



ROLE OF FACEBOOK USAGE IN PREDICTING ACADEMIC ACHIEVEMENT OF ADOLESCENT STUDENTS

KEYWORDS

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ABSTRACT

This paper deals with the increasing use of facebook among adolescents and facebook usage as a predictor of academic achievement in adolescent students. A sample of 400 students of Haryana state was considered. Facebook Usage Scale developed by Hooda and Tyagi (2016) was used to collect the data. Results shows that there is a significant positive correlation between the facebook usage and academic achievement and approximately 3 % of academic achievement can be predicted by facebook usage.

Internet usage is increasing very fast and it's word wide increase has changed our ways of communication (Ellison, Steinfield and Lampe, 2007). We have so many options for communication via internet viz e-mail, instent, messaging, chatting, vedio calling, social networking sites (SNS) etc. SNS have come very popular these days. Almost everyone is connected and using these site by some or other way. SNS have been described by Boyel and Ellison (2007) as a web based service which provides individuals chance to construct personal profiles and communicate with others, enlisted by him/her.

Among all the SNSs, Facebook has become the most popular and used Social Network Site (Rose et. al. 2009). Being combination of so many useful tools, it is used most by the people. It allows the users to perform so many actions on one platform in place of different websites and softwares (Ulusu 2010). Facebook facilitates a user to create his/her personal profile and share with others his/her photographs, video like/dislikes and tests etc. with friends. Various applications like messages, greeting e-cards, gifts, groups, fun pages, games can be used on facebook. People also use facebook to make new friends and create wide social circle. Official reports explain that facebook in the second website which is most frequently visited on internet and reached 901 million users (Facebook 2012).

Social networking sites, specially facebook connects its were around the world and completely changed the mode of interactions among people. It provides a platform to the people to maintain current relationship and also to encouraging them to create new relationship at the same time. Facebook now allows anyone to become a registered user who claims to be at least 13 gears old. Since its debut in 2004, Facebook has attracted billions of users. People rely on this social networking site to assist in many other aspects other than socializing. Facebook with more than billions of its users, is becoming the first social networking site choice of adolescents. It is the need and demand of the hour to analyse its effect on our students.

Facebook has various utilities and it is seen as useful educational tool because of it's structure. Now the question arises how it should be used for educational purpose. The studies related to it argue that facebook and other social networks facilitate non-formal learning because it's members' role is active in their daily routines. Lee and Mcloughlin (2008) consider social networks as pedagogical tools, as people may use them for connectivity and social support, collaborative information discovery and sharing and creation of content, knowledge and aggregation of knowledge and modification. Youngsters from lower and medial income families were more likely to say that they use the sites to make new friends than higher income teens (Lenhart and Madden, 2007). In general, Facebook usage is adversely affecting the academic performance of the student but this adverse effect is observed greater for male students (Ahsan Ul Haq and Chand, S.2012). Despite its adverse effect on academic performance, facebook usage is positively correlated with time spent in co-curricular activities (Junco 2012). Facebook usage develops

student satisfaction with friends and family. The high level of satisfaction of the students with his family continue to enhance the academic performance, though, overall, facebook usage, appears to do not have a significant effect on academic achievement. However, this independency is significantly moderated by the student's interest and his multitasking capabilities. (Rouis.S, et.al.2012). Carrying the research forward, the investigator examined whether students' Facebook Usage can be a predictor of their academic achievement or not and if it is, then what is the percentage of its contribution.

Objectives of the study

1. To study Academic Achievement of senior secondary students.
2. To study Facebook Usage among senior secondary students.
3. To study the relationship between Academic Achievement and Facebook usage of senior secondary school students.
4. To identify the role of Face Book Usages in predicting academic achievement of senior secondary students.

Hypotheses of the Study

1. There is no significant relationship between academic achievement and Facebook usage of senior secondary students.
2. Facebook Usage will have no significant role in predicting Academic Achievement of senior secondary students.

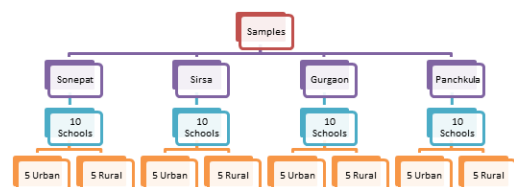
Research Design

Cross sectional design or correlation design was applied to see the relationship and its reliable prediction between Academic achievement and Facebook Usage.

Population and Sample of the study

Students of Xth class of Haryana state studying in session 2014-15 comprised the population of the study. Stratified multistage random sampling was used in selecting the units for the study. In the First stage 4 districts from the four division of Haryana were selected. Sonapat was selected from Rohtak division, Sirsa was selected from Hisar division, Gurgaon was selected from Gurgaon Division and Panchkula was selected from Ambala division. In order to attain a reasonable stratification, 10 schools whereas 5 schools from rural area and 5 schools from urban area were randomly selected as is presented in the diagram below:

Sample of the Study



MEASURING TOOLS

Facebook Usage Scale (2016) by Hooda and Tyagi was selected for measuring facebook usage . Details Marks Cards (DMC) of Board exams of Class X were considered as an indicator of academic achievement.

VARIABLE

Independent Variable:
Facebook Usage
Dependent variable
Academic Achievement

STATISTICAL TECHNIQUES:

Descriptive Statistic – Mean, SD and percentage were worked out to describe the nature of the data. In order to find out the relationship and its prediction Product Moment Correlation and Regression were employed.

ANALYSIS AND INTERPRETATIONS

O₁,"To study Academic Achievement of Senior Secondary Students."
In the light above objective, collected data has been analyzed as given in the table 1, which provides a clear picture about the prevailing of Academic Achievement in various groups of the sample.

Table 1 Percentage Distribution of Academic Achievement of senior secondary students:

| Variables | Group | N | Mean | Percentage |
|-------------------------------|--------------|-----|-------|------------|
| Gender | Male | 200 | 75.95 | 51% |
| | Female | 200 | 73.83 | 49% |
| Locality | Urban | 200 | 76.56 | 51% |
| | Rural | 200 | 73.22 | 49% |
| Gender*Residential Background | Urban Male | 100 | 80.16 | 27% |
| | Urban Female | 100 | 72.96 | 24% |
| | Rural Male | 100 | 71.74 | 24% |
| | Rural Female | 100 | 74.71 | 25% |

Above data shows (Table 1) that the distribution of Academic Achievement in male and female groups are approximately same, that is 51% and 49% respectively with 75.95 and 73.83 mean scores . So it may be concluded that male are slightly higher edge over the female counterparts. Above table is further showing the distribution of Academic Achievement in urban and rural sub groups. It is clearly observed that Urban senior secondary students have scored slightly higher with mean scores 76.56 (51%) as compare to their rural counterparts with mean score 73.22 (49%), which may be counted approximately equal. Above data also gives a clear picture of the distribution of Academic Achievement in percentage on the bases of Gender and Residential Background. Urban male (mean 80.10, 27%) scored the highest in the group and rural male (mean 71.74, 24%) and urban female (mean 72.96, 24%) remained the lower.

DISTRIBUTION OF FACEBOOK USAGE IN VARIOUS GROUPS OF DATA:

O₂,"To study Facebook Usage of Senior Secondary Students."

In the light of the above objective, following data has been analyzed as given in the Table 2, which presents a clear picture about the existence of facebook usage in various groups of the sample.

Table 2 Distribution of Facebook Usage of senior secondary students:-

| Variables | Group | N | Mean | Percentage |
|---------------------------------|--------------|-----|-------|------------|
| Gender | Male | 200 | 73.66 | 49% |
| | Female | 200 | 76.20 | 51% |
| Residential background | Urban | 200 | 78.17 | 52% |
| | Rural | 200 | 71.69 | 48% |
| Gender * residential background | Urban Male | 100 | 76.21 | 25% |
| | Urban Female | 100 | 80.13 | 27% |

| | | | | |
|--|--------------|-----|-------|-----|
| | Rural Male | 100 | 71.11 | 24% |
| | Rural Female | 100 | 72.27 | 24% |

It can be seen from the Table 2 that female subjects are more facebook users (mean 76.20, 51%) than the male subjects (mean 73.66, 49%). Further, urban senior secondary students have high facebook usages (52%) than their rural counter parts (48%) furthermore, it is evident that urban female subjects have the highest facebook usage (mean 80.13,27%) in the group and rural male enjoys the lowest (mean 71.11, 24% each) facebook usage in the group.

RELATIONSHIP BETWEEN ACADEMIC ACHIEVEMENT AND FACEBOOK USAGE

concerned objective of the study:

O₃,"To study the relationship between Academic Achievement and Facebook Usage of Senior Secondary Students."

In the light of the above said objective the hypothesis was formulated by the researcher:-

Ho,"There is no significant relationship between academic achievement and Facebook usages of senior secondary students".

Table 3 Relationship between Academic Achievement and Facebook usage

| VARIABLES | N | MEAN | S D | r | LEVEL OF SIGNIFICANCE |
|---------------|-----|--------|-------|-------|-----------------------|
| A ACHIEVEMENT | 400 | 74.892 | 9.95 | 0.173 | .01 |
| F B U | 400 | 73.92 | 22.68 | | |

Above Table 3 shows that obtained Product Moment Correlation – coefficient .173 is significant at .01 level of significance at the df 399. It refers to the rejection of formulated null hypothesis "There is no significant relationship between academic achievement and facebook usage of senior secondary students". Hence it may conclude that there exists a significant and positive co- relation between Academic achievement and facebook usages of senior secondary students. The higher academic achievers found to be the higher facebook users. This relation may also realized through the line diagram given below.

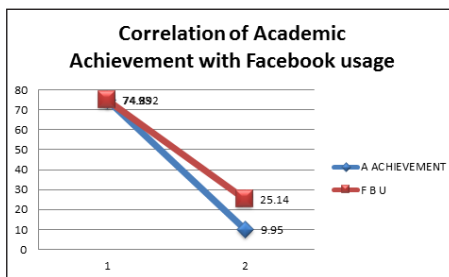


Fig. 3 Correlation of Academic Achievement with Facebook usage

ROLE OF FACEBOOK USAGE IN DETERMINING ACADEMIC ACHIEVEMENT:-

Concerned Objective

O.4 "To identify the role of Facebook Usage in predicting academic achievement of senior secondary students".

In the light of the above said objective by the researcher formulated the hypothesis:-

Ho₂ "Facebook usage will have no significant role in predicting Academic Achievement of senior secondary students."

To predict the role of Facebook Usage in determining Academic Achievement the following Table 4 was analysed:

Table 4

| | Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|------------|----------------|-----|-------------|--------|------|
| 1 | Regression | 1182.84 | 1 | 1182.84 | 12.283 | .001 |
| | Residual | 38325.83 | 398 | 96.29 | | |
| | Total | 39508.378 | 399 | | | |

It is clear from Table No.4 that computed F ratio = 12.283,(df 1/398) is highly greater than the table value and is significant at .01 level. Hence the null hypothesis "Facebook Usage will have no significant role in predicting Academic Achievement of senior secondary students." is rejected. Now, it is clear that Facebook Usage significantly predicts Academic Achievement of senior secondary students. Furthermore to find out how many points of Facebook usage fall on the regression line, the following Table 5 was analysed:

Table 5

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|-------------------|----------------------------|
| 1 | .173 | .22 | .19 | 9.81302 |

The above table No. 5 depicts that R Square = .22 and Adjusted R Square = 0.19, which indicates that independent variable that is, Facebook Usage occupies 2.2% of the variability of the academic achievement. It can be concluded on the basis of the table that 2.2 % of Academic Achievement is influenced and determined by the facebook Usage. In other words, inculcating the habit of using technology among senior secondary students, 2.2 % or approximately 3% of Academic Achievement can be improved. It can be shown by the pie diagram also:

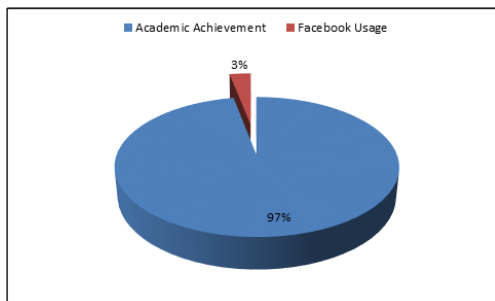


Fig. 1 Role of Facebook Usage in determining Academic Achievement:-

Main Findings of the Study:

- Male students were found to have higher Academic achiever than their female counterparts.
- Urban subjects were found to achieve more score on academic achievement comparatively to their rural counterparts.
- Urban male subjects were found to the highest on academic achievement among all subjects of the present study.
- Rural female subject were found to higher on academic achievement as compared to urban female subjects.
- Female subjects were found to be higher on facebook usage than their male counterparts but the difference was not significant.
- A significant and positive co- relation was found between Academic achievement and Facebook Usage score of senior secondary school students. The higher academic achievers were found to be higher on Facebook Usage score.
- Facebook usage accounts approximately 3% of academic achievement in the present study. It means 3% of academic achievement can be predicted by facebook usage among this sample of the study.

Discussion of the result:-

A significant positive correlation was found between both of the variables. Subjects, higher on facebook usage were found to be higher on academic achievement. Results are surprising and contradictory

of the studies of Englander, et. al. (2010) Khan (2009), Junco (2012), Kirschner and Karpinski (2010). Result of this study supports Wnag Jenny, 2013; Sana. Rouis. 2012; Roblyer.et.al 2010. that facebook usage is positively correlated with academic achievement.

Educational implications:-

The present study has valuable implications for educationists, policy planners, curriculum developers, teachers, parents and school authorities. Results of study can be utilized for devising new models and strategies of teaching-learning. As the results are in favour of technology use, teaching-learning process may be more interesting and quick by proper use of technology. Weak areas can be found by observing the obtained results for further improvement, variables, which are found to be contributors of academic achievement, can be manipulated in positive way to gain more and more educational output with less efforts. Facebook Usage also found to be positively correlated with academic achievement of the students, it is an indication that electronic media helps students to gain knowledge when is used properly.

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