

Internet Addiction Among Secondary School Students In Sudan 2016

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ملخص البحث:

هدفت هذه الدراسة إلى تقدير انتشار الإدمان على الإنترنت، وتحديد العوامل المرتبطة بها وعلاقتها مع البيانات الشخصية بين طلاب المدارس الثانوية، وتحديد استراتيجيات التدخل المحتملة التي قد تساعد على تقليل الضرر منها
منهجية البحث:

أجريت الدراسة في المدارس الثانوية بنين وبنات تتراوح أعمارهم بين 13 و 19 عاماً، وأخذت عينة عشوائية بسيطة تم جمعها من طلبة الصفين الثاني والثالث ادرجوا في الدراسة من 5 مدارس ، وبلغ حجم العينة 303 طالبا من مجموع 500 طالب وطالبة من مجموع المدارس الحكومية التي هي 8 مدارس

النتائج: أجاب 303 طالبا على الاستبيان، 141 منهم من الذكور و 162 من الإناث، أغلبهم من الإناث

وارتبط إدمان الإنترنت مع أولئك الذين يمتلكون أجهزة الكمبيوتر وقضى أكثر من 8 ساعات في شبكة الإنترنت حيث غياب الرقابة الأبوية

الخلاصة: إدمان الإنترنت هو مشكلة متزايدة، لها تأثير نفسي وجسدي واجتماعي على حياة المراهقين، وتتطلب استراتيجيات وقائية فضلا عن التدخلات العلاجية

الكلمات الرئيسية: الإدمان على الإنترنت. السودان، طلاب وطالبات المدارس الثانوية

Abstract: This study aimed to estimate the prevalence of internet addiction, determine its associated factors and its relationship with their demographic data among secondary school students ,and to identify potential intervention strategies that may help to minimize harm of IA. Material and Methods: A cross sectional survey, using a self-administered questionnaire, was conducted between May and June 2016, among governmental secondary school students (boys and girls) in Elthawra city, sudan, their ages between 13 and 19-years-old ,a simple random sampling were collected from students in class two and three, students under study collected from 5 schools, the sample size was 303 from total 500 students from total governmental school which are 8 schools. Results: 303 students answered the questionnaire, 141 are males and 162 are females. Prevalence was 53.5%, with female predominance. Internet addiction was associated with those who owned computers and spent more than 8 hours in the internet and absence of parental control. Conclusion: Internet addiction is growing problem, which has psychological, physical, and social impact on adolescents' life, and requires preventive strategies as well as therapeutic interventions.

Key- Words: Internet Addiction. Secondary school students .Sudan .

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I. Introduction

The Internet is a global linking of computers that allows information transfer. The Internet was established in the early 1960s by the U.S. Department of Defence⁽¹⁾, primarily used for military purposes. Since then, the improvement of content of the Internet technology that has provided an extraordinary level of public accessibility to a wide range of forms of communication, e.g. intra-organisational and inter-organisational email; data storage, management and transfer; social websites like Facebook; text messaging such as Twitter, and so forth. Due to the development and spread of cheaper and more user-friendly computer technology and software (e.g., portable computers, Microsoft Word etc), the use of the Internet has increased dramatically. In 2010, the world's Internet use was 28.7% of the population. While this may not seem like a very large portion of the world's population, the growth in the use of the Internet has been dramatic. For example, between 2000 and 2010, the rate of growth of Internet use was 44.8% .⁽²⁾Usage of internet growth explosively worldwide and this is expected to continue with its use becoming an integral part of everyday life. The internet provides tremendous educational benefits; however, excessive internet use can lead to negative outcomes such as poor school performance and social isolation⁽³⁾. Adolescents are more affected by using this internet and they are gaining so many benefits when using Internet, such as access to needed information, worldwide access to news and events, and interpersonal communication through email. However, along with the phenomenal growth of the Internet and its use, there has been a growing concern worldwide regarding the risks associated with Internet over-use⁽⁴⁾, and because of their more vulnerability than adults to the negative impacts of the Internet world⁽⁵⁾. Since they are immature, both physically and psychologically, they may develop more serious complications than other age groups regarding the negative impact of the Internet world⁽⁶⁾. which include lowered concentration, lack of sleep, poor school attendance and performance, vision problems and a wide range of behavioral problems⁽⁷⁾. In addition, young adolescents are at high risk of being approached by online predators since they are relatively new to online activities, actively seeking attention, isolated, easily tricked by adults, and confused regarding their sexual identity⁽⁸⁾. Internet addiction (IA) has generally can be identified by these criteria based which based on dependence and pathological gambling and using the Internet in a manner akin to a maladaptive preoccupation⁽⁹⁾ using the Internet for a longer duration than intended. being preoccupied with the use of the Internet, causing significant problems, including academic/professional, social and relationship problems. (IA) is a relatively newly academic inquiry field. There was an empirical studies found that IA, has addictive behaviors like any other well researched, and has an effect on many aspects of a person's life, which include academic/work performance, relationships, and physical and mental health⁽¹⁰⁾. Evidence suggested that of Internet addicts spent more time online and experience withdrawal symptoms when offline. Those preoccupied with Internet-related activities may neglect exercise, family and social activities⁽¹¹⁾ Using of internet has been increased while a problems arising from excessive Internet use have been documented worldwide, where the use of the Internet has increased noticeably⁽¹²⁾. It is a particularly common problem among students, Aim of the study This study aimed to estimate the prevalence of internet addiction, determine its associated factors and its relationship with their demographic data among secondary school students, and to identify potential intervention strategies that may help to minimize harm of IA.

II. Material And Methods

A cross sectional survey, using a self-administered questionnaire, was conducted between May and June 2016, among governmental secondary school students (boys and girls) in Elthawra city, Sudan, their ages between 13 and 19-years-old, a simple random sampling were collected from students in class two and three, students under study collected from 5 schools, the sample size was 303 from total 500 students from total governmental school which are 8. The study investigated the prevalence of Internet use and its impacts among this students assessing the definition and diagnostic criteria of IA. In addition the amounts of time spend on internet and its effects on their education and find out strategy to minimize harms that may arise from using internet. This study differentiated between normal everyday Internet use behaviors and Internet addictive behaviors as well as exploring the impacts of those behaviors that may signify maladaptive use.

III. Statistical Analysis

Data were analyzed using the statistical package for social science (SPSS) software (version 20.0). Descriptive analyses were performed on all variables. Correlation tests were used to describe the distributions of participant characteristics. P-value of 0.001 was used as a test of significance.

IV. Results

15 self-administered questionnaires were distributed to the students. All questionnaires were completed. Of those 303 students, 141 (46.5%) were males and 162 (53.5%) were females, and 181 (59.7%) their age between 13-15 years, and 122 (40.3%) their age more than 15 years. Other demographic data are shown in

Table 1. 303 internet users, 242 are addictive 36.6 males and 44.2 females, 61 students 33 (10.9%) were male, and 28 (9.2%) were female who were non-addicts, their education level were 113(37.3%) in the second class and 190(62.7%) in the third class respectively. Table 1. Most of them had experience more than 6 months 148 (48.8%), 136 (44.9%) their experience between 6 months - 2 years, the rest of students represent 19 (6.3%) of the experience more than 3 years. Table 1. The family economic status most of them between moderate, rich, poor, 155 (51.2%) 89(29.4%) 59 (19.5%) respectively. Table 1. The sample size took from 5 schools Eldigare secondary school male, Elthawra Elaashra female, Elthamna males, Elthamna females, Adam Yagoop females, represent 53(17.3%) 47 (15.3%) 25(8.1%) 64(20.8%) 114 (39.8%) respectively. Table 1. Regarding Number of hours per day spent on the Internet the researcher found that most of students use the internet 8 hours per day 143 (47.3%), 104 (34.3%) spent 12 hours, 56(18.4%) spent 4 hours. Table 1. Although most of them know the definition of internet addiction that represent 220(71.7%) and those who did not know the definition of internet addiction represent 83 (28.3%) but 242 (79.9%) are addictive users and 61 (20.1%) are normal internet users. Table (1) 241 (79.5%) own computer compared to those who had no computer 62 (20.5%) Table (1) The majority of students feel euphoric when using internet 123 (40.1%), 109 (35.9%), 2 (.7%) same percent of the felt the lost track of time and feeling of sadness, while 4(1.3%) Irritated, 45 (14.7%) feel they were Powerful, and 15 (4.9%) Preoccupied as shown in Figure (1) When asked student about for what they were searching in internet, they answered 65(21.2%) Visiting Porn(adult site), 2 (.7%) for shopping, 1 (.3%) Creating webpage, 66(21.5%) meeting new friends, 23 (7.5%) downloading software, 4 (1.3%) Playing games, 15 (4.9%) Listening to music, while the majority make Chatting with others 127 (41.4%) Figure (2) Also when asked students why using internet they answered 165 (53.7%) communicate with others, 30 (9.8%) to gain knowledge 16 (5.2%) search for information for interest, 69 (22.5%) update their information and 23 (7.5%) meet new friends Figure (3) When asked them about the negative impacts of internet 162(52.8%) answered it cause mental problems and 92 (30%) answered physical problems Figure (4) therefore they use internet in Net café which represent 216 (70.4%), 15 (4.9%) in the presence of their father, 2 (.7%) in the presence of teacher, the same percent in the presence of mother, 5 (1.6%) in the presence of brother, 45 (14.7%) in the presence of sisters and 18 (5.9%) in the presence of friends Figure (5) The overall prevalence of internet addiction was 134 girls and 108 boys, girls reported more internet addiction than boys, with percentage of 44.2% and 35.8.6% respectively. Table (2) Results also showed significant relationship between internet addiction and time of hours spending in the internet, at weekend 33%, and only 18.5%, 23.9%, 24.3% about 8 and 4 and 12 hours respectively that means they spent more than 12 hours at weekend. Table (2)

Table (1) Demographic data n(303)

| Item | Variable | frequency | Percent% |
|---------------------------------------|--------------------------------|--------------------------------|----------|
| gender | MALE | 141 | 46.5 |
| | FEMALE | 162 | 53.5 |
| Age | 13-15 YEARS | 181 | 59.7 |
| Internet user | Normal user | 61 | 20.1 |
| | Addictive user | 242 | 79.9 |
| Education level | MORE THAN 15 YEARS | 122 | 40.3 |
| | SECOND CLASS | 113 | 37.3 |
| | THIRD CLASS | 190 | 62.7 |
| Experience of using internet | MORE THAN 6 MONTH | 148 | 48.8 |
| | 6MONTH -2 YEARS | 136 | 44.9 |
| | MORE THAN 3 YEARS | 19 | 6.3 |
| Family economic status | RITCH | 89 | 29.4 |
| | MODERATE | 59 | 19.4 |
| | POOR | 155 | 51.2 |
| Number of hours spent in the internet | 4 hours | 56 | 18.4 |
| | 8 hours | 143 | 47.1 |
| | 12 hours | 104 | 34.3 |
| | own computer | Yes | 241 |
| Definition of internet addiction | No | 62 | 20.5 |
| | Yes | 220 | 71.7 |
| School name | No | 83 | 28.3 |
| | Eldigare secodery school males | Eldigare secodery school males | 53 |
| Elthawra elaashra females | Elthawra elaashra females | 47 | 15.3 |
| Elthamna males | Elthamna males | 25 | 8.1 |
| Elthamna females | Elthamna females | 64 | 20.8 |
| Adam yagoop females | Adam yagoop females | 114 | 37.6 |

Figure (1)

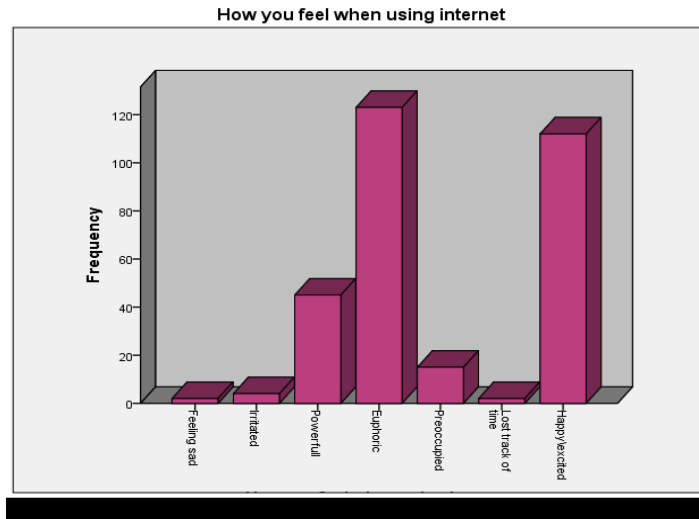
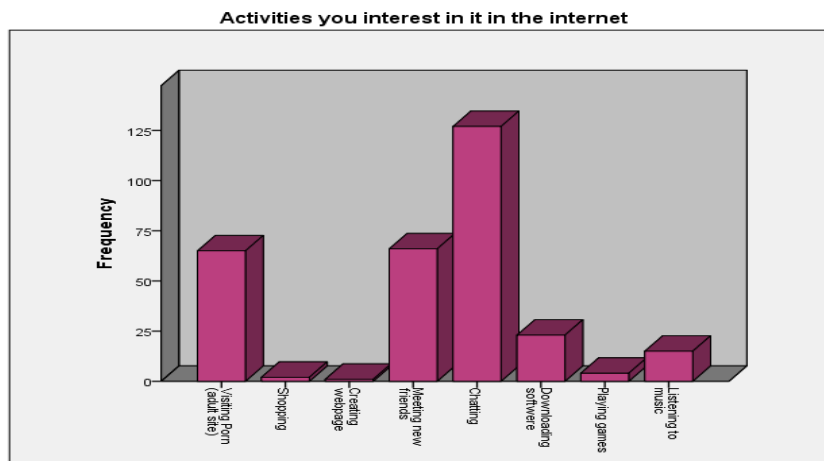


Figure (2)



Figure(3)

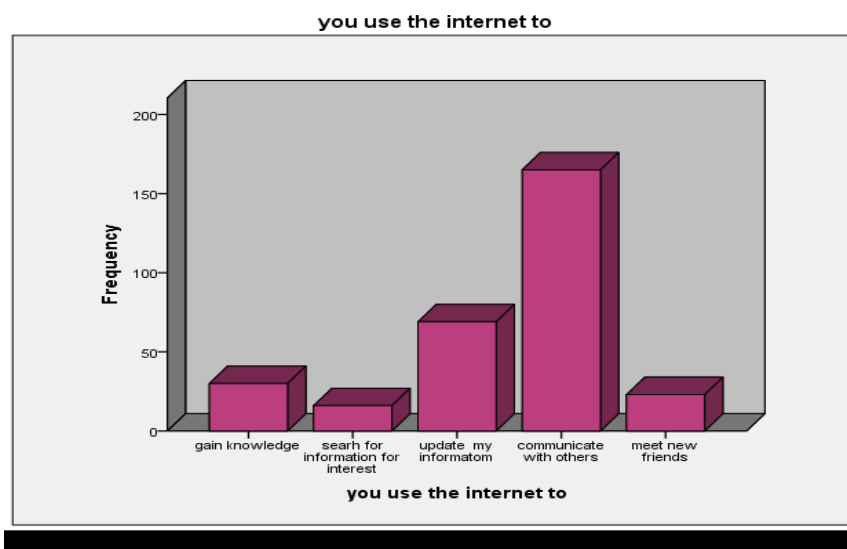
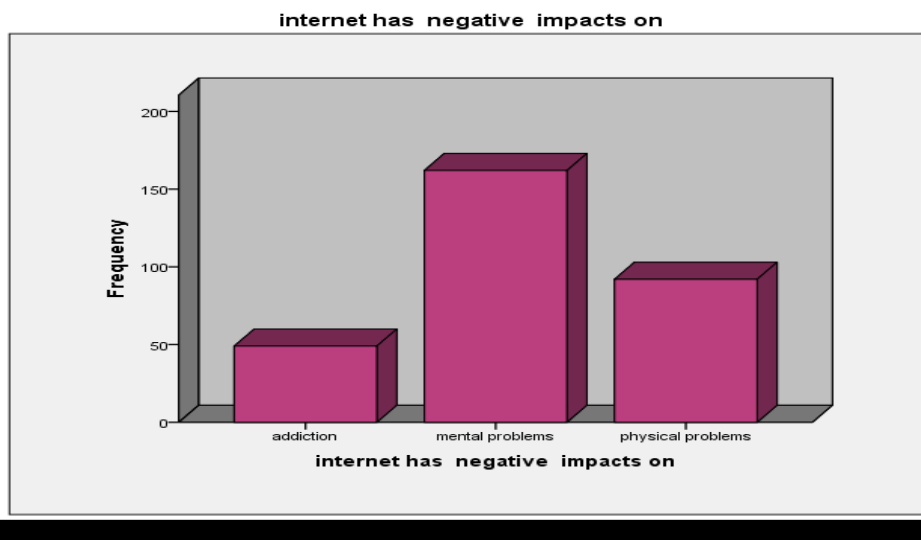


Figure (4)



Figure(5)

Use the Internet in the presence of a companion, defined as anyone including a friend, parent, sibling, teacher, or other Internet users as in an Internet cafe. More than half of respondents

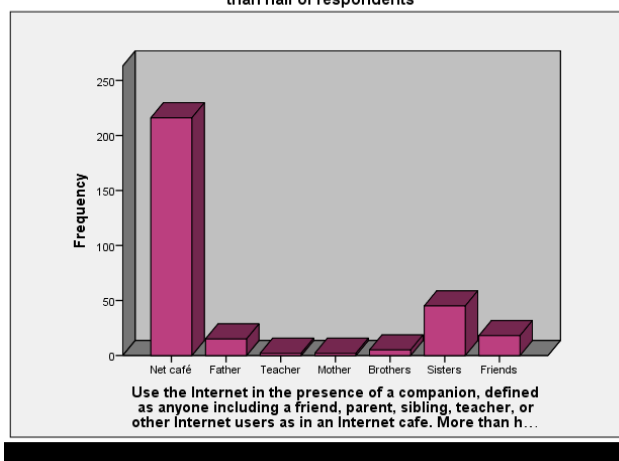


Table-2: Different Factors and their Relation to Internet Addiction

| demographic | internet use type | | | | Total | Means±SD | p-value |
|---------------------------------|-------------------|------|----------------|------|-------|---------------|---------|
| | normal user | | addictive user | | | | |
| | NO | perc | NO | PREC | | | |
| 1- age | | | | | 181 | 1.4026±.49124 | 0.0001 |
| 13-15 YEARS MORE THAN 15 YEARS | 20 | 6.6 | 102 | 33.7 | 122 | | |
| 2-Gender | | | | | 141 | 1.5347±.49962 | 0.0791 |
| Male female | 33 | 10.9 | 108 | 35.6 | 141 | | |
| 3-Education level | | | | | | | |
| second class | | | | | | 1.6271±.48439 | 0.0001 |
| third class | 14 | 4.6 | 99 | 32.7 | 113 | | |
| | 47 | 15.5 | 143 | 47.2 | 190 | | |
| 4- experience of using internet | | | | | | 1.5743±.60920 | 0.0001 |
| 6 month | 16 | 5.3 | 132 | 43.6 | 148 | | |
| >6 month-2 years | 36 | 11.9 | 100 | 33 | 136 | | |
| >2 year | 9 | 3 | 10 | 3.3 | 19 | | |
| 5- Family economic status | | | | | | | |
| RITCH | 30 | 9.9 | 59 | 19.5 | 89 | 1.901±.69299 | 0.0001 |
| | 18 | 5.9 | 137 | 45.2 | 155 | | |

| | | | | | | | |
|--|----|------|-----|------|-----|---------------|--------|
| MODERATE | 13 | 4.3 | 46 | 15.2 | 59 | | |
| POOR | | | | | | | |
| 6- Number of hours per day spent on the Internet | | | | | | | |
| 4 hours | 3 | 4.9 | 58 | 23.9 | 61 | 2.1584±.71037 | |
| 8hours | 4 | 6.5 | 45 | 18.5 | 49 | | |
| 12 hours | 33 | 54 | 59 | 24.3 | 92 | | |
| At weekend | 21 | 34.6 | 80 | 33 | 101 | | |
| 7- own computer | | | | | | | |
| Yes | 41 | 17.1 | 200 | 82.9 | 241 | 1.2046±.40409 | 0.0001 |
| no | 20 | 32.3 | 42 | 67.7 | 62 | | |

V. Discussion

A dramatic change did take place in the mid-late 1990s and early 2000s. It is the revolution in Information and Communication Technologies. Probably the most notable component of this was the dramatic growth of the internet in world⁽¹³⁾. and its usage prevalence is increasing world wide.

VI. Demographic Data

In this study the sample was 303, (46.5%) were male and (53.5%) were female which at variance with study done by Mashhor Al-hantoushi, Saad Al-abdullateefin Saudi Arabia, male 54.6% and female 45.4%, and in the same study the majority of the students own computer 66.2% as in our study 79.5%⁽³⁾. In this study the age group divided into age from 13-15 which represent 59.7% and more than 15 years which represent 40.3% it came nearly the result of study done in Thailand, the age above 15 was 43.3%⁽¹⁴⁾. The researcher selected the group study from second level and third level and from analysis the researcher observed that third group represent the majority of students. Also observed their family economic status were in moderate level while most of them use internet more than six months and spent 8 hours per day in using internet (47.1%) 65% is result done in Saudi Arabia their study group spent more than 5 hours per day.⁽³⁾ and from the analysis found that 71.7% were addictive user 44.2% who were female and it came at variance with study in Saudi Arabia which found that males were twice as likely as females to be internet addicts.⁽³⁾. The preferred websites by internet addicts in this study are the communication websites, which are chat rooms and Listening to music and playing games, these findings are at variance to those of Young, who found that non-addicts predominantly used those aspects of the internet which allowed them to gather information⁽¹⁵⁾. Increasing time spent on internet per day is also a feature of internet addiction; this was also finding of Niemz et al and Nalwa and Anand. This is most likely due to inability of adolescents to restrict their time online, especially when they engage in chat and community websites, and the availability of 24 hours internet service at netcafe opposite to finding of our study (68.5%) who get the internet services at net café⁽¹⁶⁾⁽¹⁷⁾. In recent years, the number of Internet users has increased worldwide. In 2011, 30.2% of the world's population were Internet users (2,095 million). Of those, 44% were in Asia, 22.7% were in Europe and 13% were in North America⁽²⁾. By comparison, from 2000-2016, population in Sudan total internet users 10,886,813 from total population 41,175,541⁽¹⁸⁾.

VII. Conclusion And Recommendations

In conclusion, Internet addiction is growing problem, which has psychological, physical, and social impact on adolescents' life, and requires preventive strategies as well as therapeutic interventions, one of strategies is family intervention which include individual and parental actions, were identified as the most important mechanism helpful in minimizing the negative impacts caused by IA among secondary school students. For example, to suggest that use of Internet should be set under parents control and reviewed regularly by them and their children together. Parents should discuss and share Internet experiences regularly with their children and educate themselves about the possible risks caused by Internet use. In addition, the researcher suggest that parents be good role models for their children; that is, adhering themselves to any rules set up in the home for Internet use. Moreover, parents should monitor their children, taking note of any changes in behavior, especially if related to online activity, and also suggest that education programs for parents about possible IA, Finally suggest that home

computers should be at areas where children can be supervised by their parents when using the Internet and computer software.

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