

Self-Regulation of Facebook Usage and Academic Performance of Students in Kenyan Universities

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Abstract

The increasing connectivity of places to the internet platform has led to widespread use of the social media platforms in homes, workplaces and schools wherein it is preferred by mostly the young people christened as dot.com generation. The use of social media platforms has a potential effect on the productivity of the users either in their places of work, schools and society in general. The purpose of this study was to investigate the influence of self-regulation of Facebook usage on academic performance among university students in Kenya. To achieve this objective, the study employed the *ex post facto* research design. Purposive and stratified random sampling methods were used to select participating campuses (n=4) from (N=12) and students (n=348) from (N=2698) third year regular students. Data was collected using a self administered questionnaire. The null hypothesis was tested at .01 level of significance using Kendall's *tau_b* correlation coefficient. The findings revealed that there was a moderate level of self regulation on facebook usage by university students thus depicting ambivalence in attitude towards controlling the urge to use facebook when in site. Further, it was found that there was a significant relationship between the level of facebook self regulation and academic performance ($p < .01$). The implication of this finding was that the more one self regulates, the higher the likelihood of improving in academic performance. From the findings, it is recommended that universities incorporate time management skills in the curriculum in order to help the students achieve balance between leisure activities and academics.

KEYWORDS: Facebook, Facebook usage, self-regulation, academic performance

1. Introduction

Social network sites are among the vast and widely used online tools for social networking and communication in today's contemporary society (Aghazamani, 2010). Sites such as Facebook, LinkedIn, Instagram, Google plus and many more have found wider applicability and usage in today's world especially in the fields of business and academics and are used mostly by young people popularly referred as the *dot.com* generation. Of all the social sites, face book is the most widely used and popular website that is visited regularly on the internet especially by college students (Experian, 2011; Lenhart, Purcell, Smith, & Zickuhr, 2010). According to (Smith, 2013) Facebook has over 1.15 billion active users and 699 million members log in daily with 8.3 hours average time spent per day.

Much of the research on Face book has focused on describing usage and identifying reasons for use (Hargittai, 2007; Sheldon, 2008; Stern & Taylor, 2007) while others have delved on privacy issues (Acquisti & Gross, 2006; Jones, Johnson, Perez, & Schuller, 2007), online disclosure (Kolek & Saunders, 2008; Peluchette & Karl, 2008) offline/online relationships (Ellison, Steinfield, & Lampe, 2007; Lampe, Ellison, & Steinfield, 2006) and examination of the relationship between Facebook usage patterns and academics (Hargittai & Hsieh, 2010; Jones *et al.*, 2007; Karpinski & Duberstein, 2009; O'Brien, 2011).

The effect of Facebook usage on academic performance cannot be overemphasized. According to Jones, *et.al* (2007) students miss important lecture and discussion facts when they access Facebook during class which could affect their grades. Karpinski and Duberstein (2009) have shown that the extended time spent on Facebook has a harmful effect on the students' task performance. O'Brien (2011), Karpinski and Duberstein (2009) studies demonstrated that long hours spent on Facebook seem to decrease students' study time. Other potential effects of Facebook include: clamor for addiction (Debatin, Lovejoy, Horn, & Hughes, 2009) and inculcating a culture of procrastination among the learners thus affecting study time (O'Brien, 2011) and hence academic performance. In spite of this negativity however, research studies show that many students cannot quit visiting the Facebook website because it is a sure way of keeping in touch with friends, family members, and peers (Facebook, 2010). It is important therefore that students adopt self regulation as a way of establishing balance on face book use and

academics. However, it is not clear whether self regulation of Facebook usage among university students has any significant influence on their academic performance. This study therefore sought to establish the extent of self-regulation on Facebook usage among the university students and find out if there existed a relationship between self-regulation on Facebook usage and academic performance among university students in Kenya.

2. Theoretical Framework

The study was informed by the Flow theory also called "Optimal experience". Flow theory was proposed by Mihalyi Csikszentmihalyi. Csikszentmihalyi (1997) described flow as the state in which one is so involved in an activity that nothing else seems to matter. The theory is useful in the study since a self regulated person can be seen to be one who is conscious of his/her environment while an unregulated individual seems to be immersed in an activity without environmental consciousness. Although the user is delighted in the networking activities and appears to be in command, the sense of time becomes distorted. Facebook activities end up taking time that would have been spent on studies. Distractions are excluded from consciousness because of the absorption in the social activity, the student is only aware of what is relevant to the task at hand, and forgets about other things like their studies.

3. Methods

Data was collected from the third year regular university students who were selected from a purposively sampled set of universities (n=4, N=12) within Nakuru county in Kenya. The county was chosen because it has a variety of campuses representing nearly all public and private universities operating with a charter in Kenya. A sample size of 340 students was chosen from a population of 2698 regular third year students. Stratified sampling procedures were used to determine a representative sample from each category of universities (2 public, 2 private). Thereafter, simple random sampling was adopted in selecting actual respondents for the study. The study adopted the *ex post facto* research design in which survey method of cross sectional type was used to collect data using a self made five- point likert scale with the following response categories: Strongly Disagree = 1; Disagree = 2; Not Sure = 3; Agree = 4 and Strongly Agree = 5. The extent of self regulation on Facebook usage was codified into three artificial categories as low, moderate, and high regulation and respectively transformed into an interval scale thus: $1 \leq 1.7$; $1.8-3.3$ and $\geq 3.4-5$.

4. Results

4.1. Extent of self regulation on face book usage

A descriptive analysis was run on the eleven statements in the questionnaire aimed at measuring the extent of self regulation on Facebook usage by university students. The results are presented in table 1

Table 1. Extent of Self-Regulation on FB usage by university students

Item	Index (x)	Std. Deviation
I would get better grades if I spent less time on Face book	3.68	1.52
Rarely log in FB whenever on computer	2.71	1.497
FB never take way study time	2.55	1.429
Never missed class when on FB	2.87	1.55
Never check on FB in class	2.17	1.444
Use FB more on weekends than weekdays	2.07	1.15
Rarely yield to urge to access FB whenever on computer	2.43	1.42
Never lose track of time when on FB	2.42	1.47
Avoid accessing FB in class	2.31	1.477
Am not addicted to FB	2.27	1.499
Able to control FB use not to interfere with studies	2.14	1.446
Mean index (n = 340)	2.51	

It can be observed from table 1 that responses to all the items yielded mean indices of between 2.07 and 2.87, implying a moderate self regulation. Only item one yielded a response with mean index of 3.68 implying that

students were highly self regulated in view of the item. In general, the overall self regulation index was 2.51 which implied a moderate self regulation of facebook usage by university students.

4.2. Relationship between self regulation of Facebook usage and academic performance

The academic performance of university students by grade in view of previous and latest examination results is summarized in table 2

Table 2. Students Academic Performance by Grade

Grade	Grade marks	Latest exams		Previous exams	
		Frequency	Percent	Frequency	Percent
D	40-49	33	9.7	34	10
C	50-59	150	44.1	146	42.9
B	60-69	139	40.9	143	42.1
A	70-100	18	5.3	17	5
	Total	340	100	340	100

It can be observed from table 2 that the grades showed a normal distribution with few students attaining grade A and D and most students (85%) scoring grade B and C in both latest and previous exams. Those who attained grade A and B were 46 % or above and were fewer than nearly 54% of those who had attained grade C and D in latest grade. On previous exams, 47% or above had grade A and B and they were fewer compared to nearly 53% of those who had grade C and D. From the findings, it is clear that there is a tendency for majority of students to score lower grades of between C and D. In order to establish if the tendency to regress towards lower grades could be attributed to the level of self regulation on facebook usage, a non parametric correlation analysis was carried out using *Kendal-tau* correlation statistics and hypothesis was tested at the .01 level of significance.

Kendall's *tau_b* was computed for all items measuring self regulation and those for academic performance so as to test the hypothesis which stated that there was no statistically significant relationship between self regulation on Facebook usage and academic performance. From the findings in table 3, it is clear that previous grade significantly and positively correlated with all the self regulation items ($p < .01$) except '*I have never missed class due to Facebook* ($p > .01$). There was no significant correlation, however, between latest grade and ability to control Facebook use so that it does not interfere with studies; avoidance of accessing Facebook in class; rarely yielding to the urge to access Facebook whenever on computer; never checking on Facebook in class; rarely logging in Facebook whenever on computer; and Facebook never takes away study time ($p > .01$). However, all the other items significantly and positively correlated with latest grade ($p < .01$). Overall, there was a significant positive correlation between self regulation of Facebook usage and academic performance and therefore the null hypothesis was rejected ($p < .01$). The significant positive correlation between previous grade on 10 out of the 11 items measuring self regulation implies that students require high self regulation on FB usage to be able to control their Facebook habits so that it does not affect their academic performance.

Table 3. Kendall's *tau_b* for Correlations between Self Regulation and Academic Performance

	Latest grade	Previous grade
Latest grade	-	
Previous grade	.263**	-
Able to control FB use not to interfere with studies	.069	.165**
Am not addicted to FB	.094*	.132**
Avoid accessing FB in class	.077	.129**
Never lose track of time when on FB	.123**	.124**
Rarely yield to urge to access FB whenever on computer	.061	.128**
Never check on FB in class	.076	.148**
Never missed class due to FB	.126**	.003
Rarely log in FB whenever on computer	.023	.141**
FB never take away study time	.047	.117*

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

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

5. Discussion

According to Karimi (2012) self-regulatory learning strategies are the greatest determinant of high academic performance of a student. In this study, it was envisaged that a student with a high level of self regulation could be able to control the use of social media such as Facebook and hence academic performance of such student will not be negatively impacted. The findings however showed that majority of the students were ambivalent towards regulating the extent of Facebook usage. Because of the ambivalence to self regulate, there is a likelihood of the student yielding to the urge to access Facebook in class or when on the computer doing schoolwork. According to O'Brien (2011), the lack of control may lead the student losing track of time when they are on Facebook and this can interfere with their study time thus affecting performance in the long run. Students with high Self regulation are likely to allocate less time to social network sites, have a low frequency towards Facebook usage which in turn limits the negative effects of Facebook on their academic performance. According to Malaney (2005) these students have more effective reflection on interactions on Facebook or content generated by online communities. Rouis, Limayem, and Salehi-Sangari, (2011) also notes that the self regulated student thinks in terms of the benefit of the interaction they might have rather than the affective basis which means that they do not enter into Facebook or any social network sites to seek affection but for the potential benefits that are likely to get from such engagements. Hence, a self regulated student will control the urge for Facebook usage when they know that there are no benefits for using it. This is in contrast to students who have a low self regulatory strategy. According to a study done in the University of Iowa to assess the number of students using social network sites for the preparation of their subject courses, 64% claimed that they did not use social network sites for academic purposes regardless of their subject courses.

It is equally important to note that there was a significant positive relationship between self regulation on Facebook usage and academic performance. This implies that the more an individual self regulates, the higher the academic performance. This finding is also consistent with Rouis *et al.* (2011) who found out that high self regulation slows frequency and duration of Facebook usage and correlates positively with performance. In contrast though, a regression analysis by Junco (2012) found a negative correlation between frequencies of Facebook use with time spent preparing for class and overall GPA (Grade Point Average). According to Jones *et al.*, (2007) students who do not regulate their social network usage are likely to miss important lectures and discussion facts when they access Facebook during class which could affect their grades adversely. Similarly, O'Brien (2011) cautioned students from going on Facebook and other social network site while they are in class, because of the potential distractions on private studies.

6. Conclusion and Recommendations

This study sought to establish the relationship between academic performance and the extent of self regulation of Facebook usage among students in Kenyan universities. Although the study found a moderate usage of Facebook among the students, there was a statistically significant positive relationship between Facebook self regulation and academic performance thus leading to the rejection of the null hypothesis. It was therefore concluded that Facebook usage and academic performance were statistically dependent. This implies that, the more a student self regulates, the higher the academic performance and vice versa. The moderate usage of Facebook on the other hand implies that most university students had an addictive tendency to the use of Facebook and this demonstrated a lack of self regulation. Majority of the students as was found could not stop the urge to use Facebook while in class and were unable to control it from interfering with their studies. This finding led to the conclusion that since most students in Kenyan universities were unable to regulate the pattern of Facebook use, their academic performance was negatively affected. It is critical to note that this tendency of not having the wherewithal to control and prioritize activities by students was likely to negatively affect future careers too. Therefore, proper intervention strategies should be instituted to prevent the current generation of youth from being Facebook "prisoners". A lack of self regulation has a direct implication on the students' time management. Without proper time management skills, students are likely to be immersed in activities which will not be beneficial to them academically, since higher self regulation as was shown in this study, is an antecedent to higher performance in academics. Low self regulation can lead a student to start developing procrastination tendencies in academics and consequently lead to reduced performance and productivity in future careers. It is therefore important for universities to establish strategies to help students achieve balance between social networking sites and academics which is the core mandate of the university. In this regard therefore, Universities as reservoirs of the human capital of the society, through their counseling departments, should incorporate time management skills into their curriculum in order to help students cope well with university life and the life after.

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