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Students who spend more time on Facebook tend to have higher grades: Findings from a Philippine university

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Abstract

Studies show that university students are big fans of FB, but to date, no local study documenting the association between FB use and academic performance among Filipino college students has yet been published. Thus, this research investigated the extent of FB use among students in a private university in the Philippines and correlated it to their General Weighted Average (GWA). A total of six hundred eighty-six (686) freshmen and sophomores participated in the survey. Results showed a weak but positive correlation between FB use and GWA, implying that more time spent on FB is associated with better academic performance. This may be attributed to the finding that most of the students use Facebook to update themselves on school activities and work with other students in completing course and school requirements. The students spend an average of 2 hours every week using Facebook, peaking during the weekends. This study provides evidence that FB offers a useful platform for students' academic communication. Details of school-related FB use by students as well as teachers may be subjects for future studies.

Keywords: social media; academic performance; Facebook; online platform; social networking sites

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1. Introduction

Meeting or mingling with friends and interacting with other people through the Internet is becoming an integral part of the modern life. Alcott, Braghieri, Eichmeyer, and Gentzkow (2019) observed that the intense impact of social media specifically Facebook for many networking site enthusiasts could be seen by trying to look at how they engage themselves with this podium in their everyday life. These so-called modern-day travelers would definitely agree that so far, there is no technology that can equate with the social networking sites in terms of easy connection and communication, dissemination of information and sharing thoughts or ideas with families and friends. It was also noted that for most young people nowadays, the use of digital technology takes most of their time since they consider this technology as a tool which enhances their skills in communication and interaction as well as developing their creativity.

The 21st century teenagers are universally known as either "digital natives" or "digital immigrants" who exist and use a new brand of language common only for people who are exposed to virtual communication. These young people are also noted to be using the same platform in expressing themselves (Prensky, 2001). The Internet world defines these computer-generated communication devices as social networking sites which provide online services from which users can create and maintain a public or partially-public profile, come up with a list of other users who they identified as friends or acquaintances with whom they share a connection, which they can view as many times as they want (Boyd & Ellison, 2008). The social networking site users look at these tools as important instruments to interact with friends, peers, and others (Mingle & Adams, 2015).

Badri, Nuaimi, Guang, and Rashedi (2017) have identified several entry points like iPad, tablets, desktops, laptops, and smartphones, which according to them can provide an easy access to the social networking sites or social media applications. It could never be denied that one of the social networking sites which attracted millions of users all over the world, particularly young people, is Facebook (FB). Kashif (2013) cited that FB is the largest social network site in the Internet today. Contrary to the belief of many, FB has also attracted a number of adults with users aged 24-34 increasing by 181% and those aged more than 35 years old increasing by 98% (Kirschner & Karpinski, 2010). However, the prevalence of using FB remains higher to college students and young adult. In their training for collaboration and information sourcing, students have found Facebook to be an effective tool to update themselves with various curricular and extra-curricular activities. In time, the site has also entered the educational system as teachers begin utilizing the increased accessibility of Facebook to reach their students for school announcements and assignments.

Similarly, Kirschner, and Karpinski (2010), argued that college students consume a considerable amount of time using the website that it may already have an impact on their daily activities. Rouis, Limayen, and Sangari (2011) described a few of the most commonly used features of FB – content generation and sharing, communication, and contact building. Compared to the general population, students and young adults are considered as the most frequent users of the internet. Kirschner and Karpinski (2010) reported that 46% of their sample used the Internet in making assignments, 36% used it to send instant communication through chat or email, and 38% used it for computer gaming. Many Facebook users would also agree that this platform has been very useful as an instrument for interaction among people from the different parts of the world and serves as a primary podium for communication for people from the different walks of life.

Mingle and Adams (2015) cited FB can also be instrumental in facilitating peer support among students. In their study involving business education students, they found out that FB has been used primarily to facilitate exchanges, which aim to promote group cohesiveness and teamwork. However, despite the positive remarks

coming from Facebook users, there are still some negative comments made against this website especially questions regarding its impact in the lives of students particularly those that are from the tertiary or college level (Barrat, Hendrickson, Stephens, & Torres, 2005). There are some studies that justify the negative effect on the academic experiences of students whose lives revolve around this social networking site. A study made by Boogart and Robert (2006), found out that too much usage of FB is associated with lower academic achievement, implying a negative impact on the scholastic performance of students.

1.1 Time spent using Facebook

Although the use of Facebook is prevalent in this modern world, it is undeniably true that students from the tertiary level are still its primary users. Consequently, a study made by Ellison, Vitak, Gray, and Lampe (2014) noted that 94% of the identified active Facebook users are from the Higher Education Institution (HEI), spending 60 to 90 minutes online each day, connecting and conversing with friends or relatives which has a striking similarity to Dunbar's Number (Dunbar, 1992). In the same manner, Wiley and Sisson (2006), as stated in Pempek, Yermolayeva, and Calvert (2009), spearheaded a massive survey involving college students from universities in the different emerging countries, wherein it was found out that 91% of the respondents use Facebook at an average of 28 minutes a day. Furthermore, in another study made by Erlin, Triyani, and Susandri, (2015), it was found that about 95% of the college students that they surveyed already have an FB account even before entering the university. From the same report, it was mentioned that students who maintained an account would usually spend less than an hour each day browsing through the site. The same students would also log into the site multiple times in a day.

The number of hours that students use Facebook provides evidence of the pervasiveness of FB. Kashif (2013) indicated that Facebook intensity could be determined using the FB intensity scale. These findings were supported by another study made by Knight-McCord, et al. (2016) which confirmed that students spend approximately 100 minutes per day on Facebook. Rouis, Limayem, and Salehi-Sangari (2011) stated that younger generations spend up to 8 hours a day surfing the socializing website. Ellison, Steinfield, and Lampe (2007) found out that users usually spend 10 to 30 minutes on the social networking site each day to communicate with their friends. These students would usually have about 150 to 200 contacts in their accounts. In addition, the students use at least three to four minutes browsing through the updates on their newsfeed. On the average, the students in the study spend eight hours doing various activities in FB. In 2014, FB has about 100 million active users. Half of these users spend at least 20 minutes in the site each day (Thuseethan & Kuhanesan, 2014). On the other hand, Moghavvemi, Aziz, Sulaiman, and Wai (2017) reported that 27.4% of students spent about 11 to 30 minutes engaging to the different features of FB, while about 20.5% used their Facebook accounts for less than 10 minutes each day. Mayoyo, Nyang'au, Nyamwaka, and Aming'a (2015) stated that 94% of students they interviewed had a Facebook account and used it on average of 10 to 30 minutes a day.

Adesope and Ogan-Charles (2015) noted a significantly varied time spent in the social media site. In their own study, they reported an average of 47 minutes of online time for FB users every day. Wang and Ching (2013), on the other hand, identified that 46% of the students interviewed admitted they tend to use their Facebook account at least once or twice a day for an average of 3 minutes only per day. The usage is lower compared with the findings of previous studies. Social networking sites gained their popularity in the second half of the past decade, partly attributed to the patronization of university and college students. It was estimated that 73% of students who are logging into the internet have created their social networking account at the last quarter of 2009. About 38% of them are logging into their accounts every day (Ellison, Steinfield, & Lampe, 2011).

Currently, Facebook as a social networking site, generates billions of dollars and facilitates the communication of people from different parts of the world (Brydolf, 2007; Pasek, More, & Hargittai, 2009). Unfortunately, university students have become engrossed in the site and neglected their academic work and activities. The study identified students as victims of the social media sites. Researchers identify the negative impact of social media upon academic performance. Researches cannot easily identify that impact in other

sectors like office productivity (Pasek, More, & Hargittai, 2009). Ellison, Steinfield, and Lampe (2011) mentioned that there is a tendency for students to log into and browse through their FB accounts even in the middle of completing their assignments, thereby the learning process. They open several tabs in their browser to simultaneously navigate online references and their social media accounts. In the end, it has been observed that students spend most of their time in the social media site rather than working on their academic tasks. Hence, it is undeniable that FB use can indeed have an effect on the overall academic performance and achievement of students.

1.2 Uses of Facebook

Nadkarni and Hofmann (2012), through an extensive review of literature, noted that the prevalence of Facebook use among people in this generation is driven by two basic social needs – the need to belong and the need to present oneself. They further argued that these social needs are influenced by other factors such as demographic profiles, social backgrounds, and even personality traits. Such results are coherent with the findings of Cheung, Chiu, and Lee (2011) which stated that the use of social networking sites is prompted by the desire of people to socially connect with other people. Most of the participants in the study were students and they asserted that the yearning to instantly communicate with friends who may be physically distant is but a common defense for the use of social networking sites such as Facebook. Interestingly, the study conducted by Clayton, Osborne, Miller, and Oberle (2013) correlated anxiety, alcohol and marijuana use to the development of emotional attachment in Facebook. This may suggest that the use of Facebook may provide social support to people who may be experiencing emotional problems. In fact, the same study has revealed that anxious and lonely people tend to connect more to people who are using Facebook. A more recent study has associated the use of Facebook to the alleviation of depression among people. Ellison, Steinfield, and Lampe (2007), made a study on Facebook use which include bridging, bonding, maintaining social capital and online-offline relationship in which their finding says there is a positive relationship between the use of Facebook with the creation and upkeep of social capital. This, however, can happen when the feeling of envy towards others (as mediated by what they see in the social networking site) is controlled.

Despite the contrasting results and implications of the use of Facebook in the various facets of human interactions, the social networking site has found its way into the educational system. In a study conducted in 2010, Gray, Annabell, and Kennedy explained that Facebook can provide mixed experiences for students, making it a good learning environment. Given the idea that Facebook can support social interactions, groups and peer learning can be scaffold for teachers to allow collaborations during project creations. They also noted that FB is a better choice for keeping students updated than the university's learning management system (LMS). In the perspective of the respondents, they consider Facebook as relatively easier to use than their university's LMS. Kabilan, Ahmad, and Abidin (2010) have also studied how to use Facebook in facilitating the learning of English among undergraduate Malaysian students. The researchers, however, cautioned teachers that activities done in the social media require careful planning and anchoring to predetermined learning outcomes for such integration to be effective.

The advice of Kabilan, Ahmad, and Abidin (2010) may be deemed crucial in education as Junco (2012) revealed that much of the activities done by students when using Facebook unsupervised include viewing photos and keeping themselves updated about the activities of their friends. McAndrew and Jeong (2012) even noted that females tend to spend more time in the site compared to males, with most of their activities linked to impression management. Older people, on the other hand, are likely to engage with family activities whenever they are logged in. Despite this, males who use Facebook tend to be more affected with relationship status compared to their female counterparts. Whiting and Williams (2013) organized uses of Facebook into ten (10) categories – interaction, information seeking, entertainment, relaxation, expression of opinion, information sharing, social interaction, pastime, communication utility, convenience utility, and surveillance. Lampe et al. (2011) asserted that these utilities may be associated with social organizing behaviors among people wherein they would want to interact with other people and eventually feel a sense of belonging to a group. However, the

mere use of Facebook could not predict positive or negative collaboration making it challenging for teachers to integrate this into their lessons. Rosen, Carrier, and Cheever (2013) even provided empirical evidences that students who use Facebook have lower GPAs than their contemporaries who do not use it. However, they also argued that short "technology breaks," wherein students would browse through the newsfeed after some hours of study, can help reduce distractions.

The previously cited studies assert a dynamic interplay between the use of Facebook and academic achievement of students. Despite having several relevant studies, there is still no consensus on how Facebook use impacts the learning process. A relevant point of discussion could be on how teachers and schools encourage or discourage the use of Facebook in disseminating school-related information. Research into the impact of culture on the use of social networking needs further analysis and study. Given these considerations, results of similar studies can be of help in establishing a more solid foundation on the debate. The present study aims to contribute to the existing literature by weighing in empirical data from the Philippine setup, particularly findings from university students.

On the premises of the stated objectives, three research questions guide this study:

- > Is there a relationship between the Facebook usage of students and their academic performance?
- ► How much time do university students spend on Facebook collectively per day?
- ➤ Why do university students use Facebook?

2. Method

2.1 Participants

The target population for this study is composed of students enrolled in the first- and second-year college levels of Angeles University Foundation. From the total population of 6,500 college students from the different colleges, a sample of 686 first and second year participated in the study.

2.2 Research Instrument

The study adopted a survey questionnaire developed by Kirschner and Karpinski (2010). The questionnaire comprises of three parts. The first part of the instrument profiled the respondent according to their demographic information (e.g. student ID. number, gender, gender, age, course, and year level). The second part specified the number of hours for Facebook use (e.g. no of hours spent per week). For the third section of the questionnaire, the respondents ranked common Facebook activities according to how often they engage in them.

2.3 Procedure

The questionnaire was administered to the respondents after seeking permission for the study. The administration of questionnaires was done during the class hours of the respondents. The respondents took 15 to 20 minutes to complete the questionnaires. The students' colleges provided the Grade Weighted Average (GWA) for the students.

2.4 Analysis

The team correlated Facebook usage time with a frequency distribution. The team ranked the top three activities identified by the frequency distribution. In addition, the team correlated the relationship between Facebook usage and GWA. The relationship between time spent on Facebook and GWA were correlated and analyzed.

3. Results and discussions

3.1 Impact of Facebook on student performance

Understanding the impact of Facebook use to the academic performance of the students was determined by probing the correlation between the amount of time spent by students in Facebook as against their General Weighted Average (GWA). Statistical analysis reveals a Spearman rho value of .08 (p=.03), indicating a statistically significant but weak positive correlation between Facebook use and the students' academic performance.

This result is contrary to the findings of Junco (2012) which concluded that the time spent by students in Facebook is negatively correlated with the overall GPA of college students. In another related study steered by Pasek, More, and Hargittai (2009), they cited that current studies on the matter are reporting inconsistent results, particularly when dealing with the correlation between FB use and academic performance of students. They added they found significant negative relationships between Facebook use and students' academic performance. Similarly, Pasek, More, and Hargittai (2009) and Kolek and Saunders (2008), found that excessive use of FB does not affect the grades of students. In another study conducted by Junco and Cotten (2012), the researchers justified that such negative relationship could be associated with multitasking that students engage into while in the social media site.

Students are easily tempted to open other sites and explore other groups while they are using Facebook in communicating with their friend and classmates. According to Thuseethan and Kuhanesan (2014), the prevalent adoption of social media platform, particularly Facebook, has caused boundless interest among college students. They further stated the use of the social networking sites is harshly affecting the academic life of university students. In another study, Farooqi (2013) mentioned the influence of Facebook's sensational entrance into the lives of the users especially students were manifested in their academic performances. Kirschner and Karpinski (2010) confirmed the use of Facebook adversely affects GPA and the study time per week. Rouis, Limayen, and Salehi-Sangari (2011) presumed the widespread existence of Facebook and the consequent increased levels of how information is communicated entailed students' engagement in this task more than their homework which swing over their attention from their academic undertaking. They added this has been the reason why students engage more in constant interactions and socialization which prohibits them to concentrate on their academic works significant resulting to poor academic performance.

While Facebook has been initially created as a form of social media outlet, many have found the convenience offered by the website to build various groups in which they can share information. For instance, college students are usually heard instructing classmates to upload slides through their Facebook group or even through messenger. This appears to be more convenient than simply sending the files through emails. It is in this light that Facebook may have been beneficial for the students. They can communicate with their friends whenever they have queries regarding their projects or assignments. Some instructors would even communicate with their students using Facebook. The university also has a Facebook account which updates the students of specific events that are to be conducted in the school.

While several studies may point that Facebook use may have a detrimental effect to the academic performance of students, there may be a possibility that it can also facilitate learning and accomplishment of relevant scholastic activities. This suggests that when properly used, Facebook may aid students in developing better academic environment that would extend the classroom even at the places where the students are at. Facebook is accessible if there is an Internet connection. Therefore, students find it convenient to use it wherever they are. Junco (2015) even clarified that the use of Facebook may not be the culprit for the reported negative association of it to students' academic performance. While logged in to the social media sites, students can navigate other sites through browser tabs or links. This multitasking behavior can significantly diminish their

attention towards the activities that they are supposed to finish. Instead of simply completing their tasks by communicating with their classmates, they are tempted to browse through the newsfeed and open links that may consume much of their time online.

3.2 Reasons why students use Facebook

Table 1 shows the common reasons of students in using Facebook. From the results, it can be gleaned that most of the respondents use Facebook to be updated with school activities. This is coherent with the findings of Wang, Woo, Quek, and Yang (2011) that Facebook can be used as a learning management system (LMS). While students may benefit in using Facebook as a platform for posting schedules and other academic activities, the researchers asserted that students have great concerns over their security and privacy while using the social media site. In the context of the samples in this study, many of them are utilizing Facebook in communicating with their schoolmates about programs and activities. In fact, it has been a common sight in the social media site to see academic groups of different colleges and clubs where members are updated of the different announcements and activities.

Table 1Activities done by students in Facebook

Online Activities	Rank 1	Rank 2	Rank 3	
Join interest groups	73	35	51	
Let others know what I am doing	19	25	50	
Look at strangers' photos	27	22	38	
Look at friends' photos	89	60	72	
Maintain a social network	143	91	96	
Make plans with friends	97	70	55	
Meet new people	48	38	42	
Meet people to date	18	14	35	
Post photos of myself, my friends, and family	138	109	128	
See or follow what others are doing	44	61	57	
Send group messages	122	92	69	
Send private messages to people	219	152	110	
Stay in touch with friends I rarely see in person	231	130	135	
Stay in touch with friends I see a lot	74	61	31	
Stay in touch with friends I've met online	30	24	34	
Work on school activities	215	189	97	
Be updated on school activities	386	218	173	
Do business online	28	28	40	

The increasing number of academic groups in Facebook is evidence that universities and other academic institutions are exploring on the advantageous side of using the social media site. Because most students are logged into the site, these groups have seen that it would be more efficient to utilize the site in disseminating information pertinent to school activities. Such use of Facebook is not solely limited to school activities as other non-academic groups have also taken the site as a valuable platform for ensuring that everyone is informed of certain information regardless of their location.

Another compelling result from the sample is the use of Facebook in maintaining social circles through communicating and keeping track of friends who are rarely seen in person. This could be attributed to the original idea as to why Facebook came about. The social media platform allows people to communicate and share life experiences through photos, videos, and the like. With the rise of different gadgets and applications, students have been more enticed to create their own materials that depict their daily experiences. Some have seen Facebook as an online diary that they use to inform more people about their activities. While there may be varying perspectives and arguments towards this, it is still apparent that students have developed such mentality that by sharing this information via the social media, they are communicating with their group of friends about their current state. It must be noted, however, that the respondents are not posting updates on Facebook to simply

show others what they are doing. It appears that the respondents are still cautious about their privacy as they maintain exclusivity with their posts.

3.3 Time spent by students in Facebook

On the average, the respondents spend about two hours every week using Facebook. The most amount of time spent in the social media site is noted on the weekends. This is relatively lower than the reported time that college students utilize in the study conducted by Pempek, Yermolayeva, and Calvert (2009). In their study involving 92 students, they reported that the respondents used Facebook for at least 30 minutes each day as part of their daily routines. In consonance with the previous discussions, the respondents in the said study utilize Facebook to disseminate information to a group of people, usually their friends and classmates.

Interestingly, Kalpidou, Costin, and Morris (2010) reported that the amount of time spent by college students vary significantly from the freshmen to the seniors. Freshmen tend to spend more time in the social media site than their senior counterpart. It was also found out that the association between social adjustment and attachment and the use of Facebook becomes increasingly significant as the students' progress from freshmen to senior. This finding has been attributed to the ability of the seniors to maximize the use of Facebook in reinforcing their social connections with other members of the community. Many of the respondents noted that they only use Facebook for about 10 minutes each day to get updates with certain messages and events.

This could suggest that despite the clamor that people have about students being addicted to the use of the site, the respondents are still capable of managing the utilization of the site. It can be viewed as that the use of the social media site is simply limited to messaging and keeping social connections with other people. Browsing of documents, posts, and newsfeed may be associated with the use of Facebook, but this does not intervene severely with the academic activities of the students.

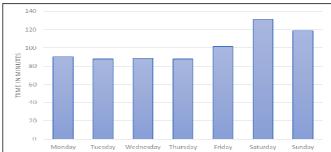


Figure 1. Comparison of time spent by students in Facebook

4. Conclusions and recommendations

The use of Facebook may have a beneficial effect among college students in terms of their academic performance. This can be attributed to the fact that the social media site has been utilized to create academic groups, inform people in the university about school activities, and the like. Facebook has been utilized as a platform to disseminate information about various academic programs, which students have been exploring. The social media site is also used to communicate with friends and other members of the community about projects and assignments that they must complete. The time spent by the respondents is at par with the noted utilization of the same site with existing literature. While Facebook may have a beneficial effect towards the academic performance of students, the results of many other studies pertinent to social media utilization must also be considered. Because sites like Facebook have already been explored even by universities and other academic groups in disseminating information, these institutions should also be able to educate students about the proper use of these sites. It has been seen from literature that improper utilization, such as the impact of multitasking, can have detrimental impact on the academic performance of students. Therefore, universities should have policies and limitations that will guide students on how to use the advantageous side of these social media sites. Because it has been implied that students are usually being informed through the social media site, it could be a

consideration for future researchers to verify how instructors and educational managers are using the social media site pertinent to school activities. This will allow a comparison and verification of the prevalence of the use of Facebook for academic purposes and eventually propose mutually beneficial policies and guidelines for schools and students.

Note: Part of this paper was also presented in the *3rd Lumina Research Congress* held in Kuala Lumpur, Malaysia on February 23 to 24, 2019.

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