



# The Influence of the Internet on Teenagers' Behaviour in Oman

Ali H. Al-Badi<sup>1</sup>, Sara Al Mahrouqi<sup>2</sup> and Oualid Ali<sup>3</sup>

<sup>1,2</sup>Information System Department, Sultan Qaboos University, Muscat, Oman

<sup>3</sup>Training and Smart Solutions Centre, German University of Technology in Oman, Muscat, Oman

Correspondence should be addressed to: Ali Al-Badi; aalbadi@squ.edu.om

Received date: 28 March 2016; Accepted date: 11 July 2016; published date: 10 November 2016

Academic Editor: Mohammad Khaled AL Hassan

Copyright © 2016. Ali H. Al-Badi, Sara Al Mahrouqi and Oualid Ali. Distributed under Creative Commons CC-BY 4.0

## Abstract

Recently, the emergence of advanced technology has impacted on all aspects of our lives; it has had both positive and negative consequences. As can be seen currently, the evolving technology can have a strong impact on people's lives, and especially if they are teenagers, as they are vulnerable to change, and it can affect them in different ways. Since they can be exposed to different types of victimization online, much research has been done in this area in order to find out about behavioural Internet usage among teenagers. This study aims to explore to what extent the Internet can affect the behaviour of Omani teenagers (e.g. through harassment, sensual and inappropriate content, racist/violent material), to discover the reasons why Omani teenagers engage in these negative online activities and to recommend strategies designed to minimize participation in these activities amongst teenagers. The data was collected from school students in the Sultanate of Oman, the sample size being 500 students of both genders. The research was designed to aid in the understanding of this phenomenon of bad effects inflicted on the youth through certain online activities and the high-risk consequences on their behaviour, and to stress the importance of minimizing these affects. The research gaps in this area include the status of teenagers in Oman and the influence of the internet on their behaviour. The paper concludes by highlighting the main negative online behaviours among teenagers, discussing the results of engaging Omani teenagers in such behaviours and commenting on some effective solutions for curbing these high risk behaviours.

**Keywords:** Teenagers, Internet, Online behaviour, negative behaviour, Oman

## Introduction

There are several effects of globalization behaviour, and one of these is the impact that the Internet has had, and especially on teenage behaviour. The widespread use of the Internet is the cause of high online risks which can lead to the teenagers' victimization [Mitchell et al., 2007]. Recently, researchers have found that online victimization is associated with adult-content abuse, interpersonal abuse, bullying and many other misuses. As the number of young people online increases, the risk in them becoming involved in unsavoury activities does likewise, so that an appropriate and safe Internet usage should be determined for them. A recent study shows that about 97% of teenagers aged between 12 and 18 years old are using the Internet [Madden et al., 2013]. This growth in teenage Internet use is leading to an ever-increasing risk in engaging online. Thus, understanding negative and risky Internet behaviour is a very important step [Mitchell et al., 2011].

There are now in Oman great efforts to solve such problems, raise awareness, and propose solutions to reduce the risks, and discuss ways in which to build human capacity to protect children/teenagers while using the Internet. The Information Technology Authority (ITA), through the National Center for Computer Security (NCCS), has implemented several initiatives in the field of protecting children/teenagers on the Internet. They aim to provide a safe Internet environment for children/teenagers along with all other members of society [Observer, 2013].

In our research we discuss the effects of the Internet on teenagers' behaviour, the negative online practice of many teenagers and how to minimize teenagers' risky Internet usage. The study will focus on the behaviour aspects since this is the most sensitive aspect in the Omani society. The data gathered through a questionnaire distributed among school students was to

obtain their opinions, knowledge and recommendations in addition to eliciting their actual online experience.

The rest of the paper is structured as follows: Section 2 sums up the related literature on how the Internet affects teenagers and, specifically, how it affects their behaviour, discussing some potential reasons for young people engaging in such activities and how to reduce the risks that this poses for their ethical behaviour. Section 3 describes the research methodology adopted in this study, followed by Section 4: Findings and data analysis. Section 5 discusses the results and provides a set of recommendations. Finally, the paper ends with the conclusion in Section 6.

## Literature Review and Related Research

The use of the Internet is increasing annually. The majority of people log in from their houses, followed by their work places, schools and net cafes [Ho et al., 2012]. These facts identify how the Internet is becoming the most important tool in people's lives. Most facts about teenagers' behaviour online highlight the very real dangers of exchanging adult-content, experiencing harassment and bullying, and engaging in undesirable relationships with other genders, all of which will surely affect vulnerable teenagers [Martin, 2010]. A study conducted in the US in 2013 revealed critical facts about teenage Internet usage. It found that 95% of teenagers go online. About 74% between the ages of 12 and 17 access the Internet from smart phones as well as other mobile devices. Internet usage has increased among people due to its mobile connection.

### *The extent to which the Internet affects the behaviour of young people*

What is important is that the risk expands to the teenagers themselves, as they spend increasingly long hours on-line, sending emails, using social media, downloading

music, videos and games, shopping, and many other activities [Martin, 2010]. Being online for all these activities affects their performance, social life and their health as well. Negative Internet activities could be anything from theft, information damage, copyright infractions, digital privacy, intellectual property, and distribution of illegal content, anti-competitive attacks, disinformation, and various forms of fraud. According to the FBI; "Cyber terrorism is a form of computer-related crime committed using Internet technology" [Singh and Siddiqui, 2011]. With reference to this issue, we present the following hypothesis:

*H1: Online activities can negatively influence a teenager's academic performance, social life and their health as well.*

As the electronic environment changes, the protective adaption changes equally. Thus, as young people shift from chat rooms to Facebook, the Internet platform provides new controls and security [Jones et al., 2012]. Online activities expose young people to many criminal, unethical activities including dealing with sensual content and the use of others' identities [Dowell et al., 2009]. With reference to this issue, we present the following hypothesis:

*H2: Online activities expose young people to many criminal, unethical activities including sexual content and the use of others' identities [Dowell et al., 2009].*

More important, it might also lead to Internet addiction that, in turn, will change the developing brain structure of teenagers, leading to poor academic achievements, involvement in dangerous activities, unhealthily nutritional habits, poor personal relationships and self-injurious activities [Kuss et al., 2013]. The following four categories classify the online negative activities that can influence adolescents [Livingstone and Haddon, 2008]:

1) *Content risks, including:* being confronted with sensual/violent/racist/hate

material, pornography, challenging content (e.g. suicide, anorexia, drugs, etc.). Many teenagers pointed out that they search for inappropriate content, talk about sensitive topics, read about and see Internet postings on these issues [Livingstone and Haddon, 2008].

Violence is not limited to a single group, religion, culture, or background. Many teenagers create groups to discover more about other people's beliefs, religions and behaviours [Dowell et al., 2009]. This in turn might expose them to racial issues. Researchers suggest that clinical assessments on young people should include questions about online content regarding suicide situations. Also, the Internet might affect them when they search for harmful content as they will be exposed to violent images and content, and there is a danger that they will act on what they have seen. Internet addiction increases the risk of self-harm, depression and suicide. Encouraging suicide online is a criminal offence. The harm extends to the use of drugs too, and researchers have found that young people use instant messaging to discuss drug issues [Barratt, 2012].

Sometimes risky Internet behaviour can expose users to pornography, that is pictures of undressed people or people in sensitive postures, without seeking or expecting such pictures, when they are searching online, opening websites or pop-up links [Mitchell et al., 2007]. Some teenagers can become involved in online harassment by sending unethical photos of people to others without their knowledge [Jonsson et al., 2014].

2) *Contact risks: including* contact with foreigners, cyber-bullying, online harassment, etc. The Internet provides teenagers with much information, but it can also expose them to greater risks and dangers. They can face dangerous people online, a variety of sensitive material, and they could become victims of

harassment and bullying [Mitchell et al., 2007]. Online harassment is attacking or offensive online content that is inflicted on teenagers and seen by others [Mitchell et al., 2007]. Nearly a third, (29.5%) of the boys and 27.8% of the girls, reported that they had posted rude comments online [Dowell et al., 2009]. Other types of harassment carried out by teenagers are embarrassing others by making jokes, and harassing foreigners.

Online harassment (playing jokes, making rude comments, intentionally embarrassing someone online, or bullying) are all types of bad activity conducted by teenage students that can present a really serious risk to teenagers.

The phenomenon of cyber-bullying is what researchers look for, as it is not an individual problem but involves the whole society [Thorsten Quandt, 2012]. Cyber-bullying is defined as intentional aggression used through the Internet or any electronic media to harm others [Morrow and Downey, 2013]. Cyber-bullying is carried out by teenagers to make them feel more powerful by strengthening their own social position and minimizing that of their opponents in the discussion group [Festl and Quandt, 2013].

Involvement in cyber-bullying via the Internet can be carried out anonymously by teenagers. It can take many forms such as flaming, harassment, cyber-stalking, denigration, imitation, exclusion, and trickery [K. Alex Burton et al., 2013]. The male students are more likely to be bullying others. Many teenagers said that they feel angry, unhappy, and depressed after being bullied online [Mishna et al., 2010].

H3: *Cyber-bullying is practiced by teenagers to make them feel more powerful or to strengthen their own social position [Festl and Quandt, 2013].*

3) *Commercial risks:* including advertising/commercial misuse, illegal downloading, gambling, etc.. Transferring music from the Internet into users' computers is unauthorized for copyright reasons and researchers consider illegal music downloading online to be theft [Jambon and Smetana, 2012].

4) *Privacy risks:* including giving/posting personal information, attacks on privacy, hacking and identity theft. Many young students post their personal information, especially onto social media websites. Research shows that 31% of boys and 27% of girls admitted that they had done so [Livingstone and Haddon, 2008]. The posting of personal information and personal pictures can lead to many risks such as harassment, cyber-bullying, privacy attack and unwanted sensual solicitations [Livingstone and Haddon, 2008]. According to the FBI, "cyber terrorism" could be any means of threatening others. Another form is hacking. Nowadays hackers are able to penetrate even fairly well-protected systems, which poses a great threat to the security of individuals and nations alike, and increases the risk to young people and children [Singh and Siddiqui, 2011]. Identity theft: this is an easy and anonymous way to carry out illegal acts without being exposed to any risk of getting caught [Singh and Siddiqui, 2011].

Thus, a fourth hypothesis is presented as follows:

H4: *Omani teenagers can be impacted by many online negative activities.*

#### ***The involvement of teenagers in negative behaviours on the Internet***

Young people are connected with others through the use of the Internet and other media devices. These media become the tools for practising bullying behaviour [Huang and

Chou, 2010]. The rise of teenagers going online via smartphone (mobile devices) Wi-Fi connections seems to pose the potential problem of Internet misuse [Kuss et al., 2013]. Teenagers, who post their personal information or pictures, involve themselves in inappropriate behaviours and have contact with strangers, are most likely to be at risk [Sengupta and Chaudhuri, 2011]. There are many factors pushing teenagers to become involved in negative behaviour on the Internet. Nowadays social networking websites are considered to be one of the main sources of teenage harassment online [Sengupta and Chaudhuri, 2011].

The anonymity factor plays a role in increasing such negative Internet behaviour, as young people can hide themselves behind screens to carry out bullying acts and, in turn, the bullied victims will then take revenge in cyberspace [Huang and Chou, 2010]. When teenagers were asked about why they hurt others, they replied that it was because it was made possible by the anonymity of the space.

The Internet is a tool that might be misused by teenagers themselves as it gives them the ability to broadcast illegal products such as drugs, either directly via social networking sites and online auctions or indirectly through pop-ups, to catch teens [Forsyth, 2012]. Moreover, teenagers who have the material resources and the knowledge of how to use the Internet are more likely to engage in such negative behaviour [Moule Jr et al., 2013]. The life style that the teenagers live affects their Internet behaviour, which may lead to a greater likelihood of their exposure to online pornography [Moule Jr et al., 2013]. Teenagers who participate in street crime have a greater chance of practising negative behaviour online, in their use of the Internet in dealing with others [Moule Jr et al., 2013], and teenagers who harass others at school are more likely to be perpetrators of cyber-bullying [Mishna et al., 2012]. The widespread use of advanced technology gives teenagers the chance to access pornography [Miller, 2013].

Studies found that teenagers with married parents are less likely to be online, while it is more common for teenagers with divorced parents. The reason appears to be that they have greater unsupervised Internet access and therefore face higher risks such as contact with strangers and people looking for unwelcome social relationships [Sengupta and Chaudhuri, 2011]. When teenagers use the Internet secretly, away from parents' attention, there is a 60% increase in the likelihood of their being cyber-bullied [Sengupta and Chaudhuri, 2011]. With reference to this issue, we present the following hypothesis:

*H5: Omani teenagers with married parents are less likely to be bullied, while it is more likely for teenagers with divorced parents.*

From the teenager's perspective, a common reason for becoming involved in online negative activities is to humiliate friends, and spending a long time on the Internet in their free time can exacerbate this behaviour [Mishna et al., 2012]. The availability of time in a teenager's life increases the risk of their using the Internet negatively. Another reason for going online was found to be sharing of feelings. Many parents are not aware of the likely effects the Internet can have on their children [Álvarez et al., 2013]. Even the teenagers themselves may not be aware of the risks posed by Internet utilization. Regarding online harassment, bullied victims reported that they felt sad, nervous, afraid and unable to focus at school, and that it had exposed them to social difficulties. They might have been encouraged to use drugs and alcohol, play truant from school, procure eating disorders, and take weapons to school [Mishna et al., 2012]. With reference to this issue, we present the following hypothesis:

*H6: Many parents are not aware of the risks that their children are exposed to through using the Internet [Álvarez et al., 2013].*

Experiencing feelings of anxiety and depression can lead to more negative behaviour [Hedman et al., 2013], while

teenagers who cyber-bully might engage in rule-breaking and have problems with aggression [Mishna et al., 2012]. Studies found that when young people use the Internet intensively in private, they are much more likely to misuse it [Mishna et al., 2012]. Often young people misuse the Internet because they have been rejected by friends and have adjustment problems [Mishna et al., 2012]. Also, perhaps they have experienced violence or harassment by school staff [Mishna et al., 2012].

### ***How to control the negative online behaviour among young people***

Young people's usage of the Internet has caused concern for both educators and the media [Jones et al., 2012]. There are calls for restrictions on Internet use by teenagers [Sengupta and Chaudhuri, 2011], and setting rules and regulations for computer use by teenagers will restrict its usage [Robinson et al., 2010], and that monitoring teenagers' computer use will lead to a reduction in their exposure to inappropriate Internet behaviour [Sengupta and Chaudhuri, 2011].

Many responses have indicated that to filter and/or block illegal and unethical sites will be the best solution for protecting today's youth [Robinson et al., 2010]. Some of the content, and especially that of social networking sites, needs to be monitored and corrected regarding its unstructured and unsupervised peer content [Geeraerts, 2012], and parents have an important role to play in minimizing the risk the Internet can present to their teenagers. Drawing up regulations for Internet use in the home, being responsible about the amount of time spent online, selecting the appropriate location of the computer and monitoring the content accessed could go a long way towards minimizing these risks [Álvarez et al., 2013].

Parents also have a role in raising their children's awareness about the dangers of giving personal information to strangers online and the sites that they should not visit,

and staying close to them in order to monitor their doings [Álvarez et al., 2013]. They can monitor their search history in the browser software [Robinson et al., 2010]. Parents also should give advice to their children about Internet safety and responsibility. Whereas many teenagers can access the Internet anytime and anywhere, this connection needs to be monitored and controlled as well [Kuss et al., 2013]. The authorities should use their power to prosecute the people who misuse the Internet to harm teenagers. About 70% of the latter said that they did receive advice from a teacher or other adults in their schools about appropriate Internet usage. With reference to this issue, we present the following hypothesis:

*H7: The society can play a role in reducing the negative effect of Internet usage.*

### ***Internet usage in Oman***

Oman possesses advance ICT infrastructure due to investment in the telecommunication industry [Oman - Telecoms, 2013]. Statistics show a rapid increase in Internet usage in Arab countries: they now count for about 3.7% of world users. The total number of Arab Internet users is 90,000,455 according to Internet World Stats.

Last year Omani Internet users reached 2,101,302 users. According to the World Bank, in 2012-2013 [EAST, 2013] there were 60 users in Oman per 100 people [Oman - Telecoms, 2013]. About 68% of the population is now using the Internet in the Sultanate of Oman. Statistics that only focus on social media sites separately show us that 120,840 Omanis use Facebook, while 6550 use Twitter and 169,000 use LinkedIn.

### **Research Methodology**

In our research, a questionnaire was chosen as the data collection instrument. The questionnaire was prepared, then printed and distributed among school students. The sample size of this study was 500 students.

The school students had to fulfil the following criteria to be included in the sample:

- Be over 12 years old (either male or female)
- Have access to a computer, smartphone or any other device to go online
- Have access to the Internet
- Be able to participate in the study

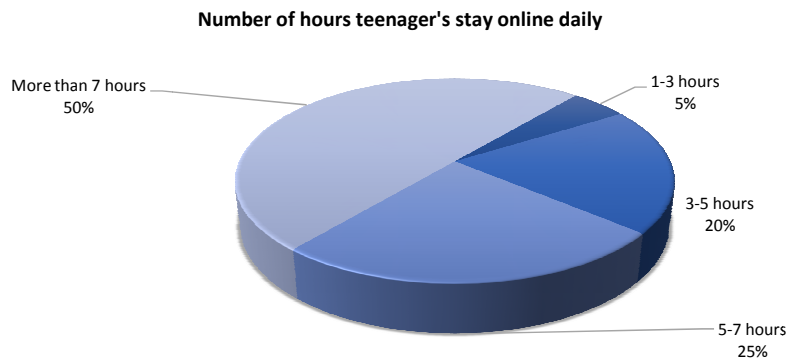
The questionnaire was designed to elicit the valid opinions and views from students, avoiding bias. It was decided to use this instrument to reach as many respondents as possible, to offer them anonymity, and give the students enough time to respond easily. The questionnaire was distributed amongst

the Omani students, was in Arabic language and contained open-ended and closed questions.

### Findings and Data Analysis

#### *The extent to which the Internet affects young people's behaviour*

The size of the sample was 500 students; comprising about 50% male and 50% female students aged between 12 and 18 years old. The study showed that just 5% of the students went online from 1 to 3 hours daily, 25% used the Internet for 3 to 5 hours, about 50% stayed connected for 5 to 7 hours, and 20% were online for more than 7 hours a day, as is shown in Figure 1 below.

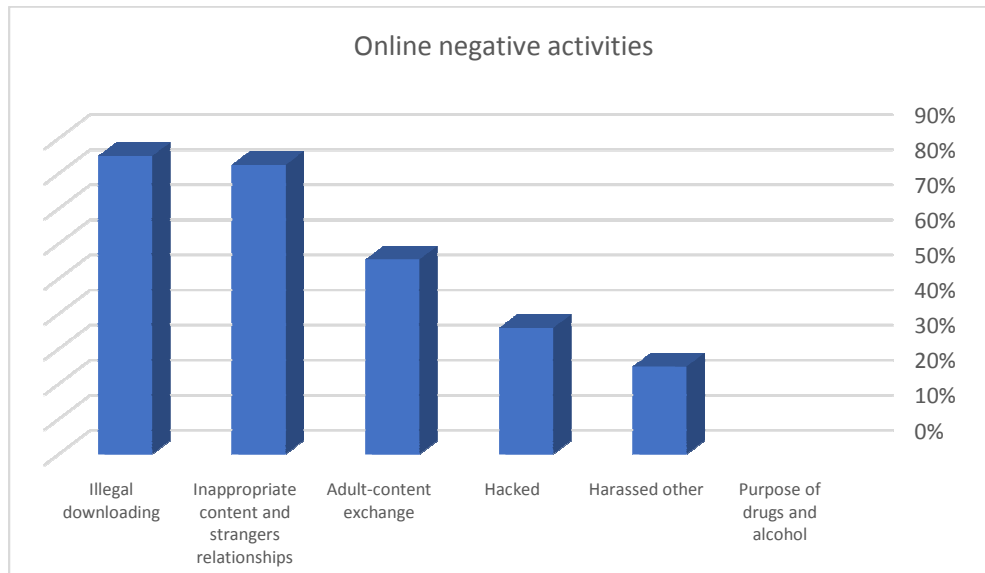


**Figure 1: Number of hours students stay online daily**

It was found that 82.5% of the students think that going online affects their academic performance, social life and their health as well, whereas 17.5% of them think it does not. Therefore, hypothesis [H1] which assumed that 'online activities can negatively influence teenagers' academic performance, social life and their health' is accepted.

Hypothesis [H4] 'Omani teenagers can be impacted by many negative activities' is also accepted. There are many negative online activities experienced by students; illegal downloading (music, programs or other content) was at the top of these activities

(85% of the students admitted doing this). While searching for inappropriate content and forming relationships with strangers came second with a percentage of 82.5%. About 55.5% of the students admitted that they've exchanged adult-content; while 36% of the students had hacked others and 25% confessed that they had harassed others online (see Figure 2). Therefore hypothesis [2] that assumed 'online activity exposes young people to many criminal, unethical activities including dealing with sexual content and using other people's identity-was accepted.



**Figure 2: The study results concerning the practice of negative online activities**

There are a significant number of findings which illustrate that 70% of the students have harassed others online, for enjoyment and a feeling of power, while just 30% have not. This confirms the hypothesis [H3] that *cyber-bullying is practiced by teenagers for enjoyment and to give them a feeling of power, strengthening their own social position*. However, the conception of the majority of students about the engagement of young Omanis in negative online activities is that social media are one of the main 'enablers' of negative online activities amongst the youth, free time, feel bored, it being seen as a negative social-influence, and lack of entertainment activities or clubs to spend their time.

#### ***The Involvement of Teenagers in Online Negative Activities***

Regarding whether the parents specify and monitor time for their children to be online or not, 88.5 % of the students said 'no' (these students have 87.5% of their parents married). However, only 11.5% of them said 'yes'. Concerning the recommendations of the students on how to minimize the

involvement of children in negative activities while they are online, most of them recommended blocking inappropriate websites, while many of them recommended that teenagers spent their online time engaging in educational activities and clubs rather than being online just for chatting, although some of them suggested that parents should monitor their children's Internet usage and control the length of time they spend online. From these results it can be observed that the hypothesis [H5] that Omani teenagers with married parents are less likely to be bullied, while this happens more frequently to teenagers with divorced parents- was rejected. Obviously, hypothesis [H6] which says "many parents are not aware of the risks that the internet might pose on their children" was accepted.

#### ***Controlling the online negative activities among Omani youth***

One question was about the role of society (citizens, law enforcement, schools, and parents) in minimizing the online negative activities that influence teenage behaviour. All the students agreed that there were three



main actions to be taken in order to minimize the effect of the Internet on their behaviour: schools should conduct awareness seminars on the consequence of misusing the Internet, point out the serious risks that might affect their behaviour, and teach them how to use the Internet appropriately. Approximately 70% of the students indicated that parents should warn their children about online risk activities and monitor them. Concerning law enforcement, they proposed setting up laws to restrict Internet access and prevent users from misusing the Internet. It is notable that the hypothesis [H7] that society can play a role in reducing the negative effects of Internet usage was accepted.

### **Discussion and Recommendation**

The research findings highlight many hidden areas in teenagers' online usage. Concerning Internet access, the results vary considerably among Omani youth. The majority of the teenagers admitted that they use the Internet for 5 to 7 hours a day, while many of them use it for 3 to 5 hours and some of them are on it for more than 7 hours. Actually, the negative online behaviour is not limited to those who are connected for long hours. Almost all of them have harassed others. Of the teenagers who said that they harassed others online, more than half were boys. As mentioned above, there was no obvious relationship between the hours spent online and the practice of negative online activities. Intentionally or unintentionally, more than half the teenagers downloaded content from the Internet illegally, and as downloading music is considered to be stealing copyrights and is a crime by law, it would appear that many of them do not pay much attention to their infringement (Singh and Siddiqui, 2010). The surveyed Omani students believed that the most serious negative online behaviour is using the Internet for the purpose of buying and selling drugs and alcohol among teenagers, and this is because it is not just a form of electronic harm but extends to the encouragement of serious illegal practices. The accessibility of social networking sites facilitates considerably

discussions about drugs among youth [Barratt, 2012].

The second highest online negative risky activity was communicating with strangers. As the danger of contacting with foreigners worries parents more because of giving personal information from young people, thus facilitates foreigners attack [Geeraerts, 2012]. The pornography search rose among both male and female, this is why all students proposed blocking the illegal and pornography sites as one solution to reduce the online negative behaviours among young people. It got the highest frequency reported solutions to solve this problem.

Hacking is practiced more by boys than girls, who like to explore and discover new things, helped by the availability of advanced software that facilitates hacking and the breaching of other people's computers.

The exchange of sexual material also rose among both males and females, but is more frequent among boys than girls. Here again all of the students agreed that pornography sites should be blocked to get rid of such online misuse, and that Internet usage should be monitored by the parents [Sengupta and Chaudhuri, 2011]. Many of the students reported that such content appears in pop-ups or links that lead to these unethical photos or videos [Mitchell et al., 2007].

After that, the online harassment reported by boys more than girls. Many of them figure out that they did harass others. As studies show, the harassments practiced are by boys more than girls [Mishna et al., 2010].

Most of the students know about the risks and consequences of engaging in negative online behaviour, and they provide valued recommendations to solve this phenomenon. To begin with, they report convincing causes that lead young people to misuse the Internet. The high frequency reported reason was feeling bored and having free time [Mishna et al., 2012]. The lack of entertainment activities for youth and sports clubs make them feeling bored so much they

switch to spending their time on the Internet, which increases the probability of using it negatively [Mishna et al., 2012; Robinson et al., 2010]. The negative social influence was the second highest reported reason for teenagers engaging in such negative attitude. The availability of Internet access and resources like money or devices increase the likelihood of being exposed to unwanted material.

The lack of parent monitoring and Internet security obviously has a great influence on youth online behaviour. There should be strong security that limits their Internet access and connection as well as monitoring by parents and advice to raise awareness about using the Internet and dealing with any online risks that may face them [Álvarez et al., 2013; Robinson et al., 2010]. Many students report a lack of awareness of the dangers of utilizing the Internet and the consequences of engaging in negative online behaviour. In Oman, there should be comprehensive plan to raise awareness among young people about correct Internet use.

Also, there are laws and regulations set by the Information Technology Authority (ITA) which assign great importance to the security of children on the Internet in Oman. They collaborate with the regional and international organizations in this field. They set laws against electronic crimes, doubling penalties in cases where the targeted victims are children. Also, a "National Centre for Computer Security Authority" has been established to protect young people online, educate children, teachers and parents in the means of protection to avoid young people presenting a security risk.

### Conclusion

This study provides a better understanding of the impact of unrestricted Internet on young people and Omani teenagers' behaviour in particular. Since little research has been done in this area, this research will give Omani parents and other concerned

parties a clear picture of the risks and impact associated with the use of the Internet by teenagers.

The results show that many teenagers download Internet content without being aware that it is illegal, harass others, hack other people's computers, and search for sensual content online, and all these activities will affect their lives in a negative way.

Realizing the danger of allowing teenagers uncontrolled Internet access hopefully will foster responsible actions to minimize such undesirable consequences. Thus, educators, law enforcement, parents, local social clubs and the concerned government agencies should play an effective role in providing sufficient awareness material for young people while using the Internet and warn them about the bad effects of using it indiscriminately. Furthermore, deterrent measures must be taken to prevent whoever the accountable for allowing such online negative activities from continuing to do so.

### References

1. Álvarez, M., Torres, A., Rodríguez, E., Padilla, S. and Rodrigo, M., (2013), Attitudes and parenting dimensions in parents' regulation of Internet use by primary and secondary school children, *Computers & Education*.
2. Barratt, M. J., (2012), The efficacy of interviewing young drug users through online chat, *Drug and Alcohol Review*, vol. 31 (4), pp. 566-572.
3. Dowell, E. B., Burgess, A. W. and Cavanaugh, D. J., (2009), Clustering of Internet risk behaviors in a middle school student population, *Journal of school health*, vol. 79 (11), pp. 547-553.

4. EAST, M., (2013), internet world stats, Accessed on 12/12/2013, Available at: [<http://www.internetworldstats.com/middle.htm>]
5. Festl, R. and Quandt, T., (2013), Social relations and cyberbullying: The influence of individual and structural attributes on victimization and perpetration via the Internet, *Human Communication Research*, vol. 39 (1), pp. 101-126.
6. Forsyth, A. J., (2012), Virtually a drug scare: Mephedrone and the impact of the Internet on drug news transmission, *International Journal of Drug Policy*, vol. 23 (3), pp. 198-209.
7. Geeraerts, S. B., (2012), Digital radicalization of youth, *Social Cosmos*, vol. 3 (1), pp. 25-32.
8. Hedman, E., Lindefors, N., Andersson, G., Andersson, E., Lekander, M., Rück, C. and Ljótsson, B., (2013), Predictors of outcome in Internet-based cognitive behavior therapy for severe health anxiety, *Behaviour research and therapy*, vol. 51 (10), pp. 711-717.
9. Ho, L.-A., Kuo, T.-H. and Lin, B., (2012), The mediating effect of website quality on Internet searching behavior, *Computers in Human Behavior*, vol. 28 (3), pp. 840-848.
10. Huang, Y.-y. and Chou, C., (2010), An analysis of multiple factors of cyberbullying among junior high school students in Taiwan, *Computers in Human Behavior*, vol. 26 (6), pp. 1581-1590.
11. Jambon, M. M. and Smetana, J. G., (2012), College students' moral evaluations of illegal music downloading, *Journal of Applied Developmental Psychology*, vol. 33 (1), pp. 31-39.
12. Jones, L. M., Mitchell, K. J. and Finkelhor, D., (2012), Trends in youth internet victimization: Findings from three youth internet safety surveys 2000–2010, *Journal of Adolescent Health*, vol. 50 (2), pp. 179-186.
13. Jonsson, L. S., Priebe, G., Bladh, M. and Svedin, C. G., (2014), Voluntary sexual exposure online among Swedish youth—social background, Internet behavior and psychosocial health, *Computers in Human Behavior*, vol. 30, pp. 181-190.
14. K. Alex Burton<sup>1</sup>, Dan Florell<sup>2</sup> and Wygant<sup>2</sup>, D. B., (2013), THE ROLE OF PEER ATTACHMENT AND NORMATIVE BELIEFS ABOUT AGGRESSION ON TRADITIONAL BULLYING AND CYBERBULLYING, vol. 50 (2), pp. 103-115.
15. Kuss, D. J., van Rooij, A. J., Shorter, G. W., Griffiths, M. D. and van de Mheen, D., (2013), Internet addiction in adolescents: Prevalence and risk factors, *Computers in Human Behavior*, vol. 29 (5), pp. 1987-1996.
16. Livingstone, S. and Haddon, L., (2008), Risky experiences for children online: Charting European research on children and the internet, *Children & Society*, vol. 22 (4), pp. 314-323.
17. Madden, M., Lenhart, A., Cortesi, S., Gasser, U., Duggan, M., Smith, A. and Beaton, M., (2013), Teens, social media, and privacy, Report Pew Internet and American Life.
18. Martin, W., (2010), Teens and the Internet: How Much Is Too Much?, Accessed on 13/11/2013, Available at: [<http://www.psychologytoday.com/experts/wednesday-martin-phd>]
19. Miller, L., (2013), Sexual offenses against children: Patterns and motives, *Aggression and Violent Behavior*, vol. 18 (5), pp. 506-519.
20. Mishna, F., Cook, C., Gadalla, T., Daciuk, J. and Solomon, S., (2010), Cyber bullying behaviors among middle and high school students, *American Journal of Orthopsychiatry*, vol. 80 (3), pp. 362-374.
21. Mishna, F., Khoury-Kassabri, M., Gadalla, T. and Daciuk, J., (2012), Risk factors for involvement in cyber bullying: Victims,

- bullies and bully-victims, *Children and Youth Services Review*, vol. 34 (1), pp. 63-70.
22. Mitchell, K. J., Finkelhor, D., Wolak, J., Ybarra, M. L. and Turner, H., (2011), Youth internet victimization in a broader victimization context, *Journal of Adolescent Health*, vol. 48 (2), pp. 128-134.
23. Mitchell, K. J., Wolak, J. and Finkelhor, D., (2007), Trends in youth reports of sexual solicitations, harassment and unwanted exposure to pornography on the Internet, *Journal of Adolescent Health*, vol. 40 (2), pp. 116-126.
24. Morrow, A. and Downey, C. A., (2013), Perceptions of adolescent bullying: Attributions of blame and responsibility in cases of cyber-bullying, *Scandinavian journal of psychology*, vol. 54 (6), pp. 536-540.
25. Moule Jr, R. K., Pyrooz, D. C. and Decker, S. H., (2013), From 'What the F#@% is a Facebook?' to 'Who Doesn't Use Facebook?': The role of criminal lifestyles in the adoption and use of the Internet, *Social science research*, vol. 42 (6), pp. 1411-1421.
26. Observer, O. (2013), A workshop on the construction of the national strategy for the protection of children on the Internet, In *Oman Observer* Oman Establishment for Press, Publication and Advertising, Oamn.
27. Oman - Telecoms, M., Broadband and Forecasts, (2013), Oman - Telecoms, Mobile, Broadband and Forecasts, Accessed on 12/12/2013, Available at: [<http://www.budde.com.au/Research/Oman-Telecoms-Mobile-Broadband-and-Forecasts.html?r=51>]
28. Robinson, L., Brown, A. and Green, T. D. (2010), Security vs. access, *International Society for Technology in Education*.
29. Sengupta, A. and Chaudhuri, A., (2011), Are social networking sites a source of online harassment for teens? Evidence from survey data, *Children and Youth Services Review*, vol. 33 (2), pp. 284-290.
30. Singh, A. K. and Siddiqui, A. T., (2011), New Face of Terror: Cyber Threats, Emails Containing Viruses, *Asian Journal of Technology & Management Research* [ISSN: 2249-0892], vol. 1 (01).
31. Thorsten Quandt, R. F. M. A. (2012), Cyber bullying at schools.