Social Media Use, Perceived Depression and Academic Performance of College Students in a Philippine Higher Education Institution

Jean Cyril V. Salisi, Ma. Crizyl V. Aravejo, Gelain C. Eguia, Rebecca Shandie B. Maranan,
Dr. Myriam R. Du
LPU-St. Cabrini School of Helath Sciences

ABSTRACT

The study aimed to determine the relationship between social media use, depression, and the academic performance among college students. A descriptive-correlative design was applied to study 194 randomly selected Nursing and Medical technology students from a tertiary health educational institution in the CALABARZON area using an adapted survey questionnaire. The data were treated using frequency and percentage, weighted mean, Pearson's r and regression. Results revealed that the College of Allied Medicine students showing good academic performance are active social media users with one to ten social media platforms, spending an average of one to two hours per engagement in search for information. Facebook still is the most popular social media platform site among this population group. Most of the students do not show evidence of perceived depression despite the number of engagements in social media platform. There is no significant relationship between perceived depression and social media use among allied medicine students. Social media use and depression are not predictors of academic performance.

Keywords: *Social Media Use, Perceived Depression, Academic Performance, college students*

INTRODUCTION

Almost half of the world's population spends their time in social media (Kemp, 2018). There is an estimated 4.021 billion active social media users out of the Earth's population of 7.524 billion as of January 2018. Its usage went up by 18% on the year 2015 to 2016 (Brown, 2017).

Among the fifteen most popular media sites (Kallas, 2018), Facebook (FB), which is considered as the "king of the social media platforms", has an estimated 2.17 billion active users per month (ABS-CBN News, 2018). Filipinos spend an average of nine hours and twenty-nine minutes a day on the internet (Camus, 2018). The Philippines again topped the world in terms of social media usage with 67 million accounts on Facebook, and another 10 million on Instagram, which is owned by Facebook.

Studies have shown that excessive usage of internet can become an addiction and can cause academic problems, psychological and mental problems (Akhter, 2013), cyberbullying, unrealistic comparisons and feeling left out and increased in the major depressive episode (Hurley, 2018). However, in a study done among Filipino college students, intensity of Facebook use is not substantially linked to their levels of depression, anxiety, and stress even though Labrague (2014) asserted that time spent on FB increases the likelihood to develop depression and anxiety.

The purpose of this study is to determine the association between social media use, depression and the academic performance among college students. Specifically, the study aims to determine: 1. the social media use of college students in terms of 1.1 number of social media platform use; 1.2 numbers of hours spent per social media platform engagement; and 1.3 reasons for the using social media platform. 2. the perceived level of depression among college students., 3. the academic performance of college students in terms of general weighted average. 4. if there is a significant relationship between social media use and perceived depression among the college students 5. if the academic performance is directly influenced by 5.1 social media use; and 5.2 perceived depression.

Conceptual framework

Figure 1 shows the three broad concepts of this study, which are separated using three boxes. The social media use and perceived depression represent the independent variables while the academic performance represents the dependent variable. Relationship between social media use and perceived depresssion, and between social media use and perceived depression with academic performance are signified by the two headed arrows in between the boxes. Social media use is described in terms of number of social media sites used, numbers of hours spent per social media site engagement, and the reasons for the use of online social network. Operationally, academic performance refers to student's preliminary performance. Perceived depression signifies self-report feeling of being sad or at low ebb for a significant period of time often with accompanying failure in experiencing a fulfilled life.
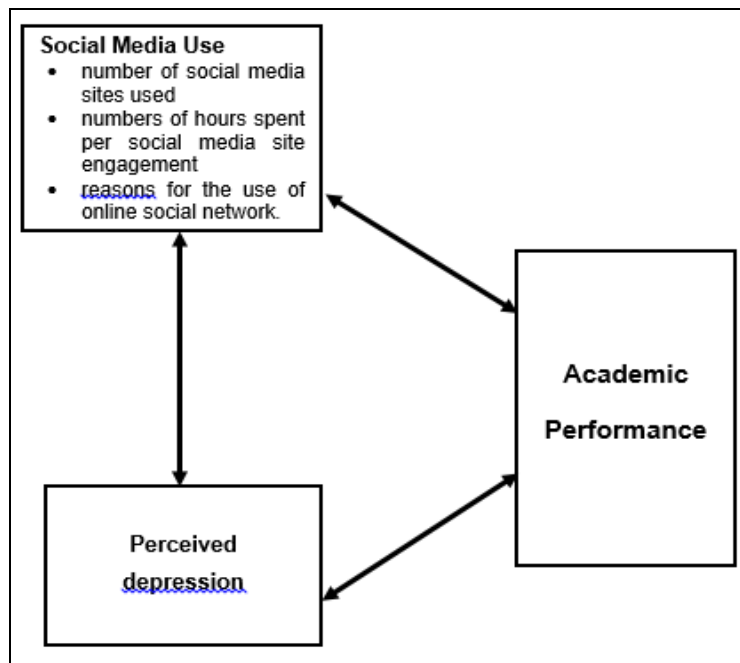

**Figure 1. Relationship of Perceived Depresion, Social Media Use
and Academic Performance**

MATERIALS AND METHODS

To achieve the purpose of the study, the researchers used the quantitative design specifically the descriptive-correlative design. In this study, the design was used to describe and determine the relationship of social media use and perceived depression of the students and how it could affect academic performance.

The respondents of the study were the students from the College of Allied Medicine and were limited to the first year and fourth year students enrolled during the first semester of School Year 2018-2019. As baseline reference for the sample size, the study utilized the enrollment data of the college students for the first semester of School Year 2018-2019. Using the G-Power Software, the calculated sample size was 134 for a population size of 352.

The instrument is a two-part questionnaire. Part I included six items on the social media use and Part II is composed 11 items on perceived depression adopted from Kutcher Depression scale. This depression scale is a self-report scale specifically designed to diagnose and assess the severity of

adolescent depression. The scores were assessed relative to individual's baseline score with higher scores indicating worsening depression and lower scores suggesting possible improvement. This had been used by many countries in assessing the depression among adolescents. The Chinese version of the tool was validated and tested for reliability, which resulted to Cronbach alpha of 0.84 (Zhou, H., Hao, N., Du, Y., Liu, Y., Sui, Y., et al. (2016). As a rule, an instrument is considered valid if it is reliable. While some tests aim for .90 or higher reliability, a minimum reliability of .70 is required for attitude instruments indicating 70% consistency in the instrument scores (Siegle, 2013). The perceived depression scale was rated using a three-point Likert scale with the following description:

Weight	Scale	Description
2.50 – 3.00	3	All of the time
1.50 – 2.49	2	Most of the time
0.50 – 1.49	1	Much of the time
0 - 0.49	0	Hardly ever

Midterm grades' general weighted average, which measured the academic performance of the students and expressed in grade point average, were requested from the Registrar's Office. The Midterm grades were given the following description:

Grade point	Classification
1.00	Excellent
1.25	Superior
1.50	Exemplary
1.75	Very Good
2.00	Good
2.25	Satisfactory
2.50	Fairly Satisfactory
2.75	Fair
3.00	Passed
5.00	Failed

The researchers wrote a permission letter to the Dean to undertake the present study. Upon approval, the researchers proceeded to conduct the survey to the chosen students. The researchers distributed the questionnaire with the attached informed consent. The students were given enough time to read and understand the content of the informed consent and the questionnaire. Questions were answered and clarifications were given. Understanding and acceptance to be part of the research study was determined by affixing their signatures on the informed consent. The students were able to accomplish the questionnaire for 15 minutes. The researchers facilitated the data gathering to achieve a hundred percent retrieval of the questionnaire.

To ensure the protection of the respondents, the existing rules on the ethical standards on health research using human subjects was used. Confidentiality of information and anonymity of the respondents were maintained all throughout the research period. There was no risk involved with the respondents since they were only asked to accomplish the questionnaire. The researcher asked the respondents for their student number instead of their names. In obtaining the Midterm grades needed, the researchers provided their adviser with the list of the respondents' student number. The list was submitted by the adviser to the registrar's office who provided the grades. The grades were given to the adviser who forwarded all the raw data, which included the encoded responses from the depression questionnaire and the Midterm grade to the statistician for treatment. With the current policy on Data Privacy, the request

for the acquisition of the grades from the Registrar's Office obtained the scrutiny and approval of the University Data Privacy Management Officer.

The data obtained were subjected for analysis using frequency and percentage for determining the social media characteristics of the respondents. Weighted mean was used in measuring the perceived level of depression and the academic performance of college students. In determining if relationship existed between social media use and perceived depression, Pearson's r was used. Lastly, to determine if academic performance was influenced by the social media use and perceived depression multiple, the researchers applied regression analysis.

RESULTS AND DISCUSSION

Table 1 shows the findings on social media use of college students in terms of the number of social media sites used. Almost 100% of the respondents have used one to ten social media sites while only one had used fifteen and above social media sites. However, it is also interesting to note that there was one who has not used social media. The results clearly show that the current generation belongs to the many active social media users who have explored different social media sites. Students want social media sites as reliable sources of data because everything is a package. Researchers also discovered that the use of some types of social media has advantageous effects to students, not only when it comes to their academic needs but also to help them establish a sense of identity and build and enhance networking skills.

Table 1. Social media use of college students in terms of the number of social media sites used

Range of social media site used	Frequency	Percentage
15 and above	1	0.7
11 - 15	0	0
1 – 10	132	98.5
None	1	0.7
Total	134	100

The data on Table 2 show Facebook got the highest rank confirming that it remains to be the most popular among the social medial platforms. Instagram (92.53%) and YouTube 91.04% followed this. Whatsapp is considered the least favored with less than 10% user. The low usage of WhatsApp may be due to its limited use, which is for communication alone, while Facebook serves a lot of purpose from messaging to business and games aside from it being a well-known application. The results may be attributed to the fact that the respondents are young adults belonging to the millennial generation who spend most of their time in social networking sites for different reasons such as communicating with families and friends, school-related work, entertainment or even doing business.

Table 2. Social media use of college students in terms of the number of social media user per site

Social media sites	Frequency	Percentage
Facebook	134	100.00
Instagram	124	92.53
Youtube	122	91.04
Twitter	115	85.82
Spotify	91	67.91
Snapchat	75	55.97
Pinterest	57	42.53
Viber	50	37.31
Tumblr	26	19.40
Whatsapp	13	9.70

Others	10	7.46

The data below reveals the social media use of college students in terms of numbers of hours spent per social media site engagement. Based on the survey, less than half of the respondents spent one to two hours per engagement. Those users who consumed less than an hour and those who spent two to six hours accounts to a number close to the number of the first group. A little less than 5% of the respondents consumed more than 12 hours in the internet. According to Mander (2017) the daily time spent on social media sites is over two hours per day. As the influence of social media use continues to rise, every year social media usage is increasing. It represents the central role that social media is really playing in the daily lives of today's internet users.

Table 3. Social media use of college students in terms of numbers of hours spent per day

Number of Hours	Frequency	Percentage
1-2 hours	59	44.02
2- 6 hours	32	23.8
Less than an hour	27	20.14
6 – 12 hours	10	7.46
More than 12 hours	6	4.4

College students' reasons for using social media

Table 4 shows the reason for the social media use of college students. The most identified reason for social media use is searching for information at 95.52%. Searching for information has become a common activity of the students as part of their education.

Second and third highest reasons are the use of social media to keep in touch with families and friends. Unlike the early years wherein distance was a primary reason to remain in contact with friends and families, with social media communicating with them is just a click away. Communicating is easier and getting updated on events and experiences becomes an everyday activity, particularly for students who are living far from their families during weekdays to attend their classes. Keeping in touch with families becomes easier for those in distant places.

Table 4. Social media use of college students in terms of the reasons for the use of social media sites

Reason for using online social network	Frequency	Percentage
1. Search for information	128	95.52
2. Keep in touch with friends	119	88.80
3. Keep in touch with family	114	85.07
4. Share videos/pictures/music	97	72.38
5. Do research	92	68.65
6. Watch movies	88	65.67
7. Play games	86	64.17
8. Connect professionally	77	57.46
9. Share experience/s	55	41.04
10. Seek for advice or opinions	54	40.29
11. Buy products	51	38.05
12. Make new friends	49	35.56
13. Do business	11	8.20
14. Others	2	1.49

While "other reasons for use" and "doing business" gained a little less than 10% and obtained the lowest scores, few students also resort to doing business through social media platforms.

Perceived depression among college students

Table 5 reveals the perceived depression among the college students. The table shows that majority of the respondents do not show indication of perceived depression. A small percentage expressed experiencing depression. It is worth noting that majority of students are free from depression. This is perceived as one of the reasons why majority of the respondents have good academic performance. Although college students are faced with so many challenges that add burden to their personal difficulties, they still are able to cope with their academic requirement. However, academic leaders must also look at the 15.67% result indicating that there are students who are currently having perceived depression.

Table 5. Perceived level of depression among college students

Score	Frequency	Percentage	Interpretation
Below 19	113	84.33%	No indication of perceived depression
19 and above	21	15.67%	With indication of perceived depression
Total	134	100	

Academic performance of college students

The academic performance of the respondents in terms of general weighted average is illustrated in Table 6. Findings show that a little less than 30% showed "good" academic performance. Almost 100% passed the enrolled courses with only one failure. However, with almost 36% who did not reach the satisfactory performance, it is worthy to know the reason behind this finding. Passing the enrolled courses is a purpose-driven task for college students. For first year students, passing means moving to the next level particularly for courses that have prerequisites, while for the senior students being able to pass the courses means being able to finish the program successfully. Success in academic performance is an assurance of a better future for the students particularly for the senior students since this may determine their future employment. One reason for finishing college education is the capability of the graduate to find a job to help the family in the financial expenses at home.

Table 6. Academic performance of college students in terms of general weighted average

Point Average	Classification	Frequency	Percentage
1.00	Excellent	0	0
1.25	Superior	0	0
1.50	Exemplary	5	3.73
1.75	Very Good	23	17.16
2.00	Good	40	29.85
2.25	Satisfactory	17	12.68
2.50	Fairly Satisfactory	16	11.94
2.75	Fair	15	11.19
3.00	Passed	17	12.68
5.00	Failed	1	0.75

Relationship between social media use and perceived depression

The results on Table 7 show the relationship between social media use and perceived depression. The findings reveal that the computed value with resultant P value on number of social networking site used, time spent daily on social media site and time spent on social media site per engagement is higher than 0.05 level of significance. Therefore, in this case, there is no significant relationship between social media use and perceived depression among students.

Table 7. Relationship between social media use and perceived depression

Social Media Use	Pearson's r	P Value	Interpretation
Number of Social Networking Site used	-0.05	0.567	No significant relationship
Time Spent Daily on Social Media Site	0.074	0.393	No significant relationship
Time spent on Social Media Site Per Engagement	0.132	0.13	No significant relationship

Predictor of academic performance

The finding reveals that social media use and depression is not a predictor of academic performance. The p value of .645 for social media use and .602 for depression are both higher than 0.5 level of significance. Therefore, the null hypothesis is accepted. This only means that social media use has no influence on the academic performance of students. The findings also showed that depression is not a predictor of academic performance as no indication of depression was seen among the respondents. Even with the use of social media, no negative effect was noted that could result to development of depression. The college students under still showed good academic performance.

Table 8. Predictor of academic performance

	F	P value	Interpretation
Social Media use	0.626	.645	Not a predictor
Depression	0.73	.602	Not a predictor

CONCLUSION AND RECOMMENDATION

Having considered the above-mentioned findings of the study, the proponents have drawn the following conclusions:

The College of Allied Medicine students showing good academic performance are active social media users with one to ten social media platforms, spending an average of one to two hours per engagement in search for information. Facebook remains the most popular social media platform site among this population group. Most of the students do not show evidence of perceived depression despite the number of engagements in social media platform. There is no significant relationship between perceived depression and social media use among allied medicine students. Social media use and depression are not predictors of academic performance.

In the light of the above conclusion, it is recommended that future research be done to determine other reasons for the use of social media platforms not mentioned in this study which in one way or another may have an impact on student's academic performance, since not all students reached satisfactory performance.

Future studies may be done to determine what information can be explored by students on social media platforms and how these are used in relation to their academic learning.

With the introduction of the new curriculum, other sources of student's task performance, such as self-directed learning may be utilized to measure the academic performance of students.

REFERENCES

ABS CBN News. (2018). *Philippines is world's top social media user: study*. Retrieved from http://news.abs-cbn.com/focus/02/01/18/philippines-is-worlds-top-social-media-user-study

Akhter, N. (2013). Relationship between Internet Addiction and Academic Performance among University Undergraduates. *Academic Journals,* Vol. 8(19), pp. 1793-1796. htt9p://www.academicjournals.org/ERR

Brown, J. (2018). *Is social media bad for you? The evidence and the unknowns*. Retrieved from http://www.bbc.com/future/story/20180104-is-social-media-bad-for-you-the-evidence-and-the-unknowns

Brown, N. (2017). *How to Prevent Social Media Depression: Tips For Limiting Your Social Media Use*. Retrieved from https://www.fix.com/blog/does-social-media-cause-depression/

Camus, M. (2018). *PH is world leader in social media usage.* Retrieved from http://business.inquirer.net/246015/ph-world-leader-social-media-usage

Hurley, K. (2018). *Teens + Social Media = Depression? Is Social Media Affecting Mental Health?*. Retrieved from https://www.psycom.net/depression-teens-social-media

Kallas, P. (2018). *Top 15 Most Popular Social Networking Sites and Apps*. Retrieved from https://www.dreamgrow.com/top-15-most-popular-social-networking-sites/

Kemp, S. (2018). Digital in 2018: world's internet users pass the 4 billion mark. Retrieved from https://wearesocial.com/blog/2018/01/global-digital-report-2018

Labrague, L. (2014). Facebook use and adolescents' emotional states of depression, anxiety, and stress. Health Science Journal. 8. 80 - 89. https://www.researchgate.net/publication/262725734_Facebook_use_and_adolescents'_emotional_states_of_depression_anxiety_and_stress

Mander J. (2017). Daily Time Spent on Social Networks Rises to Over 2 Hours. Retrieved from https://blog.globalwebindex.com/chart-of-the-day/daily-time-spent-on-social-networks/

Siegle, D. (2013). Instrument Reliability. University of Connecticut. Retrieved @ https://researchbasics.education.uconn.edu/instrument_reliability/# on February 19,2019.

Zhou, H., Hao, N., Du, Y., Liu, Y., Sui, Y., et al. (2016) Reliability and Validity of the Eleven Item Kutcher Adolescent Depression Scale,Chinese Version (KADS-11CV). J Child Adolesc Behav 4: 308. doi: 10.4172/2375-4494.10003