

POSITIVE AND NEGATIVE EFFECT OF SOCIAL MEDIA AND OF SOCIAL MEDIA AND THEIR IMPACT ON ACADEMIC PERFORMANCE OF HIGHER SECONDARY STUDENTS IN NADIA DISTRICT OF WEST BENGAL

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Abstract

Use of social media is increasing during last few years. It is not only being used by people who is in working field but also there is a rise in use of social media by students. But use of social media has both positive and negative effects on higher secondary students regarding their academic performance. Realising the importance of academic performance and effects of social media the researcher has taken the present study. The present research aimed to study the differences in the effects of social media on academic performance of the students. Researcher also likes to study the relation between positive effects of social media on academic performance of the students and between negative effects of social media on their academic performance. The necessary data were collected from 150 higher secondary students of Nadia district. The findings of the study revealed that there are a significant difference among high, medium and low positive effects of social media on academic performance of the students and also high, medium and low negative effects of social media on academic performance of the students. The findings also revealed that significant relation exists between both types of effects of social media and academic performance.

Key Words:

Positive effect of social media, Negative effect of social media, Academic performance.

Introduction

Social media are computer-mediated technologies. It facilitate the sharing and creation of ideas, information and other forms of expression via virtual communities and network. Users access social media services via web-based technologies. Some of the most popular social media websites are Facebook, Google+, Instagram, Snapchat, Twitter, Whatsapp, You Tube, WeChat, Viber, and Wikia.

Social media is a term that is used to describe any number of technological system related to collaboration and community (Joosten, 2012), while it appears that a specific definition may be elusive (Kaplan and Haenlein, 2010). 'Social Media' is a multipurpose platform with web-based technology. It incorporates text, sound, video and images with the purpose of making communication more interactive, appreciative and enjoyable (Kalpan and Haenlein, 2010) . It is a means of interaction among people in which they create, share and comment on contains among themselves in virtual communities and

networks. It introduces substantial and pervasive changes to communication between organizations, communities and individuals (Kietzmann et al, 2011).

Social media have two effect. These are positive effect and negative effect. Discuss educational topics, increase a person's quality of life, communicate and remain in contact with persons etc. are the positive effect of social media. Another side, reduce the amount of face socialization with other people, reduce focus on learning and retaining information, privacy issues like posting personal information on online sites etc. are the negative effects of social media. In some scenario there are many inappropriate educational information posted which may lead the students to the wrong side. Social media encourages the development of technical, social skill and transferable of value in formal and informal learning (Pratisha Padmasri Deka, 2015). Most of the negative aspect can be overcome by reducing the amount of time spent on social media (V.Raut and P.Patil, 2016). Social media has increased the quality and rate of collaboration on education for student (S.Siddiqui and T.Singh, 2016). Social media has become essential but it could ruin the future of teenagers and it has a very bad impact on education (F.Ullah and W.Tarik, 2012). In absence of real social life, technology mediated interaction does not teach healthy social skill (Dr. Sharmistha, 2016).

Academic performance is the extent to which a student, teacher or institution has achieved their short or long-term educational goals. It is measured by the final grade in the course. Positive effects of social media in case of education, increases the academic performance of the students. It is clear that social media does not impact schools student academic performance (Y.Hasham, 2015). Another side, negative effects of social media in case of education, decreases the academic performance of the students. Students, who checking social media while studying, reduce their academic performance. Social media has an inverse relationship with academic performance (H.Hasnain and A.Nasreen, 2012). Student divert from school activities to social media usage largely affect their academic performance (J.D.Tamayo, 2014).

Problem of the study

At present time, we, all the students, are using social media platform. In educational field, we all are using it to gather information. But social media has both positive and negative effect on education. Negative effects of social media effects students' carrier and reduced their academic performance. So it is very important to know the positive & negative impact of social media in education. So the researcher decided to know the impact of social media in Nadia district. Researcher will observe both positive and negative effect of social media and their academic performance in Nadia District, West Bengal.

Objectives of the Study

1. To find out positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.
2. To find out the high positive effect and medium positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.
3. To find out the low positive effect and medium positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.
4. To find out the high positive effect and low positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.
5. To find out the negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.
6. To find out the high negative effect and medium negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

7. To find out the high negative effect and low negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.
8. To find out the low negative effect and medium negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.
9. To find out the relation between positive effect of social media and academic performance of higher secondary students of Nadia District, West Bengal.
10. To find out the relation between negative effect of social media and academic performance of higher secondary students of Nadia District, West Bengal.

Hypotheses:

On the basis of earlier stated objectives the following hypotheses have been formulated:

Ho1: There will be no significance influence of positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho2: There will be no significance difference between high positive effect and medium positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho3: There will be no significance difference between low positive effect and medium positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho4: There will be no significance difference between high positive effect and low positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho5: There will be no significance influence of negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho6: There will be no significance difference between high negative effect and medium negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho7: There will be no significance difference between high negative effect and low negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho8: There will be no significance difference between low negative effect and medium negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Ho9: There will be no relation between positive effect of social media and academic performance of higher secondary students of Nadia District, West Bengal.

Ho10: There will be no relation between negative effect of social media and academic performance of higher secondary students of Nadia District, West Bengal.

Delimitation of the study:

The delimitation of the present study have been listed below:

The present study is delimited to 150 higher secondary school students of Nadia District of West Bengal only.

Variables of the study:

- Positive effects of social media
- Negative effects of social media
- Academic performance

The Sample:

In the present study all the higher secondary students of Nadia district constituted the population of the study. As per the convenience of researcher, the investigator has chosen some different schools of Nadia district for collecting data. The researcher visited some different schools of Nadia district with the permission of Head Master. Researcher collects data from the sample of 150 higher secondary students.

Tools:

Questionnaire: The investigator in this study will collect necessary information from the sample with the help of questionnaire made by the researchers.

Reliability: Keeping in view the objectives of the present investigation, Reliability was assessed by using the Cronbach's alpha formula. For positive effect of social media scale, it was found .674 and negative effect of social media scale, it was found .575. Two test were validate by three experts.

Data Analysis:

The hypotheses H_{01} - H_{08} were tested using one way ANOVA and Independent sample T Tests. The details of hypotheses testing, analyses and interpretations are explained below in the following sections.

Testing for null hypothesis H_{01} through one way ANOVA

H_{01} : There will be no significance effect of positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of null hypothesis H_{01}

Hypothesis	Factor variable	Dependent variable	N	Mean	Std. deviation	F	P (sig)	Df	Remarks
H_{01}	High positive effect	Academic performance	36	61.36	17.260	8.198	.000	2 147	F significant at 0.05 level. H_{01} rejected
	Medium positive effect		88	57.45	17.322				
	Low positive effect		26	44.54	14.146				

- In the case of H_{01} result indicates that F value calculated is 8.198 and P value is .000($P < 0.05$). Hence H_{01} is rejected. So it can be concluded that there is significant difference among the High, Normal & Low positive effect of social media on academic performance of higher secondary students.
- Therefore, independent sample T-test are required to find out difference between various groups of positive effect of social media of H.S student differed in their academic performance.

Testing of Null Hypothesis H_{02}

H_{02} : There will be no significance difference between high positive effect and medium positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H_{02}

hypothesis	Independent variable	Dependent variable	N	Mean	Std. deviation	t	P(sig)	Df	Remarks
H_{02}	High positive effect	Academic performance	36	61.36	17.26	-1.141	.256	122	Not significant 't' at 0.05 level. H_{02} accepted
	Medium positive effect		88	57.45	17.32				

- In case of H_{02} results indicate that the mean value of high positive effect of social media on academic performance is 61.36 and medium positive effect is 57.45. The value of $t = -1.414$ and $p = .256$ ($p > 0.05$). Therefore H_{02} is accepted. So it can be concluded that there is no significance difference between high & medium positive effect of social media on academic performance of H.S students of Nadia district.

Testing of Null Hypothesis H_{03}

H_{03} : There will be no significance difference between high positive effect and low positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H_{03}

hypothesis	Independent variable	Dependent variable	N	Mean	Std. deviation	t	P(sig)	Df	Remarks
H_{03}	High positive effect	Academic performance	36	61.36	17.26	-4.076	.000	60	Significant 't' at 0.05 level. H_{03} rejected
	Low positive effect		26	44.54	14.14				

- In case of H_{03} results indicate that the mean value of high positive effect of social media on academic performance is 61.36 and low positive effect is 44.54. The value of $t = -4.076$ and $p = .000$ ($p < 0.05$). Therefore H_{03} is rejected. So it can be concluded that there is a significance difference between high & low positive effect of social media on academic performance of H.S students of Nadia district.

Testing of Null Hypothesis H_{04}

H_{04} : There will be no significance difference between low positive effect and medium positive effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H_{04}

hypothesis	Independent variable	Dependent variable	N	Mean	Std. deviation	t	P(sig)	Df	Remarks
H_{04}	medium positive effect	Academic performance	88	57.45	17.32	-3.472	.001	112	Significant 't' at 0.05 level. H_{04} rejected
	Low positive effect		26	44.54	14.14				

- In case of H_{04} results indicate that the mean value of medium positive effect of social media on academic performance is 57.45 and low positive effect is 44.54. The value of $t = -3.472$ and $p = .001$ ($p < 0.05$). Therefore H_{04} is rejected. So it can be concluded that there is a significance difference between medium & low positive effect of social media on academic performance of H.S students of Nadia district.

Testing for null hypothesis H_{05} through one way ANOVA

H_{05} : There will be no significance effect of negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of null hypothesis H_{06}

hypothesis	Factor variable	Dependent variable	N	Mean	Std. deviation	F	P (sig)	Df	Remarks
H_{05}	High negative effect	Academic performance	42	55.5	18.552	3.844	.024	2 147	F significant at 0.05 level. H_{05} rejected
	Medium negative effect		83	53.89	16.681				
	Low N. effect		25	64.76	17.013				

- In the case of H_{05} result indicates that F value calculated is 3.844 and P value is .024 ($P < 0.05$). Hence H_{05} is rejected. So it can be concluded that there is significant difference among the High, Normal & Low positive effect of social media on academic performance of higher secondary students.
- Therefore, independent sample T-test are required to find out difference between various groups of positive effect of social media of H.S student differed in their academic performance.

Testing of Null Hypothesis H_{06} - H_{08} through Independent sample T-tests

Testing of Null Hypothesis H_{06}

H₀₆: There will be no significance difference between high negative effect and medium negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H₀₆

hypothesis	Independent variable	Dependent variable	N	Mean	Std. deviation	t	P(sig)	Df	Remarks
H ₀₆	High negative effect	Academic performance	42	55.50	18.552	-.490	.625	123	Not significant 't' at 0.05 level. H ₀₆ accepted
	Medium negative effect		83	53.89	16.681				

- In case of H₀₆ results indicate that the mean value of high negative effect of social media on academic performance is 55.50 and medium negative effect is 53.89. The value of $t = -.490$ and $p = .625$ ($p > 0.05$). Therefore H₀₆ is not rejected. So it can be concluded that there is no significance difference between high & medium negative effect of social media on academic performance of H.S students of Nadia district.

Testing of Null Hypothesis H₀₇

H₀₇: There will be no significance difference between high negative effect and low negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H₀₇

hypothesis	Independent variable	Dependent variable	N	Mean	Std. deviation	t	P(sig)	Df	Remarks
H ₀₇	High negative effect	Academic performance	42	55.50	18.552	-4.076	.000	60	Significant 't' at 0.05 level. H ₀₇ rejected
	Low negative effect		26	44.54	14.146				

- In case of H₀₇ results indicate that the mean value of high negative effect of social media on academic performance is 55.50 and low negative effect is 44.54. The value of $t = -4.076$ and $p = .000$ ($p < 0.05$). Therefore H₀₇ is rejected. So it can be concluded that there is significance difference between high & low negative effect of social media on academic performance of H.S students of Nadia district.

Testing of Null Hypothesis H₀₈

H₀₈: There will be no significance difference between medium negative effect and low negative effect of social media on academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H₀₈

hypothesis	Independent variable	Dependent variable	N	Mean	Std. deviation	t	P(sig)	Df	Remarks
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H ₀₈	Medium negative effect	Academic performance	88	57.45	17.322	-3.472	.001	112	Significant 't' at 0.05 level. H ₀₈ rejected
	Low negative effect		26	44.54	14.146				

- In case of H₀₈ results indicate that the mean value of medium negative effect of social media on academic performance is 57.45 and low negative effect is 44.54. The value of $t = -3.472$ and $p = .001$ ($p < 0.05$). Therefore H₀₈ is rejected. So it can be concluded that there is significance difference between medium & low negative effect of social media on academic performance of H.S students of Nadia district.

Testing of correlation:

H₀₉: There will be no relation between positive effect of social media and academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H₀₉

		Percentage	Total PF
Percentage	Pearson Correlation	1	.361**
	Sig. (2-tailed)		.000
	N	150	150
Total PF	Pearson Correlation	.361**	1
	Sig. (2-tailed)	.000	
	N	150	150

** . Correlation is significant at the 0.01 level (2-tailed).

- In case of H₀₉ results indicate that the correlation value at 0.01 level is .361. So the correlation is significant at 0.01 level. Therefore H₀₉ is rejected. So it can be concluded that there is significance correlation between positive effect of social media and academic performance of higher secondary students of Nadia District.

Testing of correlation:

H₀₁₀: There will be no relation between negative effect of social media and academic performance of higher secondary students of Nadia District, West Bengal.

Table: Testing of Null Hypothesis H₀₁₀

		total NF	Percentage
total NF	Pearson Correlation	1	-.202*
	Sig. (2-tailed)		.013
	N	150	150
Percentage	Pearson Correlation	-.202*	1
	Sig. (2-tailed)	.013	
	N	150	150

*. Correlation is significant at the 0.05 level (2-tailed).

- In case of H_{10} results indicate that the correlation value at 0.05 level is .202. So the correlation is significant at 0.05 level. Therefore H_{10} is rejected. So it can be concluded that there is significance correlation between negative effect of social media and academic performance of higher secondary students of Nadia District.

Findings:

After the analysis of the data and interpretation of the results with regard to the objectives and hypotheses of the study, the investigator reached at the following findings:

- Between high & medium positive effect of social media of H.S students of Nadia district, West Bengal have significant difference on their academic performance.
- Between high & low positive effect of social media of H.S students of Nadia district, West Bengal have significant difference on their academic performance.
- Between low & medium positive effect of social media of H.S students of Nadia district, West Bengal have significant difference on their academic performance.
- Between high & medium negative effect of social media of H.S students of Nadia district, West Bengal have not significant difference on their academic performance.
- Between high & low negative effect of social media of H.S students of Nadia district, West Bengal have significant difference on their academic performance.
- Between low & medium negative effect of social media of H.S students of Nadia district, West Bengal have not significant difference on their academic performance.
- Positive effect of social media have significant correlation with academic performance of H.S students of Nadia district, West Bengal.
- Negative effect of social media have significant correlation with academic performance of H.S students of Nadia district, West Bengal.

Conclusion:

Social media are computer-mediated technologies. It facilitate the sharing and creation of ideas and information. Academic performance is the extent to which a student, teacher or institution has achieved their short or long-term educational goals. The overall study makes it clear that positive and negative effects of social media of higher secondary students on their academic performance plays a significant role. Different effects of Social media have significant difference regarding academic performance. Positive and negative effect of Social Media have significant relation with academic performance of students. Positive effect of social media increase academic performance of higher secondary students whereas negative effects of social media decrease academic performance of higher secondary students.

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