

Hanna Przybyła-Basista, Anna Kołodziej
Poland

Parental Monitoring of the Internet Activity of Young Children and Preadolescents

Abstract

This study explores the influence of three psychological factors of the parental monitoring of children's Internet activity: (i) parents' perception of the Internet as a source of threat and risk, (ii) parents' perception of the Internet as a source of benefits, and (iii) family closeness. The sample consisted of 161 parents (20 fathers and 141 mothers) of children aged 7–12. Results show that family closeness is the most significant predictor for parental monitoring. The second significant predictor is parents' perception of the Internet as a source of threat or risk. As expected, the predictors for parental monitoring of children's Internet activity depend on children's age.

Keywords: *Internet activity, parental monitoring, children, preadolescents*

1. Problem

The Internet has become one of the most popular and important parts of children's leisure-time activities (Van den Eijnden et al., 2010; Valkenburg, 2008). Generally, the age at which children use the Internet for the first time is decreasing across Europe. For instance, it is seven years in Denmark and Sweden and eight in several other countries like Norway, Finland, the UK (Livingstone et al, 2011). In Poland, the average age of the first Internet use is nine (Kirwil, 2011).

The Internet offers many educational benefits. One of the important reasons for using the Internet is access to information on their hobbies and idols and carrying out school assignments (Valkenburg, Soeters, 2001). Social interaction, like making

new friends or getting to know other children, is also important, especially for the age range from 10 to 13. At about 10 years of age, children's need for online social interaction with peers usually rapidly increases (Valkenburg, 2008). However, it is also quite risky for the child user. Children may learn negative behavior patterns and values from computer games and dangerous websites (Juszczak, 2004; Matyjas, 2008).

The rising popularity of the Internet among children and adolescents wakens parental concern because adolescents spend more and more of their free time online. This has become a challenge for parents who want to protect their teenage children from excessive Internet use (Greenfield, 2004; Wang et al. 2005; Van den Eijnden et al, 2010).

Parents are afraid of such negative consequences of using the Internet as the one-sidedness and passivity of their children's leisure activity, possible negative health consequences such as obesity (Van den Eijnden et al, 2010), deterioration in contacts with peers (especially lack of face to face contact). Excessive use of the Internet may result in poor school work, social isolation, engagement in cybersex, face-to-face meeting with someone first encountered online or even Internet addiction (Lin, Lin, Wu, 2009). Leisure boredom and involvement in the Internet enhance the probability of Internet addiction among children (Lin, Lin, Wu, 2009). According Lin and Yu (2008) boredom avoidance is one of the major drivers for using the Internet.

Some studies have reported links between family characteristics and the use of the Internet by children and adolescents (Van den Eijnden et al, 2010; Moore, Whitney, Kinukawa, 2009; Romero, Ruiz, 2007). For instance, the quality of the parent-child relationship was negatively associated with the level of Internet addiction among students (Liu, Kuo, 2007; Van den Eijnden et al, 2010). The lower satisfaction with family functioning was positively related to adolescents' Internet addiction (Van den Eijnden et al, 2010). Only a few studies have addressed the link between actual parenting practices and children's use of the Internet. Up to date it is still not clear whether Internet-specific parenting practices can affect the risk of children's compulsive Internet use (Van den Eijnden et al, 2010).

Parental monitoring of children's and adolescents' activities is an essential issue. More intensive parental monitoring is related to decreasing children's and adolescents' involvement in risky behaviors (Cottrell et al, 2007). Parental monitoring is a key concept in a number of developmental models for adolescent risky behaviors (Romero, Ruiz, 2007). Usually, it is understood as parents' knowledge about their children's daily activities, whereabouts, and acquaintances (Cottrell et al., 2010; Kerr, Stattin, Burk, 2010). Monitoring behavior not only concentrates

on the social network of children and adolescents, such as information about the children's friends and their parents, but it also includes guidelines of acceptable behaviors and rules to follow. In other words, parental monitoring includes both the knowledge of child activities and disciplinary practices (Romero, Ruiz, 2007).

Although a number of studies have examined parents' attitudes towards the Internet, less empirical research has been done to investigate parents' awareness and monitoring of children's Internet use (Liau, Khoo, Ang, 2008). The presented paper is meant as a step towards filling up this gap by investigating the factors affecting parents' monitoring of children's Internet use.

Based on the relevant literature, we assume that three variables: (1) perception of the Internet as a source of threat and risky behavior, (2) perception of the Internet as a source of benefits/support and (3) family closeness would play significant roles when undertaking parental monitoring of children's activity on the Internet. Specifically, we put forward a hypothesis that increasing parental monitoring of children's Internet activity would be positively associated with the family closeness and perception of the Internet as a source of threat/risk, but it may be negatively associated with the perception of the Internet as a source of benefits. We expect that predictors of parental monitoring of children's Internet activity may differ by age, based on the literature reports indicating that parents tend to monitor and supervise their older children (preadolescents, aged 10–12) in a way different from their primary school children (aged 7–9).

The following research questions are posed:

Research question 1. To what extent are parents aware of children's Internet activities?

1a. Does parental awareness vary according to the age of their children?

Research question 2. Which of the assumed variables (i.e., family closeness, parents' perception of the Internet as a source of threat or a risk factor, parents' perception of the Internet as a source of benefits) has a significant effect on the parental monitoring of children's Internet use?

2a. Do predictors of parental monitoring vary according to the age of children?

It is to be noted that the presented study is exploratory in nature.

2. Method

Variables

Parental Monitoring of Children's Internet Activity. A questionnaire called Parental Monitoring of Children's Internet Activity (Przybyła-Basista, Kołodziej,

2012) was used to assess perceptions of parents' supervision of children activities on the Internet. This 12-item questionnaire has been developed and validated by the authors. Parents were asked to assess the degree to which they are engaging in monitoring their children's Internet use. The questionnaire contains, e.g., such items as: "I limit the time my child spends on the Internet", "I speak with my child about the threats and risks when surfing on the Internet", "I watch the computer monitor when my child is on the Internet". Response options ranged from *Never* (0) to *Always* (4). The alpha reliability of the questionnaire was 0.858.

Family Closeness. The level of family closeness was measured with the use of the Family Closeness questionnaire, which has been developed and validated by us (Przybyła-Basista, Kołodziej, 2012). It includes 10 items such as: "In our family there is a common need for spending time together", "In our family there is mutual trust between us and we can count on each other", "In our family we have a lot of common subjects to talk about." Parents assessed each statement on a 5-point Likert scale with responses ranging from 4 = strongly agree to 0 = strongly disagree. The internal reliability was satisfactory – Cronbach's $\alpha = 0.897$.

Internet as a Source of Threat. To measure parents' perception of the Internet as a source of threat and a risk factor we used another questionnaire (Internet as Source of Threat) developed and validated by us (Przybyła-Basista, Kołodziej, 2012). This questionnaire consists of 8 items including such ones as: "I am convinced of the negative impact of materials with pornographic, paedophilic, prostitution and fascist contents placed on the Internet," "I think the Internet can be used for threatening, harassment and cyber-bullying," "Offline meetings with people who were acquainted online can be risky," "Free access to the Internet can result in increasing susceptibility to negative influences (such as propaganda, sects, alcohol, drugs, herbal highs, urging to suicide or anorexia). The respondents rated their level of agreement for each item on a 5-point Likert-type scale ranging from 4 – "Very high degree of threat or risk" to 0 = "No threat or risk". Cronbach's α coefficient for this scale was 0.842.

Internet as a Source of Benefits. Parents' perception of the Internet as a source of benefits was measured by another specific questionnaire (Internet as Source of Benefits) prepared and validated by the authors (Przybyła-Basista, Kołodziej, 2012). This questionnaire contains 8 statements to be rated using a 5-grade scale where 4 denotes – "Very high degree of benefits" and 0 = "No benefit at all". Exemplary items were as follows: "The Internet is a valuable source of information," "The Internet facilitates contacts with other people," "The Internet offers relaxation and entertainment." Cronbach's α coefficient for this scale was 0.838

Participants and procedure

The group of participants in this study comprised 161 parents (20 fathers and 141 mothers) of children at the age of 7–12. The data was collected in confidential and anonymous surveys. Information letters describing the purpose of the research project were sent out to the parents of children from one municipal school in the Upper Silesia region in Poland. Each parent received a set of questionnaires in a separate envelope and was asked to complete and deliver them to the school in a sealed envelope. Participation in the survey was voluntary. Initially over 200 parents had agreed to take part in this project and finally 161 of them completed the questionnaires.

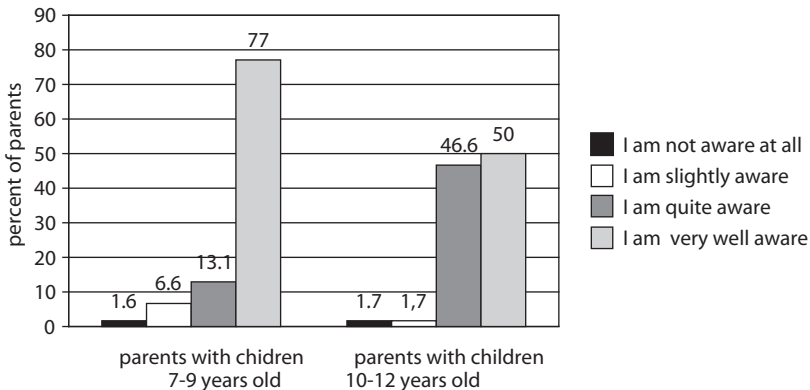
The parents’ age ranged from 26 to 66. The mean age was 37.1 (*SD* = 6.1), so they were relatively young parents. The majority of the parents were married (82.8%), 11.7% were divorced or widowed and 5.5% were remarried. 61 parents had children from 7 to 9 years old; 58 parents had children of the age from 10 to 12, and 26 parents had one older child and one younger.

3. Results

Parents’ knowledge of children’s Internet use – comparison of results for parents of children aged 7–9 and 10–12

Generally, a large majority of the parents participating in the survey reported they were very well (54.4%) or quite well (27.2%) aware what purposes their children were using the Internet for. However, this awareness varied in the two selected

Figure 1. Parents’ awareness of children’s Internet activities – comparison of two groups of parents: (i) with children aged 7–9 and (ii) 10–12.



groups relating to the children's age. Within the group of parents with children aged 7–9 ($N = 60$) more than three quarters (77%) of the participants stated they were very well aware of it. Within the group of parents with children aged 10–12 ($N = 58$) only 50% said the same, whereas 46.6% stated they were quite well aware of their children's Internet activity. The difference between the two groups of parents is statistically significant ($\chi^2 = 16.35$, $df = 3$, $p < 0.001$). A detailed comparison of the responses from the two groups is graphically shown in Figure 1.

Predictors of parental monitoring of children's Internet activity (total group of parents)

The multiple linear regression model was used to determine which of the three psychological factors under investigation (family closeness, parents' perception of the Internet as a source of threat/risk, and parents' perception of the Internet as a source of benefits) play an essential role in the parental monitoring of the children's Internet activity. The results of regression analysis confirmed the high statistical significance of the assumed model. The independent variables of the model explained approximately 21% of the total variance of the dependent variable. The results are shown in Table 1. For the group of all participants ($N = 161$) the parents' perception of the Internet as a source of benefits is not a significant predictor of the parental monitoring. Family closeness is the most significant predictor for parental monitoring ($\beta = 0.342$; $p = 0.000$) and the parents' perception of the Internet as a source of threat/ or risk ($\beta = 0.161$; $p = 0.033$) is the second significant predictor.

Table 1. Predictors of parental monitoring of the children's Internet activity for the total group of parents ($N = 161$)

Variable	<i>b</i>	<i>t</i>	<i>p</i> <
Parents' perception of the Internet as a source of threat/ risk	.161	2.151	.033
Parents' perception of the Internet as a source of benefits	.125	1.686	.094
Family closeness	.342	4.650	.000

Statistics of the model: $R^2 = 2.08$, $F = 13.77$, $df = 3$ $p < .001$

Predictors of parental monitoring of children's Internet activity (children aged 7–9)

In order to provide a meaningful answer to the second research question (2a), which concerned predictors of the monitoring of children's Internet use, a multiple linear regression analysis was performed in the group of parents having children aged 7–9 ($N = 60$). In this group the assumed model appeared statistically insignificant.

nificant ($F = 1.995$; $df = 3$ $p = 0.125$). Consequently, none of the assumed three variables can be considered as a predictor of the children’s Internet activity for this group of parents.

Predictors of parental monitoring of children’s Internet activity (children aged 10–12)

The three variables defined in Section 1 were used in the equation of multiple linear regression to identify predictors of the children’s Internet activity among the parents having children of 10–12 years of age ($N = 58$). The same model, which was statistically insignificant within the group of parents with 7–9 years old children, proved statistically significant for the parents with the children of 10–12 years of age ($F = 10.055$, $df = 3$, $p < 0.001$). Here, the strongest predictor of the parental monitoring of children’s Internet activity is family closeness ($b = 0.417$, $p = 0.001$). The other variables used in the regression equation turned out to be statistically insignificant. The results of the regression analysis for this group of parents are presented in Table 2.

Table 2. Predictors of parental monitoring of children’s Internet activity (children aged 10–12)

Variable	<i>b</i>	<i>t</i>	<i>p</i> <
Parents’ perception of the Internet as a source of threat/ risk	.214	1.861	.068
Parents’ perception of the Internet as a source of benefits	.187	1.572	.122
Family closeness	.417	3.619	.001
Statistics of the model: $R^2 = .358$ $F = 10.055$ $df = 3$ $p < .001$			

In conclusion, the regression analysis in the whole group of respondents has shown that family closeness is the most significant predictor of parents’ monitoring of children’s Internet activity. The second significant predictor was parents’ perception of the Internet as a source of threat or risk.

In the group of parents of older children (10–12 years of age) family closeness appeared as the only, albeit quite significant, predictor of the parental monitoring under investigation. Interestingly, the perception of the Internet as a source of threat or risky behaviour and the perception of the Internet as a source of benefits/support have not proven to be predictors of the parental monitoring of the children’s Internet activity for 10–12-year olds.

4. Discussion and conclusions

This study provides a portrait of parental Internet monitoring of younger (aged 7–9) and older (10–12) children. In the light of the growing popularity of the Internet among children it becomes imperative to protect them against the negative impact the Internet may have. In many investigations, positive effects of parental monitoring have been assumed. Therefore, it is important both from the theoretical and practical viewpoints to explore and verify which variables have an effect on the parental monitoring of children's online activity.

The results of our study show a rather clear picture. The most significant factor from the regression analysis turned out to be family closeness. This is the case for the whole sample of 161 surveyed parents as well as for the sub-sample of parents of older children (10–12 years of age). These findings are in accordance with the results obtained by other researchers. For instance, in their state-of-the-art report, Romero and Ruiz (2007) indicate that closeness to and communication with parents may lead to greater parental monitoring. Hence, family closeness is an important predictor of safe Internet use.

A surprising outcome of our investigation was the result of regression analysis within the sub-sample of the parents of younger children (7–9 years of age). None of the assumed variables turned out to be a predictor of the parental monitoring of children's Internet activity. Several possible explanations of this result can be offered. Firstly, since younger children are under constant care and control of their parents, monitoring of their activity, including that on the Internet, is an obvious and natural process for parents. In other words, parents of younger children do not particularly focus on their children's computer activities as they anyway control all the activities of the child, in most cases doing these activities together with the child. This hypothesis seems to be confirmed by our findings, according to which the majority of parents of younger children (7–9 years old) declared they are aware of the purposes their children are using the Internet for. Another interpretation of this result is of an entirely different nature and is not as optimistic: Parents do not make an effort to monitor their children's Internet activity because they consider it unnecessary. They might think that children of this age are too young to be exposed to threats and risks connected with the Internet.

There is a number of research reports confirming that parental control differs significantly in relation to the child's age. 9 to 10-year-old-children are controlled more frequently as compared to children of 11 to 13. Furthermore, children of 9 to 10 receive a higher level of parental warmth than older children (Valcke et al., 2010). In other investigations it was shown that there is a signifi-

cant developmental difference in parental awareness of children's Internet use (Rosen et al., 2008).

As shown in our study, the second significant predictor of parental monitoring is parents' perception of the Internet as a source of threat or risk. This is consistent with the previous research findings regarding parents' concerns about the negative influence of the Internet on children and adolescents (e.g., Valkenburg, 2008). All bad incidents happening to the child online, like cyberbullying, cyberthreats, suicide attempts, contacts with adult sexual predators seeking naive and innocent children, sexual harassment or attempts at recruiting new members by dangerous online communities "have one element in common: a lack of parental attention to what was happening online" (Willard, 2007, p. 39).

According to many studies, supervising and monitoring the child's online activities are parents' responsibility. It is important that this responsibility and proper implementation of the monitoring rules are taken seriously by parents, so that they appear natural and obvious for children. "The best way to approach monitoring is to make it such a natural and enjoyable experience that your child does not even recognize that what you are doing is monitoring" (Willard, 2007, p. 42). "Parents should be monitoring what children hear and see, discussing issues that emerge and sharing media time with their children" (Juszczyk, 2004, p. 106). Young children and preadolescents are not prepared to make safe and responsible choices online due to their cognitive development. They are not yet able to consistently and effectively perceive the connection between online actions and their consequences (Willard, 2007). Children should be carefully taught by their parents to recognize the potential dangers on the Internet.

There is no doubt that today's children are confronted with a media environment that is very different from the one faced by their grandparents or even their parents. A very specific feature of the problem is that the Internet is a technology children and adolescents are often more knowledgeable about than their parents (Donnerstein, 2009). According to Donnerstein (2009), too often we hear of computer-phobic adults who possess little knowledge of this expanding technology. Such resistance to the technology, combined with a limited knowledge base, will not bring solutions to potential problems. However, children at their developmental cognitive stage have difficulties in recognizing potential risks and predicting the consequences of their activity on the Internet. There is a need for further research on the relationship between Internet-specific parenting practices and children's Internet use.

References

- Cottrell S.A., Branstetter S., Cottrell L., Harris C.V., Rishel C., Stanton B.F. (2007). Development and validation of a parental monitoring instrument: Measuring how parents monitor adolescents' activities and risk behaviors. *The Family Journal*, 15 (4), 328–335.
- Donnerstein E. (2009). The internet. W: V.C. Strasburger, B.J. Wilson, A.B. Jordan (red.). *Children, adolescents, and the media*, [471–498]. Los Angeles-London-New Dheli-Singapore: SAGE Publications.
- Greenfield P.M. (2004). Developmental considerations for determining appropriate internet use guidelines for children and adolescents. *Journal of Applied Developmental Psychology*, 25(6), 751–762.
- Juszczak S. (2004). Media influence on children and adolescents. *The New Educational Review*, 2, 93–110.
- Kerr M., Stattin H., Burk W. (2010). A reinterpretation of parental monitoring in longitudinal perspective. *Journal of Research on Adolescence*, 20 (1), 39–64.
- Kirwil L. (2011). Polskie dzieci w Internecie. Zagrożenia i bezpieczeństwo, cz. 2. Częściowy raport z badań EU Kids Online II przeprowadzonych wśród dzieci w wieku 9–16 lat i ich rodziców. Warszawa 2011, <http://eprints.lse.ac.uk/46445/1/PolandReportPolish.pdf> [dostęp: 30.11.2013].
- Lin C.H., Lin S.L., Wu C.P. (2009). The effects of parental monitoring and leisure boredom on adolescents' Internet addiction. *Adolescence*, 44(176), 993–1004.
- Lin C.H., Yu S.F. (2008). Adolescent Internet Usage in Taiwan: Exploring gender differences. *Adolescence*, 43(170), 317–331.
- Liu C.Y., Kuo F.Y. (2007). A study of Internet addiction through the lens of the interpersonal theory. *CyberPsychology & Behavior*, 10(6), 799–804.
- Livingstone S., Haddon L., Görzing A., Ólafson K. (2011). Risk and safety on the internet. The perspective of European children. Full Findings. LSE, London: Eu Kids Online. [http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20\(2009-11\)/EUKidsOnlineIIReports/D4FullFindings.pdf](http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20(2009-11)/EUKidsOnlineIIReports/D4FullFindings.pdf) [dostęp: 30.11.2013].
- Matyjas B. (2008). Cyberculture: dangers for childhood. *The New Educational Review*, vol. 16, no 3–4, 195–208.
- Moore K.A., Whitney C., Kinukawa A. (2009). Exploring the links between family strengths and adolescent outcomes. http://www.childtrends.org/wp-content/uploads/2013/03/Child_Trends-2009_04_16_RB_FamilyStrengths.pdf [dostęp: 3.01.2014].

- Przybyła-Basista H., Kołodziej A. (2012). Aktywność internetowa dzieci a postawy rodziców i poczucie bliskości w rodzinie. W: W. Tuszyńska-Bogucka (red.) *Wpływy medialne: Szanse i zagrożenia dla współczesnej rodziny* (63–86). Kraków: Wydawnictwo Libron.
- Romero A., Ruiz M. (2007). Does familism lead to increased parental monitoring?: Protective factors for coping with risky behaviors. *Journal of Child and Family Studies*, 16, 143–154.
- Rosen L.D., Cheever N.A., Carrier L.M., (2008). The association of parenting style and child age with parental limit setting and adolescent MySpace behavior. *Journal of Applied Developmental Psychology*, 29, 459–471.
- Wang R., Bianchi S.M., Raley S.B. (2005). Teenagers' Internet use and family rules: A research note. *Journal of Marriage and Family*, 67, 1249–1258.
- Willard N.E. (2007). *Cyber-Safe Kids, Cyber-Savvy Teens*. San Francisco: John Wiley & Sons.
- Valcke M., Bonte S., De Wever B., Rots I. (2010), Internet Parenting Styles and the Impact on Internet Use of Primary School Children, *Computers & Education*, Vol. 55, Issue 2, 454–464.
- Valkenburg P.M. (2008). *Children's responses to the screen. A media psychological approach*. New York-London: Routledge.
- Valkenburg P.M., Soeters K. (2001). Children's positive and negative experiences with the Internet. *Communication Research*, 28, 653–676.
- Van den Eijnden R.J.J.M., Spijkerman R., Vermulst A.A., Van Rooij T.J., Engels R.C.M.E. (2010). Compulsive Internet use among adolescents: Bidirectional parent-child relationships. *Journal of Abnormal Child Psychology*, 38, 77–89.