

The influence of social media usage on academic performance among nursing students in University of Luzon

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Abstract

Introduction: Recent developments and advancements in mobile phone usage and accessibility to the Internet have resulted in a dramatic increase in social media use. The use of social media, along with the different social media applications that have been continuously created, has increased significantly, and it has become one of the most dominant influences on society in current times. There has been a rapid increase in the use of these social media applications, which has influenced many people's daily lives, particularly in education. However, these influences come with the caution that uncontrolled use of these platforms can pose a threat and negatively affect students' academic performance. **Objective:** The aim of the study is to determine the influence of social media usage on academic performance among nursing students at the University of Luzon. **Methods:** A questionnaire was used to collect quantitative data from the respondents. The study used total enumeration sampling to ensure that the entire population with the same characteristics as the target respondents was given a chance to answer during data collection through an online survey among 122 students. **Result:** The results depict that the majority of the students use social media for 5 hours or more on a daily basis, with academic grades ranging from 75.00-92.60. This study also illustrates the student's perceptions of social media use, including the different areas of the nursing field such as academic engagement, skills laboratories, and related learning experiences. **Conclusion:** The study, however, concluded that there is no significant relationship between social media use and the academic performance of nursing students.

Keywords:

Academic Performance, Nursing Students, Social Media



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INTRODUCTION

Social media has become one of the most significant applications in today's generation, as it helps in a variety of ways and even provides a tremendous scope of learning for developing the world based on how it is used by the users. In education, social media can be used to share information with students while traveling or even conducting research. Sharing Academic interest in others also engages the students to understand and improve their collaboration with their colleagues. However, some research has also established that educational institutions have seen a rise in the use of social media by students, which causes inefficient performance, inattentiveness, and distractions that result in being nonproductive (Hsu, 2023).

In America, some of the research found social media to be a great help when utilizing it for studying, such as in a study done by (Lepp et. al, 2015) entitled "The Relationship Between Cell Phone and Academic Performance in a Sample of U.S. College Students" that tackles how the students can discipline themselves in achieving their goals while using smartphones and social media applications. However, (American Psychological Association, 2021) entitled "The Effects of Social Media Usage on Attention, Motivation, and Academic Performance" found that in both predictors, attention and motivation significantly predict academic performance and people with poor attention spans are most likely to report low GPA despite of social media usage.

In the Philippines, this country is known for being the top in social media and internet usage worldwide, with an average daily usage of 3 hours and 43 minutes (Social Media Statistic Philippines, 2023). In Manila, a study done by (Macabale et al., 2019) entitled "Senior High School Students' Used of Social Media and its Perceived Effects on Academic Performance" concluded that most students, specifically 70%, perceived social media platforms as helpful as they were used in collaborative work, watching YouTube videos, and learning difficult lessons. In Pangasinan however, most specifically in Lingayen, one study done by students of Pangasinan State University by Ventayen (2017) entitled "Role of Social Media in Education: A Teachers' Perspective" resulted in the conclusion that social media contributes to learning, but users are still aware of its disadvantages.

This study therefore aims to explore the influence of social media on nursing students' academic performance. Technology greatly affects the lives of students in the current generation. The researchers also specifically wanted to study the popular social media platforms utilized by the students, such as Facebook, Messenger, Twitter, Instagram, TikTok, and YouTube. As shown in the related studies, social media is like a double-edged sword, which can have a positive effect through the benefits it may bring, and it can also be negative

through diverting student's attention and leading to a waste of time. It is essential to be studied, as the researcher sees the opportunity to learn about its effects in the nursing field while considering the benefits of utilizing it in the classroom as well as its potential to outweigh the drawbacks stated.

METHOD

1. Design

This study employs the descriptive-correlational method to gather the data and information necessary to solve major problems and subsidiary problems. The descriptive method plays a crucial role in describing trends and variation in populations and aims at detecting causal effects. The quantitative research method is a process of gathering and interpreting numerical data. It can be used to identify trends and averages, formulate hypotheses, examine causality, and extrapolate findings to larger populations (Bhandari, 2023).

2. Number of samples and sampling techniques

The selection of respondents in the said study is exclusive to second, third- and fourth-year nursing students at the University of Luzon, with a total population of 122 students. The students must complete their first semester at the college. Regardless of their age, sex, and race, they are included in this study. Also, nursing students should be able to give consent as well.

Excluded in this study are nursing students who are transferees, students who got an incomplete mark, and those who did not give their consent. Additionally, the researchers are also excluded to avoid a biased response. Moreover, other courses such as Liberal Arts, Criminology, Accountancy, and etc. are excluded from being respondent to the study, and part of the research investigation was to find the effect of social media on nursing academics, skills laboratories, and related learning experiences (RLE), which the above-mentioned courses doesn't have on their curriculum. First year nursing students are also excluded as they have not yet taken up their Related Learning Experience (RLE) by the time the research was being conducted.

The researchers utilize Total Enumeration Sampling in choosing the respondents of the study, which is a type of purposive sampling technique wherein the researchers will examine the entire population having the same characteristics (Canonizado, 2021). This approach ensures comprehensive coverage, allowing for accurate estimates and in-depth analysis of the selected parameters throughout the population. The study recruited nursing students from BSN II to BSN IV to ensure that every member was included. The total enumeration sampling was critical for gathering comprehensive data from 122 individuals. This methodological strategy enhances the reliability of the findings by highlighting nursing students' unique exposure to environmental problems.

The study was conducted at the University of Luzon, located at Perez Boulevard, Dagupan City, Pangasinan having Level III Accreditation on school year 2023-2024. By narrowing the focus to this institution and its locale in Dagupan City, the study recognizes the specific challenges and opportunities presented in this setting. The city's dynamic blend of urban life and cultural traditions, coupled with the University's commitment to quality education, creates an environment that warrants a closer examination of the intersection between technology and academia.

3. Instruments

The researchers utilized survey questionnaires as the main tool for gathering the data needed for research. The questionnaire was made based on the problems stated in the study and was distributed using modern (online) data collection techniques.

The questionnaire was divided into three parts: the first part of the questionnaire focused on the demographic profile of the respondent, including their ID number in order to differentiate each respondent's response, the second part showcased a question regarding the student nurse's social media usage through: (1) Types of gadgets used by the student, (2) Frequently used social media applications, and (3) Hours of time spent using social media applications. Lastly, the third part of the questionnaire contains the perceptions of nurses on social media academic performance of nursing students, that is measured in 3 areas: (1) Academic engagement (2) Skills competency (3) Related Learning Experience (RLE).

The research used face validity to evaluate if a test's content accurately captures every facet of the concept. To measure, A test, survey, or measuring method must include every pertinent aspect of the subject it is intended to assess to yield reliable findings. A measurement of the validity of the study is based on omitted variables and whether some elements are absent or if unnecessary elements are included (Middleton, 2019). The following criteria were used to determine the validity of the questionnaire: (1) Items revealed the solution to the research problem; (2) The coverage of all the questions is found in the problem statement; (3) The questions are easily understandable and comprehensive to the respondents; (4) The instructions are easy to follow and not confusing; and (5) Presentation of the questionnaire to the research adviser for review of its content, the formulation of the problem, and its grammar. The final draft also incorporates suggestions and critiques.

Moreover, a sample was also presented to the seven experts in the field of the study for them to validate the content of the questionnaire's questions. Their feedback and recommendations were incorporated into the questionnaire's final format. One expert is a Research Instructor in a Nursing Course with a PhD. Another expert is an instructor at the University of Luzon College of Information Technology. The third one is a Registered Nurse, a School Nurse, and one of the Clinical Instructor in the

major subject area of Nursing. The fourth expert is also a registered nurse specializing in Medical-Surgical nursing and a clinical instructor in Operating Room Area. The fifth expert is a DR Nurse from Affiliating Hospital which is the Luzon Medical Center. The sixth expert is an Assistant Chief Nurse in Affiliating Hospital which is the Luzon Medical Center and lastly, the seventh expert is a Nurse Supervisor in Luzon Medical Center.

In establishing reliability, the researchers utilized the test-retest method for pilot testing. Their responses were analyzed and compared afterwards by the researchers. Additionally, Cronbach's alpha was also utilized by the researchers to see if the multiple-question survey and if the Likert scale were reliable and had internal consistency. The researchers selected 30 random student nurses to answer the same questionnaires that were distributed to the chosen respondents. This was done by getting the variance of each of the answers of the respondents from the first question to the last using Excel, and researchers took the total value of the result for every respondent from the first question to the last. The variance of the total score of the respondents and, using the formula of Cronbach's alpha, the given values were computed and interpreted based on internal consistency (Frost,2023).

Furthermore, the researchers also utilized the reverse scoring method, wherein the numerical scoring scale runs in the opposite direction and the low end of the scale gets the largest number of points instead. This is done to reduce the response bias by altering the wording or scoring of some items in the questionnaire. By doing this, the researchers can balance out the effects of social desirability, which is the respondent's tendency to answer in a way that makes them look good (Zach,2021).

4. Data collection process

The research was conducted and was authorized by the University of Luzon College of Nursing Research Ethics Committee under Approval Number NR-SL-002-23. Additionally, the researchers send a letter requesting to the dean of College of Nursing to access the Final Grades of Level II, Level III, and Level IV nursing students in the first semester of SY. 2023-2024.

Before the survey was conducted, a letter of request was sent to the nursing department's dean for approval. A letter address to respondents was also been sent out which includes the significance of their study and the ethics to be followed by the researchers.

The questionnaires were distributed, and the respondents were given enough time to answer. After the questionnaires had been answered, the survey questionnaire was collected, and the results was tallied and tabulated. The information that was accumulated from this review was turned as the basis of investigation and interpretation.

5. Analysis

The survey data was arranged in an Excel spreadsheet. Seven members of the research team cross-checked the data to prevent any missing data and ensure its accuracy.

The analysis of data was done using SPSS, which is a statistical software for research, wherein the Excel data inputted was transferred and analyzed.

6. Research Ethics

The research was authorized by the University of Luzon College of Nursing Research Ethics Committee under Approval Number NR-SL-002-23. Additionally, the researchers secure informed consent from all participants. The permission form outlined the study's objectives, potential benefits based on the study's outcomes, and the estimated time required to complete the questionnaire, which is considered the primary inconvenience of the study. No rewards or coercion were used in this study. Moreover, respondents can withdraw at any point during the study. The survey was conducted from the third to fourth week of January 2024.

Additional data gathered includes the academic grades of nursing students during the first semester of 2023-2024, retrieved from the archives of the college dean's office. Permission to access this information was obtained, and data collection took place from the initial to the third week of February 2024.

The researcher cross-referenced the survey data with the archived records using the student ID numbers of the participants. The confidentiality of the submitted data was assured to the participants. The

primary researcher and the designated statistician oversee data management. Data will be securely stored on a laptop accessible only to authorized personnel involved in data processing. For further utilization in broader studies, formal requests for data usage can be directed to the principal researcher.

RESULT

Results depict that among the 122 students that were targeted in the study from 1st year to 4th year of school year 2023-2024 are within the age range below 20 years old and above 30 years old, with 25.60% of the population being male and 74.60% being female. The results also illustrate that the majority of the students use social media for 5 hours or more on a daily basis, with Messenger being the most used application and mobile phones being the most used medium to access these social media applications. This study also illustrates the student's perceptions of social media use, including the different areas of the nursing field such as academic engagement, skills laboratories, and related learning experiences. It shows that students agree on the usefulness of social media in their academics and skills laboratories while being neutral about related learning experiences. Despite this, the study, however, shows that there is no significant relationship between social media use and the academic performance of the students.

Table 1. Profile of the respondents (N = 122)

Variables	n	%
Age		
20 years old and below	59	48.40
21-25 years old	55	45.10
25-30 years old	5	4.10
30 years old above	3	2.50
Gender		
Female	92	74.60
Male	31	25.40
Year Level		
BSN2	64	52.50
BSN3	39	32.00
BSN4	19	25.60
Final Grade		
Lecture Grade	2.25	2.12
Skills Laboratory Grade	2.25	2.34
RLE Grade	2.25	2.47

DISCUSSION

Regarding the relationship between the frequency of social media usage and lecture grade, the Pearson-r score ($r=0.14$ $p=0.13$). Therefore, the null hypothesis is accepted; there is no significant

relationship between the frequency of social media usage and lecture grade.

In the related study, a study done by Antigo in 2013, concluded that there is no statistically significant difference in the effects of students' age, sex, and grade level on the use of electronic gadgets

when it comes to family relationships and study habits. When considering the health consequences of using electronic devices, there are notable variations based on the grade level of the pupils.

However, in another study done by Selwyn in 2013, student's learning interests were found to be a contributing factor to their education-related engagement. The study therefore concluded that engaging students more on education-related pages would further widen the scope of education they are getting from the media, as mentioned.

In addition, social media has drawbacks and impacts on youth, including invasions of privacy, diverting attention from academic work, consuming most of their productive time, and so on. They are useful and have advantages as well.

On the other hand, regarding the relationship between the frequency of social media usage and skills laboratory grade, the Pearson-r score ($r=0.12$ $p=0.18$). Therefore, the null hypothesis is accepted; there is no significant relationship between the frequency of social media usage and skills laboratory grade.

In related studies, the study done by Stone in 2020 found that video technology approaches offer a flexible means of instruction to modern students. Although student confidence has been included in

other assessments, it has not been thoroughly examined or comprehended.

However, Schmitt et al. in 2012 they found that social media is a tool that nursing educators can use to help students learn more about and/or develop their skills in health policy, professional communication, patient privacy and ethics, and writing abilities.

In addition, Austria in 2017, they found that informatics plays a significant role in students' academic development, with the internet making learning easier and information readily available.

Lastly, regarding the relationship between the frequency of social media usage and the Related Learning Experience Grade, the Pearson-r score ($r=0.17$ $p=0.06$). Therefore, the null hypothesis is accepted; there is no significant relationship between the frequency of social media usage and skills laboratory grade.

On the other hand, the study done by Fink in 2015 found that graduates of nursing programs in the Philippines may benefit from competency testing to assess initial skill levels due to possible differences in nursing education abroad.

In addition, Ozturk et al. (2014) concluded that nursing students' abilities with urinary catheterization were improved by web-based teaching, and these benefits doubled when web-based learning was added to traditional classroom instruction

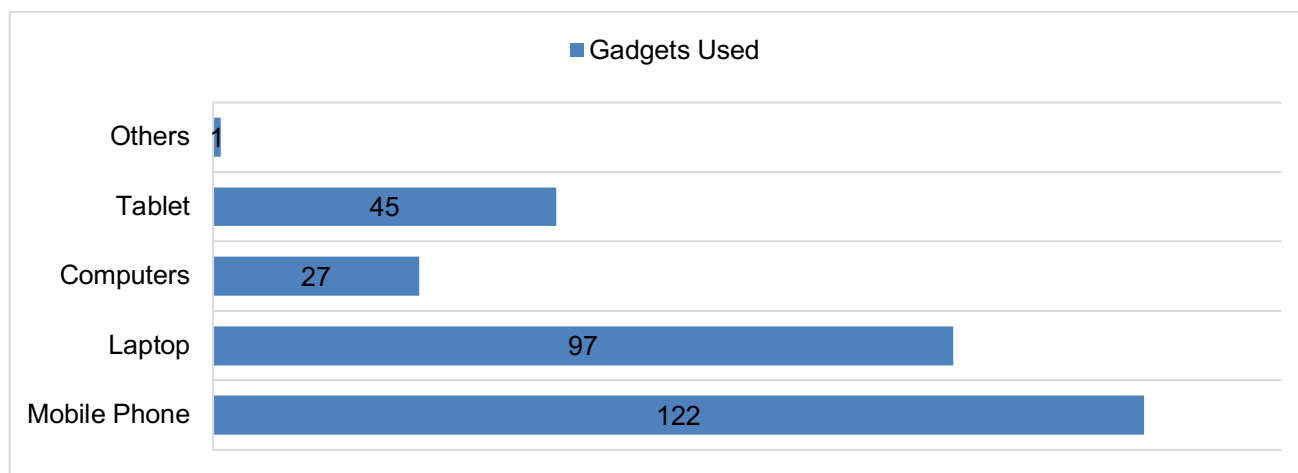


Figure 1. Types of gadgets used by the student (n=122)

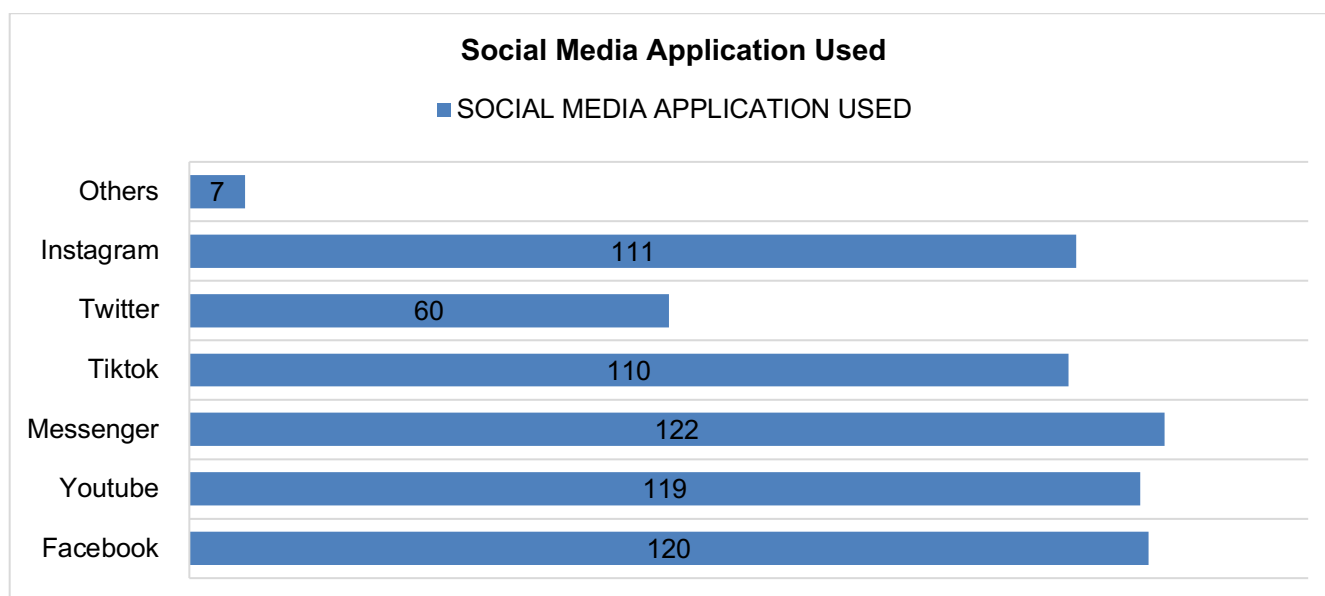


Figure 2. Frequently used social media applications

Table 2. Hours of social media usage (N = 122)

Variables	n	%
Hours of Usage		
1-2 hours	23	18.90
3-4 hours	42	34.40
5 hours or more	57	46.70

Table 3. Student's perception on social media usage in regards to academic engagement

Variable	Mean	SD	Interpretation
1. Social Media has improved communication with my peers and teachers.	4.25	0.71	Strongly Agree
2. I gained awareness of current events or relevant news through social media.	4.36	0.66	Strongly Agree
3. I found social media to be a platform that encourages me to explore and pursue my academic interests.	4.14	0.65	Agree
4. I found educational resources or study materials on social media platforms that were beneficial to my academic studies.	4.35	0.68	Strongly Agree
5. I actively participated in or witnessed the building of supportive communities on social media related to my academic interests.	3.97	0.74	Agree
6. I have difficulty focusing on my study because of technology use.	3.43	0.98	Agree
7. I'm having a difficulty reviewing my reviewer when I'm using social media.	3.54	0.88	Agree
8. I'm passing my activities late due to Social Media distractions.	2.83	1.13	Neutral
9. When I'm using technology, I'm having difficulty focusing on the tasks that is given at school	3.12	1.00	Neutral
10. Social media creates an avenue for cheating on exams and quizzes.	3.27	1.14	Neutral
Academic Engagement	3.72	0.48	Agree

Table 4. Student's perception on social media usage in regards to skills laboratory

Variables	Mean	SD	Indicators
1. I usually use social media as a guide to my upcoming return demonstration.	4.33	0.71	Strongly Agree
2. Social media influenced my awareness and understanding of new nursing techniques or procedure.	4.38	0.65	Strongly Agree
3. Social media help me boost my confidence in skills competency.	4.02	0.69	Agree
4. Social media platforms have an impact on my knowledge and abilities for practical application.	4.15	0.68	Agree
5. Social media enhances my understanding and application of nursing procedures.	4.29	0.64	Strongly Agree
6. Social media gives me something to think of whenever there is a demo.	3.97	0.82	Agree
7. Social media confuses me by offering other strategies to employ rather than performing the original performance that was taught.	3.68	0.81	Agree
8. Social media distracts me to study other things than the demonstration itself.	3.31	0.92	Neutral
9. I feel nervous when watching some video in social media about return demonstration.	2.98	1.00	Neutral
10. Social media has a good quality content however it differs from the actual return demo.	3.79	0.82	Agree
Skills Laboratory	3.82	0.51	Agree

Table 5. Student's Perception on Social Media Usage in Regards to Related Learning Experience (RLE)

Variables	Mean	SD	Indicators
1. When I'm on the duty, I typically use social media to look up acronyms and unfamiliar medications	4.04	0.85	Agree
2. When I'm on duty, I use social media to help in hospital task with awareness and respect for patient's confidentiality and privacy.	3.70	0.93	Agree
3. My social media Use negatively impacted my capacity to finish activities quickly in hospital setting.	2.93	1.00	Neutral
4. Social Media post regarding the challenges of working at hospital have made me feel I need more advice.	3.40	0.84	Neutral
5. Using social media on duty interferes with my ability to focus on my duties related to patient care.	3.13	1.05	Neutral
6. My expectations on clinical shifts are influenced by social media contents that highlights the difficulties of duties.	3.28	0.86	Neutral

7. Social media confuses me on hospital rules as they have similar and also different protocols to follow.	3.20	1.00	Neutral
Related Learning Experience	3.39	0.67	Neutral

Table 6. The relationship between social media use and academic performance (N = 122)

Variables	r-value	p-value
Academic Grade	0.14	0.13
Skills Laboratory Grade	0.12	0.18
Related Learning Grade	0.17	0.06

CONCLUSION

Based on the findings, the following conclusions are then drawn:

The chosen respondents are the 2nd to 4th year students from the College of Nursing, University of Luzon, Dagupan City with the majority of them being in their 2nd year. Most of them are around 20 years old females with a minimum grade of 3.00 and a maximum of 1.50.

In regard to social media usage, all of the respondents use mobile phones to access social media platforms. In addition, all of them use Messenger compared to other platforms out there, and the majority of them use it for 5 hours or more daily.

Most respondents' responses regarding social media usage and academic performance found that they agreed regarding the influence of social media on academic performance, with the majority of people agreeing that social media helps them gain awareness of current events and how social media can be a great help in finding educational resources that are beneficial for academic studies. However, despite these benefits, some of the students also neutrally agree with the statement that the usage of technology leads to difficulty focusing on tasks and passing activities late due to social media use.

While, in terms of social media usage and skills laboratory, the finding shows that many students agreed that social media influences their awareness and understanding of nursing techniques and procedures. Additionally, many of the students also agreed that they use social media as a guide for upcoming return demonstrations. On the other hand, students showed a neutral agreement in regards to social media acting as a distraction and feeling nervous upon watching some return demonstrations uploaded on the platforms.

In regard to social media and related learning experiences, the findings show that students agreed with using social media to look up acronyms and unfamiliar medications. Additionally, students also use social media to help with hospital tasks while still considering patient privacy. On the other hand, students neutrally agreed on social media usage and its interference with focusing on duty and social

media's negative impact on the capacity to finish activities.

Lastly, in regard to the relationship between the variables, the finding shows that there is no correlation between the variables of academic lecture, skills, laboratory, and related learning experience (RLE).

Conflict of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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