

Active and restrictive parental mediation as the predictors of adolescents' excessive Internet use

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Abstract

The aim of this paper is to analyse the relevance of parents' active and restrictive mediation of children's online behaviour. The data collected in 2018 in the EU Kids Online survey in Serbia on a nationally representative sample of children aged 9 to 17 years ($N = 1,150$) were used. The SEM model is used to test the possible relationships between parental strategies and excessive internet use (EIU) by examining the paths from active/restrictive practices to EIU (1) through limiting the time spent online and (2) through increasing digital skills. The analysis has shown that both active and restrictive parenting lowers EIU by reducing the time spent online. Restrictive mediation is more strongly related to lowering the time spent online, but, unlike active parenting, it decreases children's digital skills as well.

Keywords: Excessive Internet Use; Active mediation; Restrictive mediation; adolescents; Serbia.

Introduction

The Internet has a decisive role in the lives of adolescents these days. A recent PEW study found that 95% of adolescents in the USA have access to smartphone, and half of them report that they are almost constantly online (PEW, 2018). Great availability of the Internet and the imperative to be online "all the time" often leads to negative consequences. Internet use is sometimes characterized by compulsiveness, lack of control, the feeling of guilt and conflicts with family and friends, described in the literature as Excessive Internet Use (EIU) (Kalmus, Blinka, & Ólafsson, 2015). EIU has been intensively studied in recent years (Kalmus et al., 2015; Šmahel & Blinka, 2012; Kuzmanović et al., 2019; Popadić et al., 2020) and great efforts have been put into the identification of factors that can prevent EIU.

Parents' role in preventing EIU can be very important (Durke et al., 2012; Kalmus et al., 2015; Šmahel et al., 2012; Popadić et al., 2020). They can actively mediate children's online behaviour by encouraging and instructing safe Internet use, jointly browsing the Internet with children etc. This could even increase the time spent online, and as such, the opportunities for online learning, which helps develop digital skills. Parents, alternatively or simultaneously, can take a more passive and restrictive role – they can set rules on what can be done on the Internet, when, with whom and for how long. These restrictions could limit the time spent online, but discourage the digital skills development as well. Thus, these two mediation strategies could "prevent" EIU differently, and in two main ways: by determining the

amount of time that children spend online and/or dis/encouraging the children's digital skills.

This study is aimed at analysing the role of parental mediation practices in adolescents' EIU. More specifically, research aims are to analyse the relationships between parental strategies and EIU by examining the paths from active/restrictive practices to EIU (1) through limiting the time spent online and (2) through increasing digital skills.

Method

Participants

The study was conducted on a random, multistage stratified sample of students, representative of the school population aged 9-17 and in four major statistical regions in Serbia (Belgrade, Vojvodina, Eastern and Southern Serbia, Šumadija and Western Serbia). One class of students from 40 primary and 20 secondary schools was randomly sampled. The sample included 1,150 children in total (52% girls). Children older than 10 are included in this analysis ($M = 14.30$, $SD = 1.87$).

The data were collected in 2018 in the EU Kids Online survey in Serbia (Kuzmanović, Pavlović, Popadić & Milosevic, 2019) via pen-and-paper questionnaires that were administered in schools. Children answered them individually during classes.

Variables and measures

The questionnaire used in the study included a large number of variables. Some of them were included in the present analysis.

Restrictive mediation. Nine questions probing for the presence of restrictive rules in the family regarding the Internet were used as a measure of restrictive mediation ($\alpha = .90$). The children were asked (e.g. 'Are you allowed and do you need parent's permission to visit social networking sites?') whether they were allowed to do certain things such as using a webcam, downloading music or visiting a social networking site (1) anytime, (2) only with permission or supervision, or (3) never. Higher values on this measure imply more restrictive parental practices.

Active mediation. It was measured by eleven questions ($\alpha = .89$). Children were asked how often (1. never / 5. very often) their parents encouraged them to explore and learn things on the Internet or suggested the ways to use the Internet safely (e.g. 'How often does your parent encourage you to research and learn new things online?'). Higher values imply more active mediation.

Time spent online. Children were asked to estimate the number of hours they spent online during a school day and on weekends. The answer categories ranged from (1) *little or no time at all* to (9) *seven hours and more time*. The answers to two questions were averaged and treated as a measure of time spent online.

Digital skills. The assessments of 21 things that children knew how to do online were used as a measure of digital skills. On a scale from 1 to 5, where 1 stands for *not at all true of me* and 5 stands for *very true of me*, children were asked to answer how (un)true of them were different statements (such as ‘I know how to save a photo that I find online’) ($\alpha = .91$). Higher scores imply being more skilful.

Excessive Internet Use. A seven-item scale covering various indicators of EIU was used ($\alpha = .84$). Children were asked to evaluate on a four-point scale (1. never / 5. daily or almost daily) how often they (1) went without eating or sleeping because of the Internet; (2) felt bothered when they could not be on the Internet; (3) caught themselves using the Internet although they were not really interested; (4) spent less time with either family, friends, or doing schoolwork because of the Internet; (5) tried unsuccessfully to spend less time on the Internet; (6) experienced conflicts with the family or friends and (7) thought the amount of time spent on the Internet caused problems for them. Higher scores indicate more prominent EIU.

Results

Correlations between the variables included in the analysis are given in Table 1. All relationships are significant and in the expected directions.

Table 1: Intercorrelations between the included variables

	Active Mediation	Restrictive Mediation	Time online	Digital skills
Restrictive Mediation	.30**			
Time online	-.23**	-.43**		
Digital skills	-.11**	-.51**	.30**	
EIU	-.16**	-.19**	.34**	.11**

* $p < .05$, ** $p < .01$.

The tested model showed a satisfactory fit, $\chi^2(3) = 14.63$, $p < .01$, RMSEA = .07, CFI = .98). Total effects showed that both active and restrictive practices led to lower EIU (Table 2)⁸.

Table 2: Path model with standardized coefficients of active and restrictive mediation on EIU.

Predictors	Indirect effects via the time spent online	Indirect effects via digital skills	Total effects
Active mediation	-.04*	.00	-.04*
Restrictive mediation	-.14**	.00	-.14**

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Both active and restrictive parenting ‘lower’ EIU primarily by reducing the time spent online, which is positively related to the EIU (Figure 1). Compared to the active one, restrictive mediation is more strongly related to lowering the time spent online, thus making it a more important predictor of EIU. Still, unlike active parenting, restrictive parental practices decrease the children’s digital skills as well, making adolescents less digital savvy at the same time.

The relationship of parental practices and EIU is not mediated by adolescents’ digital skills.

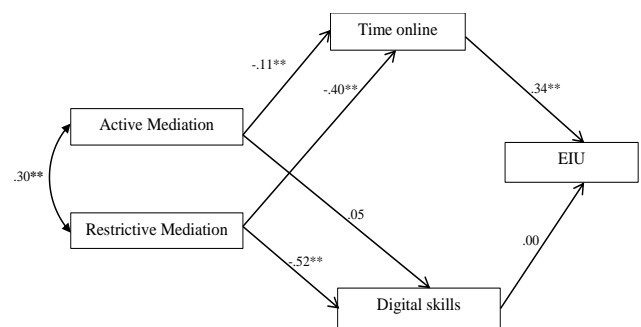


Figure 1: Path model with standardized coefficients of active and restrictive mediation on EIU.

Discussion and Conclusion

Data presented in this paper support numerous previous studies that have shown the important role of parental internet-related practices in preventing EIU among adolescents (Durke et al., 2012; Kalmus et al., 2015; Kuzmanović et al., 2019; Šmahel et al., 2012; Popadić et al., 2020). Simply put, parents’ involvement in children’s online experiences does matter.

The research design of this survey was cross-sectional and the treatment of EIU as the ‘effect’ of parental practices should be taken with caution and in statistical terms. Still, two main conclusions can be made. Limiting the amount of time spent online is a more important mechanism of EIU prevention than building digital competencies in adolescents. In addition, due to it being more strongly (negatively) related to the time spent online, restrictions regarding the Internet use that parents make proved to be more important than active instruction in safe Internet use. Strictly speaking, EIU is more related to the patterns of Internet use and real-life consequences than to online experiences *per se*. It is thus understandable that the rules of Internet use and time limitations are of greater relevance. Active mediation could have a more important role in the cases of bothering experiences online, as previous research has already shown (Šmahel et al., 2012).

It is important to stress the relative unimportance of adolescents’ digital skills for EIU, as well as its specific

⁸ We tested only the significance of the hypothesized indirect paths.

relationship with parental practices. Active mediation is not related to it, while the presence of Internet restrictions is accompanied by a lower level of digital skills. Although clearly useful in minimizing EIU, restrictive mediation can be viewed as a disservice in some other sense. It clearly makes children/adolescents less digital savvy.

In that regard, future research would benefit from a more detailed analysis of the role of digital skills for EIU, primarily in terms of possibly moderating effects of children's age. On the other hand, parental role in children's online behaviour is dependent not just on active and restrictive mediation, but possibly on their own digital skills as well.

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