
Association Between Students Social Media Use and Their Academic Performance: The Case of Preparatory Schools in Adama

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Abstract: This study aimed at examining the relationship between students' social media use and academic performance, the case of preparatory schools in Adama City. The study employed a descriptive research design (concurrent embedded research method) in which 222 student respondents were selected by using simple random, systemic and stratified random sampling techniques whereas 26 respondents, viz., principals, teachers, and class monitors, were selected purposively. The questionnaire, interview, and focus group discussions were used as the instruments of data collection. The quantitative data were analyzed by using descriptive statistics and Chi-Square tests of independence and supplemented by qualitative results. The study pointed out that all students under study were engaged in using social media using mobile data as a source for access at home and during evening time. The study also found out that students had an experience of login on social media more than five times and spent more than three hours on average per day. The study also confirmed that students tend to use social media dominantly for non-academic activities (chatting and entertainment). It was also observed that there was a trend of decreasing in students' academic performance as the time they spent on social media was increasing. Finally, it was recommended that students need to be encouraged to use social media for educational purposes and the school should also have to organize the training on meta-cognition skills (training on Growth Mind Set) which helps students to develop self-regulation skills.

Key terms: *social media, academic, performance, school, Facebook, practices, social media usage, non-academic*

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Introduction

Background of the Study

Information and Communication Technologies have created a “Global Village” in which people can communicate with others across the world as if they were living next door. Among these technological advancements, one of them is social media which has become an international trend; it is spreading to almost every corner of the world (Boyd and Ellison, 2007). It is a platform that is either web-based or mobile applications that allow individuals or organizations to create and engage with user-generated content in digital environments. It has become a common practice and behavior among communities of people who gather information, knowledge, and opinions and share these online using conversational media (Safko and Brake 2009; Lenhart, Madden, Macgill & Smith 2007).

The practices and increased use of Social Networking Websites have become a social norm and way of life for people from all over the world. A 2012 survey by the Pew Research Center's Internet and American Life Project shows that young adults are more likely than other adults to use social media. The 18-29 age group has the highest participation in social networking sites, followed by 30-49, and to a lesser extent those who are 50 and above (Duggan and Brenner, 2013).

In Ethiopia, social media (especially Facebook) allow individuals to construct a public profile within a bounded system, a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. Among social networking sites, Facebook has been the prime among highly visited social networking sites (Internet world status, 2012; Jibat, 2012). Social networking sites have also been recognized as an important resource for education today. Liccardi, Ounnas, Massey, Kinnunen, Midy, and Sakar (2007) reviewed that students are socially connected for sharing

their daily learning experiences and do conversations on several learning topics.

However, educational institutions have great fear that students' academic performance might be adversely affected because students are paying more attention to social networking sites. For this reason, some educational institutions have blocked sources like Wi-Fi, Internet broadband, and other social networking sites (Nebiat and Girum, 2014). No one can deny that as it has become a common phenomenon observing students who are using social media to make connections, not only in the school compound but also outside of the school compound.

Moreover, studies tend to show that students use social media to meet existing friends or to make new ones (Ellison, Stein field, and Lampe 2007); most of them are attracted to non-educational and inappropriate actions (Kuppuswamy and Shankar, 2010) which may have undesired effects on their academic performance (Karpinski and Duberstein, 2009). Even though they consider the website is distracting and time-consuming, these students note that they cannot quit visiting it (Facebook, 2011; Adan, 2011). Researchers are fascinated by social media and its effects on adolescents, and they are concerned with social media's effects on students' attitudes, self-esteem, and relationships (O'Keeffe and Clarke-Pearson, 2011; Lenhart, Purcell, Smith and Zickuhr, 2010; Ahn, 2011; Lenhart et al., 2007).

The use of social media among students has been changing the landscape of communication and education drastically. High school students, for instance, spend stereotypically more time on social media by consuming much of their school work. This may lead them to deviation, distraction, and divided attention that can reduce their concentration level and influence their academic achievement negatively. Besides, students' addiction to social networks may have a direct effect on their academic performance (Nebiat and Girum, 2014).

Moreover, it is becoming common earshot that many parents and guardians at home, teachers at schools are worried and they complain about students' untraced usage of social media. Even though there is such a huge complaint from all sides, studies in this area are very scant. Therefore, an investigation regarding the influence of students' practices of social media on their academic performances has paramount importance to alleviate such alarming social problems. As a result, this study attempted to examine students' social media usage and their academic performances. Thus, the following research issues were raised:

- the prevalent practices of students in using social media, and
- the relationship between students' social media usage and their academic performances.

Significance of the Study

The findings of the study may help students to develop a sense of self-regulation to use their time effectively and efficiently in their learning, and it will also enable preparatory school students to know how best to use social media as a tool for integrating themselves into the globalized world without affecting their academic performance. The study is also significant for parents and school management to guide their students to use social media for educational purposes, which can be realized through the collaboration of school management, parents, and teachers. It also helps schools to have rules and regulations on social media usages. Moreover, the study will enable the students of different levels in general and the preparatory school level in particular to raise their awareness about the negative effect of social media and to use the social network site only for educational purposes.

Delimitation of the Study

The study was delimited to preparatory students, teachers, unit leaders, and school directors of selected public and private preparatory schools in Adama City. Secondly, there are many factors (extraneous variables) such as intelligence, respondents' socio-economic status, learners' prior knowledge that may affect the students' academic performances, in addition to time spent on non-academic activities on social media, but this study was delimited to students' attitudes, practices and academic performances concerning social media usage. The study was also delimited to only social media rather than all electronic media used for communications.

Operational Definition of Terms

As various terms may have different meanings in different contexts, the following definitions are given for the following terms in the context of this study.

Academic performance: the academic achievement of students measured in their yearly cumulative average of the scores of the subjects they have taken during a given semester.

Practices: any activities performed by students on social media.

Social Media: forms of electronic communication that facilitate interaction based on certain interests.

Social Networking Site: A website where people put information about them and can send it to others.

Theoretical Framework

Uses and gratification theory suggests that social media users have power over their media consumption and assume an active role in integrating media into their own lives and that they are responsible for choosing media to meet their desires and needs to achieve gratification. It focuses on why and how people use social media to satisfy their needs (Park, et al., 2009, Uwem, et al., 2013). From this theory perspective, students are highly interested that social networking sites having a wide range of information material that they utilize to satisfy their needs by surfing different online resources. Therefore, the uses and gratifications approach applied to the current study or a good way to find out what motivated the students to use social media, and how this participation in social media may affect their academic achievement of selected preparatory schools in Adama city.

Research Methodology

Research Design

Based on the nature of the problem under investigation and its representativeness of a wide target population, this study employed a descriptive survey design for it can also provide descriptive and explanatory information. Among the three categories of research approach, this study employed a mixed research method to collect both quantitative and qualitative data from the respondents. This study specifically used the concurrent research approach, especially the concurrent embedded (nested) method to integrate the data obtained through quantitative (survey questionnaire) and qualitative methods (interview and focus group discussion). This was to triangulate the data and draw a clear picture of the problem under investigation.

Target Population

The target population for this study was students of grade 11 and 12 public and private preparatory schools and principals and teachers in the respective schools.

Sample Size and Sampling Techniques

Based on the assumption of Neumann and Kreuger (2002) sample determination, the researchers took 10% of the total target population (2412) which constitutes 242 students (participants). Similarly, the same procedure was applied for both public and private preparatory schools. This means 10% of 1612 public preparatory school students constituted 162 sample respondents, and 10% of 800 private preparatory schools constituted 80 sample respondents. A total of 242 (162 from public and 80 from private) students, therefore, constituted the sample. Finally, by using correction factor as stated by Cochran (2012), a sample of 152 students was selected using simple random, systematic, and stratified sampling techniques from public preparatory school and a sample of 70 students from private preparatory school which make up a total of 222 sample students as shown in Table 1.

Concerning sampling procedures, the target population was stratified based on their school type (public and private), grade level (11th and 12th), sex (male and female), and sections. This means preparatory schools in Adama city were categorized into two strata. These are three public preparatory schools (Bole, Goro, and Hawas) and four private preparatory Schools (Excel, Mako Billi, NAFYAD, and St.Yoseph). Among these two strata, Hawas preparatory school from public and NAFYAD preparatory school from private schools were selected using simple random sampling techniques.

Hawas preparatory school has twelve sections of grade 11th (744 students), and fourteen sections of grade 12th (868 students) that constituted a total of (1612 students). Similarly, NAFYAD preparatory

As indicated in Table1, 24 respondents were selected from every three sections of grade 11 which constitutes 72 students of which 42 and 30 were males and females respectively. Similarly, 20 respondents were from every four sections of grade 12 public school which constitutes 80 students (48 respondents were male while 32 were females) (Hawas preparatory school). On the other hand, 70 students were from private (NAFYAD) preparatory school) of which 27 respondents were male and 43 were females selected from grade 11 and grade 12 by using a systematic random sampling technique.

Finally, two-unit leaders, two school directors, and four teachers which constitute eight male respondents were selected purposively for an interview from both Hawas and NAFYAD preparatory schools. Besides, ten students from Hawas and eight students from NAFYAD preparatory school which make up a total of 18 students were selected for focus group discussions (FGD) by using purposive sampling. Therefore, the total number of the research sample size was 248 respondents.

Sources of Data

In this study, primary and secondary data were used as the main source of data. The primary data were collected through questionnaires, in-depth interviews; focus group discussions. The secondary data were gathered from books, journals (articles), internet resources, and other printed materials.

Instruments of Data Gathering

To achieve the objectives of the study, the researchers used a survey questionnaire to measure students' social media practices. The questionnaire was developed from different literature available. The questionnaire consists of three parts such as Social Media Usage Related Practices (contains six items), Time Students' Spent on Social Media (contains two items) and an Item Related to Purpose of Using Social Media (one item). Regarding the qualitative data gathering tools,

the researchers developed the guideline to conduct an interview with teachers, unit leaders, and school principals which lasts for 55 minutes and focus group discussions with students for 1:20 hours to obtain a rich understanding of the issue under investigation. Moreover, the researchers believed that an interview and focus group discussions provide students with an opportunity to explain in depth which could not be gathered quantitatively.

Pilot Testing

Before collecting the data from the respondents, a pilot test was conducted. To gain insight from the students about tools that could help for the final survey, about 30 students participated from one private preparatory school (Mako Bill preparatory school) in the pilot testing. To check their face validity, the questionnaire, focus group discussion and interview questions were thoroughly reviewed, commented and validated by three selected psychology instructors and four senior high school teachers. Accordingly, in the process of the pilot study, there was no item dropped from the questionnaire; in fact, there were some amendments made to some items to avoid some ambiguities, for instance, overlapped intervals (1-3 hrs., 3-5hrs) and language editing for better clarity. Finally, the Cronbach alpha coefficients of all the items were considered for the reliability test. The value obtained from the Cronbach alpha coefficient was found to be 0.88 which indicates that the questionnaire was found to be reliable.

Students` Academic Achievement

To achieve the objective of this study, the first-semester class average of the 2018/19 academic year was used as students' academic achievement. Besides, the respondents were requested to write their first-semester class average along with their grade, section, and roll number on space provided on the questionnaire, and this was also

cross-checked with their semester class mark list (Roster) obtained from homeroom teachers.

Data Analysis Methods

In this study, data were analyzed using descriptive statistics as frequency and percentage, a nonparametric test, and qualitative data were also analyzed thematically. More specifically, the examination of statistical relationships between ordinal variables most commonly uses cross-tabulation (also known as contingency or bivariate tables). To assess relationships between two independent ordinal/nominal variables, Chi-Square tests of independence were widely used.

Ethical Considerations

For the successful completion of the study, the researchers first obtained the consent of the respondents and then ensured their privacy with appropriate use of anonymity and confidentiality.

Results and Discussion

This part presents the data and interprets the research findings which required examining practices and academic performances concerning students' social media usage and its impacts on their academic performances. Thus, in this part, data were analyzed, interpreted, and discussed with the work of different scholars.

Respondents` Demographic Information

Table 2: Grade, Sex, and Age Group of Respondents

Categories	Characteristics	Frequencies	Percentage
Gender	Male	106	53%
	Female	94	47%
	Total	200	100%
Age Group	Below 17	8	4%
	17-20	140	70%
	>20	52	21%
	Total	200	100%
Grade	11 th	96	48%
	12 th	104	52%
	Total	200	100%

Category1 of Table 2 indicates respondents` sex in which 106(53%) of them were males and 94(47%) females. In this regard, the return rate of the questionnaires was 90% in which 222 questionnaires were administered to participants, and out of which 200 questionnaires were properly filled and returned as required; the remaining questionnaires were incomplete and not given back by participants. The second category of Table 2 indicates the age group of student respondents in which 8 (4%) of them were below 17, whereas 140 (70%) of them were between 17-20, and 52 (26%) of the above 20 years. From this data, one can understand that majority of the respondents 148 (74%) were at the adolescence stage, while 52 (21%) of them were in the early adulthood stage. Concerning respondents` grade level, as shown in category 3 of Table 2, 96 (48%) of them were from grade 11 and 104 (52%) of them were grade 12 students.

*Social Media Usage Related Practices***Table 3. Types of Social Media and Their Usage Prevalence**

Items	Response	School types and their respective responses					
		Public		Private		Overall Total	
		<i>F</i>	%	<i>F</i>	%	<i>F</i>	%
Are you a user of social media?	Yes	138	69%	62	31%	200	100%
	No	-	-	-	-	-	-
Types of social media users.	Face book	59	42.8%	5	8.1%	64	32%
	Telegram	17	12.3%	36	58.1%	53	26.5%
	You tube	18	13%	11	17.7%	29	14.5%
	WhatsApp	19	13.8%	3	4.8	22	11.5%
	Instagram	9	6.5%	3	4.8%	12	6%
	Google	9	6.5%	2	3.2%	11	5.5%
	Imo	5	3.6%	-	-	5	2.5%
	Messenger	2	1.4%	2	3.2%	4	2%
	Total	138	100%	62	100%	200	100%

As indicated in Table 3, all respondents 200 (100%) of both public and private schools responded 'Yes' for the item that asks whether they were the user of social media or not. In another word, all students were users of different social media sites. This indicates that there is a high prevalence of social media usage among preparatory level students (adolescence stage) of both public and private schools. This is in line with the study of Wiley and Sisson (2006) which argued that more than 90% of school students use social networks. Besides, it is also consistent with the findings of Lenhart, Madden, Macgill, and Smith (2007) which revealed that adolescents are among the most eager users of technology in general and social network sites in particular.

Regarding the types of social media, the students used, about 64 (32%) of them use 'Facebook', followed by 'Telegram' 53(26.5%), lastly, 'Messenger' 4 (2%) relatively fewer. But there is variation between public and private school students concerning the types of social media they used. For example, about 59 (42.8%) respondents from public schools were 'Facebook' users and followed by 'WhatsApp' 19 (13.8%) users.

On the other hand, those students in private school used mostly the 'Telegram' (58.1%) followed by 'You Tube' 11 (17.7%) users. This is, perhaps, because of its recent applications that would be used for operations like sending instant pictures, videos, messages, and different documents can be attached.

The data obtained from an interview and FGD also support the above analysis or theme 'social media usage prevalence' that Facebook was a favorite social media site. Respondents of FGD further suggested that using 'Face book' has many advantages for them like expressing one's opinion and interest freely and praised it as the easiest way to make new friends, to meet family and join groups in line with their interests, and the like. For this reason, they frequently visit 'Facebook' rather than other social media applications. This confirms Schreider's (2010) assertion that approximately 85% of undergraduate students are Facebook users.

Table 4: Sources of Access (opportunity for using) Social Media

Items	School type	Sex	Responses			Total
			Mobile data	Broadband	Wi-Fi	
What is your source of access to use social media?	Public	M	60	11	10	81
		F	42	8	7	57
		T	102 (73%)	21 (15%)	17 (12%)	138
	Private	M	15	6	4	25
		F	23	8	6	37
		T	38 (61%)	14 (23%)	10 (16%)	62
	Total	M	75 (71%)	17 (16%)	14 (13%)	106
		F	65 (69%)	16 (17%)	13 (14%)	94
		F (%)	140 (70%)	33 (16.5%)	27 (13.5%)	200

Table 4 shows that the majority of the respondents 140 (70%) were the user of Mobile Data as sources of access, followed by those who used at internet café (Broadband Internet) 33 (16.5%), and only a small number of students used Wi-Fi 27 (13.5%) as sources of internet access. There was no significant association between school types and sources of social media access as χ^2 statistic ($\chi^2_{(2, n=200)} = 2.750$) does not exceed

the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(2, \alpha = .05)} = 5.992$). However, there was a significant association between sex and sources of social media access as χ^2 statistic ($\chi^2_{(2, n=200)} = 25.1$) exceeded the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(2, \alpha = .05)} = 5.992$). From chi-square results, one can conclude that sources of social media access are independent of school types but dependent on sex.

The data obtained from focus group discussions (FGD) was also congruent with the above analysis or theme 'social media access' in which they raised two reasons why they used most of the time to access the internet from mobile data. The first one was the service fee at the internet café which was more than the charge for a mobile card. For example, a participant in a focus group discussion stated that when he recharges with the 15-birr mobile card, he uses it for a longer time than for an internet café. The second reason was the slow speed in most of the boring internet café. This leads many of the students to frequently use mobile as sources of data than Broadband and Wi-Fi. The preference for 'Mobile data' seems to be appropriate as it does not require place and time for access. This is consistent with the study of Moerdyck (2012) which revealed that the manufacturing and distribution of sophisticated cellular phones have complicated the situation as students no longer need to visit a cybercafé to send and receive messages.

Table 5: Where Frequent Use of Social Media Takes Place

Items	School type	Sex	Responses				Total
			At home	At school	At internet café	At Recreation Area	
Where do you frequently use social media?	public	M	42	13	12	14	81
		F	32	9	6	10	57
		T	74 (54%)	22 (16%)	18 (13%)	24 (17%)	138
	Private	M	9	3	4	9	25
		F	15	3	4	15	37
		T	24 (39%)	6 (9%)	8 (13%)	24 (39%)	62
		M	51(48%)	16 (15%)	16 (15%)	23(22%)	106
	Total	F	47(50%)	12(13%)	10 (11%)	25 (26%)	94
	Frequency total (%)		98 (49%)	28 (14%)	26 (13%)	48 (24%)	200

As shown in Table 5, about 98 (49%) respondents used social media at home, 48 (24%) of them used it in a recreational area, whereas only 28 (14%) and 26 (13%) of them used it at school and Internet café, respectively. If those practices are for academic purposes, they certainly enhance students' academic performances; otherwise, they tend to hamper their performances as they consume their school activity time. There was no significant association between school types and place of access as χ^2 statistic ($\chi^2_{(2, n=200)} = 6.21$) does not exceed the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(2, \alpha = .05)} = 5.992$). There was also no significant association between sex and place of access as χ^2 statistic ($\chi^2_{(2, n=200)} = 1.55$) does not exceed the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(2, \alpha = .05)} = 5.992$). From chi-square results, it appears that place of access is independent of both school types and sex.

Regarding qualitative data that were obtained from an interview and focus group discussions (FGDs) conducted with students, it was also revealed that almost all of them suggested that they use social media at their homes. This was because of school policy which did not allow them to bring their mobile phones to school. The response for an interview conducted with teachers, unit leaders, and school principals is also similar to that of the students in FGD. It is not allowed for students to

bring their mobile phones to the school compound. Otherwise, students who come to the school with their mobile phones for the first time are made to lose their phones for a while till they pay 100 Birr as a penalty. Those who repeat similar practices (bringing phones to school) will lose their phones till the end of the academic year. Such measures are taken to minimize distracting factors that stem from the untimely use of mobile phones, especially during exams. As a result, these penalties have been embedded in the schools' rules and regulations every student is expected to respect.

Table 6: Time during which Students Frequently use Social Media

Item	Responses							
	School type	Sex	Morning	Afternoon	Evening	Mid-night	whenever want	Total
	When do you mostly use social media?	Public	M	11	14	22	15	19
F			8	11	15	12	11	57
T			19(14%)	25(18%)	37(27%)	27(19%)	30(22%)	138
Private		M	3	5	9	3	5	25
		F	6	10	10	5	6	37
		T	9(14%)	15(24%)	19(31%)	8(13%)	11(18%)	62
Total		M	14	19	31(29%)	18	24	106
		F	14	21	25(26%)	17	17	94
Overall Total			28(14%)	40(20%)	56(28%)	35(17.5%)	41(20.5%)	200

Regarding time during which students use social media, about 56 (28%) of them reported the evening, 41 (20.5%) of them said whenever they want, 40 (20%) of them preferred the afternoon, whereas 35 (17.5%) and 28 (14%) of them frequent the mid-night and morning time, respectively, for their social consumption (see Table 6).

There was no a significant association between school types and time when the students frequently use Social Media as χ^2 statistic ($\chi^2_{(4, n=200)} = 2.46$) does not exceed the critical value for significance level ($\alpha = 0.05$)

($\chi^2_{(4, \alpha = .05)} = 9.488$). There was also no significant association between sex and time when the students frequently use Social Media as χ^2 statistic ($\chi^2_{(4, n= 200)} = 1.25$) does not exceed the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(4, \alpha = .05)} = 9.488$). From chi-square results, it appears that the time when the students frequently use Social Media is independent of both school types and sex.

The data obtained from the interview and FGD also supported the above explanation that they use social media during the evening. Unless such time spending is not for academic purposes, it would have a negative impact on students' academic achievement as evening is their free time during which most students deal with various academic issues such as doing their assignments.

Table 7: Students' Experience as Users of Social Media

Items	School type	Sex	Responses				Total
			<1year	1-2years	3-5years	>5years	
.For how long have you been using social media?	Public	M	16	25	29	11	81
		F	11	19	20	7	57
		T	27 (20%)	44 (32%)	49 (35%)	18 (13%)	138
	Private	M	3	7	13	2	25
		F	5	12	16	4	37
		T	8 (13%)	19 (30%)	29 (47%)	6 (10%)	62
	Total	M	19	32	42 (39%)	13	106
		F	16	31	36 (38%)	11	94
	Overall Total		35 (17.5%)	63 (31.5%)	78 (39%)	24 (12%)	200

Regarding the students' experiences in using social media, about 78 (39%) of them have a 3-5 years exposure, 63 (31.5%) have been using it for 1-2 years, 35 (17.5%) have experience of less than 1year, and 24 (12%) have been using it for more than 5 years. Moreover, 102 (51%) of them have been used social media for more than three years (>3years) which may pave way for students' social media addiction (see Table 7). About 51% of students seem to have an experience of a long time of using social media.

There was no significant association between school types and experiences of students in using social media as χ^2 statistic ($\chi^2_{(3, n=200)} = 2.91$) does not exceed the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(3, \alpha = .05)} = 7.815$). There was also no significant association between sex and experiences of students in using social media as χ^2 statistic ($\chi^2_{(3, n=200)} = 0.18$) does not exceed the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(3, \alpha = .05)} = 7.815$). From chi-square results, it appears that the experiences of students in using social media are independent of both school types and sex.

The result of data gathered from students through an interview and FGD was also in line with the above findings, which reveal that majority of the respondents started using social media 3 years ago. One can understand from this data that there were respondents who started using social media in elementary school (earlier to their High school level), at the high school level, and after joining the preparatory school. Hence, if the students frequent social media for non-academic purposes, they are likely to lag behind in their learning.

Time Students` Spent on Social Media.

Table 8: Frequency of Login (Visiting) Social Media per Day

Item	School type	Sex	Responses				Total
			Once a day	2-4 times	5-8 times	>8 times	
How many times do you login (visit) social media per day?	Public	M	20	23	27	11	81
		F	10	18	25	4	57
	Private	T	30(22%)	41(30%)	52(37%)	15(11%)	138
		M	1	8	14	2	25
		F	3	11	19	4	37
		T	4(6%)	19(31%)	33(53%)	6(10%)	62
	Total	M	21	31	41(39%)	13	106
		F	13	29	44(47%)	8	94
	Overall Total		34(17%)	60(30%)	85(42%)	21(10.5%)	200

As shown in Table 8, about 85 (42.5%) visited or login social media from 5 to 8 times per day, followed by 60 (30%) those who visited or login 2 to 4 times per day, whereas only 34 (17%) of them visited or log in once a day, and finally 21 (10.5%) of them visited or log in greater than 8 times per a day. From the data presented in Table 8, students in private schools (63%) visited social media more frequently than public school (48%) more than five times per day. Although there seems to be no difference between males and females in visiting social media, females in private schools tend to log in more frequently than males per day. There was a significant association between school types and frequency of login social media as χ^2 statistic ($\chi^2_{(3, n=200)} = 8.37$) exceeded the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(3, \alpha = .05)} = 7.815$). There was no significant association between sex and frequency of login social media as χ^2 statistic ($\chi^2_{(3, n=200)} = 2.56$) does not exceed the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(3, \alpha = .05)} = 7.815$). From chi-square results, one can conclude that frequency of login social media is dependent on school types but independent of sex.

Besides, the data obtained from FGD also support the above result that the majority of them visit or log in to social media 5 to 8 times a day and more than 8 times a day. According to focus group discussion with private preparatory school students, the frequent use of social media is associated with various factors and existing access in the school compound (IT Lab.), for example, assignments/projects, high curiosity for new information posted and watching and listening different video and audio. This finding is similar to that of (Lenhart et al., 2007) which states that youth/ adolescents/ use social media technologies to communicate with the world, and they do so with high frequency and intensity. Hence, it is apparent to believe that the frequent login social media may boost students' academic performance when it is for academic purpose; otherwise, it may hinder their academic performance.

Table 9: Per day Hours Spent on Social Media

Items	School type	Sex	Responses				Total	
			<1 hour	1-2 hours	3-5 hours	>5 hours		
How many hours on average do you spend on social media per day?	Public	M	14	22	35	10	81	
		F	10	14	22	11	57	
		T	24(18%)	36(26%)	57(41%)	21(15%)	138	
		M	3	7	15	-	25	
	Private	F	1	13	19	4	37	
		T	4(6%)	20(33%)	34(55%)	4(6%)	62	
	Total	M	17	29	50(47%)	10(9%)	106	
		F	11	27	41(44%)	15(16%)	94	
	Overall Total			28(14%)	56(28%)	91(45.5%)	25(12.5%)	200

As can be seen from Table 9, among the total number of participants, about 116 (58%) reported that they spent three and more than three hours per day on social media, followed by 56(28%) who said that they spent 1 to 2 hours per a day. But, about 28(14%) responded in less than one hour. As can be seen from Table 9, students in private schools (61%) spent three and more than three hours per day on social media than students in public school (56%) per day. Although there seems no difference between males and females in visiting social media, females (60%) tend to spend three and more than three hours on social media than males (56%) per day. Where those students spend time nearly equivalent to their school time on social media, such practices might lead them to procrastinate or postpone their school works.

There was a significant association between school types and time spent on social media as χ^2 statistic ($\chi^2_{(3, n=200)} = 8.58$) exceeded the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(3, \alpha=.05)} = 7.815$). There was no significant association between sex and time spent on social media as χ^2 statistic ($\chi^2_{(3, n=200)} = 2.51$) does not exceed the critical value for significance level ($\alpha = 0.05$) ($\chi^2_{(3, \alpha=.05)} = 7.815$). From chi-square results one can conclude that time spent on social media is dependent on school types but independent of sex.

This finding is similar to the work of Neelamalar and Chitra (2009) which confirmed that members in one or more social networking sites spend a varying amount of time from less than an hour to five hours every day in social networking sites. Besides, this finding goes in line with the studies by Karpinski and Duberstein (2009) which show that an extended presence on social media can have harmful effects on productivity and task performance, and also long hours spent on social media seem to decrease students' academic performance.

Table 10: Item Related to Purpose of Using Social Media

purpose of using social media							
Item What are activities you perform on social media frequently?	School type	Sex	Academic activities	Chatting	Entertainment	Updates and Posts Information	Total
Public		M	21	29	22	9	81
		F	12	20	15	10	57
		T	33(24%)	49(35%)	37(27%)	19(14%)	138
Private		M	8	5	8	4	25
		F	8	12	12	5	37
		T	16(26%)	17(27%)	20(32%)	9(15%)	62
Total		M	29	34	30	13	106
		F	20	32	27	15	94
Overall		T	49(24.5%)	66(33%)	57(28.5%)	28(14%)	200

According to data in Table 10, about 66 (33%) of the respondents used social media for chatting, followed by those who used it for entertainment 57 (28.5%), 49 (24.5%) for academic purposes, and 28 (14%) for update and post different information. This indicates that the majority of the students 151 (75.5%) use social media for non-academic activities like chatting, entertainment, etc. The same practice was observed between males (72.6%) and females (78.7%) with a slight difference in percentage in using social media for non-academic activities. Moreover,

this analysis indicates overwhelmingly that the majority of the respondents 151(75.5%) do not use social media sites for academic work.

Besides, the data obtained from an interview and FGD also support that the majority of the students` practices on social media were highly associated with watching movies online, listening to music, sending and replying messages (chatting) with known and unknown groups, playing online games, etc. The following was the very expressive statements of two students:

When I started using face book for the first time, it makes me happy because it was new for me, and I continued the socialization process by sending and confirming friend requests with online known and unknown groups for sake of enjoyment. Gradually, I become addicted to social media, I have Facebook, YouTube, Telegram, and lmo on my cell phone and I can't stop myself from checking the updates every couple of hours (S₁).

Another respondent also explained his feeling by saying that *every time I use social media, especially Facebook, I get dragged to read my friends` status and sometimes I engaged in long conversations with my school friends and family members, and out of a sudden, I find myself wasted a couple of hours in nothing.* This implies that social media, especially, face book attracted students` attention from their school work or studying to non-academic activities and other multi-tasks.

This finding is in line with those of Lenhart et al (2007) which indicates that students who participate in virtual conversations, taking and sending pictures, listening to music, playing games, downloading songs, going online, sending emails, and downloading ring tones, answering messages even in inappropriate circumstances, and getting pathologically engaged in these activities show poor academic performance.

Students` Time Spent on Social Media against Academic Performance

Table 11: Relationship between Students' Time Consumption per Day for Social Media and Their Academic Performance

Item	Time (Responses)	Academic Achievement (semester result)				Total
		90-100 (Excellent)	80-89 (V/good)	60-79 (Satisfactory)	50-59 (Fair)	
No. of hours spent on social media	<1hr	20	5	3	-	28
	1-2hr	4	10	28	14	56
	3-5hr	1	14	46	30	91
	>5hr	-	-	16	9	25
	Total	25(12.5%)	29(14.5%)	93(46.5%)	53(26.5)	200

Table 11 reveals that 28 respondents spent less than 1 hour on social media. Among these 28 respondents, 20 of them scored above 90 (Excellent), 5 of them scored 80 to 89 (Very good), and 3 of them 60 to 70 (Satisfactory). On the other hand, of 91 (45.5%) students who spent 3 to 5 hours on social media, 76 (38%) of their class average is below 80 (satisfactory and fair), whereas only 14 students scored 80-89 (very good), and 1 student scored above 90 (excellent). On the other hand, among 93 (46.5%) students whose class average scores were between 60 to 79 (Satisfactory), 74 (37%) of them spend 1 to 5 hours per day on social media, and these are followed by those who spent more than 5 hours per a day on the social media. This implies that there is a trend of decrease in academic performance as the time spent on social media increases. This also implies that the time spent on social media and students` academic performances seem to have a negative relationship.

There was also a significant evidence of an association, ($\chi^2_{(9,200)} = 319.249, p < 0.001$). From this, it can be concluded that there is very strong evidence of an association between the first-semester class average and the number of hours spent on using social media. Besides, as the cross-tabulation is a square table (4 x 4), one would also use

Kendall's tau-b for further interpretation as the scale was ordinal by ordinal. The obtained value of .805 for the cross-tabulation (treating the student's first semester class average as dependent) indicates that one can guess of student first semester class average by 80.5% by knowing student's number of hours spent on using social media.

This finding is in line with the work of Paul, Baker, and Cochran (2012) which suggests that a negative relationship exists between time spent by students on social networking sites and their academic performance. Besides, this finding is also congruent with the findings of Akyildiz and Argan, 2012; Hamat, *et al.* 2012; Kuppuswamy and Shankar, 2010; Shejwal and Purayidathil, 2006 which suggested that excessive use of social media reduces student's academic performance since time meant for studies is used for non-academic issues will eventually decrease the students' academic achievement.

Another study by Ahn (2011) disclosed that while teenagers are engaged with social media technology, they are more disengaged from another major component of their school lives.

Conclusion and Recommendations

Conclusion

The study attempted to examine students' social media usage and their academic performances in selected preparatory schools in Adama City. The study employed a mixed research method (concurrent embedded) to triangulate the data obtained through quantitative and qualitative methods. Regardless of sex and school types, the study shows that all students under study were engaged in using social media such as face book in the first place and followed by telegram. The finding also indicates that to get the required social media services students had been using mobile data as a source for access. The study also found out that students tend to use social media frequently at home during evening time as per their preferences and available access. It can also be

concluded that students had an experience of login on social media more than five times and spent more than three hours on average per day for non-academic purposes (chatting and entertainment) in most cases. The results of the study also disclosed that students have been using social media for the last five years. Even though a high prevalence of social media usage by students was evident, the relationship between their social media usage and academic performance appears to be negative. By implication, there is a trend of decreasing in students' academic performance as the time they spent on social media is increasing. The study also ensured that students tend to use social media dominantly for non-academic rather than for academic purposes. Had those practices been for academic purposes, the academic performance of students could have been certainly increased instead of decreasing.

Recommendations

Based on the findings, the following recommendations are made;

School Administration and Teachers

- School administrations should orient their students to use social media for academic purposes;
- The school management should also organize training for students to develop self-regulation skills and effective use of their time;
- Schools prepare rules and regulations on social media usage switching off Wi-Fi, and others when students are occupied with their academic studies;
- They also collaborate with the parents/guardians to minimize the chance of students' exposure to non-academic activities on social media;
- Teachers should encourage and promote their students to properly use social media in education by providing opportunities that attract students to academic work, and

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- Teachers can adopt new strategies by channeling assignments or discussions on social media platforms to help inculcate the habit of using these sites for academic work.

Students

- Initially, students need to settle a clear personal goal especially an academic one, and have to be committed to their vision by designing their life`s blueprint and adhering to it;
- Students have to develop self-regulating skills which are very important in the present day`s academic life, and
- They have to develop their time management skills by prioritizing their daily activities, and they have to minimize the time they spend on social media to avoid being obsessed by these sites for unnecessary chatting.

Parents and Guardians

- Parents should follow regularly their children`s academic performances, by advising them to pay attention to their learning than useless chatting and temporary entertainment;
- The study result indicated that the majority of the students were using social media at home. Follow up is needed to check whether they pass several hours on social media for academic work or not, and
- The parents also have to orient and inform the advantage and disadvantage of using social media in a clear way.

References

- Adan, L. (2011). *Addicted to Facebook?* Retrieved from: <http://1batxeng.blogspot.se/2011/11/addicted-to-facebook.html>. Last access: November 16, 2011.
- Ahn, J. (2011). The Effect of Social Network Sites on Adolescents' Social and Academic Development: Current Theories and Controversies. **Journal of the American Society for Information Science and Technology**, 62(8), 1435-1445.
- Akyildiz and Argan (2012). Using online social networking: Students' purposes of Facebook usage at the University of Turkey. **Journal of Technology Research**, <http://www.nms.sagepub.com/content/11/3/395>.
- Ahn, J. (2011). The Effect of Social Network Sites on Adolescents' Social and Academic Development: Current Theories and Controversies. **Journal of the American Society for Information Science and Technology**, 62(8), 1435-1445.
- Boyd, D. M. and Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. **Journal of Computer-Mediated Communication**, 1(13), 11. Retrieved July 1, 2010, from <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.ht>
- Duggan, M., Brenner, J. (2013), *The Demographics of Social Media Users 2012*, Pew Internet and American Life Project, available at: (www.pewinternet.org/Reports/2013/Social-media-users.aspx), accessed on 20 July,2014

Ellison, N.B., Steinfield C. and Lampe, C. (2007): The Benefits of Face Book Friends: Social Capital and College Students' Use of Online Social Network Sites. **Journal of Computer-Mediated Communication**, 12:.1143–1168.

Face book, (2011). I Can't Stop Using Face Book, Groups. Retrieved from: <https://www.facebook.com/search/results.php?q=I%20can%27t%20stop%20using%20facebookandinit=quickandtas=0.876909596566064>. Last access: October 12, 2011.

Hamat, A. et al. (2012). The Use of Social Networking Sites Among Malaysian University Students. **International Education Studies**,5(3),56-66.

<http://www.ccsenet.org/journal/index.php/ies/article/view/14340>.

Internet World Statistics. (2014). Retrieved from *Usage and Population Statistic*: internetworldstats.com/stats1.htm.

Jibat,T.(2012) *Ethiopia: Is Facebook Advantageous?* Available online at: <http://allafrica.com/stories/201210190157.html>. (Accessed 28 Oct 2014).

Karpinski, A. C. and Duberstein, A. (2009). A Description of Face Book Use and Academic Performance Among Undergraduate and Graduate Students. In Poster presented at the Meeting of The American Educational Research Association, San Diego, CA.

Kuppuswamy and Shankar (2010): The Impact of Social Networking Websites on the Education of Youth. **International Journal of Virtual Communities and Social Networking**, 2(1), 67-79.

- Kuppuswamy, S., and Narayan, P. (2010). The Impact of Social Networking Websites on The Education of Youth. **International Journal of Virtual Communities and Social Networking (IJVCSN)**, 2(1).
- Lenhart, A., Purcell, K., Smith, A., and Zickuhr, K. (2010). Social Media and Mobile Internet Use Among Teens and Young Adults. *Pew Internet and American Life Project*, 1-37.
- Lenhart, A., Madden, M., Macgill, A. R. & Smith, A. (2007), Teens and Social Media: The use of social media gains a greater foothold in teen life as they embrace the conversational nature of interactive online media. PEW Internet and American Life Project, PP: 1-36. Available online at: [http://www.pewinternet.org/files/oldmedia/Files/Reports/2007/PIP_Teens_Social_Media]
- Liccardi, et al. (2007). *The Role of Social Networks in Students Learning Experiences*. **ACM SIGCSE Bull** 39(4), 224-237. Retrieved from citepeerx.ist.psu.edu.
- Moerdyck, A (2012), *Social Media around the World*. Retrieved February .13. 2013 from <http://www.insites-consulting.com/social-media-around-the-world-2012>
- Nebiat N. and Girum K. 2014. Relationship between Facebook Practice and Academic Performance of University Students. **Asian Journal of Humanities and Social Sciences (AJHSS)** 2(2): 2014.
- Neelamalar M. and Chitra P. (2009): A Study on The Impacts of Social Networking Sites on Indian Youth. **New Media and Society**. Accessed on <http://www.ec.ubi.pt/ec/06/pdf/neelamalar-new-media.pdf>

Neuman L. and Kreuger L., (2002), **Social Work Research Methods: Qualitative and Quantitative Application**. Bless and Higson-Smith (1995:85)

O'Keeffe, G., and Clarke, P. (2011): Council on Communications and Media: The Impact of Social Media on Children. **Journal of Adolescents, and Families**, 27(8) 4-11.

Park et.al:(2009): Being Immersed in Social Networking Environment: Facebook Groups, Uses and Gratifications, and Social Outcomes. **Cyber Psychology and Behavior** 12.6 (2009) 729-33. Mary Ann Liebert, Inc.

Paul, Baker and Cochran (2012): Effect of online social networking on student academic performance. **Computers in Human Behaviors**, 28(6), 2117-2127.

Pew Research Center (2013, March 5). *World Internet Users' Stats*. Retrieved from <http://www.pewinternet.org/Reports/2013/>

Safko, L., & Brake, D. K. (2009). **The social media bible: Tactics, tools, and strategies for business success**. Hoboken: Wiley John & Sons.

Schulten, K. (2009b). The Learning Network Blog. Retrieved June 10, 2011, [http:// learning.blogs.nytimes.com/2009/12/21/do-you-spend-too-much-time-on-facebook/](http://learning.blogs.nytimes.com/2009/12/21/do-you-spend-too-much-time-on-facebook/)

Social media fact sheet. (2017). Retrieved from <http://www.pewinternet.org/fact-sheet/social-media>.

Shejwal, B. R., and Purayidathil, J. (2006). Television Viewing of Higher Secondary Students: Does it affect their academic achievement and mathematical reasoning? **Psychology and Developing Societies**, 8, 201-213.

Uwem, A. Enobong A. & Nsikan, S. (2013). Uses and gratifications of social networking websites among youths in Uyo, Nigeria. **International Journal of Asian Social Science**, 3(2):353-369.