

Mobile-based tool analyzer for parents and teacher in guiding young adolescents in using internet

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Abstract— The Internet world makes it easy and fun for every one especially for young people, however overusing or misusing of Internet can cause negative effect physically and mentally. The researcher aim to develop a mobile application that would help parents and teacher in guiding young adolescents in using the Internet by gathering data's from the past records of negative and positive effects of the Internet used by the teenagers.

Keywords- Internet, internet addiction, social media, teenagers, data mining, mobile applications

I. INTRODUCTION

Internet nowadays is way affordable and easier access than before. Decades ago Internet can only access by the use of desktop computers and operated by the professional adults with the same field of study in computers. As technology innovated, more and more people are able to use Internet, including the young people. In present Internet is just a single click in the phone, tablets, or any gadgets that can connect to the world of Internet. In business, Internet was use for earning money, and selling different things etc. In School, Internet was use as a tool for teaching, for research purposes etc. It is also use for communication, an example to that is when a member of a family or love ones are away from where the person is, Internet can be a bridge for communication. However, if Internet is misused or overused it can be dangerous and risky for a person's health and life. There is a saying that, addiction can leads to a danger situation, also from the Internet Addiction.^[1]

Internet addiction or internet dependence is the term use for excessively spending hours a day online. According to the inquiry, several terms are used to describe the excessively use of the Cyberspace, such as Compulsive Internet Use, Problematic Internet Use and Pathological Internet Use.^[2] Either way, these excessive uses of Cyberspace are affecting people's lives, including teenagers and children.

According to the research, it is stated that the main group affected most by the technology are the young adolescences. Main forms of technology that affects teenagers are phones and the Internet that brought main variations of their lifestyle, wherein maximum number of teens have access to Internet. Unstable emotional state is often characterized to teenage

stage, where young people are shifting from child to adult. In this stage young people were trying to build roles to the society and follow the trends. Almost 90 percent of online are teenagers and spend numerous hours per day using Internet or playing online games, and less time for family and friends. According to the psychology professor at California that daily overuse of technology has a negative effect on children and teenagers, making them prone to anxiety, aggressiveness and other psychological disorders.^[3]

Nowadays, the most common use in the Internet world is the Social media where in everyone can communicate, sharing of pictures, sharing of whatever they thinking and etc. Social media is used commonly by teenagers, In america survey says 95 % of teens ages 12 -17 are online and 80% of them are using social media.^[4]

Social media has an advantages, it is used for socialization and communication, for support, and for accessing health information. Socialization and communication are most teens use for extending their friendships, connect with other people outside the country and have the opportunity to learn from each other. Social media supports environment in exploring many things that may lack in real life such as romance, friendships and social status. Teenagers uses socialmedia to gain answers in many of their health concerns easily and discuss with others including drug use and sexual health. Social media also had disadvantages these includes risk to mental health, teens who are overly use of social media are reported as being less content and they get into trouble a lot are unhappy and bored. Cyberbullying is one of the common happening inside the cyberspace, it can lead to depression, anxiety, severe isolation, and worst suicide.^[5]

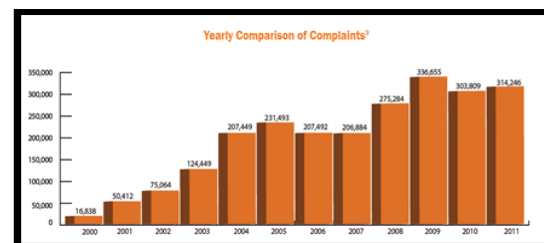


Figure 1 Overall statistics of complaints from 2001-2011

We cannot disagree the importance of internet in our daily society. The internet is a valuable tool where people of all ages use it in order find valuable information and entertainment. However, it is often misused by contemporary society. Cyber crimes increase rapidly since 2001. Moreover, young children in this generation could end up being a victim of cyber crime. As shown in figure 1, the reports show's an increase of internet crimes in 2001 leading to the year 2011. Since many crimes nowadays are build inside the Internet specifically in Social media, cyberbullying, scam etc., most of the victims specially in cyberbullying are young adolescents and children that can lead to death by means of suicide.

Data mining is a technique use to obtain knowledge by extracting information from data, a process of discovering patterns in data, and a task of discovering meaningful data from big data with the aim of obtaining clear and useful results.

Mobile application is a processed by application software developed for devices such as mobile phones and tablets.

A. Statement of the Problem

This study aim to analyzes and answer the following problems:

1. How often does the children spend time in the Internet;
2. How does the system will help the parents in guiding their children.
3. What are the basic software and Hardware Requirements for a mobile-based tool analyzer?

B. Goals and Objectives

This reseach project aims to provide information for parents and teachers in guiding their children specifically teenagers in using Internet and Social media, and be aware of what are the risk in overuse of internet and social media. Thus, the proposed system excludes the medical terms.

C. Significance of the Study

The proposed mobile system will be very useful in guiding our young adolescents from the continous innovation of technology.

The researchers believe that the proposed mobile application will benefit the following users:

1. **Students** – The system program can help students in a way that even they parents are busy they are aware on the negative effects of Internet.
2. **Teachers/Parents** – The system program can help teachers and parents to give guidance to our young adolescents specifically with the teenagers in using the Cyberspace or the Internet.
3. **Future Researchers** – This research study can be used as a guide for future research studies.

D. Conceptual Framework



This proposed system works by inputing answers from the questions and from the results based on the answer the system will analyzes and generate a result give an advice or what the user do to the subject who had seen a symptom of overused or msued of the Internet.

User will choose stages depending on what the parents observe from the child. Each stages user have to answer corresponding questions and by that point the system can analyze and provide an output as the result from the answered question.

II. METHODOLOGY

Qualitative method was used by proponents in order to describe and interprets the present condition, nature and processes of the research. This was done by using questionnaire's in order to collect data and information. The purpose of this study was to determine the psychosocial factors and Internet use of Internet addicted teenagers. The survey was complemented by individual in-depth interviews with 100 Internet-addicted teenagers.

III. RESULTS AND DISCUSSION

In this study, the results from the conducted survey are discussed.

Table 1: Survey showing how often student accesses the internet

How often New Era University Students uses the Internet						
Several times a day	Once a day	3-5 days a week	102 days a week	Every few weeks	Less often	Never
SCHOOL						
26	25	14	16	12	7	0
HOME						
36	30	15	6	6	7	0

As shown in Table 1, about 36 students of New Era University uses Internet at home several times more than those who uses it at school.

This is according to a survey conducted for 100 students/respondents from New Era University. Therefore, we can conclude that most of the students spend more time in using the internet to their houses. For some reasons, we can predict that there are some factors that affect this survey like the comfortability, reliability, resources, etc.

Table 2 Rate of the system [n=100]

RATINGS						
	1	2	3	4	5	Mean
Information	8	11	31	46	4	3.27
Monitoring	4	18	32	41	5	3.25
Security	2	26	36	33	3	3.09
System Design	10	23	41	21	5	2.88
Usability	3	43	20	31	3	2.88

Based on the survey conducted, as shown in the Table 2, information plays a major role in our research allowing parents to know the good and bad effect of Internet to their children.

Monitoring children's behavior, parents are able to distinguish each behaviors and for them to prevent and guide their children from internet's bad influence. This can be seen in Table 2 where it shows that based on users opinion, monitoring has a rating of 3.25.

In terms of security, it can be a part of the information based on the maturity level of the data that can be seen or gathered by the students. In complement, parents will serve as the security of their children when their center of attention are within the internet. On the other hand, system design and utility can be provided by the university or by means of personal lifestyle.

Table 3 The Proposed System hardware and software requirement

Software and Hardware Requirement		
	Minimum	Required
Operating system	Android 4.2	Android 4.4
RAM	120 MB	160 MB

As shown in table 3, the proposed system is required to have at least an Operating System of 4.2 (Jelly Bean) with a minimum RAM of 120 MB.

IV. CONCLUSION AND RECOMMENDATION

This system helps the parents especially with children that were quite addicted in using new technology. It does give knowledge to the parents on how to avoid children from misusing the cyberspace and avoid them from abusive people. This system is recommended also to use by guardians and teenagers to be knowledgeable on the effects of misuse and overuse of Internet, and what could be the effect for each individual either bad or good.

REFERENCES

- [1] Guan, S.-S. A., & Subrahmanyam, K. (2009). *Youth Internet Use: Risks and Opportunities*. Retrieved from http://www.medscape.com/viewarticle/704888_2
- [2] Hedayat, M. (2013). *INTERNET HARMS TEENAGERS MORE THAN IT HELPS*. Retrieved from <http://islam.ru/en/content/story/internet-harms-teenagers-more-it-helps>
- [3] Herbolingo, L. O. (2011). *What psychosocial factors influence Internet use of Internet addicted teenagers in Baybay, Leyte*. Retrieved from <http://devcompage.com/?p=3459>
- [4] Lenhart, A. M. (2011). *How American teens navigate the new world of digital citizenship*. Retrieved from <http://www.pewinternet.org/2011/11/09/teens-kindness-and-cruelty-on-social-network-sites>
- [5] *Social Media Use and Adolescents: A Guide for Parents*. (2014). Retrieved from The Brown University Child and Adolescent Behavior: <http://www.childadolescentbehavior.com/Feature-Detail/social-media-use-and-adolescents-a-guide-for-parents.aspx>