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## Parental controls on children's computer and Internet use

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### Abstract

Every new technology brings along both excitement and anxiety. Although computer and Internet are increasingly indispensable tools for children and have many advantages in several areas, mainly in education, communication and creativity, computer and Internet use also cause anxiety because of violence in games, extreme use of computer, ease of accessing pornography and other controversial content, invading privacy and Internet addiction. In this study, the treats, encountered by children using computer and Internet, effectiveness of precaution methods and solution suggestions about how the treats could be minimized were examined and discussed according to the related literature.

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*Keywords:* Parental control; computer and internet use; regulations; blocking and filtering software.

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### 1. Introduction

In many countries, children are using computer and connecting to the Internet increasingly at a rapid pace. This situation arise a lot of questions like what kind of benefits do computer and Internet make for children, what are the risks of connecting to the Internet, what are the attitudes of families, teachers, schools and law makers towards this situation, what are the effects of computer and Internet use on social life and family's values and so on. This study is related with the risks of computer and Internet use for children and precaution methods taken by their parents for these risks.

A lot of research in literature found that computer and Internet use are beneficial for children. Hasebrink, Livingstone & Haddon (2008) found that computer and Internet have many opportunities like entertainment, information, education, communication, networking, creativity, play and civic participation for children. Besides, Kuhlemeier & Hemker (2007) found that home access to computer and Internet were substantially related to Internet and computer skills which are obligatory for contemporary life. Similarly Jackson et al. (2006) found that children who used the Internet more had higher scores on standardized tests of reading achievement and higher grade points than children who used it less.

Although computer and Internet are increasingly indispensable tools for children, computer and Internet use also cause anxiety because of violence in games, extreme use of computer, ease of accessing pornography and other

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controversial content, invading privacy and Internet addiction (Hasebrink, Livingstone, Haddon, 2008). Most of the treats are not directly related with the Internet, however, eased with Internet. Internet is an international network and can not be controlled by any central control mechanism. So a child can encounter the treats mentioned above easily by using the Internet without any precaution.

This situation is a big problem especially for families. In this study, the treats, encountered by children using computer and Internet, effectiveness of precaution methods and solution suggestions about how these treats could be minimized were examined and discussed according to the related literature.

## 2. Treats

### 2.1. *Extreme use of computer*

It is indicated that some children, especially male adolescents, spend more than four hours with computer at home in a day (Shields, Behrman, 2000). Extreme use of computer can cause physical, social and psychological problems for children. Internet addiction, an important one of the extreme use cases, is defined as the problem of spending overmuch time on using Internet. According to Young (2004), if Internet addiction was not brought under control, it would cause a lot of problems on children like using the Internet everyday, being unaware of time while online, showing no interest in other things, feeling restless and angry if stopped from using the Internet, decrease in social activities, getting away from sportive activities, having not enough time for family members, preferring online chat instead of face to face talk and so on.

### 2.2. *Violence in games*

The effect of violent video games appears to be cognitive in nature. In the short term, playing a violent video game appears to affect aggression by priming aggressive thoughts. Longer-term effects are likely to be longer lasting as well, as the player learns and practices new aggression-related scripts that become more and more accessible for use when real-life conflict situations arise (Anderson and Dill, 2000, cited by Mitchell & Savill-Smith, 2004).

Dündar (2006) said about violent computer games that you should know that your children will come to home as if coming from real war when they will have played computer games in future. According to Akgündüz, Oral & Avanoğlu (2006), Internet café users mostly prefer war type computer games with 27.2%. As a result, violent computer games make a treat for especially little children.

### 2.3. *Ease of accessing pornography and other controversial content*

There is a great anxiety about the possible harms to youth of being exposed to online pornography and other controversial content. According to Ropelato (2006), online pornography became \$97.06 billion sized market in 2006. 12% of web sites on Internet included pornographic content in 2006. 25% of total search engine requests included pornographic keywords in a day in 2006. Received unwanted exposure to sexual material was 34% in 2006. Average age of first Internet exposure to pornography was 11 years old in 2006.

There is clear evidence that many children and adolescents who use the Internet are exposed to pornographic websites. In a national study of youth Internet users aged 10–17 years old, Mitchell, Finkelhor, and Wolak (2005) found that one in four had viewed sexual material they did not want to see in the previous year.

According to the findings of the research performed by Wolak, Mitchell, & Finkelhor (2007), much exposure is unwanted, and youth with certain vulnerabilities, such as depression, interpersonal victimization, and delinquent tendencies, have more exposure to online pornography. 42% percent of youth Internet users were exposed to online pornography in the year 2004. Of those, 66% reported only unwanted exposure.

According to the findings of the research performed by Peter & Valkenburg (2008) with a sample of 2,343 Dutch adolescents aged 13 to 20, more frequent exposure to sexually explicit Internet material is associated with greater sexual uncertainty and more positive attitudes toward uncommitted sexual exploration (i.e., sexual relations with casual partners/friends or with sexual partners in one-night stands).

In addition exposure to web sites including violence, fear, horror, racism except pornography, also causes hazardous situation for children. According to Livingstone & Bober (2004), 22% of children are exposed to web sites including violence and fear content. Besides, 9% of children are exposed to web sites including hostile and honor content.

#### 2.4. *Invading privacy*

Internet is the place where malicious people can easily interact with innocent people. According to Ropelato (2006), 29% of 7-17 year olds freely give out their home address and 14% of them freely give out their email address by means of chat programs and web site forms which collect personal data form children.

### 3. Parental Controls on Children’s Computer and Internet use

#### 3.1. *Parents’ concerns and attitudes*

The “Young People, New Media” survey showed that 95% of parents, especially middle class parents, are broadly positive about computers, though they are more enthusiastic for their children than for themselves (Livingstone, 2007). In addition, Odabaşı (2005) found that parents believe that Internet enhances the academic achievement and is a necessity of contemporary life.

According to “UK Children Go Online” survey, parents appear particularly ambivalent about this latest medium, holding both positive attitudes (e.g. the Internet helps children with school work and to discover new things) and negative attitudes (e.g. the Internet risks children’s personal information and exposes them to pornographic or violent images) (Livingston & Bober, 2004). It can be said that this situation is normal because parents receive information about both benefits of the Internet and harms of the Internet form media and their environments. This situation causes parents to develop conflicting attitudes towards the Internet. Consequently parents apparently wish both to facilitate and to restrict their children’s use of the Internet and computer. Children, tend to view their mothers as generally more restrictive, perhaps because they are more often present in the home, and also because domestic regulation is commonly perceived as part of the maternal role (Livingstone, 2007).

#### 3.2. *Parental Restriction Methods*

According to European Opinion Research Group, families were asked the rules which they set for their children in using the Internet. These rules are listed in Table 1 with percentages

Table 1 Rules set by parents for children about the use of Internet

Rule	%
There are some sites that he/she is not allowed to visit	60
Rules regarding how much time he/she is allowed to spend on the Internet	52
He/she is not allowed to give out any personal information	49
He/she is not allowed to meet in person someone he/she only met on the Internet	39
He/she is to tell me/us if he/she finds something on the net making him/her uncomfortable	38
He/she is not allowed to go to chat-rooms/to talk to strangers in chat-rooms	32
He/she is not allowed to use rude language in e-mails or chat-rooms	26

It is appeared that most of the parents are aware of Internet security and treats for their children by setting various rules. In addition it can be affective that rules set by parents are put up on somewhere as a poster seen easily by children.

There are several different kinds of software tools available to families to restrict their children's computer and Internet use. "Time-Limiting" software allows parents to set limits on how much time or at what time a child can use the computer or Internet. "Filtering and Blocking" software limits access to some sites, words, and/or images. "Outgoing Content Blocking" regulates the content leaving the computer to prevent children from revealing personal information, such as names, addresses and telephone numbers, to people they do not know. "Kid-Oriented Search Engines" work like regular search engines but also provide special features to screen out inappropriate material. Finally, "Monitoring Tool" software informs adults about children's online activity by recording the addresses of visited websites or displaying warning messages to children if they visit inappropriate websites, without necessarily limiting access. Some software incorporates several of these features (Mitchell, Finkelhor, & Wolak, 2005).

Richardson et al. (2002), suggest that it is the level of the blocking setting that has a greater impact than choice of software itself. They simulated adolescent Internet searching and found, at the least restrictive setting, the software blocked 1.4% of health information sites and 87% of pornography sites. The moderate setting blocked 5% of health information sites and 90% of pornography sites; while the most restrictive setting block a much larger number of health information sites (24%) and only increased pornography blocking to 91%

Internet content filters make two kinds of errors: 1) blocking a page that should not be blocked, called overblocking, and 2) failing to block a page that should be blocked, called underblocking (Stark, 2007).

#### **4. Consequences of These Restrictions**

In the USA, Cole (2001) found that 55% of children aged 12–15 stated that they did not tell their parents everything they did on the Internet, yet adults kept an eye on children's Internet use (91%), limited online hours (62%), and used software to filter or block questionable websites (32%); moreover, two-thirds (67%) of children surveyed had to ask permission to access the Internet.

Odabaşı (2005) found that parents showed consideration for filter. According to "UK Children Go Online" survey findings: while 46% of parents claim that there is filtering software on the computer used by their child, 69% of 9–17 year olds who use the Internet at least once a week have some concerns about their parents restricting or monitoring their Internet use, and two thirds of these young people have taken some action (e.g. deleting e-mails, hiding files) to maintain their online privacy from their parents or others (Livingstone & Bober, 2004).

Although filtering and blocking software programs are advertised as preventing youth from encountering pornographic and other inappropriate sexual material online, research findings suggest that many families do not use them (Cole, 2000). 33% of parents in homes with Internet access reported using filtering or blocking software on the computer their child used. Parents who had younger children (10–15 years) were more likely (36%) to use filtering and blocking software. 5% of the parents who reported no current use of filtering or blocking software said they had used it in the past year and had discontinued its use (Mitchell, Finkelhor, & Wolak, 2005).

Studies have recommended the use of Internet content filters as one of many tools to help protect children because they reduce the risks (Stark, 2007; Mitchell, Finkelhor, & Wolak, 2005).

#### **5. Conclusion**

A family's role can not be limited to provide computer and Internet to their children. Families have also responsibilities and duties of taking precautions for their children. They should establish rules for their children about certain online behaviors like talking about sex with and sending personal information to someone met online, and should educate them about the potential dangers associated with such activities (Mitchell, Finkelhor, & Wolak, 2007). And they also should use restriction software as necessary.

Families have anxieties about treats of computer and Internet use but they do not take enough precautions. Children are more confident than their parents in using a computer and Internet, this impacting on the parental skills in managing this new medium. Among children, 92% claim to feel very or fairly comfortable using a computer, compared with 69% of their parents (Livingstone, 2007). A generation gap exists between parents and children in terms of knowledge about computers and the Internet in particular, with children being more computer savvy. So it is not a very easy job for parents to protect their children from harmful contents. Accordingly, it is probably the situations that either parents don't use restriction software or their restriction software can be disabled by their

children easily. As a result, families should get training about computer and Internet use and potential treats. One of the reasons of not using restriction software can be overblocking problem that the software block the access of educational web sites erroneously and don't allow children to search the Internet for educational purposes.

There is clear evidence that filtering software prevents exposure to pornography to some extent (Mitchell, Finkelhor, & Wolak, 2005). So it can be beneficial that technical precautions are taken by professional institutions, ISPs (Internet Service Providers) or government instead of families.

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