
PARENTAL AWARENESS OVER THEIR CHILDREN'S INTERNET USAGE: A REVIEW

Muhammad Arif Mustaqim
Kulliyah of Medicine
International Islamic University of Malaysia
Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, 25200
Kuantan, Pahang Darul Makmur
Email: arifmustaqim96@gmail.com

Muhammad Badrul Nizam
Kulliyah of Medicine
International Islamic University of Malaysia
Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, 25200
Kuantan, Pahang Darul Makmur
Email: baddnizam96@gmail.com

Muhammad Fathul Hakim
Kulliyah of Medicine
International Islamic University of Malaysia
Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, 25200
Kuantan, Pahang Darul Makmur
Email: sopost95@gmail.com

Asst. Prof. Dr. Azwanis Abdul Hadi
Department of Family Medicine
Kulliyah of Medicine
International Islamic University of Malaysia
Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, 25200
Kuantan, Pahang Darul Makmur
Email: azwanis@iium.edu.my

ABSTRACT

The internet has become widely popular in this millenium era and it has evolved to become one of the vital needs in our personal and social life that leads to the improvement in individual quality of life. The role of urbanized parents is extremely imperative since children nowadays are using this technological advancement extensively. Hence, this review mainly discussed regarding parental awareness over their children's internet usage. Internet use pattern and different internet threats among children were also addressed. This review also covered the different mediation strategies adopted by parents to monitor their children's internet use.

Key words: Parents, Internet, Threat, Awareness, Mediation, Children

INTRODUCTION

In the era of rapid globalization of technological advancement, the internet is steadily becoming a part of a person's daily life and routine. The usage of the internet has greatly enhanced a person's quality of life where it has given influential impact on education, as a way of communication, source of entertainment and affecting one's working environment (Ktoridou et. al., 2012). Children regardless of any age seem to be more familiar with the usage of the internet since they are born in this information era. In Malaysia, about 90% of children are engaging with the internet either via broadband or through smartphones as they can access it everywhere (Yusuf et. al., 2014). Since the internet can be a source of knowledge, entertainment and socialization, it benefits the children in a variety of ways. The use of the internet can help children, especially students to improve their knowledge in various fields of education such as in language literacy, grammar, mathematics etc. It is also a great tool for children to gather information regarding a topic on their school projects as they can search for information and inquiries through several search engines available on the internet such as Google®, Yahoo® and others. Richardson (2010) stated that, apart from the usage of the search engines, they can also access knowledge in the form of literature, videos, music through blogs, wikis and established online libraries.

The internet also provides opportunities for children to communicate with their peers regardless from any countries through chat rooms like MSN®, Skype® and other online forums. This present facility enables children to keep in touch and share their experiences, views and perspectives pertaining to any topic of interest with the rest of their friends all around the world from different sociodemographic backgrounds and beliefs. This will improve the children's understanding of world views and eliminate racial boundaries by understanding and accepting each other's differences and uniqueness (Ktoridou et al., 2012; Denić at al., 2017).

As with any other development and advancement of technology, there are many benefits that children can gain from using the internet. But there are also dangers that they need to be aware of such as cyberbullying, cyberpornography and others when engaging with the internet (Ktoridou et al., 2012). That is why parental awareness and their role in mediating their children's accessibility to the internet is vital to ensure that their children do not experience any harm from the internet. Hence, this review article is conducted to discuss the various internet threats to the children, to explore parental awareness and control over their children's internet usage.

METHODOLOGY

An electronic search of available literature was conducted using Google scholar and Scopus. The following keywords were used: Parents, Internet, Threat, Awareness, Mediation, Children. Finally, 27 articles were included in this review and they were organized and synthesized into this review article related to the parental awareness on children's internet usage.

INTERNET THREAT

The internet undeniably has become an indispensable tool in our daily lives because of its unlimited potential. However, it also provides unnecessary threats and inappropriate content to children. They can browse and surf many websites to find what they are looking for whether it is an image, video, or article. Definition of the internet threat is a malignant and destructive act that uses a data communications pathway to access a computer network, without gaining the right authorization or consent from the owner (Arifin et al., 2019). Some of the most common internet threats such as inappropriate content (i.e. pornography), cyber bullying, exposure to sexual predators, credit theft, money frauds, grooming, phishing, pharming, hacking, unsafe downloads and viruses. Sorbring (2012) stated that these threats have become a concern to parents. The children are the ones who are more susceptible to be exposed to these threats compared to adults because they are the ones who spend more time on the internet (Ktoridou et al., 2012). The most common threat in Malaysia is cyberbullying. This is followed by cyberstalking, cybergrooming, paedophilia, and identity theft (Arifin et al., 2019).

Before the era of technology, bullying occurred tangibly. With the advancement of technology, these activities are occurring on the internet and are called cyberbullying. Basically, cyberbullying can be defined as online harassment or abuse. The activity of cyberbullying is to intentionally harm other internet users in a repetitive and aggressive manner. Cyberbullies will make threatening messages, intimidation and post fake pictures of the victims. According to Ktoridou et al. (2012), sexting (sex and texting) is a term where the users exchanged sexually explicit contents without the consent of the person that appeared in the messages.

Electronic communications such as email or instant messaging or messages sent to a website or forum is a method used by the convicts when it comes to cyberstalking. They will impersonate as an anonymous person to enable them to spy on victims (Arifin et al., 2019). Their aim is to physically or emotionally harm or frighten the victims.

Another threat of the internet is cybergrooming. This activity is carried out by an adult who will pretend to be a friend to the children. They will introduce, direct, and convince the children to accept inappropriate sexual content and behaviour. Later on, these adults might want to meet up with the children. The children who are willing to meet physically with these unknown adults might consequently lead to dangers such as adolescent sex and child pornography (Arifin et al., 2019). A study showed that 16.2% of teenagers met with the person who they befriended for the first time via the internet, and this number is sadly underestimated by parents (Liau et al., 2008).

60% of the teenagers are exposed with inappropriate content such as pornography (Sorbring & Lundin, 2012). Nowadays, more teenagers have their own mobile phones and can surf the internet through them. Through mobile phones, they received a lot of spam messages which contain inappropriate materials and contents. Liau et al. (2008) stated that more than half of the teenagers spend their time on pornographic websites and almost half of them surfing gory and violent materials. In addition, 4% of the teens who own mobile phones (12-17 years old) actually sent suggestive sexually semi nudes/nudes' messages and 15 % of mobile-owning teens (12-17 years old) actually received these types of messages from someone they know (Ktoridou et al., 2012). Child pornography is one of the subtypes of pornography. The children involved will be engaged in a sexual exercise and this action is recorded.

The other internet threat that is more dangerous is online predators. They are the one who the parents mention specifically and are worried for their children (Hsiao et al., 2007). The aim of these dangerous people is usually for seduction and sexual abuse. The victims are mostly gay or any boys who questioned their own sexuality. These groups are easier to be targeted as they are more vulnerable compared to the others. One subgroup of predators is called a paedophile. According to the American Psychiatric Association, paedophiles have an ongoing sexual interest in children. In Malaysia, there are many cases associated with child sexual abuse however only minority of them are convicted (Arifin et al., 2019).

Finally, is identity theft. Identity theft can be regarded as when a person uses personal and important information of others such as name, date of birth or phone number that is accidentally exposed or stolen (Arifin et al., 2019). This act is done without the consent of the victims. In Malaysia, the number of cases was proportionally increasing from 2015- 2017 which was from 220 cases to 262 cases.

PARENTAL AWARENESS

Adolescents have the highest tendency to be exposed to inappropriate internet experiences; contact with pornography; violence against a person or group of people; or experiences of being bullied or threatened. However, these experiences are almost out of their parent's awareness. Parents' unawareness of their children's online activities might lead to problematic internet use (Sorbring & Lundin, 2012). According to Yusuf et al. (2014), only 40% of Malaysian parents are generally aware of their children's internet activities, and 1 in 3 of them showed lack of responsibility in governing their children in terms of internet usage. A study showed that mothers have more awareness compared to fathers, this is due to the fact that teenagers are probably closer to their mothers and more comfortable in sharing their experiences with their mothers (Liau et al., 2008). Despite that, some study stated that fathers have higher awareness of their children's online activities because they check the websites visited by their children compared to mothers (Liau et al., 2008).

Another study showed that majority of parents have a medium level of internet threat awareness and they may not fully understand the associated threats (Arifin et al., 2019). This is due to the lack of knowledge and skills of using the internet compared to their children, which will make it difficult to control their children's activities.

The difference in level of awareness among parents might arise from several factors. First is the frequency of the parents' use of the internet. Parents who use more internet have lower awareness of their children's online activity. This is because when the parents spend more time on the internet, they will consider themselves to have more knowledge on how to use the internet. Thus, this will make them less concerned about the negative experiences experienced by the teenagers (Sorbring, 2012). In addition, children's age also affect parents' awareness level. The younger the child, the higher the level of awareness (Ktoridou et al., 2012). This might be due to the parents' belief that older children could take care of themselves. This is probably linked to the parents' general idea of the child's maturity and ability to cope with the negative experiences of the internet (Sorbring, 2012).

Most parents believe the internet can help in their children's growth. It can assist them in educational purposes and thus improve their children's performances in school. The internet also can enhance their children's arithmetic skill. Despite that, parents are also afraid that their children will become victims to internet threats such as sexual or violent images (Ktoridou et al., 2012). They are also afraid that their children will become more isolated from others or risk their own privacy, for example, by willingly giving out their postal address just to win a prize in a contest (Liau et al., 2008). This might lead to an increase in parental awareness on their children's online activities.

Parents' awareness is greater when parents have trust in their children (Sorbring & Lundin, 2012). This trust reflects a good and healthy relationship with their children. This will make it easier for parents to guide their children and they will establish a sense of mutual respect with each other. The children will include their parents in their activities which will result in greater awareness.

Furthermore, there are many different measures that parents use to gain awareness of their children's online activities. Majority of them have a rule about sharing personal information while more than half of parents check their children's activities afterwards. Thus, this active participation of parents will bring a positive effect on awareness on children's activities.

Lastly, parents who have poor parental communication with their children have poor awareness of their children's activities. The quality of communication also reflects the relationship of the family. Children who have poor parental relationships and unsupportive peers might turn to the internet to cope with their stress. This will lead to problematic internet usage (Bleakley, Ellithorpe & Romer, 2016). Thus, when the children are involved with unnecessary activities, they will not tell their parents.

PARENTAL MEDIATION

Due to the risks of internet use, it is expected that parents will be concerned about their children's safety. Generally, there are 3 strategies of parental mediation which are: (1) active mediation, (2) restrictive mediation, and (3) co-viewing (co-using) (Daud et al., 2014).

It is similar to the strategies used for television mediation which fall into categories of instructive (active mediation), making rules (restrictive mediation) and parental modelling (co-viewing) (Shin & Li, 2016). On the other hand, mediation for children playing video games is also the same, where these 3 strategies are implemented that include 'active mediation', 'restrictive mediation', and 'co-playing' (Shin & Huh, 2011).

Therefore, these three strategies can be applied more generally to all media:

(1) Active mediation refers to the discussion between the parents and the child regarding the content while the child is using the Internet. Thus, parents will comment upon the content and discuss it with the children. However, some of the parents are evaluative as they will approve for one of the contents while disapprove towards another (Shin & Li, 2016; Clark, 2011).

(2) Restrictive mediation consists of parents' setting rules that limit the media uses which includes limiting the time spent or content. For example, the time spent for the children will be only for about a few hours per day and restrict any violent or sexual content. However, it does not necessarily discuss the effect of the content. It is basically to control the duration of the children's Internet use and prohibit the contents which are not appropriate (Vaala & Bleakley, 2015).

(3) Co-viewing involves the parents viewing the media or using it together with the children. Therefore, parents will be together with their child while engaging the medium but without talking about the content or its effect (Lee, 2012). However, it is difficult for parents to be involved in their children's activities due to size of the screen, place for sitting, mouse dependence, and the location of the medium (small room or personal room) as compared to the television (Livingstone & Helsper, 2008).

Research about parental television mediation showed consistency in parental approach on controlling the Internet use (as well as video games) and possibly most parents use these methods. However, the Internet has a higher risk than television due to the extreme pornographic or violent content; privacy risk and so on that will increase the anxieties among parents (Wolak et al., 2007; Tripp, 2011). Thus, parents would prefer restrictive mediation as compared to active mediation and co-use (co-viewing) because of the limitations and difficulties of monitoring and parental expertise on the strategies of mediation (Livingstone & Helsper, 2008).

Plus, with the evolution and complexity of digital technology that has produced many children with amazing and competent technological skills in terms of creation of active content, multi-media usage and social interactivity have implied difficult challenges for parents to monitor each of their activities (Sonck, Nikken & de Haan, 2013). Thus, keeping up with these changes, Livingstone and Helsper (2008) came out with the new mediation which is called "monitoring" in which the parents can check their children's visited websites and emails after using the internet either openly or in secret. Moreover, Nikken and Jansz (2014) reported a resemblance in the intervention which is known as "supervision" where the parents monitor their children and the devices used at the same time allowing them to browse the internet when they are physically together.

PARENTAL MEDIATION IN MALAYSIA AND OTHER COUNTRIES.

In Malaysia, four parental mediation strategies were utilized exclusively in relation to the use of the internet, which are: (1) active co-use, (2) interaction restriction, (3) technical restriction, and (4) monitoring (Daud et al., 2014). Active co-use is primarily about describing and implementing restrictions during co-using between the parents and the child for example, restricting the provision of giving out their personal data including online shopping or filling any kind of online forms (Livingstone & Helsper, 2008). Parents will remain nearby while the child is using the Internet and will talk about what they do on the Internet to their children (Livingstone et al., 2011). This is the most commonly used mediation in Malaysia. Though there are many studies that support co-use as beneficial to children, but a study in Malaysia found the opposite instead (Daud et al., 2014).

There are two types of restrictive mediation which are interaction restriction and technical restriction. Interaction restriction refers to parents prohibiting email, online chat or messaging as well as playing video games and downloading movies or music as this could be dangerous activities for them (Livingstone & Helsper, 2008). Daud et al. (2014) found that restriction interaction does not benefit children's positive use of the internet. The other restrictive mediation which is technical restriction, monitors the way the children use the Internet by installing a software on the computer that was used by them (Kirwil et al., 2009). The use of software is surprisingly low, only three tenths of the parents block or filter websites and one quarter of them trace the visited websites by their children (Livingstone et al., 2011). Studies have showed that technical restriction type of mediation is the better strategy since the children will have more opportunities to access online such as education and knowledge (Garmendia et al., 2012). Both restrictive parental meditations are unpopular and most parents claimed they never utilized these types of mediation for their children's Internet use (Daud et al., 2014).

Finally, the fourth strategy of parental mediation is monitoring mediation by regularly checking the computers that were used by the children and monitor the browsing history that were visited by them.^[8] This is the second most used mediation strategy by parents in Malaysia which is tracking their children's website visits and their activities on social media, e.g. Facebook (Daud et al., 2014). Nevertheless, Yusuf et al. (2014) revealed that most parents in Malaysia concentrate more on the physical safety and well-being of their children rather than on the internet risk to their children. After all, 30% of the total study population, agreed that their parents demonstrate a lack of accountability (Yusuf et al., 2014).

In other countries, Kirwil (2009) had done research about Internet mediation among parents across 18 European nations and found that discussion between parents and children about the rules as well as co-use mediation was more popular and efficient in most countries compared to technical restriction strategies. As in the United States, parents would rather co-use the Internet and set rules for children instead of installing blocking or filtering software in the computer that is used by them (Vaala & Bleakley, 2015).

Singaporean parents focused on 3 methods of mediation for their children's internet use which include active mediation, restrictive mediation and monitoring and based on the results of the study, it showed that restrictive mediation and active mediation were more common than monitoring (Shin & Li, 2016). It can be very difficult for busy parents in Singapore to closely monitor the online activities of their children or make suggestions for appropriate online content. And possibly the active and restrictive mediation are much easier and more appropriate strategies for them to comply with the active involvement of their children in digital technology (Shin & Li, 2016).

There are 3 strategies applied in Germany by parents in controlling their children's television and playing video games usage. These include: (1) active-emotional co-use, (2) restrictive mediation, and (3) patronising mediation (Schaan & Melzer, 2015). It is termed as active-emotional co-use because it also includes 'empathy-related aspects' of the media in the discussion between the parents and the child along with shared media use by parents and children (i.e., active co-use) due to active mediation have limitation on providing data and analysing the game content in the new model (Schaan & Melzer, 2015). The next mediation is the classical restrictive mediation, but it also included active aspects, i.e. parents learned themselves about the video game medium, discourage video game use, and encourage critical thinking by concentrating the attention of their children on negative things in

the game. The last mediation was described as patronizing mediation because it is described by observing the video games played by the child and analysing the content of video games (Schaan & Melzer, 2015).

CONCLUSION

The internet has its own benefits and risks. Nowadays, many ways can be used to increase parents' awareness. Social and educational awareness can minimize the gap of knowledge difference between parents and their children, thus can limit the internet threats. Along with good parental control and mediation, it can be an efficient way to protect and educate the children (Ktoridou et al., 2012). The parents who use the internet should be the role model for their children (Denić et al., 2017).

In addition, children are the most likely group to be exposed to internet threats as they are the ones who use it the most and parents always overestimate their children's online activities and control. Parents who spend less time on the computer; have younger children; who see the internet as an important development tool; have high level of trust in their children; have high level parental participation in the internet with their children; and have good communication with their children have greater awareness on their children's online activities. This positivity will prevent their children from indulging themselves in the bad influences of the internet (Bleakley, Ellithorpe & Romer, 2016).

Because of the risk and threats associated with internet, parents will apply strategies on internet mediation. Four types of strategies which a reactive, restrictive, co-using and monitoring. However, there was little evidence that increasing mediation would minimise risks, as was also seen for parental supervision and surveillance of other risks in adolescence (Racz & McMahon, 2011). Yet, parents may use these strategies for restrictions and monitoring practice. Hopefully, teenagers can use the Internet wisely and know their limitations towards it, with or without parental guidance.

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AUTHORS' CONTRIBUTION

All authors have made contribution to this work.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

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