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#### The Dangers of Facebook

#### **Daniel Chionuma and Luis Miguel Ponce**

Social networking sites have been around for a long time but just recently, within the decade, they have been experiencing exponential growth. Facebook is the media's leading social networking site and it is dominant among today's youth. In the present study, 91 participants were asked a variety of questions in order to assess the kind of impact facebook had on an individual's GPA. Facebook usage and GPA was shown to have no correlation,  $r_s$ =.035. The findings were due to lack of control throughout the experiment and an insufficient amount of participants.

Technology is everywhere. In this day and age it would be unfathomable to even imagine going a day without technology. Let us take a step back and think about what it would truly mean to be without any influence of technology for just a day. It would mean no cell phones to communicate with family and friends, it would mean no computers to use for research or social interaction, it would mean no use of modern day cars that take us from place to place, and no television. These are just a few of the footprints the field of technology has left on modern day United States and we can see how devastating their absence would be for the lives of Americans. Computer technology is more than likely the force that is driving the market in the field of technology. Users are spending more time on them and social networking sites (SNS) seem to play a key role in it. SNS developed in 1997 but did not really have a huge impact in the world until 2003 (Boyd & Ellison, 2007). According to Valenzuela, Park, and Kee (2008), Facebook and MySpace are the leading social networking websites.

Facebook, Orkut, Myspace, Cyworld and other social network sites are increasing in their popularity; more and more people from different ages, ethnicity, and socioeconomic classes are joining daily (Valenzuela, Park & Kee, 2008). SNS help individuals stay connected with people who are your neighbors or people who live halfway around the globe without the use of a telephone, post office mail system or going to visit them in person (Boyd & Ellison, 2007). Now the only things a person needs in order to stay current in his or her friend's lives is a computer, internet, and an SNS account. Facebook, however, was first created for just college students before entering to the rest of the world. Orkut was developed in the U.S. but most of their users where from Brazil (Graunke & Woosley, 2005). Cyworld became very popular in some parts of Asia and Hi5 become popular in South America (Valenzuela, Park & Kee, 2008). Social networking sites are everywhere, ranging from different countries, different places, and different ethnicities. They also seem provide some sort of dependence as research but Kung (2004) demonstrates. It seems the ability to interact with friends and family no matter where they are in the world attaches them to these websites (Kung, 2004).

Mark Zuckerberg, Dustin Moskovitz, and Chris Hughes were students from Harvard University developed an idea of creating a social networking website that people at their university could use to stay connected with each other. They named the website Facebook and it débuted in 2004. A little more than one year later, they decided to expand the user domain to anyone that had an education (.edu) e-mail account (Boyd & Ellison, 2007). Not even six months later Facebook expanded its domain again, this time to high school students. Their intentions for doing this was so that the seniors in high school who were preparing for college could begin to get connected with their peers without the boundary of an education e-mail

account in the way (Kung, 2004). By 2006, Facebook was accessible to anyone who had internet access as long as they were at least 14 years old (Valenzuela, Park & Kee, 2008). With it's new found potential and growth, Facebook quickly jumped to one of the most common websites used in the world (Kung, 2004). Last year, Facebook had 67 million active users; more than half of them spent an average of 20 minutes per day on this website (Facebook, 2008). Mark, Dustin, and Chris are now individually multimillionaires and still remain responsible for creating a new, more efficient way of staying connected.

Facebook, like other social networks, has become a key role in our society. In today's world it is evident that people are spending more and more time at home on their computers. The first assumption was that it was television, then it was video games, and now it is shifting towards social networking websites. With this new found information the questions arises; how is this impacting the users? Facebook started out targeting college students so it is no surprised that it is most used by them. What attracts people to use it is the fact that they can always check a friend's profile by watching his or her recent status (Valenzuela, Park & Kee, 2008). However, the addicting qualities of the mass social website may have an effect on an individual's grade point average. In this experiment, we intend to examine the correlation between Facebook usage and grade point average.

The University of Minnesota (2008) created a study to see the educational benefits of using web pages like Facebook, and they concluded that the type of learning and creativity that kids are developing during this century is the required for everyone who lives in a civilized society due to the fact that internet is everywhere. So it is possible that Facebook in reality has no correlation to GPA. We are conducting this experiment because as stated before, social

networking sites have a major role in our society and it would be important to see what kinds of relationships can be found. We realize that causation cannot be conducted through our study but possibly through the correlational evidence experiments could be conducted to find causation.

#### Method

#### **Participants**

There were a total of 91 participants recruited for the Lindenwood Human Subject Pool. Participants were 40 male and 51 female undergraduate students, ages 18 to 27, who participated in the study for extra credit. Experimental sessions were conducted by both male researchers.

Materials

Participants were presented with a survey was presented that consisted of 12 questions (see Appendix A); participants took no longer than five to eight minutes to fill out the questions in the survey. The questions in the survey were designed to control for a particular set of extraneous variables: time spent studying weekly, time spent working at an off campus job weekly, time spent work and learning weekly, time spent in one's respective sports team weekly, time spent in an extracurricular activity weekly, whether or not participant owned a Facebook book account, what type a computer participant owned, and how hard the participant strives to maintain a good G.P.A. (3.0 or higher). The critical questions that were used in our study were; the amount of time participant spent on Facebook weekly and the participant's last semester or mid-term G.P.A. Two informed consent forms (see Appendix B) were provided, one for the participant and one for the researchers. After conducting the survey we also gave them a feedback letter (see Appendix C) which thanked them for their time and gave them our contact information in the case they would be interested in our findings. There was a pen or pencils

present so the participant could fill out the survey and a desk for them to sit in. For the participants eligible for extra credit we gave them a participants receipt for them to take back to the HSP. Everything was done in room Y105A.

#### Procedure

Upon arriving at Y105A the participant was asked to read and sign two informed consent forms, one for him or her and one for the researcher. The informed consent form explained the terms of withdrawal and how it was option without penalty, how their information given is confidential, our process of documentation, and that they have to be 18 or older to participate. After explaining the forms the researchers administered the survey which took about five to eight minutes. After the participant took the survey the researchers collected the survey, debriefed the participant on what the study was testing, and reassured him or her about the confidentiality. The researchers then handed the participant a feedback letter and a participant receipt depending on whether he or she was eligible for it.

#### Results

We did a Spearman's r analysis to test the relationship between G.P.A. and hours spent on Facebook. Our results showed a very weak correlation, which was  $r_s$ =.035. Using a multiple regression analysis on the data showed there to be only six participants who met the criteria of the other extraneous variable tested in the survey (hours played in sport weekly, hours spent at work weekly, hours spent doing work and learn weekly, hours participating in an extracurricular activity weekly, hours spent studying weekly, hours spent on Facebook weekly) and G.P.A.

An independent t-test comparing between sex on the numbers of hours on Facebook revealed a significant effect of sex, t(87.779) = -2.601, p=.011. Male and female groups were

not equal and the previous statistic shows results when equal variances were not assumed. Correlation analysis shows there to be a relationship between hours the participant worked at their job and hours spent on Facebook,  $r_s$ =-.330 as well as hours spent studying and hours spent on Facebook,  $r_s$ =.243. All other relationships when compared to hours spent on Facebook or G.P.A. did not exhibit a significant relationship.

#### Discussion

Our study did not find a relationship between time spent on Facebook and G.P.A. This presents a problem because other research shows there to be a relationship (Karpinski, 2009). So this would either mean other research is incorrect or there were some variables which were not controlled for in the study that was skewing the data.

One explanation for the results is that there was no blind in the study. The project title was "The Dangers of Facebook" so when participants were signing up for the project from the Human Subject Pool, they probably already had an idea of what they were getting themselves into. It is likely that non Facebook users did not sign up so it would be impossible to test whether non-Facebook users have a better or worse G.P.A. than active Facebook users. In a later study it would be advised to have a blind in the research name and also to have a certain quota for both non-Facebook users and active Facebook users.

Another alternative to why there was no correlation between time spent on Facebook and G.P.A. is the variability of the information subjects are presenting. The setting was designed to be a quick in and out, but in doing that subjects may have rushed their information which leads to incorrect data. Depending on the level of stress the individual was experiencing at the moment of study, he or she may write down more hours at work than he or she really worked.

This could apply and factor in to all of the other "time spent" variables. The questionnaire left room for many subjective responses which presented a problem because the researchers were accounting for them objectively. Better and clearly defined questions would help future researchers better account for reliable data.

Participants could also inflate their G.P.A. and deflate the time spent on Facebook book because of social desirable expectations (William, 2008). One wants to appear as if he or she has a good G.P.A. and one does not want to appear as if he or she does not have a real social life (this is the common assertion when one talks about how much time one spends of Facebook). Participants may consciously or sometimes unconsciously make themselves look better than they are. The lack of anonymity with their confidential information may have played a factor with the possible inflation as well. The survey was just placed faced down when they had completed so they had no assurance that the researchers would not peak at their information. Participants may have seen this flaw and inflated their responses.

Overall, the experiment helps show experimenters the effect uncontrolled stimuli can have on an experiment. The researchers still stand behind their hypothesis of a relation between time spent on Facebook and G.P.A. If conducted in the future more variables will be accounted for and properly controlled.

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We would like to thank everyone who helped us complete this study. We first like to thank Dr. Nohara-LeClair for assisting us anytime we needed and teaching us how to become quality researchers. We also would like to thank our classmates who critiqued our papers throughout the semester. And finally we would like to thank all of our participants who participated in our experiment. Without them, we would not have been able arrive with this information our research.

For further information concerning this study please contact researcher Daniel Chionuma at duc383@lionmail.lindenwood.edu.

			Appendix A			
1)	Are you:	MALE	FEMALE			
2)	How old are you? _	year	s old			
3)	What is your ethnicity? (please circle one)					
	Caucasian					
	Hispanic					
	African American					
	Asian					
	Other (please specify):					
4)	Do you play any ins	ide or outside	school sports?	Yes	No	
	If so, which	sport, and hov	v many hours p	er week do yo	u play it?	
5)	Do you have a job b	esides work a	nd learn? Yes	No		
	If so, how m	any hours per	week do you w	ork?	_	
6)	Do you have a work	and learn?	Yes No			
	If so, how m	any hours per	week do you w	ork?	_	
7) Do you involve yourself in any extracurricular activity outside school? Yes				school? Yes	No	
	If so, how m	any hours per	week you spen	d on participat	ing in the	
	activity?					
8)	Do you own one of the following: (please circle one)					
	Laptop	Desktop	I do	not own a con	nputer	

9)	Do you hav	ve a facebool	k account:	Yes	No			
	If y	es, how man	y hours pe	r week do yo	ou spend on i	t?		
10)	What was	your lasts se	mester GP	A? (please c	ircle one)			
	0.00499	.500999	1.00-1.49	1.50-1.99	2.00-2.49	2.5-2.99	3.00-3.49	3.5-
	4.0							
11)	How hard	do you striv	e to achiev	e or maintaiı	n a high GPA	(3.0 or hig	gher)? (pleaso	e circle
	one)							
	Not at all	I strive a li	ttle bit M	Ioderately	I strive a lot	I do all	that I can	
12)	How many	hours do yo	u study pei	week?				

## Appendix B

### Informed Consent Form

I,	(print name	e), understand that I will be taking part in a research project that
requires me to complet	e a short survey asking ab	out my study habits, extracurricular activities, and current GPA. I
understand that I shoul	d be able to complete this	project within 10 minutes. I am aware that my participation in this
study is strictly volunta	ary and that I may choose	to withdraw from the study at any time without any penalty or
prejudice. I should not	t incur any penalty or prej	udice because I cannot complete the study. I understand that the
information obtained f	rom my responses will be	analyzed only as part of aggregate data and that all identifying
information will be abs	sent from the data in order	to ensure anonymity. I am also aware that my responses will be
kept confidential and the	hat data obtained from thi	s study will only be available for research and educational purposes.
I understand that any q	uestions I may have regar	ding this study shall be answered by the researcher(s) involved to
my satisfaction. Finall	y, I verify that I am at lea	st 18 years of age and am legally able to give consent or that I am
under the age of 18 but	t have on file with the HS	P office, a completed parental consent form that allows me to give
consent as a minor.		
		Date:
(Signature of participal	nt)	
		Date:
(Signature of researche	er obtaining consent)	
Student Researchers' N	Names and Numbers:	Supervisor:
Luis Ponce	636-426-9015	Dr. Michiko Nohara-LeClair
Daniel Chionuma	816-582-2355	Course Instructor
		(636)-949-4371
		mnohara-leclair@lindenwood.edu

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#### Appendix C

#### Feedback Letter

Thank you for participating in our study. The survey was used in order to determine if there is any correlation between time spent on facebook and an individual's GPA. The questions about other activities were asked so we could see what other kind of variables, along with facebook, affect one's GPA.

Please note that we are not interested in your individual results; rather, we are only interested in the results of a large group of consumers, of which you are now a part of. No identifying information about you will be associated with any of the findings.

If you have any questions or concerns regarding any portion of this study, please do not hesitate to bring them up now or in the future. Our contact information is found at the bottom of this letter. If you are interested in obtaining a summary of the findings of this study at a later date, please contact us and we will make it available to you at the completion of this project.

Thank you again for your valuable contribution to this study.

Sincerely,

Principal Investigators:

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