

## Social Networks and Students' Performance in Secondary Schools: Lessons from an Open Learning Centre, Kenya

Wilkins Ndege Muhingi<sup>1\*</sup> Teresia Mutavi<sup>2</sup> Donald Kokonya<sup>3</sup> Violet Nekesa Simiyu<sup>4</sup> Ben Musungu<sup>5</sup> Anne Obondo<sup>6</sup> Mary Wangari Kuria<sup>7</sup>

1. St. Paul's University, P.O Box Private Bag-00207, Limuru, Kenya
2. University of Nairobi, P.O Box 74-00519, Mlolongo, Kenya
3. Masinde Muliro University of Science & Technology (MMUST), P.O. Box 190-50100, Kakamega, Kenya
4. Kisii University, Nairobi Campus
5. Kenyatta University, Kitui Campus, P.O. BOX 43844-00100, Nairobi:
6. University of Nairobi, School of Medicine, College of Health Sciences, Department of Psychiatry.
7. University of Nairobi, School of Medicine, College of Health Sciences, Department of Psychiatry.

### Abstract

Given the known positive and negative effects of uncontrolled social networking among secondary school students worldwide, it is necessary to establish the relationship between social network sites and academic performances among secondary school students. This study, therefore, aimed at establishing the relationship between secondary school students' access to and use of social network sites at an Open Learning Centre in Kenya. The centre was located about 30km South West of Nairobi, the capital city. This site was selected because information technology was the designed mode of delivery of the courses at the school, hence, high exposure of the students to quantitative social networking among the young, knowledge and information-thirsty population. The study sought opinions of key informants, parents, teachers and policy-makers in Kenya at the school compound. In addition, it investigated the behaviour of the students to generate both quantitative and qualitative data. Findings in this study showed that secondary school students in Kenya were much more vulnerable to the adverse effects of social networks in a manner consistently and concurrently similar to that found elsewhere in the worldwide. This included conversion of academic into recreational sessions and subsequent poor academic performances among the majority of the secondary school students in Kenya.

It is, therefore, necessary for the schools to vet, supervise, monitor, control, censor and restrict secondary school students' access to available information on the SNS in Kenya to enable the students to concentrate on academic excellence. The government, on the other hand, should develop a learner-friendly policy to curb the downward spiraling of academic performances in secondary schools in Kenya attributable to uncensored access to social network sites.

**Key words:** *Social networks, secondary students', academic performance, social network sites*

### 1. Introduction

Social Networking Sites (SNS) are the latest online communication tools that allow users to create a public or private profile to interact in real time with other people in their networks (Boyd & Ellison, 2008). The Facebook (FB) website was created by Mark Zuckerberg with the aim of helping residential college and university students to identify fellow students in other halls of residence.. It is described as "an online directory that connects people through social networks at colleges and universities" (Zuckerberg, 2005, p. 1). MySpace and the more popular FB have millions of registered users, with FB being the overwhelmingly more popular SNS (Gavin, 2009; Gonzalez, 2009, [checkfacebook.com](http://checkfacebook.com)). Research has proved the overwhelmingly immense impact of technology on academic achievement and development of children and teenagers. Both positive and negative effects of technology on students' achievements' have been documented (Espinosa et al, 2006). He investigated the role of technology in early childhood development using data from the Early Childhood Longitudinal Study. Findings showed that access to internet had contributed to the learning potential of the students. The authors cautioned

parents to encourage educational use of technology to improve academic achievement. Studies on the specifics of access and acknowledge that quantity is not as important as quality when it comes to technology use and student achievement (Lei and Zhao, 2005). Specifically, when the quality of technology use is not closely monitored or controlled, computer use may do more harm than good to student achievement in school. In addition, technology that was found to have a positive impact on academic achievement, or technology with educational value, was not popular with students and they used it less frequently (Espinosa et al, 2006). It has also been documented that there is no relationship between computer use and academic achievement.

For example, no relationship was established between time spent on the computer at home and (GPA) in a sample of adolescents (Hunley, Evans, Delgado-Hachey, Krise, Rich, & Schell, 2005). Other studies found out that recreational Internet use is strongly correlated with impaired academic performance (Kubey, Lavin, & Barrows, 2001). Approximately 10-15% of study participants reported a feeling of not being in complete control of their Internet use and that it hurt their schoolwork. Students who reported Internet-caused schoolwork problems were found to have spent five times (x5) more hours online than those who did not, and they were significantly more likely to report that their Internet use caused them to stay up late, get less sleep and miss classes (Kirschner, 2009). Although not specifically mentioning FB, the authors conclude that it is not so much the Internet that causes these problems as the new social opportunities of the Internet (Kirschner, 2009). Students who reported academic problems were more likely to use the Internet for real-time social activities such as chat rooms. Kubey *et al* (2001) noted that these social uses are what hold students captive, especially late at night.

According to Vanden Boogart (2006), in an unpublished Master's thesis, he found out that heavy FB use (i.e., more time spent on FB) is observed among students with lower GPAs, although no control variables were implemented in the analyses. There was no correlation between Facebook use and GPA in a sample of students from a public Northeast Research University (Kolek & Saunders, 2008). However, more recently, an exploratory survey study reported a negative relationship between FB use and academic achievement as measured by self-reported GPA and hours spent studying per week (Karpinski & Duberstein, 2009). Again, this study only implemented one control variable (i.e., student status as either undergraduate or graduate) and failed to control for other confounding variables such as university major. The study aimed at determining the effects of social networks on secondary students' performances.

## 2. Methods

This was a descriptive and cross-sectional study, which adopted an analytical approach to investigate the effect of social networks on the secondary school students' academic performances. Gay (1992) defines descriptive research as a process of collecting data in order to test a hypothesis or to answer questions concerning the current status of the subjects in the study. Being a descriptive study, it aims at reporting the findings of the relationship between social networking and secondary school students' academic performance in Kenya, using lessons learnt from an Open Learning Centre. It attempts to describe aspects such as possible behaviour, attitudes, values and characteristics. This study was conducted in order to describe the opinions of the study population (Open Learning Secondary School students) in order to help shape the policy with regard to the SNS and secondary schools in Kenya. The data was collected using a locally-design questionnaire over a period of three (3) months, from July to October (2012). The study population (N=174) consisted of 100 secondary school students (target population, forms one to four but predominantly forms twos and threes) and key informants comprising 8 teachers, 50 parents and 16 policy makers at the Ngong Centre for Open Learning, about 30km South West of Nairobi, Kenya.

Stratified sampling was used in selecting the classes and students (unit of study). Participants particularly students and parents were systematically sampled in strata sampled to collect qualitative and quantitative data. Qualitative data, which was non-quantifiable, was manually analyzed in narrative while quantitative data was analyzed using SPSS version 13.

### 3. Results

#### Demographic information

**Table 1: Gender Distribution (N=100)**

Gender	%
Male	37.6
Female	62.4
<b>Total</b>	<b>100.0</b>

A total of 100 students participated in this study to whom questionnaires were distributed. Questionnaires return rate of 100% was registered (Table 1). The male students (37.6%) were a minority in this study compared to the females (62%) because more female students were reached in this study than boys. The study also revealed that the enrolment of girls was higher than that of boys in this school.

**Table 2: Disaggregation of Students by Age (N=100)**

Age Category	%
10-14	11
15-19	79
20-25	9
25-29	1
Above 30	0
<b>Total</b>	<b>100</b>

A large majority (90%) of the students were young (below 20 years of age) in their mid adolescence stage. A mere 10% were 20 years of age and above.

**Table 3: Student Numbers by Class (N=100)**

Education level	%
Form 1	15
Form 2	5
Form 3	60
Form 4	20
<b>Total</b>	<b>100</b>

Most of the students (80%) were forms threes (60%) and fours (20%). This are the classes faced with the challenge of wide and heavy reading, yet engaged more in recreational social net working. The domination by form threes and fours was more appropriate for the objective of this study because at this level, most students have defined their objectives and purposes in their secondary school lives and they were the best to give reasons on how social net working among secondary school students affected their academic performance (Table 3).

**Chart 1: Distribution of students by Age (N=100)**

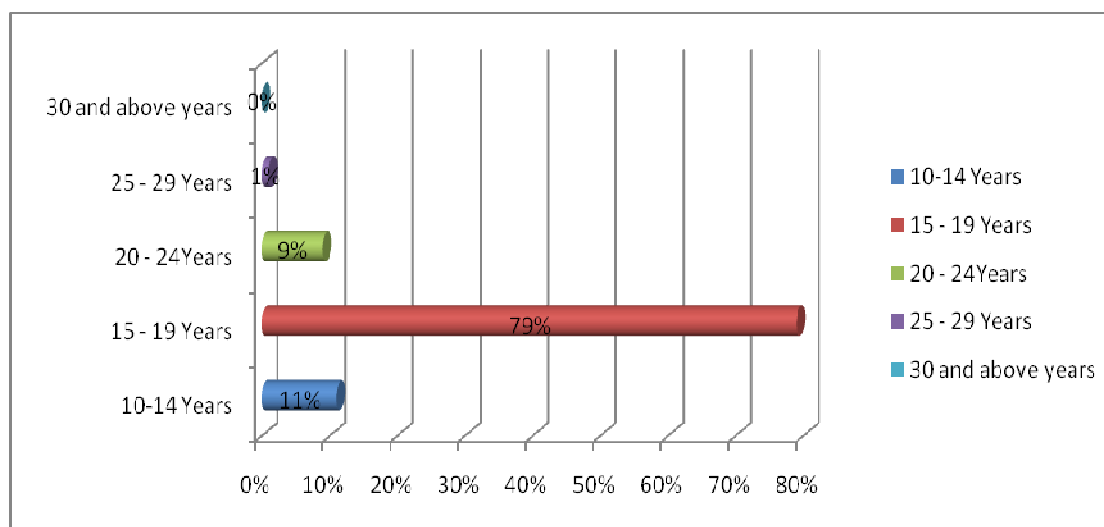
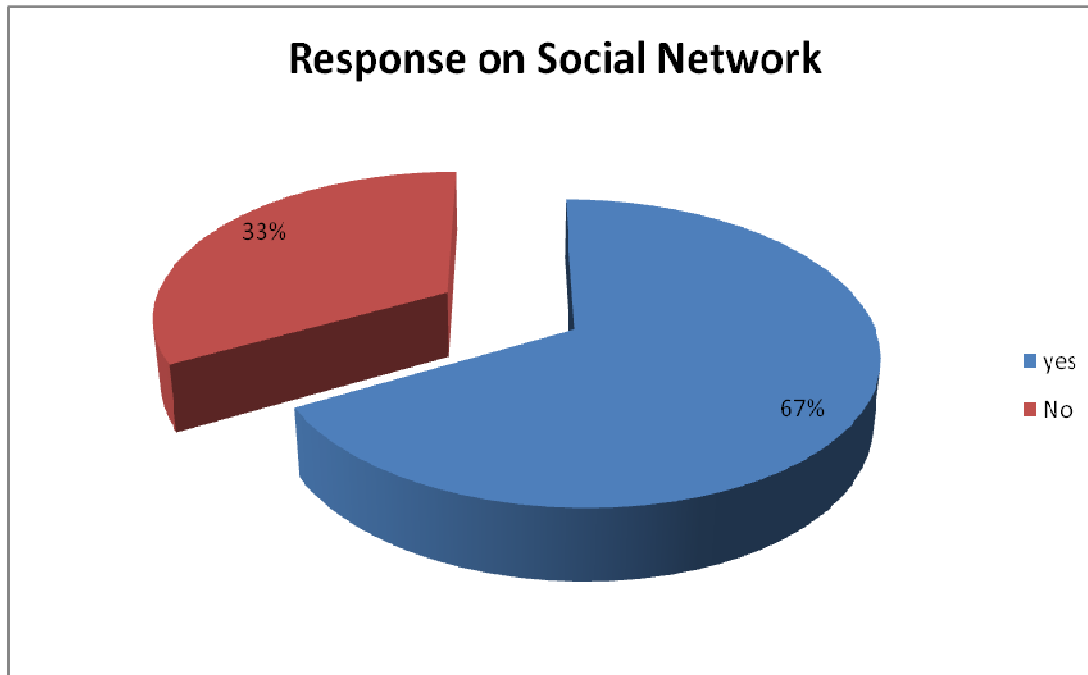


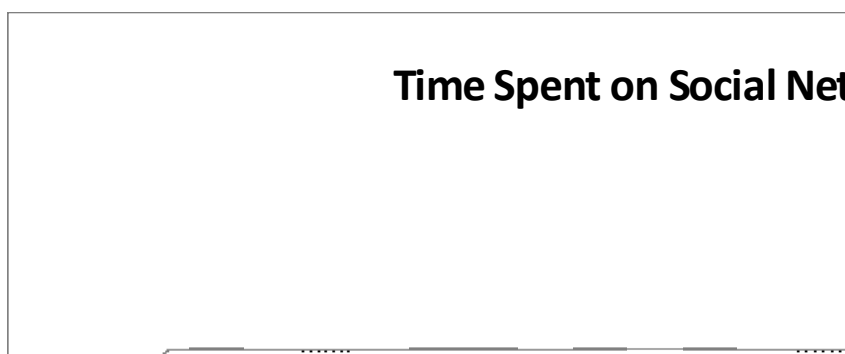
Chart 1 above further shows that the majority (79%) of the respondents were young adolescents aged between 15-19 years. This is the age of the majority of elements expected to be in secondary school. However, 9 % of the students were aged 25-29 and (11 %) were aged 10-14 years. No student was aged above 30 years. Most of the students who were older performed averagely or poorly and also the researcher found out that they had experienced challenges such as being orphaned, lacking school fees and having been affected by health problems that affected their performance in turn.

**Chart. 2 Students' Access to Social Networks (N=100)**



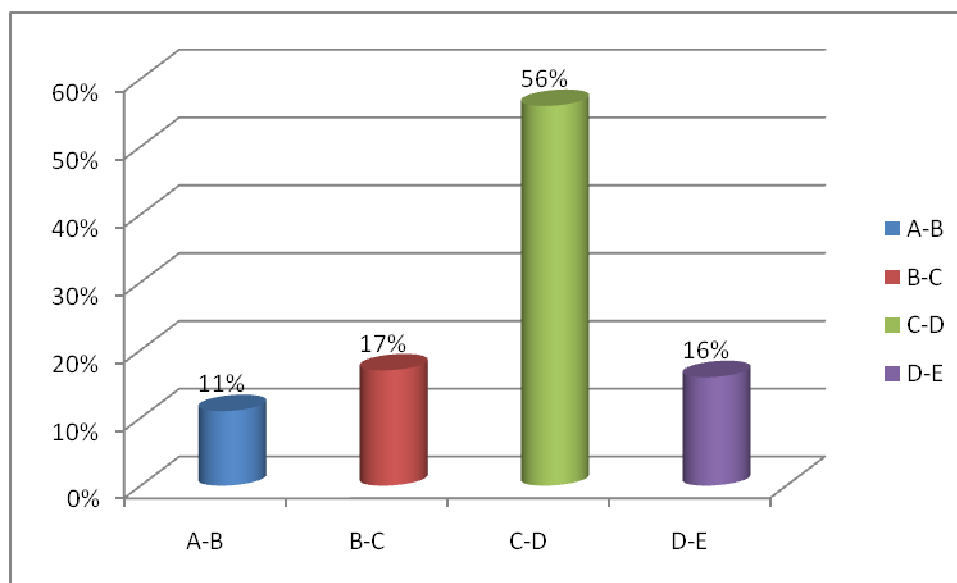
Most students spent their time on social networks including Facebook, Ovi Store, Tag, Hi5, Twitter and 2Go. Slightly over two-thirds (67 %) of the students acknowledged spending more time (> 2 hours/day) on social network. A smaller portion of 33 (33 %) of the students did not spend longer times on social network though still some performed poorly, showing that there were other factors that impacted negatively on students academic achievement (Chart 2).

**Chart. 3 Time spent by Students on Social Networks (N=100)**



The majority of the students spent more than two hours per day on social network especially Facebook which they cited as a good ground for socialization to connect with friends. It was clear that students wasted their study time on this. Half of them (50 %) reported that they spent more than two hours on social network and most of them performed poorly in class, attributing it to time lost on Social Networks instead of studying. Only 15% spent 30 minutes or less (Chart 3).

**Chart. 4 Students' Academic Scores (N=100)**



Further, Chart 4 shows that the highest number (56 %) of students' fell in the score grade category C-D. The sum of those who got between C-D and D-E was 72 %. This implied that the students' performance was relatively poor. Very few (11%) students got between A-B, scores that were regarded as good performance, followed by 17 % of students in category B-C.

Most students spent their time (over 2 hours) on social network including Facebook, Ovi Store, Tag, Hi5, Twitter and 2Go. Above two-thirds (67%) of the students acknowledged spending longer times (>2 hours per day) on social network. A smaller portion of (33%) of the students spent less than 2 hours per day on social network though still some performed poorly, meaning that there were other factors that impacted negatively on students academic achievement which were compounded by social networks.

Most of the students spent more than two hours specifically on Facebook, which they cited as a good ground for socialization to connect with friends. It was clear that students wasted their study time on recreational social networks at the expense of academic growth.

#### 4. Discussion

This study registered 100% (all) questionnaire response rate and a female dominance of participation, proportional to student numbers in the school, a possibility that females prefer open learning mode of delivery (Table 1). All the students were found to have been registered on social net works, mainly the FB but this study found out that unlike public expectations, it was for recreational social networking (Boyd & Ellison, 2008 & Espinosa, 2006)). The study showed that the majority of the students (90% below 20 years of age) were in the psychologically labile age, the early and mid adolescence (79%), characterized by high levels of knowledge and information consumption (Table 2 & 3). The majority (67%) of the students spent long hours (>2 hours/day) on recreational social networking at the expense of studies (academic excellence). A very small proportion of the students spent less than 30 minutes on social networking (Chart 2 & 3). This was found to be consistent with previous studies in which quality use of social networks was academically beneficial to students as opposed to quantity in this study (Lei & Zao, 2005 & Espinosa *et al*, 2006).

Analysis of the students' academic performance showed that 56% of them performed below average (grade C-D) while 16% of them scored poorly (D-E). Overall, 72% of the students fell below average in their performances (grade D-E). Only 28% of the students got above average (A-C) scores (Chart 4), confirming that most students spent more of their time on recreational social networking at the expense of pursuance for academic excellence, thereby lowering academic standards in secondary schools in Kenya. A key finding in other studies was the strong relationship between recreational Internet and impaired academic performance among secondary school

students. The studies showed that students who performed poorly at school had spent five times (x5) more hours online than those who performed well.

The same students reported being sleepy during day (school) time. These researches findings correlated well with the findings in this study (Kubey, Lavin & Barrows, 2001 & Kirschner 2009). Other studies also produced strong evidence that low GPA scores were also found out to be directly related to long hours on FB, whose findings again concur with the findings in this study (Vanden Boogart -2006 & Karpinski & Duberstein-2009). The findings in this study and those found elsewhere conclude that there is therefore, need for monitoring and control of access to SNS by secondary school students to enhance their academic performances, though this was found to be unpopular with students (Espinosa *et al*, 2005).

## 5. Conclusion

From the findings in this study, it is clear that Social Networks have both negative and positive effects on secondary school Learners, but the negative effects on the students outweigh the positive. The study demonstrates that the social networks have positive effects but the recreational use by secondary school students ruin their academic achievement. The negative effects are as a result of the addictive nature of social networks to the students; hence time wasting instead of utilizing the time for studies or academic assignments. It can, therefore, be concluded that secondary school students' access to social networks should be closely supervised, censored, monitored, vetted and restricted where necessary in order for the students to focus on and achieve the objective for which they are in school: academic excellence.

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