IS THERE ANY IMPACT OF SOCIAL MEDIA ON ACADEMIC PERFORMANCE?
(An Empirical Study From College Student In Jakarta)

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Abstract

This study aimed to examine empirically the social network activities that affect academic performance. Obtain sample data using questionnaires and obtain data from top 10 universities in Webometrics and total 75 respondents. This study examined the utilization period of social networks, social network usage motivation, academic data and activities respondents perceived influence on academic performance. Using multiple regression techniques, the study found that social network activity does not negatively impact on academic performance.

Keywords: social network, Facebook, Twitter, Academic Performance, GPA

Abstrak

Penelitian ini bertujuan untuk menguji secara empiris aktivitas jaringan sosial yang mempengaruhi kinerja akademik. Dapatkan data sampel dengan menggunakan kuesioner dan dapatkan data dari 10 universitas teratas di Webometrics dan total 75 responden. Penelitian ini menguji masa manfaat jaringan sosial, motivasi penggunaan jaringan sosial, data akademik dan aktivitas responden yang dirasakan berpengaruh terhadap kinerja akademik. Dengan menggunakan teknik regresi berganda, studi tersebut menemukan bahwa aktivitas jaringan sosial tidak berdampak negatif pada kinerja akademik.

Kata kunci: jaringan sosial, Facebook, Twitter, Kinerja Akademik, IPK

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Pendahuluan

Dalam kehidupan bangsa dan Negara Social networks gives three main capabilities: 1. The ability to build a profile of a person in a society or community; 2. The ability to identify with other users who are connected; 3. The ability to find activities or things that are or have been done by others (Boyd and Ellison, 2007). According to the statistical data on the number of users of social networks, it can indicate the social network are most favored or preferred by the world community. If this investigation deepened the facebook who topping As with social networks are the most popular and loved by the world community. According to data obtained from Facebook (2011), FB users have a total of more than 500 million registered users. Meanwhile, according to reports comScore (Lipsman, 2011), FB was ranked first by the number of users per month at 157.2 million, ranking second is MySpace (34.9 million users per month), the third is Linkedin (33.4 million users per month ), and the last Twitter (27.0 million users per month).

According to Ross, et al. (2009) the main purpose of Facebook is to connect or socializing among students of the university. On the other hand, Twitter also has a purpose that is not much different from the original purpose made Facebook, Twitter is a micro blogging basic concepts which the author can write as many as 140 characters and can be read by others and twitter can be used to communicate with a small group.

In Indonesia, this time, many people who understand the technology when compared to the 1990s. Before the existence of Facebook and Twitter, there is one social network which popular among the society named Friendster, but when Facebook and Twitter are present in Indonesia, then all users turning to Facebook and Twitter until now. This indicates that Facebook and Twitter is popular in Indonesia compared with other social networks like MySpace and Linkedin. The features are available to the user more attractive and easy to use, is one of the reasons they prefer to use Facebook. Another thing with Twitter, most of the Twitter users use Twitter to communicate with people they already know or just to the community only.

According to the news on the Internet that launched the data from Socialbakers.com (2011), the Indonesia ranks third as the country with the most Facebook users with a total of 43 million users. Ten countries most Facebook users can be seen in Table 1 below.

Table 1. Top Ten The Most users of Facebook

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Users*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>152,6</td>
</tr>
<tr>
<td>India</td>
<td>43,50</td>
</tr>
<tr>
<td>Indonesia</td>
<td>43,06</td>
</tr>
<tr>
<td>Brazil</td>
<td>37,90</td>
</tr>
<tr>
<td>Mexico</td>
<td>32</td>
</tr>
<tr>
<td>Turkey</td>
<td>31,25</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>30,25</td>
</tr>
<tr>
<td>Philippines</td>
<td>27,6</td>
</tr>
<tr>
<td>France</td>
<td>23,6</td>
</tr>
<tr>
<td>Germany</td>
<td>22,6</td>
</tr>
</tbody>
</table>

*in million

Despite the popularity of Facebook in Indonesia is still the highest, but the number of Twitter users in the country quite accounted in the world. Proven by research conducted by a French-owned company, Semiocast, Indonesia entered the ranks of the top 20 Twitter users. Precisely, Indonesia ranks fifth, and only slightly behind the Japanese who finished third, to competitors in the Asia region. The top is occupied by the Americans - of course - remember Twitter is a social media favorite of celebrities. Followed by Brazil in the second rank. In full,
following data released by Semiotics (2012) in Figure 1.

Figure 1. Big 20 The Most Users of Twitter
As most Twitter users in the world, it does not guarantee high activity in the country's post tweets as well. In fact, the Dutch it is suspected to be the origin of the most active Twitter users posting tweetnya. And then followed by Japan, Spain and the United States. Indonesia once again ranks fifth for the this category. More details, the following data is presented by Semiotics (2012) in Figure 2.

Figure 2. Big 20 The Most Active in Twitter
Most social network users — — both Facebook and Twitter are among teenagers, elementary school up to the student university. But it is undeniable that most users of the teens were university students.

The university students has a duty to study, get good grades and develop themselves, and how the presence of Facebook and Twitter in the middle of their routine is. Whether it can interfere with self-development and academic performance of the nation's potential. Thus the hypothesis of the study are:

\[ H_0: \text{social network does not negatively impact academic performance} \]
\[ H_1: \text{social network negatively impact academic performance} \]

THEORETICAL BACKGROUND
Social Network Sites
Socializing via the Internet has become a habit and a necessity in the world and today's teenagers routines (Gemmill and Peterson, 2006). Referring to the general public, the highest users to use computers and the internet are teenagers, computers and the internet are they used for: completing school work or college (46%), e-mail or instant messaging (36%), and playing computer games (38%) (Debell and Chapman, 2006). Social network sites (SNS) is a communication technology internet (online) the most recent and sophisticated compared to other communication tools because users can create profiles about themselves and to interact with people who are on the network or the user's friend list (Boyd and Ellison, 2008).

According to the Boys and Ellison (2008), SNS can be defined as follows: "...web-based services that allow individuals to: (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and
(3) view and traverse their list of connections and those made by others within the system”

Or it can be assessed that the social network provides three main capabilities: 1. The ability to build a profile of a person in a society or community; 2. The ability to identify with other users who are connected; 3. The ability to find activities or things that are or have been carried out by others.

Facebook®

Facebook is a social networking service and website launched in February 2004 that is operated and owned by Facebook, Inc.. Users can create a personal profile, add other users as friends and exchange messages, including automatic notifications when they update their profile. Additionally, users can join a user group that has a specific purpose, sorted by workplace, school, college, or other characteristics. The service name is derived from the name of books given to students in the first academic year by university administrations in the U.S. with the goal of helping students get to know one another. Facebook allows anyone at least 13 years old to be a registered user of this site.

Facebook was founded by Mark Zuckerberg with his roommates and fellow computer science students, Eduardo Saverin, Dustin Moskovitz and Chris Hughes with the aim of helping students to get to know other students within the same university. Membership was initially restricted to the website for Harvard students only, then expanded to other colleges in the Boston, Ivy League, and Stanford University. This site is slowly opening up to students at other universities before opening to high school students, and eventually to all persons at least 13 years.

According to data per April 2012, more than 901 million active Facebook users (http://www.facebook.com/press/info.php?statistics) it is very different from the data presented as of December 2009. The data can be seen in Figure 3.

![Figure 3. Statistics Data of Facebook on 2009 VS 2012](attachment:image)

From Figure 3, it can be concluded that users of social network Facebook is increasing annually. In 2009 a total of more than 350 million users but when in 2012 the total users to 901 million users. There was also an increase in other things like the number of photos that have been uploaded. In 2009 total photo upload photos and as much as 2.5 billion in 2012 increased to 125 billion photos. The increase in these two very significant. In the past three years there has been increased more than 100%. The increasing popularity of Facebook is also raising questions about the effects of the matter to the students / learners (Barratt, et al., 2005).

Twitter

Twitter adalah sebuah situs web yang dimiliki dan dioperasikan oleh Twitter Inc., yang menawarkan jejaring sosial berupa mikroblog sehingga memungkinkan penggunanya untuk mengirim dan membaca pesan yang disebut kicauan (tweets). Kicauan adalah teks tulisan hingga 140 karakter yang ditampilkan pada halaman profil pengguna. Kicauan bisa dilihat secara luar, namun pengirim dapat membatasi pengiriman pesan ke daftar teman-teman mereka saja. Pengguna dapat melihat kicauan penulis lain yang dikenal dengan sebutan pengikut. Semua pengguna dapat mengirim dan menerima kicauan melalui
situs Twitter, aplikasi eksternal yang kompatibel (telepon seluler), atau dengan pesan singkat (SMS) yang tersedia di negara-negara tertentu. Situs ini berbasis di San Bruno, California dekat San Francisco, di mana situs ini pertama kali dibuat. Twitter juga memiliki server dan kantor di San Antonio, Texas dan Boston, Massachusetts (Wikipedia).

Since its creation in 2006 by Jack Dorsey, Twitter has gained popularity worldwide and currently has more than 100 million users. It is sometimes described as the "SMS of the Internet". Twitter started with a discussion held by board members of the podcasting company Odeo. During the meeting, Jack Dorsey introduced the idea of twitter in which individuals can use the SMS service to communicate with a small group. This project began on 21 publicly on July 15, 2006. Twitter became its own company in April 2007.

Twitter popularity began to rise in 2007 when there was festival South by Southwest (SXSW). During the last event, Twitter usage increased from 20,000 per day to 60,000 tweets. Reaction at the festival was very positive. On 14 September 2010, Twitter change the logo and launched a new design.

Already over 400,000 tweets sent-perform (post) per quarter in 2007. Later developed into 100 million tweets-featured shipped per quarter in 2008. At the end of 2009, 2 billion per quarter tweets been sent-appear. In the first quarter of 2010, 4 billion tweets sent-appear. In February 2010 Twitter users send 50 million per day. In June 2010, about 65 million were shipped tweets-appear every day, equivalent to about 750 tweets sent every second, according to Twitter.

Twitter users will be more active when there is a prominent event. For example, a record was created in the 2010 World Cup, when fans wrote in 2940 tweets per second in both the 30 after Japan scored against Cameroon on June 14, 2010. This also happens when singer Michael Jackson died on June 25, 2009, Twitter servers down because users updating their status to include the words "Michael Jackson" at a rate of 100,000 per hour tweets.

In Indonesia, Twitter is very popular. Moreover, the convenience provided by the existing mobile phone and the applications it supports. This makes Indonesia ranks fifth as the country with the most Twitter users. According to the Institute for Social Media Observer, Sysomos, recorded total Twitter users in Indonesia in the year 2012 as many as 19.8 million or 5.1% of the total Twitter users in the world, with Indonesia the previous year by only 2, 41% in 2011 and 0.5% in 2010 of total Twitter users around the world.

**Motivation Using Social Network**

Based on previous research there is some motivation to use social networks. Motivations are summarized in Table 2 below.

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosch (2009); Ellison et al. (2007); Joinson (2008); Lampe, Ellison, &amp; Steinfield (2006, 2008); Lewis &amp; West (2009); Pempek et al. (2009); Sheldon (2008); Stern &amp; Taylor (2007); Young &amp; Quan-Haase (2009).</td>
<td>Maintaining good relationships with friends or family (example: sending short messages, post on friends walls, communicating, and keeping in touch with friends, friends, or family who do not often see)</td>
</tr>
<tr>
<td>Ellison et al. (2007); Lampe et al. (2006); Sheldon (2008); Stern &amp; Taylor (2007); Urista et al. (2009); Zhao, Grasmuck &amp; Martin (2008).</td>
<td>To meet new people (eg find information about others, develop feelings of love, and be friends).</td>
</tr>
<tr>
<td>Lewis &amp; West (2009); Pempek et al. (2009); Sheldon (2008).</td>
<td>Using Facebook is cool and fun.</td>
</tr>
<tr>
<td>Urista et al. (2009).</td>
<td>To make yourself popular (eg, contests get the most...</td>
</tr>
</tbody>
</table>
Motivation on Study

Motivation is a psychological aspect that has an influence on learning achievements. The defining motivation in Kamus Besar Bahasa Indonesia, is a desire or impulse that arises in a person either consciously or unconsciously to perform a deed with a specific purpose. According to WS Winkel, motivation is the driving force that has become active, the motive becomes active at a given time, even the need to achieve a goal is perceived or comprehended.

According Soemanto (1990) learning is a process, not an outcome. Therefore, learning takes place actively and integrated by using various forms of action to achieve a goal. According Aritonang (2007) learning is a process of individual efforts to acquire new behavior changes as the individual's own experience and motivation is the driving force in the overall student learning and activities that cause members direction on learning activities, so that the desired destination by the subject to learn it. Students' motivation dimensions include:

a. Diligence in learning, the indicator:
   1) Attendance at school / university
   2) Following the teaching and learning process in the classroom

b. Resilient in the face of adversity, the indicator:
   1) Attitude for adversity
   2) Efforts to overcome difficulties

c. Interest and alertness in learning, the indicator:
   1) habit to follow lessons
   2) The spirit in the following PBM

d. Achievement of learning, the indicator:
   1) Desire to excel
   2) Qualifying results

e. Independent in learning, the indicator:
   1) Completion of tasks
   2) Using opportunities outside school hours

Furthermore Sartain in Arita (2007) form of motivation can be divided into two kinds, namely:

1. Intrinsic Motivation
   Motivasi intrinsik adalah hal dan keadaan yang berasal dari dalam diri siswa sendiri yang dapat mendorong melakukan tindakan belajar. Dalam buku lain motivasi intrinsik adalah motivasi yang timbul dari dalam diri seseorang atau motivasi yang erat hubungannya dengan tujuan belajar, misalnya : ingin memahami suatu konsep, ingin memperoleh pengetahuan dan sebagainya.

Faktor-faktor yang dapat menimbulkan motivasi intrinsik adalah:
   a. Adanya kebutuhan
   b. Adanya pengetahuan tentang kemajuan dirinya sendiri
   c. Adanya cita-cita atau aspirasi.

2. Extrinsic motivation
   Extrinsic motivation is the thing or situation that comes from outside the individual student, which prompted him to conduct learning activities. Forms of extrinsic motivation is an encouragement that is not
absolutely related to learning activities, for example, students study hard for the prize that has been promised by her parents, praise and reward, regulation or order of the school, exemplary parents, teachers and others is a concrete example of extrinsic motivation to encourage students to learn.

Grade Point Average (GPA)

One measure of the success of student learning parameters measured from grade grade point average (GPA). Interval a GPA is on a scale of 0 to 4.00. According Irnawati (2003) high and low GPA students generally can be influenced by several factors, such as student background, the environment, the process of learning during college, study load and student academic achievement, socioeconomic factors or student motivation.

Factors that affect GPA by Anni (2004) is divided into two:

1) Internal factors, which include the physical aspects, such as organ health, psychological aspects, such as intellectual, emotional, motivational, and social aspects, such as the ability to socialize with.

2) External factors, such as variation and degree of difficulty of the material being studied, a place to learn, climate, atmosphere, culture of learning communities and so on.

According to Purwanto (2004) factors that affect the GPA are:

1) Internal factors, the physiological condition of physical and psychological senses and related interests, level of intelligence, talent, motivation, and cognitive abilities.

2) The external factors ie curricula, teachers, infrastructure and facilities and management policies in schools (the study) is concerned.

Meanwhile, Dalyono (1997) suggests the factors that influence learning outcomes are.

1) Internal factors, including health, intelligence and talent, interest and motivation, and how to learn.

2) External factors, including family, school, community, and environment.

From learning theory, we can conclude that the learning outcomes are influenced by internal and external factors. Internal factors are factors that affect student learning outcomes that come from the students themselves. While external factors are factors that come from outside the student.

Previous Study

Previous studies have described the impact of the use of technology in this social network on one's academic performance. Previous studies exist that give positive results but others gave negative results. These will be given data on the results of previous studies on the relationship of technology, social networks and academic performance in Table 3.

### Table 3. Previous Study

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Espinosa, Laffey, Whittaker, &amp; Sheng (2006).</td>
<td>There is a positive relationship between academic achievement with a social network with notes that parents should be encouraged and reminded that the use of technology to improve academic achievement.</td>
</tr>
<tr>
<td>Lei dan Zhao (2005).</td>
<td>There is a positive impact on academic achievement.</td>
</tr>
<tr>
<td>Hunley et al. (2005).</td>
<td>There is no positive correlation between spend more time on the internet with a grade point average (GPA).</td>
</tr>
<tr>
<td>Kubey, Lavin, &amp; Barrows (2001).</td>
<td>Use of the Internet for social networks are highly correlated with the disruption of academic tasks and academic achievement.</td>
</tr>
<tr>
<td>Kolek</td>
<td>There is no correlation</td>
</tr>
</tbody>
</table>
Saunders (2008). between the use of Facebook with a student’s GPA
Karpinski & Duberstein (2009). There is a negative correlation between the use of social network with academic achievement. This variable is measured with GPA and the amount of time spent studying per week.
Pasek, More & Hargittai (2009). There is no correlation between social network with GPA
Kirschner & Karpinski (2010). The use of Facebook does not have an impact on someone academic performance.

Research Purpose
The purpose of this study is to give students an overview of the effect of social network activity on the student's academic performance as seen from the Grade Point Average (GPA) is achieved.

METHODS
Population and Sample
This study is based on data obtained from informants. The study population was all students who are still active student status until the end of the school year 2011/2012. Sample selection is done by purposive sampling method, which is to select a sample according to established criteria. Samples are selected must meet several criteria / requirements that have been determined by researchers. Criteria / requirements of a respondent who can be sampled as follows:
1. Studying in one of the universities that accredited A by regulator,
2. Students active until to end of the school year 2016/2017,
3. Minimal level two and / or have completed a one-year study,
4. Have obtained a minimum GPA two semesters,
5. Having a personal account on Facebook ® and Twitter ®,
6. Minimal active and / or possessed personal account for one year.

Data and Variables of Research
The data used are primary data, that is source of which directly provide data to researchers. Obtaining primary data are the most widely used form of questionnaires and interviews. Acquisition primary data used in this study were distributed questionnaires to a sample that meets the criteria.

The variables in this study consists of independent variables and the dependent variable. The independent variable is a variable that affects the dependent variable. Meanwhile, the dependent variable is the variable that is affected by the independent variable. The dependent variable in this study is shown academic performance of the Grade Point Average (GPA) is the latest and the independent variable of the study is divided into several parts: the period of exploiting social networks, social network usage motivation, academic data and activities.

Analysis Method
This study aims to describe the effect of a student activity on the social network on academic performance. The method used to analyze the influence of social networks on academic performance is a qualitative method and multiple linear regression analysis with doing some tests on the data that has been obtained. Thus, this equation can be formulated as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \cdots + \beta_{14}X_{14} + \varepsilon \]

Where:
Y = The latest GPA
X1 = Length have account FB
X2 = Length have account Twitter
X3 = Total access FB per day
X4 = Total access Twitter per day
X5 = Length access FB
X6 = Length access Twitter
X7 = Total friends in FB
X8 = Total friends in Twitter
X9 = Influence from total friends
X10 = Motivation using FB
X11 = Motivation using Twitter
X12 = Previous GPA
X13 = Length of study per day
X14 = Holiday activities
\( \varepsilon = \text{Error Term} \)

Tools regression analysis was conducted using SPSS 18.0 software to test whether the independent variables affect the dependent variable. Before testing the hypothesis that will be tested Normality Test, Assumptions Classical Test (Autocorrelation Test, Test Multikolinearitas, heteroscedasticity test) and Test of Hypothesis (t test and F test).

RESULT AND DISCUSSION

This study trying to empirically examine the social network affects the academic performance of a student with a grade point average (GPA) earned by students as the indicator who are affected by social network activities such as the length social network access, and motivations using social network.

According to Kirschner and Karpinski 2010 study, which stated that there is a negative effect of the use of Facebook with academic performance. It is similar to a study conducted Hunley, et al. (2005) which states that there is no positive correlation between taking the time to social network with the GPA obtained. While Espinosa, et al. (2006) and Lei and Zhao (2005) states that there is a positive correlation between the use of social network with a GPA of students on the condition these people around to remind students to use the media to improve performance.

Test of Data Quality

Validity Test

The validity of the test results as shown in Appendix 1 shows that all of the items declared, is valid because the value of the correlation probability [sig. (2-tailed)] is less than the significance level (\( \alpha \)) of 0.05 (Singgih, 2007). The results showed that all items valid statement, so it is legitimate to use as a data collection tool.

Reliability Test

Appendix 2 states Cronbach Alpha value equal to 0.6. Reliability test results indicate that all reliability coefficients equal to 0.6 then all the items declared reliable. This means that all the statements in the questionnaire is reliable.

Normality Test

Normality test is used to determine if the data has a normal distribution. To test the normality of the data can use the normal probability graphs. Here are the results of tests of normality menggunakan normal probability graphs.

![Figure 4. Normality Test](image)

Assumption Classical Test

Multicollinearity Test

Multicollinearity test is used to determine whether the regression model found a correlation between the independent variables. The results can be seen from the value of Tolerance and Variance Inflation Factor (VIF).
Table 5. Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LlamaFB</td>
<td>0.645</td>
<td>1.552</td>
</tr>
<tr>
<td></td>
<td>LlamaTwitter</td>
<td>0.498</td>
<td>2.010</td>
</tr>
<tr>
<td></td>
<td>AksesFB</td>
<td>0.692</td>
<td>1.445</td>
</tr>
<tr>
<td></td>
<td>AksesTwitter</td>
<td>0.502</td>
<td>1.994</td>
</tr>
<tr>
<td></td>
<td>LamaAksesFB</td>
<td>0.688</td>
<td>1.454</td>
</tr>
<tr>
<td></td>
<td>LamaAksesTwitter</td>
<td>0.513</td>
<td>1.949</td>
</tr>
<tr>
<td></td>
<td>TemanFB</td>
<td>0.707</td>
<td>1.415</td>
</tr>
<tr>
<td></td>
<td>TemanTwitter</td>
<td>0.407</td>
<td>2.458</td>
</tr>
<tr>
<td></td>
<td>Pencapahterunan</td>
<td>0.809</td>
<td>1.235</td>
</tr>
<tr>
<td></td>
<td>MotivasiFB</td>
<td>0.774</td>
<td>1.292</td>
</tr>
<tr>
<td></td>
<td>MotivasiTwitter</td>
<td>0.753</td>
<td>1.328</td>
</tr>
<tr>
<td></td>
<td>IPKsebelum</td>
<td>0.765</td>
<td>1.308</td>
</tr>
<tr>
<td></td>
<td>LamaBelajar</td>
<td>0.856</td>
<td>1.168</td>
</tr>
<tr>
<td></td>
<td>KegiatanLiburan</td>
<td>0.863</td>
<td>1.159</td>
</tr>
</tbody>
</table>

Based on the test results showed that the value of Tolerance multikoliniearitas on each independent variable approaches 1. Thus, it can be concluded that the regression between the independent variables terhadapa GPA is currently not the case multikoliniearitas between independent variables.

**Heteroscedasticity Test**

Heteroscedasticity test is used to determine whether the regression model has the same variance (homoscedasticity). Heteroscedasticity test results are shown in Figure 5.

**Figure 5. Heteroscedasticity Test**

Heteroscedasticity test can be seen through the graph scatterplots. Scateterplots Graph shows the point spread randomly above or below the Y axis so that it can be concluded that there is no heteroscedasticity in the regression model.

**5.4. Hypothesis Test**

Testing the hypothesis in this research by conducting tests of significance are indicated by $\alpha = 0.05$. Once the test results are known then performed multiple linear regression and partial both simultaneously. Partially linear regression performed using T test, and simultaneously using the Test F. Here are the results of the regression equation:

$$Y = 0.387 + 0.066X_1 - 0.066X_2 - 0.032X_3 - 0.010X_4 - 0.050X_5 + 0.025X_6$$

$$+ 0.066X_7 - 0.036X_8 - 0.033X_9 + 0.043X_{10} - 0.036X_{11} + 0.832X_{12}$$

$$- 0.037X_{13} + 0.039X_{14}$$

The coefficient of determination ($R^2$) is 0.837 this means that the dependent variable be explained by the independent variables of other words that 83.7 83.7% change in the GPA is currently able to be explained by the independent variables. While the remaining 16.3% is explained by other factors that are not addressed in this study.

Result of F test, Fstat values obtained for 22.045 with a significance level of 0.000 owned less than alpha 0.05, which means that the independent variable affects the dependent variable.

**Tabel 6. Autocorrelation Test**

From the table above shows the value of Durbin Watson 2.199 where the number of observation $n = 30$, independent variable = 14, then the value of $Du = 1.46$. So this study shows no autocorrelation terdapar among members of the sample, the test looks asums autocorrelation Durbin Watson meet as follows: $1.46 <2.199 <2.54$. 
Discussion and Analysis

Research is also conducted qualitatively to the respondents without restricting the answers of the respondents. Qualitatively, the results obtained can be seen in diagram 1 below.

Source: Data Processed by Author, 2016.

Based on the diagram 1 above that 22.67% of respondents said social networks negatively affect their academic performance, and 77.33% of respondents said they did not negatively affect academic performance. The statement above is in accordance with Lei and Zhao (2005) who stated that there a positive impact on academic achievement. While Espinosa, et al. (2006) states there is a positive relationship between academic achievement by social network with a note that parents should be encouraged and reminded that the use of technology to improve academic achievement.

The following will explain more about the results of the respondents' answers are shown in Table 7 to Table 9.

<table>
<thead>
<tr>
<th>Length to Study</th>
<th>Holiday Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not study</td>
<td>Social Network activities 22.67%</td>
</tr>
<tr>
<td>&lt; 15 minutes</td>
<td>Study 1.33%</td>
</tr>
<tr>
<td>16 - 30 minutes</td>
<td>Study and SN activities 21.33%</td>
</tr>
<tr>
<td>31 - 60 minutes</td>
<td>Gaming 16.00%</td>
</tr>
<tr>
<td>&gt; 1 hour</td>
<td>Watching TV 38.67%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length to access FB</th>
<th>Length to access Twitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not access</td>
<td>Not access 14.67%</td>
</tr>
<tr>
<td>&lt; 15 minutes</td>
<td>&lt; 15 minutes 46.67%</td>
</tr>
<tr>
<td>16 - 30 minutes</td>
<td>16 - 30 minutes 13.33%</td>
</tr>
<tr>
<td>31 - 60 minutes</td>
<td>31 - 60 minutes 9.33%</td>
</tr>
<tr>
<td>&gt; 1 hour</td>
<td>&gt; 1 hour 16.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency to access FB</th>
<th>Frequency to access Twitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not access</td>
<td>Not access 17.33%</td>
</tr>
<tr>
<td>1 - 3 times</td>
<td>1 - 3 times 23.67%</td>
</tr>
<tr>
<td>4 - 6 times</td>
<td>4 - 6 times 24.33%</td>
</tr>
<tr>
<td>7 - 10 times</td>
<td>7 - 10 times 12.00%</td>
</tr>
<tr>
<td>&gt; 10 times</td>
<td>&gt; 10 times 22.67%</td>
</tr>
</tbody>
</table>

Source: Data Processed by Author, 2016

From table 7 above can be seen that the highest percentage of respondents learning activity duration per day was not studied (37.33%) followed by study less than 15 minutes (20%) and respondents activities carried out during the holidays is watching TV (38.67% ) followed by activities on the social network (22.67%). These results undermine the hypothesis of this study because the results of lifestyle students who prefer to reduce the learning time and increasing the time to watch TV and do activities on the social network.
The results of the length of respondents access the FB and Twitter as well as the frequency of respondents in accessing FB and Twitter weaken this hypothesis. For the duration access FB, many respondents chose less than 15 minutes (41.33%) per one access and frequency of access to FB, many respondents chose 1-3 times (64%) access per day. While for a long time to access Twitter, many respondents chose less than 15 minutes (46.67%) per one access and 4-6 times (24.33%) access per day. When performed further calculations, the average respondent access FB 45 minutes per day and to Twitter 90 minutes per day.

If the learning activities compared to the activities of social networks, it can be concluded respondents prefer to be active in the social network than studying. It can be seen from the respondents prefer not to learn or repeat material per day, although there are respondents who are learning, but the majority of respondents learn less than 15 minutes per day. As for the social network activity, respondents prefer approximately 90 minutes per day. When seen from the length of time it is used it is appropriate when the social network effect on academic performance.

Respondents prefer to be active on social networks compared to learning due to some underlying motivation. The results of the respondents' answers can be seen in table 8 below.

**Table 8. Motivation Using Social Network**

<table>
<thead>
<tr>
<th>Total Friends in FB</th>
<th>Total Friends in Twitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 400</td>
<td>5.33%</td>
</tr>
<tr>
<td>401 - 500</td>
<td>5.33%</td>
</tr>
<tr>
<td>501 - 800</td>
<td>21.3%</td>
</tr>
<tr>
<td>800 - 1100</td>
<td>34.6%</td>
</tr>
<tr>
<td>&gt; 1100</td>
<td>33.3%</td>
</tr>
<tr>
<td>&lt; 100</td>
<td>24.0%</td>
</tr>
<tr>
<td>101 - 250</td>
<td>38.6%</td>
</tr>
<tr>
<td>251 - 350</td>
<td>17.3%</td>
</tr>
<tr>
<td>351 - 500</td>
<td>14.6%</td>
</tr>
<tr>
<td>&gt; 500</td>
<td>5.33%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Motivation Using FB</th>
<th>Motivation Using Twitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeping the relationship</td>
<td>61.3%</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>2.67%</td>
</tr>
<tr>
<td>It’s cool, happy and wasting time</td>
<td>8.00%</td>
</tr>
<tr>
<td>Study</td>
<td>20.0%</td>
</tr>
<tr>
<td>Gaming</td>
<td>8.00%</td>
</tr>
<tr>
<td>Keeping the relationship</td>
<td>50.6%</td>
</tr>
<tr>
<td>Updating about artist</td>
<td>14.6%</td>
</tr>
<tr>
<td>It’s cool, happy and wasting time</td>
<td>8.00%</td>
</tr>
<tr>
<td>Study</td>
<td>8.00%</td>
</tr>
<tr>
<td>Show the feeling to society</td>
<td>18.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Influence from Total Friends</th>
<th>Really Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Really</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13.3%</td>
<td>28.0%</td>
<td>24.0%</td>
<td>32.0%</td>
<td>2.67%</td>
<td>2.67%</td>
</tr>
</tbody>
</table>

Source: Data Processed by Author, 2016

Based on Table 8, many respondents who have friends on FB as much as 800-1100 people (34.67%) followed by the many friends of more than 1100 people (33.33%) and on Twitter as many as 101-250 people (38.67%) followed by the many friends as less than 100 people. This is in line with the results of the use of motivational FB and Twitter is as much as
61.33% FB users stated their main motivation is to maintain good relationships with friends, friends, or family, and the same was expressed by Twitter users (50.67%).

But the things described in the preceding paragraph contradict the results of the influence of many friends in accessing FB and Twitter. Apparently many friends on the social network does not affect length of a respondent to access social networks (32%). This phenomenon occurs because the perception of maintaining good relationships with friends, family or the social network does not mean having to interact intensively / continuously.

In addition to maintaining a good relationship, it turns out FB is also used as a learning tool as one of the biggest motivations FB usage by 20%. This indicates that there are many who use FB to positive things and support their academic performance. As for the Twitter use most after maintaining good relationships is to express inner feelings (18.67%) and to determine the activity or the latest news from the artists or their idol (14.67%). Mean Twitter is more popular to communicate with others than to learn. The reason for this phenomenon occurs because the capacity of Twitter to communication very small when compared to FB. Twitter can only convey a message of 140 characters per message, making it difficult for users if you want to discuss or communicate about the subject.

Motivation use of social networks has been described in the previous section were consistent with the research that has been conducted by Bosch (2009); Ellison et al. (2007); Joinson (2008); Lampe, Ellison, and Steinfield (2006, 2008); Lewis & West (2009); Pempek et al. (2009), Sheldon (2008); Stern & Taylor (2007), Young & Quan-Haase (2009), which states that the biggest motivation to maintain good relations with friends, friends, or family (example: send a short message, posted on the friends wall, communicating, and keeping in touch with friends, friends, or family who do not often see). Joinson (2008); Pempek et al. (2009), which claimed to reveal the inner feelings (eg, updating status mood and update your profile) and Bosch (2009); Pempek et al. (2009) who says to learn the specific purpose (eg, asking for help in task difficulty) and for student activities (eg, vote against something)

### Table 9. The Latest GPA VS Previous GPA

<table>
<thead>
<tr>
<th>The Latest GPA</th>
<th>Previous GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2.74</td>
<td>1.33%</td>
</tr>
<tr>
<td>2.75 - 3.10</td>
<td>20.00%</td>
</tr>
<tr>
<td>3.11 - 3.49</td>
<td>32.00%</td>
</tr>
<tr>
<td>3.50 - 3.80</td>
<td>34.67%</td>
</tr>
<tr>
<td>3.81 - 4.00</td>
<td>12.00%</td>
</tr>
</tbody>
</table>

Source: Data Processed by Author, 2016

The data shown in Table 9 states that, based on the percentage increase in the GPA respondents. This is indicated by the percentage decline in GPA <2.74 were previously as much as 2.67% of respondents get GPA at the interval to 1.33% in the current GPA. For GPA interval from 2.75 to 3.10 previously as much as 22.67% down to 20% and an increase in GPA for the interval from 3.11 to 3.49 previously 25.33% to 32%. But a decline in the percentage of GPA in the interval from 3.81 to 4.00 the previous year of 14.67% to 12%. In addition, the GPA did not increase and decrease in the percentage above is in interval of GPA 3.50 to 3.80 GPA as well as being the most achieved by respondents. This indicates that factors strongly influence the GPA before obtaining GPA without disturbing the current social network activity.

Based on the explanation above, the social network did not negatively affect academic performance. This is evident from the description of the table 7 to table 9. Although the respondents were not repeated daily lectures / not learn and keep routine to access the social network but it does not negatively impact the GPA obtained.

Keep access to social networks and achieve a good GPA is a phenomenon evident in this study. This can be explained by several phenomena that occur in accordance with reality. The first phenomenon is accessing
social networks to discuss assignments and lessons. The second phenomenon is that many are lulled will delight when accessing social networks so as to make themselves forget their obligation should be doing as a student.

When these two phenomena occur and see the results achieved GPA remains good then it can be explained further in the next phenomenon. The third phenomenon is when students access the social network with status online, open, and check, but after that did not perform activities of social networks in other words let the social network users in standby mode for online and remain active for the task or concentrate on the lessons in class. The latter phenomenon is the student remains active in social networks in daily life and not learn / repeat material but still achieve a good GPA because the pattern of learning night racing system (a night before the test).

CONCLUSION AND SUGGESTION

Conclusion

This study trying to test empirically demonstrated academic performance of current GPA is influenced by social network activity. Specifically, this study found empirical evidence that social network activity does not negatively impact student academic performance or GPA in other words social networks have a positive influence on students' academic performance.

Based on testing conducted utilization period social network, social network usage motivation, academic data and activities negatively affect the GPA obtained. But many friends on the social network does not affect the GPA obtained.

Suggestion

It is hoped further research can be better and more widespread. Total respondents propagated and spread more widely and more questionnaires covering the whole archipelago. Besides content incorporated in the social network is not just Facebook and Twitter, diharpakan can be varied and supplemented.

REFERENCES


computing systems (pp. 1027–1036). New York: ACM.


