuss with the teacher	.766	
	INTT3- S.M facilitates dialogue with the teacher	.742	
	INTT4- S.M allows the exchange of information with the teacher	.617	
	INTT5- S.M my peer and faculty interactions made me feel valuable	.492	
Factor 3 (Collaborative learning)	CL1- Using S.M for collaborative learning in my group was effective	.600	12.499
	CL2- S.M develop research skills through peer collaboration	.761	
	CL3- S.M develop new skills and knowledge from other members in my group	.760	
	CL4- S.M better than in a face to face learning environment	.473	
	SAP1- S.M facilitate academic activities and coordinate with peers	.596	
Factor 4 (Academic performance)	SAP2- S.M facilitate academic activities and coordinate with teachers	.584	10.195
	SAP3- Group discussions in S.M and will improve my academic performance	.573	
	SAP4- S.M build student-lecturer relationship with my lecturers and this improves my academic performance	.740	
	SAP5- S.M improves my interaction with classmates and lecturers, thus help me to improve my academic performance	.641	
Factor 5 (Engagement)	ENG1- S.M favored my personal relationships with my peers and teachers	.842	5.676

The above Table 7 denotes the loaded factors and their respective variables with loaded values and the respective “% of Variance” accounted for by each specific factor. The significant loaded factors and corresponding variables are depicted below:

Factor 1: (Interactivity with peers) consist of 5 variables:

INTP1- S.M facilitates interaction with peers

INTP2- S.M gives me the opportunity to discuss with peers

INTP3- S.M facilitates dialog with peers

INTP4- S.M allows exchange of information with peers

ENG3- S.M felt that my opinions have been taken into account in this class

Factor 2: (Interactivity with teachers) consists of 5 variables

- INTT1- S.M facilitates interaction with teacher
- INTT2- S.M gives opportunity to discuss with the teacher
- INTT3- S.M facilitates dialogue with the teacher
- INTT4- S.M allows the exchange of information with the teacher
- ENG2- S.M my peer and faculty interactions made me feel valuable

Factor 3: (Collaborative learning) consists of 5 variables

- CL1- Using S.M for collaborative learning in my group was effective
- CL2- S.M develop research skills through peer collaboration
- CL3- S.M develop new skills and knowledge from other members in my group
- CL4- S.M better than in a face to face learning environment
- SAP1- S.M facilitates academic activities and coordinates with peers

Factor 4: (Students' academic Performance) consists of 3 variables

- SAP2- S.M facilitates academic activities and coordinates with teachers
- SAP3- Group discussions in S.M and will improve my academic performance
- SAP4- S.M builds student-lecturer relationship with my lecturers and this improves my academic performance
- SAP5- S.M improves my interaction with classmates and lecturers thus help me to improve my academic performance

Factor 5: (Engagement) consists of 1 variable

- ENG1- S.M favored my personal relationships with my peers and teachers

6. CONCLUSION AND IMPLICATION

This study concludes that usage of social media will have a significant impact on academic performance. Academic performance will get improved through collaborative learning, since more than fifty percent of the respondent's state that they use social media for learning and experience improvement in their academic performance. This study extracted five factors, namely interactivity with peer, interactivity with teachers, collaborative learning, academic performance and engagement using social media which are considered to be important for enhancing academic performance of students. The study also concludes that the post graduate and graduate students are extremely satisfied with the use of SNSs for enhancing their career and they stated that social media facilitates dialog with peers, social media allows exchange of information with peers, social media facilitates dialogue with the teacher, social media favored their personal relationships with their peers and teachers, social media develop research skills through peer collaboration, social media develop new skills and knowledge from other members in their group, social media facilitate their academic activities and coordinate with their peers, social media build student-lecturer relationship which improves

their academic performance and finally they claim social media improves their interaction with classmates and lecturers whereby help them to improve their academic performance.

We propose for future work that this study focus only on the student's perception of using social media for academic purpose but faculty's perception is also taken into account and bridge the gap between their perceptions and make use of the result to inculcate the social media in educational institutions to improve the students' academic performance. Future work may focus some more factors to measure students' academic performance using social media

References

- Ab.Rahim, A. M. (2014). The Influence of Social Networking Sites on Students' Academic Performance in Malaysia. *International Journal of Electronic Commerce Studies*, 5 (2), 247-254.
- Afendi Hamat, M. A. (2012). The Use of Social Networking Sites among Malaysian University Students. *International Education Studies*, 5 (3).
- Al-Bahrani, A. A. (2014). Engaging Students Using Social Media: The Students Perspective.
- Bateman and Willams (2012). Facing off: Facebook and higher education', in *Misbehaviour Online in Higher Education: Cutting-edge Technologies in Higher Education*. 5, 53-79.
- Bernard, R. M. (2009). A meta-analysis of three types of interaction treatments in distance education. *Review of Educational Research*, 79 (3), 1243-1289.
- Dalsgaard, C. (2008). Social networking sites: Transparency in online education. *EUNIS 2008 VISION IT - Vision for IT in higher education. Helsingforsgade*.
- Gupta, A. K. (2015). Scope And Implications Of Social Media In The Context Of Higher Education: Review Of Researches. *Mier Journal of Educational Studies, Trends & Practices, Vol. 4* (No. 2), 231 – 253.
- Hovorka, D (2014). Active collaborative learning environments: The class of Web 2.0. *20th Australasian Conference on Information Systems: ACIS 2009, Melbourne, Australia*.
- Junco, R. M. (2010). The effect of gender, ethnicity, and income on college students' use of communication technologies. *CyberPsychology, Behavior, and Social Networking*, 13 (6), 619-627.
- Kumar, K. &. (2013). Use of Social Networking Sites (SNSs): A study of Maharishi Dayanand University, Rohtak, India. *Library Philosophy and Practice (e-journal)*.
- M.D. Roblyer, M. M. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *Internet and Higher Education*, 13, 134–140.
- Manjunatha.S. (2013). The Usage of Social Networking sites Among the College Students in India. *International Research Journal of Social Sciences*, 2 (5), 15-21.
- Mazer, J. P. (2007). I'll see you on "Facebook": the effects of computer-mediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56 (1), 1-17.
- Means, B. T. (2015). Evaluation of evidence based practices in online learning: A meta-analysis and review of online learning studies.
- Naushia, P. (2011). Use of social networking sites (facebook) in making awareness among the library and information science professionals of university of U.P.: A Case Study. *International Journal of Digital Library Services*, 1 (1), 9-17.

- Rebecca Viviana*, A. B. (2016). The academic journey of university students on Facebook: an analysis of informal academic-related activity over a semester. *Research in Learning Technology*, 22.
- Salomon, B. L. (2013). Engaging Students Through Social Media. *Proceedings of the Charleston Library conference*.
- Selwyn, N. (2014). Faceworking: Exploring students' education-related use of Facebook. *Learning, Media and Technology*, 34 (2), 157-174.