Impact of Social Media to the Health Status of Children and Adolescents

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Abstract – Social media networks became more endemic in the society; however, the more people use these, the more they have lesser knowledge on the effects of social media in the health status of children and adolescents. Using descriptive-correlational design, this study aimed to determine the impact of social media on the health status of children and adolescents. The results of the study revealed that elementary students are always addicted to the internet and their grade or schoolwork was affected due to the amount of time spent online. Moreover, most students prioritize checking their emails rather than doing urgent tasks as needed. A proposed plan of action has been developed to enhance the knowledge of elementary students on the proper management of health effects of internet addiction.

Keywords – Adolescents, children, health status, social media

INTRODUCTION

Over the years, activities that involve various kinds of social media networks became more endemic in the society; however, the more people use these, the more they have lesser knowledge on the effects of social media in the health status of children and adolescents.

Approximately 2% or 100 million has increased in the users of mobile phone, which is 5.11 billion today. Meanwhile, the internet users have grown from 4.24 billion to 4.39 billion (9%) and social media users were 3.29 billion in total last 2019. Hence, there were 3.48 billion, representing a 9% and from the 3.48 billion users; 3.26 billion of them use social media on mobile devices, growing by 10% from the past year (Kemp, 2019).

Philippines topped the longest time spent online, which is nine (9) hours and 19 minutes a day last year and increased to ten hours and two minutes this year. Other countries that have the longest duration of using online platforms were Brazil and Thailand. The worldwide average of time spent online was six hours and 42 minutes, with Japan, ranked the shortest time online at three hours and 45 minutes [1].

On the other hand, in terms of using the internet from a desktop and laptop, the Philippines also ranked first, clocking five hours and four minutes daily, which was far from the global average of three hours and 28 minutes [1].

Internet has a big role in the lives of people as latest news and information may be obtained from it. Updates about the latest trends and issues can also be find in the internet through social media. Further, jobs are easier to find with the use of internet and updates from anything around can easily be found with the aid of specific sites from the internet. It also entertains people across the lifespan; above all this, internet can help one communicate to any point in the world. Moreover, internet has been the foundation of new discoveries and researchers may it be about technology, health, and environment. Hence, this shows that the internet has been useful in every individual.

Despite the positive facts about the internet, it also has negative effects. Infringement of copyright is done easily using the available sites from the internet; hence, piracy is widespread on the web. Pornography is also an alarming issue that is caused by the world of internet. Young people who were exposed to it result to corrupted minds and it paved the way for degradation of human dignity. The internet also has some health effects, which can be alarming if they continue to progress.

In addition, overexposure to CRT (cathode ray tubes) can cause eye strain, which can lead to impaired vision. There are also allergic reactions caused by bright light like itchy eyes. This can damage the eyes as germs and other bacteria can be transmitted this way [2]. There is also a disease called Carpal Tunnel

Syndrome, a disease characterized by the constriction of a key nerve in the wrist that results in numbness, tingling, weakness, or muscle atrophy in the hands and in fingers. Repetitive motion of the hands and wrist such as typing, and constant instant messaging could lead to this. Sitting for a long period of time facing the computer can result in minor back and spinal strain depending on the duration of maintaining such position. Sleep disturbance is also one of the health effects of internet use. Hence, "Heavy use of computer before bedtime has a small effect on sleep duration, it may have a significant effect on sleep demand and sleep quality" [2]. Most of the children and adolescents now are using social media for a long period of time.

Anderson and Rainie [3] mentioned that social media was unforeseen to affect the health, but when the length of time being spent on social media sites like Facebook, Twitter and Instagram is to consider, it may make sense.

It was said that anything that consumed much of a person's time can have an effect to one's health. For most people, the question is if the social media is good or bad. With this, the answer can be both. It may harm or may not harm a person by minimizing its use, hence the researcher conducted this study [3].

OBJECTIVES OF THE STUDY

This study aimed to determine the impact of social media on the health status of children and adolescents. Specifically, it identified the health effects of internet and how they manage those health effects. This study also intended to know the relationship of impact of internet and its health effects; and finally proposed a plan of action that will help the children and adolescents to become a responsible social media users.

MATERIALS AND METHODS
Research Design

The study used descriptive-correlational design in gathering data. According to Miksza et. al [4], descriptive-correlational research uses both descriptive and correlational designs. Descriptive research involves the collection of data to test the hypotheses or answer questions concerning the level of addiction of the respondents. A descriptive research determines and reports the way things are. The study sought for the relationship of impact of internet, its health effects together with its management.

Respondents of the Study

The study used elementary and high school students in selected elementary and secondary schools in Batangas City. The target population of the study was composed of 100 respondents who are 10-13 years old males or females, Grades 4 to 6 elementary students. These respondents also claimed to be internet users. The researchers utilized quota sampling in choosing the respondents due to the limited access to the respondents because of pandemic.

Data Collection

The researcher adapted the instrument from the previous study of Garcia and Ramos. The researchers asked permission from the authors for the utilization of the instrument.
The instrument used is composed of three parts. The first part contains items regarding the level of addiction of the respondents; the second part identifies the health effects of internet addiction to them; and the last part deals with the assessment and evaluation of the management of the said health effects. Pilot testing was done, and it passes the reliability test.

Data Gathering Procedure

The researcher used schools in Batangas City because many computer shops and primary schools are located in the area.
The researchers made consent form for the school principals or administrators, parents and asked permission from them to use Grades 4 to 6 students at the said schools as the respondents. The researchers upon approval distributed the data-gathering instrument to generate the necessary data.

Data Analysis

The researchers used mean, correlation, Pearson r and SPSS v.15.0 in analyzing the study's data. Statistical software was used in computing the data.

Ethical Considerations

Ethical clearance was obtained from different institutions involved in the study. Because the study was retrospective by design, it is not required to have written consent from patients. Anonymity was secured by analyzing and presenting the data in aggregate.

RESULTS AND DISCUSSION

After the data gathering and statistical analysis, the study arrived at the following results.
Table 1 shows that the respondents always (x=5.5394) experience the social media dependency as indicators cited. They are always dependent on the internet even if the grades or work suffer because of the

amount of time they spent online (x =6.47). They prioritize to be on-line to check e-mails (x=6.15) rather than doing urgent tasks as needed. Further, always want to be online again (x =6.11).

Table 1
Level of Social Media Dependency

Items	Mean	Std DEV	Verbal Interpretation
1. How often do you find that you stay on-line longer than you intended?	5.0	2.27	Always
2. How often do you neglect household chores to spend more time on-line?	5.9	2.30	Always
3. How often do you form new relationship with fellow on-line users?	5.0	2.55	Always
4. How often do others complain to you about the amount of time you spend on-line?	5.9	2.38	Always
5. How often do your grades or schoolwork suffer because of the amount of time you spend on-line?	6.4	2.00	Always
6. How often do you check your e-mail before something else that you need to do?	4.8	5.54	Always
7. How often does your job performance or productivity suffer because of the Internet?	6.1	2.06	Always
Composite Mean	**5.5**	**1.47**	**Always**

The result on Table 1 reveals that the top indicator with the mean of 6.4 was how grades suffer due to the usage of social media, while the second highest mean in the indicator were tied with the mean of 6.1, respectively were; how does productive have been affected because of the internet; how often does loss of sleep and; being secretive about what activities done in the internet. Lastly, the fifth highest mean in the indicators were also tied with the mean of 5.9 about; neglecting household to spend on the internet; how often does others complain about the time spent online; and how often do you try to hide how long you have been online. On the other hand, the indicators that had the lowest mean were "How often do you find yourself saying "just a few more minutes" when on-line?" (4.7); "How often do you check your e-mail before something else that you need to do" (4.8); "How often do you fear that life without the Internet would be boring, empty and joyless?" (4.8); How often do you find that you stay on-line longer than you intended?" (5.0); "How often do you form new relationship with fellow on-line users?" (5.0) and lastly "How often do you feel preoccupied with the Internet when off-line, or fantasize about being on-line?" (5.1).

The internet is a wonderful information resource. Students, teachers, and researchers use it as an exploratory method. People all over the world use it to hook up with human beings of other countries and cultures. The ability of internet for socialization is the main reason for the increasing amount of duration by people who have real-time interaction through email, forums, chat rooms and online games. In comparison about the usage and experience of a men from women on internet addiction, men are more likely to seek for information about games and cybersex that results to flux of information, aggressive interactive games addiction, and joining sexually explicit chat rooms. On the other hand, women use internet to support and build friendship, romance, and complaints [5] [6].

Invariably, the addiction to internet is said to be an impulse control problem that happen to a person who has difficulty on internet addiction and is said to be an impulse control problem, which occurs to an individual who suffer difficulty in managing the amount of time in engaging to non-essential internet usage. Young in Griffiths [7] claimed that internet addiction is a broad term that talks about the various kind of behaviors and impulse control problems.

Based on the research by Kalim and Sert [8], if there is an increase in access to the use of the internet among elementary students, there will be a higher risk for internet addiction among them.

Table 2 shows that the respondents tend to ignore personal needs as to hygiene (x = 6.98), as they set aside tasks such as taking a bath, brushing their teeth, and keeping themselves clean all the time. Also, they suffer from painful elbows (x = 6.67) and have sleep disturbances (x= 6.67).

That is, taking them long hours on keyboard causes painful elbows and makes them wide awake all the time that even if they want to sleep, they could not sleep at all or even they are sleeping they are experiencing disturbances.

Being dependent to the use of computer can cause physical discomfort like carpal tunnel syndrome, backaches, severe headaches, and dry eyes, failure to attend personal hygiene, eating irregularities such as skipping meals, and sleep disturbances [9]. Internet media use before sleep can trigger self-prescribed insufficient sleep. Sleep deprivation results to excessive fatigue and decrease of one's immune system leaving an addict internet user vulnerable to disease. According to Goodie [10] adolescents with high internet addiction are more likely to experience backache, eyestrain, blurred vision, carpal tunnel

syndrome, and others than ordinary internet users. Their research suggests that preventive actions should be implemented for internet addicted adolescents.

Table 2
Health Effects of Social Media

Items	Mean	Std DEV	Verbal Interpretation
1. How often do you experience numbness of wrist/hands?	6.2	2.167	Always
2. How often do you experience painful elbow?	6.6	1.918	Always
3. How often do you experience headache?	5.3	2.227	Always
4. How often do you experience blurred vision?	5.6	2.33	Always
5. How often do you experience eyestrain?	5.6	2.259	Always
6. How often do you experience drying of the eyes?	6.5	1.991	Always
7. How often do you experience backache?	5.4	2.306	Always
8. How often do you skip your meals just to use the internet?	6.5	2.245	Always
9. How often do you experience sleep disturbances?	6.6	1.882	Always
10. How often do you get short sleeping time after internet use?	6.4	2.057	Always
11. How often do you fail to attend personal hygiene just to use the internet?	6.9	1.639	Always
COMPOSITE MEAN	**6.19**	**1.374**	**Always**

Table 2.2 on the next page shows that the respondents always put eye drops (x =6.13) to prevent eye strain and itchy eyes due to long hours of looking on the computer's screen since they always stay long hours online. They have to take pain relievers to reduce headache (x = 5.78) that they experienced, as headache are caused by not having adequate sleep as required at their age. Since they enjoy extending being online even in nighttime, they tend to forget the time and spend overnight online; hence, they tend to sleep during daytime (X= 5.49).

This result implies that most of the internet addicted students do not perform the basic management of the health effects of internet addiction. That is why a plan of action must be formulated in order for them to gain information on how to manage the health effects of internet addiction.

In different people, medication can have uneven efficiency to treat headaches. Others are trying many kinds of medication until an effective drug or combination of drug and are therapies can be used while taking medications. These may include Cryotherapy or cold treatments, relaxation techniques, physical therapy, cognitive behavioral therapy biofeedback, TENS (Transcutaneous Electrical Nerve Stimulation) or other electrical therapies, acupressure or acupuncture and nerve block.

Nevertheless, when experiencing symptoms, it is important to seek advice from an eye specialist or doctor to prevent possible damage and also to have knowledge about what should be done. If eye strain becomes frequent due to excessive use of computer and gadgets, then maybe adjustment on the contrast of the screen should be done. Also, repositioning the screen to avoid glaring can be effective. Hence, there is a need to use sunglasses when outdoors. Workstation must also be effective to lessen eye problems by arranging the workstation when light can hurt your eyes. Vision breaks should also be done to relax the eye muscles. Even simple exercise like rolling the eyes and closing the eyes can relieve the eye strain [11].

Table 3 shows the relationship between their responses on health effects and management of social media dependency. At 0.01 level of significance, the assessment on effects of social media is highly significant while management is not significantly related with p-values of 0.0 and 0.790, respectively. This result implies that if there is an increase access to internet, there would be a greater risk for them to experience the health effects of internet addiction. The respondents lack knowledge about the proper management of health effects of internet addiction that is why management is not significant. Elementary students should be educated regarding the health effects of internet addiction and its proper management so that further health problems and possible complications may be prevented and reduced.

Based on the research by Zou [12] if there is increase in access to the use of internet among elementary students, there will be a higher risk for internet addiction, that is why it is necessary to develop a program for prevention and treatment of internet addiction, especially among those at younger age.

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Table 3
Management of Health Effects of Social Media

Items	Mean	Std DEV	Verbal Interpretation
1. How often do you rest and exercise your wrist after internet use?	3.35	2.199	Never
2. How often do you rest and exercise your elbows after internet use?	3.81	2.273	Never
3. How often do you take pain relievers for headache?	5.13	2.553	Always
4. How often do you rest your eyes after internet use?	5.14	2.151	Never
5. How often do you put eye drops after internet use?	6.13	2.423	Always
6. How often do you rest your back after internet use?	3.05	2.139	Never
7. How often do you take pain relievers for backache?	5.78	2.505	Always
8. How often do sleep at day after heavy use of internet during night time?	5.49	2.650	Always
9. How often do you attend to your personal hygiene after heavy use of internet?	2.87	2.191	Never
Composite Mean	**4.31**	**1.374**	**Never**

Table 4
Relationship Between Respondents Responses on Health Effects and Management of the Effects of Social Media

Level	R	p-Value	Verbal Interpretation
1. Assessment on effects	0.518	.000	Highly Significant
2. Management	0.027	0.790	Not Significant

**correlation is significant at the 0.01 level(2-tailed)

Proposed plan of action to enhance knowledge of elementary students on how to prevent internet addiction and management of health effects of internet addiction.

Goal: The respondents will gain knowledge and show understanding about proper management of health effects of internet addiction.

Table 5
Proposed Plan of Action to Enhance Knowledge of Elementary Students on the Proper Management of Health Effects of Internet Addiction

Objectives	Activity	Persons Involved	Time Frame	Evaluation
The participants will conduct health teaching able to: 1. identify ways on how to prevent social media dependency 2. Explore more on the health effects of social media 3. identify different health management on the different health effects of social media 4.Demonstrate proper management on the health effects of social media	**"TIME LIMIT"** • Use social media at a certain scheduled time. Do not let it interfere with your work, studies, or offline relationships. • If you have difficulty getting off social media, try productive apps that limit your access to certain sites. If you have a serious addiction problem, seek professional help. • Use social media to research health issues, but always consult with your own doctor before taking any advice. • Stay off social media and any communications platforms while driving or doing anything else that is potentially hazardous. • Stay positive. Do not waste time arguing with people online.	Researcher, Faculty, Nursing Students	1 hour	The participants: 1. Identify ways on how to prevent internet addiction 2. Explore more on the health effects on internet addiction 3. Identify different health management of the effects of internet addiction. 4. Demonstrate proper management on the health effects of internet addiction.

CONCLUSION AND RECOMMENDATION

Elementary students are addicted to internet even if their grade or school works are affected due to the amount of time they spend online. Elementary students suffer from painful elbows and sleep disturbances due to prolonged hours of internet use. They tend to ignore personal hygiene as they set aside tasks such as taking a bath, brushing their teeth and keeping themselves clean all the times. Some students tend to forget the time they spend overnight online, thus they are likely to sleep during daytime. A proposed plan of action was developed to enhance knowledge of elementary students on the proper management of health effects of internet addiction.

Establish a collaboration between the principals and elementary school teachers on the responsible usage of social media as part of the Community Extension Program of the College of Nursing. Proposed plan of action regarding prevention and management of internet addiction among elementary students may be disseminated to the schools and community. Parents may be involved in the health teaching once approved and may be properly monitored for the effectiveness of the plan of action. Consider the result of this study to be incorporated in the discussion of Community Health Nursing for the enhancement of the syllabus. The parents of the children and adolescents may be given health education about the usage of social media so that they can monitor their sons/daughter regularly. Future researchers may conduct another study using mixed method approach and utilizing other variables such as relating internet addiction to students' academic performance.

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