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PARENTAL PROTECTION OF CHILDREN ON THE INTERNET: RESULTS OF A SURVEY STUDY

Introduction

By observing playgrounds, school classrooms, hallways, and even our homes, we can see that, every day, fewer and fewer young children and young people socialise without using the Internet. They make new friends, but in the virtual world. They create new words that are primarily understood within their own groups, as video games, social networks, and the Internet increasingly shape modern vocabularies.

In addition to using technology and the Internet for good purposes, we often encounter various forms of violence through them. Children, as well as adults, can easily access inappropriate content on the Internet.

The Internet is integrated into the daily lives of adults, children, and adolescents, and health professionals often wonder about the effects of Internet use, screens, and digital media on mental and physical health, as well as on family life. Current evidence shows that digital media differ in their impact on cognition, psychosocial functions, and physical health, and that the benefits and risks are nuanced. As one of the benefits of the Internet and digital technology, Ponti states that age-appropriate online programs, watched together with the family with attention to purpose and within defined limits, can be immersive and informative.[1] Screen media can also improve children's academic achievement, enrich literacy knowledge and skills, and help develop positive relationships with teachers and peers. They can foster both autonomous and collaborative learning, encourage exploration, and, through dynamic software and quality apps and games, increase proficiency and reduce math learning deficits, the author states. In addition, cooperative or competitive video games, played with family and friends, can contribute to cognitive and social development, and recreational screen time at low levels (1 hour per day) is associated with a lower risk of depression compared to no screen time.

On the other hand, the author states that exposure to age-inappropriate or violent content, having a television in the bedroom, and/or having the television on in the background can negatively affect development and behaviour. Watching television for more than 3 hours per day at age 5 predicts increased behaviour problems by age 7. Similarly, higher rates of recreational screen use have been reported in children with higher levels of depressive symptoms and lower levels of physical activity.

The stronger association between depressive symptoms and sedentary leisure-time screen-based activities comes from research on younger children, who

[1] Michelle PONTI: *Digital media: Promoting healthy screen use*. Canadian Paediatric Society. https://cps.ca/en/documents/position/digital-media (Hereinafter: PONTI, 2019.)

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appear to be more vulnerable to the negative socio-cognitive outcomes of excessive screen use than teenagers. In addition to the previously mentioned negative outcomes, excessive screen use can also lead to Internet addiction.[2]

Internet addiction is classified as a behavioural addiction. As the authors state, such behavioural addictions are considered a specific group of mental and behavioural disorders in which the consumption of psychoactive substances is excluded as the cause of the addiction itself.[3] Pontes, Kuss, and Griffits similarly state, describing Internet addiction as an excessive or poorly controlled preoccupation, need, or behaviour related to Internet use, which leads to difficulties and problems in multiple areas of life.[4]

Due to the lack of empirical research in this area, Internet addiction has not been included in clinical diseases, except for Internet video game addiction, which is included among the conditions being considered for inclusion. As a cause of Internet addiction, we can say that many things influence it. Still, research shows that the development of addiction is most contributed to by parental attitudes, the level of family cohesion, and children's exposure to domestic violence.[5] The types of addiction differ according to the activity that a person is most occupied with when using the Internet, and there are several different types. Thus, we distinguish between addiction to various social media (Facebook, Instagram, TikTok), addiction to information (browsing various portals with informative content, Internet encyclopaedias, and the like), addiction to playing video games, addiction to pornographic content, and addiction to online betting.[6]

In children, the most common addiction is addiction to social media and addiction to playing video games, as we can see according to a study by the Brave Phone and the Child Protection Clinic of the City of Zagreb from 2008. which showed that almost all children in the study (95%) reported having a computer at home, and 85% also reported having access to the Internet at home. In comparison, 91% of children and young people declared themselves to be Internet users.[7]

Similarly, UNICEF's 2010 study with Brave Phone found that 95% of children have computers, 85% have Internet access, and 96% have a mobile phone. The most important finding of the study is that more than a third of children aged 10 to 11 use the Internet daily, and the majority do so at ages 14 to 15. Their favourite activities on the Internet are music, films, games, correspondence with

[2] Ibid.
[3] Dora DODIG HUNDRIĆ–Neven RICIJAŠ–Monika VLČEK: *Mladi i ovisnost o internetu: Pregled suvremenih spoznaja [Young people and Internet addiction: A review of contemporary findings]*. Časopis za psihologiju, 2018/1. (54.) 123–137. https://hrcak.srce.hr/file/300090 (Hereinafter: HUNDRIĆ, 2018.)
[4] Ibid.
[5] Ibid.
[6] Joško JURMAN–Vlatka BORIČEVIĆ MARŠANIĆ–Ljubica PARADŽIK–Ljiljana KARAPETRIĆ BOLFAN–Svebor JAVORNIK: *Ovisnost o internetu i video igrama [Addiction to the Internet and video games]*. Socijalna psihijatrija, 2017/1. (45.), 36–42. https://hrcak.srce.hr/178945 (Hereinafter: JURMAN, 2017.)
[7] Petra ROBOTIĆ: *Zamke virtualnog svijeta: Zaštita djece i mladih na internetu i prevencija ovisnosti [Traps of the virtual world: Protecting children and young people online and preventing addiction]*. JAHS, (2015/2 (1.), 81–96. https://hrcak.srce.hr/file/240160 (Hereinafter: ROBOTIĆ, 2015.)

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friends, and the use of specialised social networking sites, such as Facebook, which today would definitely include Instagram and TikTok.[8]

A UNICEF study from 2017 showed that 71% of young people (age group 15-24) worldwide have access to the Internet, compared to 48% of the population. On the other hand, UNICEF estimates that one in three Internet users worldwide is a child or adolescent under 18. They also state that there is growing evidence that children are accessing the Internet at earlier ages. In some countries, children under 15 are as likely to use the internet as adults over 25.[9]

The National Survey on Child Internet Safety[10] indicates that an increasing number of children are accessing the Internet at an early age. The study included 1,017 respondents: 307 children aged 9–11, 377 aged 12–14, and 333 aged 15–17. The survey results showed that almost half of children aged 9 to 11, 2/3 of children aged 12 to 14, and 3/4 of children aged 15 to 17 can access the Internet whenever they want or need to. The same survey showed that children most often access the Internet on smartphones, desktop or laptop computers, and tablets. The most widely used social media among children aged 9 to 17 is Facebook, followed by Instagram.

The latest research, conducted in 2024 by the University of Zagreb Faculty of Education and Rehabilitation Sciences (ERF) in cooperation with Croatian Telecom as part of the „Tools for the Modern Age"[11] project of the program for the prevention of risky behaviour of children on the Internet, in which 2,000 seventh and eighth grade primary school students participated, showed that 61% of children have their own profile on a social media or website for playing video games that they currently use, of which 53.8% are girls and 67.8% are boys. The research also showed that the use of social networks increases with the child's age, i.e., 35% of children aged 9 to 11, 68.1% of children aged 12 to 14, and 76.8% of children aged 15 to 17 have their own profile on a social media or video game website that they used at the time of the research.

Dora Dodig Hundrić from the Faculty of Education and Rehabilitation says that research has also shown that around 40% of students use social media for more than three hours a day,[12] 28.5% of them use social media for three to five hours a day, while 11.7% use social media for more than five hours a day. Dodig Hundrić states that the amount of time spent on digital platforms increases on

[8] Ibid.

[9] UNICEF: *Stanje djece u svijetu 2017: Djeca u digitalnom svijetu* [The state of the world's children 2017. Children in a digital world]. https://www.unicef.org/croatia/media/691/file/Stanje%20djece%20u%20svijetu%202017.%20%E2%80%93%20Djeca%20u%20digitalnom%20svijetu%20.pdf (Hereinafter UNICEF, 2017.)

[10] Lana CIBOCI–Ivana ĆOSIĆ PREGRAD–Igor KANIŽAJ–Dunja POTOČNIK–Dejan VINKOVIĆ: *Nacionalno istraživanje o sigurnosti djece na internetu: HR Kids Online* [National study on children's online safety: HR Kids Online]. 2020. https://hrkids.online/prez/EUKidsOnlineHRfinal.pdf2 (Hereinafter CIBOCI, 2020.)

[11] University of Zagreb Faculty of Education and Rehabilitation Sciences, Croatian Telecom: Tools for the Modern Age". 2024. https://www.hrvatskitelekom.hr/ht-grupa/en/responsibility/tools (Hereinafter ERF, 2024.)

[12] Hrvatska radiotelevizija: *Istraživanje: 40% djece na društvenim mrežama više od tri sata dnevno* [Study: 40% of children spend more than three hours a day on social media]. 2024. https://magazin.hrt.hr/znanost-tehnologija/istrazivanje-40-posto-djece-na-drustvenim-mrezama-vise-od-tri-sata-dnevno-11774768 (Hereinafter HRVATSKA RADIOTELEVIZIJA, 2024.)

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weekends, with 62.3% of students spending more than three hours a day on social networks, 34.8% spending three to five hours a day, and 27.5% spending more than five hours. The research also showed that symptoms of addiction to social media are present in 1.6% of children, which means that their psychosocial functioning is seriously impaired.

In addition to impaired psychosocial functioning, one of the most common problems that children encounter is violence on the Internet and social media. The most common forms of violence, according to another study, conducted in 2023, on the topic of peer violence on the Internet and social media in a representative sample of primary and secondary schools in the City of Zagreb, are: saying bad things about victims of violence via the Internet or messages, spreading gossip on the Internet, and excluding or ignoring them on social media. The study found that 51.6% of primary school students experienced someone saying bad things about them online or in messages; 29% of students were the perpetrators; and 32.3% of primary school students experienced online gossip about them. In comparison, 16.8% did the same, and 29.9% of respondents reported excluding or ignoring someone on social networks, while 41.3% of students experienced this.[13]

Children themselves are not always aware whether they are the perpetrator or the victim, and that this is violence that is also punishable. So parents, in particular, are obliged to take care of their children, monitor their use of the Internet, and protect children in the virtual world.

However, parents today are very often powerless, or at least they feel that way, when it comes to the Internet and their children, because in most cases, as they grow up with technology and the Internet, they know much more than they do themselves, so some parents, out of fear of the unknown sides of the Internet, may resort to complete bans on its use, which is also not good. We should not excessively limit children in acquiring the necessary skills that will enable them to function in the community; we should not arouse fear and suspicion in them, but rather provide them with enough knowledge appropriate to their age so that they are aware of potential dangers.[14]

On the other hand, some parents give their children complete freedom to use the Internet. Still, just as they should not completely prohibit their children from using it, they should also not allow their children's desire for privacy to override their parents' responsibility to monitor them.[15]

Similarly, Ponti states that in addition to lost opportunities for learning, playing, and interacting with family, independent screen use dramatically increases the risk of exposure to harmful content. Research has also shown that children can be overly confident in their ability to protect themselves online.[16]

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[13] Ana LONJAK: *Ne diraj! Opasno igralište novog doba: Dijete nosi svog zlostavljača u džepu, nema odmaka ni sigurnog mjesta [Don't touch! The dangerous playground of a new era: A child carries their abuser in their pocket, with no escape or safe place].* Dnevnik.hr. 2024. https://dnevnik.hr/vijesti/hrvatska/ne-diraj-opasno-igraliste-novog-doba-dijete-nosi-svog-zlostavljača-u-džepu-nema-odmaka-ni-sigurnog-mjesta---880677.html (Hereinafter: LONJAK, 2024.)

[14] Ibid.

[15] Ibid.

[16] PONTI, 2019.

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Parental Control Applications

Parents, of course, cannot constantly monitor what their children do while using the Internet, but various applications can help with parental control.

One of the most famous is Google Family Link, a free, specialised application for Android devices. Like most applications, it offers location tracking and the ability to approve or block applications that the child wants to download from the Google Play Store. The parents can manage the time the child spends on the Internet, and also create child accounts with limited access so that children can only access appropriate features.

The following application is Mobicip. The application is available on Android devices and other platforms, including Windows, Mac, and iOS, and lets you lock your child's device with a single tap. It sends alerts if the child tries to access blocked content or when the device usage time limit is exceeded. It also offers a customizable internet filter, an application blocker, and a location-tracking tool.

Mama Bear is also an app that can help protect children online. The parents can use this application to monitor children's social media content and activities, and read all incoming and outgoing text messages. Like the aforementioned apps, it also offers a location tracking option, and if a child is on the move, whether in a car or a bus, it can react and notify you if the vehicle's speed is above the permitted limit.

One of the apps is Screen Time, which allows parents to set limits on the time their children spend on different apps on their devices. It can also create a list of apps that will always be available, as well as those with limited usage time. Using the Screen Time app, parents can temporarily pause or permanently block a specific app and review and approve the apps their child wants to install on their device.

One of the newer apps for child protection is NetNanny, whose system is based on artificial intelligence that identifies problematic keywords that could indicate online violence, explicit materials, drug use, or other dangerous behaviours and proactively blocks that content. The system is designed to analyse the content of specific subpages and block only inappropriate content, rather than entire websites. As with other applications, you can set a screen usage schedule, track location, and receive reports on time spent on the Internet. The application also monitors social network use and sends a warning if it detects potential risks. The only drawback of the NetNanny application is that it is available only on Windows and Mac devices, whereas the others are also available on smartphones.[17,18]

These are just some of the applications available on the market, either free (like YouTube Kids) or paid (like Aura, Bark, Qustodio, and many others).

[17] Andjela NIKOLIĆ: *Najbolje aplikacije za roditeljsku kontrolu* [Best parental control applications]. vpnMentor. 2020. https://hr.vpnmentor.com/blog/najbolje-aplikacije-za-roditeljsku-kontrolu (Hereinafter: NIKOLIĆ, 2020.)

[18] Školski portal: *9 roditeljskih aplikacija za nadzor djece na internetu i pametnim uređajima* [Nine parental applications for monitoring children on the Internet and smart devices]. 2018. https://www.skolskiportal.hr/sadrzaj/zanimljivosti/9-roditeljskih-aplikacija-za-nadzor-djece-na-internetu-i-pametnim-uredajima/ (Hereinafter ŠKOLSKI PORTAL, 2018.)

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Literature review

Many of the applications we use require an Internet connection, and according to the Central Bureau of Statistics, 88% of respondents in Croatia have access to the Internet[19]. Various studies by numerous authors show that many parents are familiar with Internet parental controls and use them.

One of the studies was a 2019 study conducted for A1 Hrvatska.[20] The company IPSOS surveyed parents' familiarity with child protection applications and how often they use them. The study, which involved 300 respondents, showed that 92% of parents do not use child protection applications and do not have safe access to them, and 93% stated they do not want to use them. In conclusion, the study asserts that contemporary children are being raised in an environment fundamentally different from that of their parents.

Likewise, the new technologies they encounter pose dangers that children (and their parents) are unaware of. They also state that it is actually parents who unknowingly expose children to potential dangers by posting their photos on social networks, without being aware of who can see them or what they can be used for. That is why, in conclusion, they state that parents should educate themselves, engage, and act as a filter between Internet content and their children.[21]

Later, the same research was published in an article by the 24 sata portal, which also publishes A1 data showing that 45% of children use the Internet independently, and 90% of children independently launch and search for the content they want. Likewise, 80% of children live in households with five or more electronic devices, and 97% of them know how to turn on an electronic device independently. They also added that 77% of preschool children take photos and record videos with their mobile phones.[22]

Somewhat earlier, in 2014, Mario Dumančić, Martina Štibrić, and Vesna Markovac from the University of Zagreb Faculty of Teacher Education conducted a study involving 313 respondents on the topic of „Parental Education on Child Protection on the Internet".[23] Their research aimed to determine how educated

[19] Državni zavod za statistiku: *Primjena informacijskih i komunikacijskih tehnologija (IKT) u kućanstvima i kod pojedinaca u 2024* [Use of information and communication technologies (ICT) in households and by individuals in 2024]. 2024. https://podaci.dzs.hr/2024/hr/76943 (Hereinafter: DRŽAVNI ZAVOD ZA STATISTIKU, 2024.)

[20] 24sata: *5 koraka za bolju sigurnost djece na internetu* [Five steps for better children's online safety]. 2019. https://www.24sata.hr/native-sadrzaj/5-koraka-za-bolju-sigurnost-djece-na-internetu-644631 (Hereinafter: 24SATAa, 2019.)

[21] Martina ČIŽMIĆ: *Više od 90 posto roditelja u Hrvatskoj ne zna što im djeca rade na internetu* [More than 90 percent of parents in Croatia do not know what their children do online]. Zimo, 2019. https://zimo.dnevnik.hr/clanak/vise-od-90-posto-roditelja-u-hrvatskoj-ne-zna-sto-im-djeca-rade-na-internetu-557156.html (Hereinafter: ČIŽMIĆ, 2019)

[22] 24sata: *Neprimjerena slika na internetu može ostaviti posljedice na dijete* [Inappropriate images online can leave consequences for a child]. 2019. https://www.24sata.hr/promo-sadrzaj/neprimjerna-slika-na-internetu-moze-ostaviti-posljedice-na-dijete-624801 (Hereinafter: 24SATAb, 2019.)

[23] Mario DUMANČIĆ, Martina ŠTIBRIĆ, & Vesna MARKOVAC: Educiranost roditelja o zaštiti djece na internetu [Parents' level of education regarding children's online protection]. In *14. Dani Mate Demarina: Suvremeni izazovi teorije i prakse odgoja i obrazovanja* [14th Mate Demarin Days: Contemporary challenges of educational theory and practice] University of Zagreb Faculty of Teacher Education, 2014. 71–79. (Hereinafter DUMANČIĆ, 2014.)

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parents are about the dangers and risks on the Internet and how competent they are in protecting their children from it. In their research, they set four hypotheses, which were that there is no statistically significant difference in parental education on child protection on the Internet concerning the age, gender, and educational background of the parents, and that parents in urban areas are better educated about child protection on the Internet than parents in rural areas.

The study found that 89.50% of the parents surveyed own a computer with Internet access, while 10.50% do not. Of the 89.50%, only 36.7% said they use the Internet often, while 52.1% said they use it sometimes. When asked for what purpose they use the Internet, parents stated that 81.4% use it to obtain various information, 29.7% for education/work, 31.16% for communication with other people, and only 16% for downloading and viewing audio and video content.

The authors examined the extent to which parents are educated about protecting children online using several survey questions. The results showed that the majority of parents (63.3%) have a computer in the living room from which their child goes online, while 20.1% go online from a computer in their room. A small proportion of parents (9.3%) answered that the computer is located elsewhere, in the bedroom or study.

As one indicator of education, the authors also listed parents' ability to independently update the operating system, install antivirus software, and use a firewall. Only 38% of respondents reported updating everything independently, and 27.2% reported doing so with the help of someone with the necessary knowledge. A large percentage of parents surveyed, 51.8%, stated that they regularly monitor their child's activities on the Internet, while 25.2% did so occasionally. It is found that 8.4% of parents do not monitor their child, and 4.5% believe their child is sufficiently informed, while 2.9% believe they do not have enough knowledge about the Internet to monitor their child. 29.7% of parents chose the media as their primary source of information on the safety and protection of children on the Internet, and 31.9% chose magazines and websites. The fewest responses, 4.5%, were for education/seminars, while 12.1% of parents reported receiving such information at the school their child attends.

Ivana Lagator, Danijela Šincek, and Ivana Duvnjak from the Josip Juraj Strossmayer University in Osijek and the Faculty of Humanities and Social Sciences in Osijek conducted a study on the topic „Parental supervision and the behaviour of girls and boys on the Internet"[24] whose aim was to examine the relationship between parental supervision and the gender of the respondents with some behaviours on the Internet. Their study, which involved 388 fourth-grade students, showed that 62.6% of respondents have parents who limit their Internet use, and 79.4% state that their parents restrict their use of both the Internet and computers. Of the total number of respondents, 51.3% stated that they talk to

[24] Ivana LAGATOR–Danijela ŠINCEK–Ivana DUVNJAK: *Roditeljski nadzor i ponašanje djevojčica i dječaka na internetu [Parental supervision and the online behaviour of girls and boys]*. Filozofski fakultet Sveučilišta Josipa Jurja Strossmayera u Osijeku [Faculty of Humanities and Social Sciences, University of Josip Juraj Strossmayer in Osijek]. 2018. https://hrcak.srce.hr/file/320613 (Hereinafter: LAGATOR, 2018.)

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their parents about the content they publish, while 54.9% indicated that their parents do not monitor their use of social networks.[25]

On the other hand, in a study conducted by Maja Ravnić Radola,[26] which included 156 parents of early and preschool children, the results showed that 52.2% completely agreed with the statement: „A child uses a digital device only under the supervision of an adult." 21.9% agreed, 15.5% neither agreed nor disagreed, 5.8% disagreed, and 4.5% completely disagreed. When all is said and done, 74.2% of parents responded that they completely agreed or agreed that their child's use of the Internet, or their time spent in front of digital screens, should be monitored.

Regarding parental controls or programs for children's safety and protection on the Internet, 57.1% of parents confirmed using specific programs. In comparison, 32.5% of them do not use any form of safety or protection program. In the research, the author also addressed parental education, finding that 87.1% of parents consider themselves educated about the potential dangers and protections for children on the Internet.[27]

In her research for her graduation thesis, Bernarda Bošnjak[28] found that, out of the total number of respondents (155), 63.9% limit the time their children spend using media daily, and 25.8% as needed. In contrast, 7.7% only do so during the day, and 4% mostly do not. She also asked parents to what extent they talk to their child about how they use and for what purposes they use a digital device, or the Internet, to which 56.8% responded that they spoke to their child in detail, 66% partially, and 0.6%, or one respondent, stated that they did not talk at all. A slightly better result was shown in the question about how much they spoke with their child about the dangers of the Internet and inappropriate content, where 69.5% of respondents spoke in detail, 29.9% spoke partially, and only one respondent did not speak at all. A question that deserves special attention is whether they use parental control on their children's mobile devices, with results showing that of the 107 respondents who answered this question, 63.6% use parental control tools and 36.4% do not. In her research, Bošnjak also asked parents to write down which parental control tools they use, and the most common answer, 81.3%, was Google Family Link, followed to a somewhat lesser extent by Find My Kids, GPS tracker, Find My Kid Pingo, Google Family, Locator 24, Life 360, and iPhone family sharing. Some of the answers were about using a user account, parental control on a mobile phone, and parental control that prevents a child from installing anything without the parent entering a password.

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[25] Ibid.

[26] Maja RAVNIĆ RADOLA: *Sigurnost i zaštita djece na internetu* [*Safety and protection of children on the Internet]*. Master's thesis, Juraj Dobrila University of Pula. 2024. https://repozitorij.unipu.hr/islandora/object/unipu%3A9100/datastream/PDF/view (Hereinafter: RAVNIĆ RADOLA, 2024.)

[27] Ibid.

[28] Bernarda BOŠNJAK: *Stavovi, znanje i informacijske potrebe roditelja o dječjem korištenju medija i digitalnih uređaja [Parents' attitudes, knowledge, and informational needs regarding children's use of media and digital devices]*. Master's thesis, University of Josip Juraj Strossmayer in Osijek, Faculty of Humanities and Social Sciences. 2024. https://repozitorij.ffos.hr/islandora/object/ffos%3A6954/datastream/PDF/view2 (Hereinafter: BOŠNJAK, 2024.)

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When asked for what purposes they use parental controls, parents' answers were to control the applications and games their child downloads, which was reported by 89.7% of parents, while the least, 19.1%, use them to control or monitor messages and calls.[29] In a study conducted by Ivančić,[30] in which 300 parents of children under 18 participated, 80.3% stated that they monitor their children's Internet use, and 9% stated that they do not have parental control over their children's Internet use. Likewise, only 52.3% of parents said they advise and teach their children and discuss the proper use of the Internet with them. The results cited by Ivančić also show that 32% state that they constantly check websites, contacts, messages, and profiles as a form of parental control, while 31% state that they set technical restrictions using blocking and/or filtering software and time limits. Only 5% of parents say they do not supervise their children's internet use. Of the parents who gave this answer, 86.7% have children aged 11 or older.

Of the parents who gave this answer, 86.7% have children older than 11 years. Ivančić also compared the work of Sean Meehan and John Hickey on this topic, which showed that parents monitor the use of the Internet by female children to a much greater extent. In contrast, in her research, the results showed that parents' attitude on this topic is most often neutral, as indicated by the percentage of 48.7% of respondents who neither agree nor disagree with this statement, and more parents, 30.7% of them, disagree with this statement.

Ivona Marić also researched a similar topic[31]. Of the total 82 responses, 78% of parents stated they knew there were parental protection applications, and 22% did not. The applications they listed as known were Google Family Link, YouTube Kids, Family Keeper, Qustodio, Mobicip, and Mama Bear. They also listed some settings the mobile device itself offers for protection, including Screen Time and a password. Among the well-known applications, respondents indicated that they use Google Family Link, Family Keeper, antivirus programs, and their own „physical" surveillance most frequently. Likewise, the research showed that 95.1% of parents are aware of the dangers that threaten their children on the Internet, and Marić supports this with results that show that most parents, 73.2% of them, check their browsing history on the Internet. A large number of parents (82.9%) talk to their child about potential dangers on the Internet and consider it essential to familiarise their child with these dangers. On the other hand, although the majority reported being aware of the risks, the results also show that only 40.2% of respondents supervise their child while using the Internet, while 59.8% do not.

National research on children's safety on the Internet conducted by Lana Ciboci, Ivana Ćosić Pregrad, Igor Kanižaj, Dunja Potočnik, and Dejan Vinković[32]

[29] Ibid.

[30] Martina IVANČIĆ: *Znanje i stavovi roditelja o digitalnim navikama njihove djece [Parents' knowledge and attitudes regarding their children's digital habits]*. Master's thesis, University of Zagreb, Faculty of Croatian Studies, 2021. https://repozitorij.hrstud.unizg.hr/islandora/object/hrstud%3A2655/datastream/PDF/view (Hereinafter: IVANČIĆ, 2021.)

[31] Ivona MARIĆ: *Roditeljska kontrola i zaštita djece u virtualnom svijetu [Parental control and protection of children in the virtual world]*. Master's thesis, University of Slavonski Brod, 2022. https://repozitorij.unisb.hr/islandora/object/unisb:1170 (Hereinafter MARIĆ, 2022.)

[32] CIBOCI, 2020.

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showed that, out of 982 respondents, 40.9% claimed that their children confided in them and asked for help when something upset them, and 55% of children never talked to their parents or guardians about something that bothered or disturbed them on the Internet. Their research showed that parents, 71.4% of them, mostly never use parental controls or monitor which applications their children download.

On the other hand, foreign literature sources bring different results. Kaspersky,[33] a multinational provider of cybersecurity and antivirus protection services, conducted an online survey of 11,000 respondents in September 2021 to explore the role of healthy digital habits in families and the impact of parental habits on children and vice versa. Adults living with children aged 7 to 12 participated in the study. The sample included 1000 respondents from the United Kingdom, France, and Germany, and 500 in each of the following countries: the USA, Turkey, Egypt, Brazil, Colombia, Russia, South Africa, Malaysia, Singapore, the UAE, Saudi Arabia, Nigeria, Peru, Chile, Argentina, and Mexico. The survey showed that almost half of respondents (48%) use parental control applications, and 45% regularly check their children's Internet history. Moreover, 51% of parents reported that their children use digital devices under the supervision of a parent (42%) or a family member (9%). 49% of respondents want to limit the time their children spend online and on their devices during the day, while 23% trust their children and do not control them. The research also showed that parents (87%) bear the primary responsibility for a child's behaviour in the digital space, and that more than a quarter of respondents (28%) believe teachers and schools should do so. In comparison, 27% believe that children should have personal responsibility. In support of this view, 90% of parents have discussed the rules of online behaviour and digital etiquette with their children. Only one tenth of all respondents (10%) did not raise this topic with their children.

Likewise, a June 2023 survey of 2,000 parents of children aged 4 to 16 by the Internet Matters Team in the United Kingdom[34] found that parental awareness of online safety tools remains low. On the other hand, the research showed that 93% of parents are familiar with at least one type of parental control. The question about parental control showed that 4 out of 5 parents (81%) use some form of parental control, while 1 out of 5 parents (19%) who are aware of the possibilities of parental control do not use it.

More than half of parents are also aware of apps that can manage screen time, control gaming consoles, and adjust streaming and search security settings, but less than a third use them. The least parents are aware (37%) of security software apps (e.g., NetNanny, McAfee Family, Norton Family, Circle), while only 15% use them. Parental controls on social media (e.g., Snapchat Family Centre, TikTok Family Pairing, Instagram parental controls) also showed low levels of awareness (42%) and use (19%) among parents.

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[33] Kaspersky: *Freedom and responsibility: 48% of parents use parental control apps*. 2021. https://www.kaspersky.com/about/press-releases/freedom-and-responsibility-48-of-parents-use-parental-control-apps (Hereinafter: KASPERSKY, 2021.)

[34] Internet Matters: *Research tracker: Awareness and usage of parental controls*. 2023. https://www.internetmatters.org/hub/news-blogs/research-tracker-awareness-usage-parental-controls/ (Hereinafter: INTERNET MATTERS, 2023.)

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Researchers asked parents who did not use any online protection for their children (53%) why, and the most common reason was that they did not feel they needed it.[35] Furthermore, in Spain, due to disturbing data such as 31.5% of teenagers using the Internet for more than five hours a day during the week, or 58.4% sleeping with their mobile phones, and 21.6% going online after midnight, as stated in a UNICEF report in Spain, five Spanish ministers have passed a law to protect minors in digital environments.

Among the many sections, as stated by the author of the article[36], one stands out: manufacturers of devices such as smartphones, tablets, and computers will have to include a completely free parental control feature. They state the reason for this: given the concerns about the inappropriate use of digital devices due to their health consequences, or possible access to content that could be harmful to minors. Consequently, all internet-enabled devices will have to include free parental controls.

Methods

The aim of the research

This research aims to examine whether and how parents protect their children online. Specifically, the study investigates parents' knowledge and use of parental protection tools among families with children in lower primary school grades, as well as differences by parents' age, place of residence (rural versus urban), gender, and the child's gender. In addition, the research examines how parental online protection practices vary according to parents' level of education.

Hypotheses

There are five hypotheses in this study:

H1 - There is a statistically significant difference in parental protection of children on the Internet with respect to the age of the parents

H2 - There is a statistically significant difference in parental protection of children on the Internet with respect to the gender of the parents

H3 - There is a statistically significant difference in parental protection of children on the Internet with respect to the parents' place of residence

H4 - There is a statistically significant difference in parental protection of children on the Internet with respect to the level of education of the parents

H5 - There is a statistically significant difference in parental protection of children on the Internet with respect to the gender of the child.

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[35] Ibid.

[36] Laura Pajuelo: *Todos los dispositivos con Internet tendrán que contar con control parental gratuito: Estos son los que ya puedes usar* [All Internet-enabled devices will be required to include free parental controls: These are the ones you can already use]. *El País*. 2025. https://elpais.com/tecnologia/2025-04-09/todos-los-dispositivos-con-internet-tendran-que-contar-con-control-parental-gratuito-estos-son-los-que-ya-puedes-usar.html (Hereinafter: PAJUELO, 2025.)

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Sample

The sample consists of 233 parents, residents of the Republic of Croatia, whose children attend primary school from the first to the fourth grade (Table 1).

Gender	***N***	**%**
Female	198	85.0
Male	34	14.6
Prefer not to say	1	0.4
Total	233	100.0
Age	**N**	**%**
Younger (< 40)	108	47.6
Older (40 and older)	119	52.4
Total	227	100.0
Level of Education	**N**	**%**
Lower	90	38.6
Higher	143	61.4
Total	233	100.0
Place of Residence	**N**	**%**
Rural	67	28.8
Urban	166	71.2
Total	233	100.0

Number of respondents by gender, age, level of education, and place of residence (Table 1)

The number of respondents' children who attend primary school from first to fourth grade is distributed similarly (Table 2).

Grade	***N***	**%**
1	64	27.5
2	53	22.7
3	55	23.6
4	61	26.2
Total	233	100.0

Children's primary school grade (Table 2)

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Instruments

For the research, the authors designed a 34-question survey questionnaire. The first seven questions were multiple-choice, followed by short-answer questions on the parents' and child's age and gender, the parents' education and place of residence, and the school the child attends, including the place and grade.

The remaining questions were also mostly multiple-choice, check-box questions, and several Likert-type scale questions and they related to the child's use of digital technology and the Internet, how much time the child spends online per day, and whether parents use parental control applications for children on the Internet, how familiar they are with what their child is doing online, and whether they consider themselves educated enough to be able to protect their child from the dangers of the Internet.

Procedure

The data are collected via an online questionnaire (Google Forms). Respondents were invited to complete the questionnaire via various social media groups (WhatsApp, Viber, Facebook, etc.). Respondents could complete the questionnaire from January 24, 2025, to March 24, 2025. Respondents took 5 to 10 minutes to complete each questionnaire. The survey was anonymous.

Statistical methods

Descriptive statistics, including frequencies, percentages, tables, and charts, were applied, along with nonparametric statistical methods such as the Chi-square test and the Mann–Whitney U test.

Statistical data analysis was conducted using IBM SPSS Statistics, version 30.0.0.0 (IBM Corporation, 2024).

Results

The majority of children had their first contact with the Internet at an early age. Specifically, 38.2% (n = 89) were first exposed between 3 and 5 years of age, followed by 27.9% (n = 65) between 6 and 7 years of age. Nearly one in five children (18.9%, n = 44) had Internet access before age 3. A smaller proportion first accessed the Internet between 8 and 9 years (12.0%, n = 28), while very few did so at ages 10–11 (0.9%, n = 2). Only 2.1% (n = 4) had not yet had any contact with the Internet at the time of data collection. Overall, these findings indicate that initial Internet exposure typically occurs during early childhood (Table 3).

Child age (years)	***N***	**%**
Not yet	4	2.1
Younger than 3	44	18.9
3 - 5	89	38.2
6 - 7	65	27.9

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8 - 9	28	12.0
10 - 11	2	0.9
Total	233	100.0

Children's age at the time of first contact with the Internet (Table 3)

At the time of data collection, over one quarter of the children (27.5%, n = 64) had not yet received their first digital device. Among those who had, the most common age at first device acquisition was between 6 and 7 years (29.6%, n = 69), followed by 8 to 9 years (24.0%, n = 56). A smaller proportion received their first digital device between 3 and 5 years of age (14.6%, n = 34), while very few did so before the age of 3 (0.9%, n = 2) or between 10 and 11 years (3.4%, n = 8). Overall, these findings suggest that ownership of a first digital device generally occurs later than initial Internet exposure, most commonly during the early years of primary schooling (Table 4).

Child age (years)	***N***	**%**
Not yet	64	27.5
Younger than 3	2	0.9
3 - 5	34	14.6
6 - 7	69	29.6
8 - 9	56	24.0
10 - 11	8	3.4
Total	233	100.0

Children's age at the time they got their first digital device (Table 4)

A majority of respondents reported using parental control applications. Specifically, 61.8% (n = 144) reported using such applications, while 38.2% (n = 89) reported not using parental control tools. These results suggest that a substantial proportion of families use parental control applications, although a sizeable minority do not (Table 5).

Answer	***N***	**%**
Use	144	61.8
Do not use	89	38.2
Total	233	100.0

Number of respondents who use and do not use the parental control applications (Table 5)

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The majority of respondents reported using the built-in parental control application Family Link (108 respondents). The frequently used ones are YouTube Kids (50 respondents) and Screen Time (8 respondents) (Table 6).

Application	***N***
Family Link	108
Youtube Kids	50
Screen Time	8
Qustodio	2
Kids360 App	1
Kidslox	1
Mobicip	1

Most frequently used parental control applications (Table 6)

Seven questionnaire items were used to confirm or reject the following hypotheses:

1. Have you ever attended a lecture or workshop on online child safety and parental controls?

The majority of respondents (n = 150, 64.4%) reported not attending a lecture or workshop on online child safety and parental controls. In contrast, the rest reported that they did (n = 83, 36.6%) (Table 7).

Answer	***N***	**%**
Yes	83	36.6
No	150	64.4
Total	233	100.0

Number of respondents who attended a lecture or workshop on online safety and parental controls (Table 7)

2. Have you ever looked independently for information on online child safety and parental controls?

The majority of respondents (n = 164, 70.4%) independently sought information on online child safety and parental controls, while 69 respondents (29.6%) reported not doing so (Table 8).

Answer	***N***	**%**
Yes	164	70.4
No	69	29.6
Total	233	100.0

Number of respondents who independently looked for information about online child safety and parental controls (Table 8)

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3. Are you familiar with any applications or tools used for online parental control?

The majority of respondents reported familiarity with some applications or tools for online parental control (n = 150, 64.4%); 49 reported they are not sure (21.0%); and 34 stated they are not (14.6%) (Table 9).

Answer	*N*	%
Yes	150	64.4
No	34	14.6
Maybe	49	21.0
Total	233	100.0

Number of respondents who are familiar with any applications or tools used for online parental control (Table 9)

4. Do you currently use any parental control applications?

There are 144 respondents (61.8%) who reported that they currently use some parental control applications, and there are 89 respondents who do not (38.2%) (Table 10).

Answer	*N*	%
Yes	144	61.8
No	89	38.2
Total	233	100.0

Number of respondents who currently use any parental control applications (Table 10)

5. Do you use built-in parental control features on your child's phone or tablet (e.g., Screen Time, App Usage Limits, or similar)?

Almost half of the respondents (n = 108, 46.4%) reported using the built-in parental control features on their child's phone or tablet, and the other half (n = 113, 48.4%) reported not using them, while 10 respondents did not know. Two respondents' children do not use mobile devices (Table 11).

Answer	*N*	%
Yes	108	46.4
No	113	48.4
I do not know	10	4.3
Children do not use mobile devices	2	0.9
Total	233	100.0

Number of parents using built-in parental control features on their child's phone or tablet (Table 11)

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6. Do you feel that you are adequately protecting your child online?

Almost half of the respondents (n = 108, 46.4%) reported feeling they are adequately protecting their children online, while 48 respondents (20.6%) reported they are not. One-third of the respondents (n = 77, 33.0%) reported not knowing (Table 12).

Answer	*N*	%
Yes	108	46.4
No	48	20.6
I do not know	77	33.0
Total	233	100.0

Number of parents who think that they adequately protect their child online (Table 12)

7. I believe that I devote enough attention to protecting my child online.

The majority of respondents (n = 157, 67.4%) reported agreeing or strongly agreeing with the statement that they devote sufficient attention to protecting their children online; 58 (24.9%) neither agreed nor disagreed; and 18 (7.7%) disagreed or strongly disagreed.

Answer	*N*	%
1 - Totally disagree	4	1.7
2 - Disagree	14	6.0
3 - Neither agree nor disagree	58	24.9
4 - Agree	75	32.2
5 - Totally agree	82	35.2
Total	233	100.0

Respondents' opinion on their attention to protecting their child online (Table 13)

Evaluation of Proposed Hypotheses

H1 - There is a statistically significant difference in parental protection of children on the Internet with respect to the age of the parents

Questionnaire item	Test results	Statistically significant
1 - attended a lecture	$\chi^2 = .319$, df = 1, $p = .572$	No
2 - independently looked for information	$\chi^2 = 10.551$, df = 1, $p = .001$	**Yes**
3 - familiar with applications or tools	$\chi^2 = .485$, df = 2, $p = .785$	No
4 - use parental control applications	$\chi^2 = .030$, df = 1, $p = .863$	No

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5 - use built-in parental control	χ^2 =9.181, df = 2, p = .010	**Yes**
6 - adequately protecting	χ^2 = 4.418, df = 2, p = .110	No
7 - enough attention	U = 5188.500, p = .009	**Yes**

Test results for hypothesis H1 (Table 14)

A higher percentage of older parents (80.7%) than younger parents (60.2%) independently researched parental protection of children on the internet (χ2 = 10.551, df = 1, p = .001).

Older parents (51.3%) use the built-in protection options in the operating system more often than younger parents (40.7%) (χ2 = 9.181, df = 2, p = .010).

Younger parents (Mean Rank = 125.46) are more likely to believe that they are paying enough attention to protecting their child online than older parents (Mean Rank = 103.60) (U = 5188.500, p = .009)

Only three of seven tests show a statistically significant difference in parent age (Table 14), so the hypothesis H1 is rejected.

H2 - There is a statistically significant difference in parental protection of children on the Internet with respect to the gender of the parents

Questionnaire item	**Test results**	**Statistically significant**
1 - attended a lecture	χ^2 = 2.427, df = 2, p = .297	No
2 - independently looked for information	χ^2 = 1.160, df = 2, p = .560	No
3 - familiar with applications or tools	χ^2 = 4.055, df = 4, p = .399	No
4 - use parental control applications	χ^2 = 1.742, df = 2, p = .418	No
5 - use built-in parental control	χ^2 = .724, df = 4, p = .605	No
6 - adequately protecting	χ^2 = 2.846, df = 4, p = .584	No
7 - enough attention	U = 2883, p = .161	No

Test results for hypothesis H2 (Table 15)

None of the tests show a statistically significant difference with respect to the gender of the parents (Table 15), so the hypothesis H2 is rejected.

H3 - There is a statistically significant difference in parental protection of children on the Internet with respect to the parents' place of residence

Questionnaire item	**Test results**	**Statistically significant**
1 - attended a lecture	χ^2 = 1.742, df = 1, p = .187	No
2 - independently looked for information	χ^2 = .277, df = 1, p = .599	No
3 - familiar with applications or tools	χ^2 = .519, df = 2, p = .772	No
4 - use parental control applications	χ^2 = .323, df = 1, p = .570	No

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5 - use built-in parental control	χ^2 = 3.307, df = 2, p = .191	No
6 - adequately protecting	χ^2 = 1.234, df = 2, p = .516	No
7 - enough attention	U = 4262.000, p = .003	Yes

Test results for hypothesis H3 (Table 16)

Parents who live in rural areas (Mean Rank = 136,39) are more likely to believe that they are paying enough attention to protecting their child online than parents who live in the city (Mean Rank=109,17) (U = 4262.000, p = .003)

Only one of seven tests shows a statistically significant difference with respect to the parents' place of residence (Table 16), so the hypothesis H3 is rejected.

H4 - There is a statistically significant difference in parental protection of children on the Internet with respect to the level of education of the parents

Questionnaire item	**Test results**	**Statistically significant**
1 - attended a lecture	χ^2 = 3.397, df = 1, p = .065	No
2 - independently looked for information	χ^2 = 1.286, df = 1, p =.257	No
3 - familiar with applications or tools	χ^2 = 5.008, df = 2, p = .082	No
4 - use parental control applications	χ^2 = 2.012, df = 1, p = .156	No
5 - use built-in parental control	χ^2 = 1.623, df = 2, p = .444	No
6 - adequately protecting	χ^2 = .442, df = 2, p = .802	No
7 - enough attention	U = 5379,500, p = .027	**Yes**

Test results for hypothesis H4 (Table 17)

Parents with a lower level of education (Mean Rank = 128,73) are more likely to believe that they are paying enough attention to protecting their child online than higher educated parents (Mean Rank = 109,62) (U = 5379.500, p = .027)

Only one of seven tests shows a statistically significant difference with respect to the parents' level of education (Table 17), so the hypothesis H4 is rejected.

H5 - There is a statistically significant difference in parental protection of children on the Internet with respect to the gender of the child

Questionnaire item	**Test results**	**Statistically significant**
1 - attended a lecture	χ^2 = .069, df = 1, p = .793	No
2 - independently looked for information	χ^2 = .051, df = 1 , p =.822	No
3 - familiar with applications or tools	χ^2 = 1.449, df = 2, p = .485	No
4 - use parental control applications	χ^2 = .944, df = 1, p = .331	No

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5 - use built-in parental control	$\chi^2 = 1.760$, df = 2, $p = .415$	No
6 - adequately protecting	$\chi^2 = 3.096$, df = 2, $p = .213$	No
7 - enough attention	U = 6166.000, $p = .373$	No

Test results for hypothesis H5 (Table 18)

None of the tests show a statistically significant difference with respect to the gender of the child (Table 18), so the hypothesis H5 is rejected.

Discussion

The results of the National Study on Children's Online Safety[37] showed that almost half of children aged 9 to 11, two-thirds of children aged 12 to 14, and three-quarters of children aged 15 to 17 can access the internet whenever they want or need to. The research conducted for this paper showed even more negative results, confirming that children are gaining access to the internet at increasingly earlier ages. The largest number of responses referred to the age range of three to five years, with 38.2% of parents stating that this was when their child first accessed the internet. Slightly fewer parents (27.9%) reported that their child first accessed the internet between the ages of six and seven, while 12% stated that this occurred at eight or nine years of age. Among parents, 18.9% reported that their child first accessed the Internet before age three, while only a small proportion reported that their child first accessed the Internet at 10 or 11 years of age. A total of 0.9% of parents claimed that their child still does not have access to the Internet.

That there is nothing positive about this, particularly for primary school children, is also demonstrated by data from a study conducted by the ERF in 2023,[38] which found that 51.6% of primary school pupils experienced someone saying unpleasant things about them via the internet or messages, while 29% of pupils admitted to being perpetrators of such behaviour. 32.3% of primary school pupils reported experiencing online rumours about themselves, while 16.8% admitted spreading them. 29.9% of respondents admitted excluding or ignoring someone on social media, while 41.3% of pupils experienced this. Parents play the most essential role in protecting children; therefore, this study also included questions about inappropriate content and online violence. In this context, 74.2% of parents stated that their child would turn to them if they encountered inappropriate content, and a similarly high proportion of respondents (91.4%) stated that their child had not experienced any form of online violence. In comparison, 5.2% of parents did not know.

On the other hand, the National Study on Children's Online Safety[39] showed that, out of 982 respondents, 40.9% claimed that their children had confided in them and sought help when something had upset them, while 55% of

[37] CIBOCI, 2020.
[38] HRVATSKA RADIOTELEVIZIJA, 2024.
[39] CIBOCI, 2020.

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children had never talked to their parents or guardians about something that bothered or upset them online.

In addition to online violence, addiction, and the use of social networks are also problems. The study mentioned in this paper's introduction, conducted by the ERF,[40] shows that 40% of pupils use social networks for more than three hours a day during the week. Between three and five hours a day are spent on social networks by 28.5% of pupils, while 11.7% spend more than five hours a day. The research conducted for this master's thesis showed that 70.4% of respondents reported that their child does not use social networks, while 29.6% reported that their child does. Unlike the study conducted by Ciboci et al., which showed that Facebook was the most commonly used social network among children aged 9 to 17, followed by Instagram,[41] respondents in this study most frequently stated that the social network used was WhatsApp (15.9%), followed by Viber (15.9%). The next highest percentage indicated that children use Snapchat and TikTok.

Parents are those who should and can protect their children online, and how and to what extent they actually do so is shown by the results of this study. It showed that 87.1% of respondents (N = 233) know what their child is doing online, while 11.6% know only occasionally. A tiny proportion of respondents (1.3%) do not know what their child is doing online. Furthermore, a large percentage of respondents (90.6%) stated that they completely agree with the claim that they need to know what their child is doing online. Similar results were obtained by Ivančić,[42] who found that 80.3% of respondents (N = 300) reported monitoring their children's Internet use, while only 9% reported not having parental supervision over their children's Internet use. On the other hand, the study showed that, out of the total number of respondents (N = 233), 64.4% of parents know which parental control applications exist to protect children online, and 21% responded that they might know. In comparison, 14.6% of parents do not know which parental control applications are available. Similar results were obtained by Marić,[43] who found that of 82 responses, 78% of parents reported knowing that parental control applications existed, while 22% did not. Likewise, a study by the Internet Matters Team[44] found that the vast majority of parents (93%) are familiar with at least one type of parental control.

Accordingly, the study also examined how much parents, given their level of awareness, actually use parental control applications. In contrast to a 2019 study by A1 Hrvatska,[45] which showed that 92% of parents do not use applications for child protection and safe access, and that 93% stated they do not wish to use them, the research conducted for this master's thesis showed that more than half of respondents (61.8%) use some form of parental control application, while 38.2% do not use any. Similar results were obtained by Bošnjak,[46] who found that 63.6% of respondents use parental control tools, while 36.4% do not.

[40] HRVATSKA RADIOTELEVIZIJA, 2024.
[41] CIBOCI, 2017.
[42] IVANČIĆ, 2021.
[43] MARIĆ, 2022.
[44] INTERNET MATTERS, 2023.
[45] 24SATAa, 2019.
[46] BOŠNJAK, 2024.

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A study conducted by Kaspersky[47] also found that almost half of respondents (48%) use parental control applications, and 45% regularly check their children's browsing history. Moreover, 51% of parents stated that their children use digital devices under parental (42%) or family member (9%) supervision. The Internet Matters Team[48] also reported positive results, showing that 81% use some form of parental control, while only 19% are aware of parental control options but do not use them. Given that more than half of respondents use parental control tools, a question was also posed regarding which application or parental control option they use. The study showed that the largest proportion of parents (75.8%) chose Google Family Link. The second most common choice was YouTube Kids, selected by 32.7% of parents. A small number of parents (5.6%) chose Screen Time as a protective measure for their child, while only 0.7% selected Mobicip. Other responses that were not offered as options included Apple Family (0.7%), Kids Lock (0.7%), Kids360 (0.7%), and Qustodio (1.4%). Similar results were obtained by Bošnjak,[49] who found that 81.3% of respondents most often use Google Family Link, followed by Find My Kids, GPS Tracker, Find My Kid Pingo, Google Family, Locator 24, Life360, and iPhone Family Sharing. Research conducted by Marić[50] also yielded similar results, with respondents identifying Google Family Link, YouTube Kids, Family Keeper, Qustodio, Mobicip, and Mama Bear as well-known applications. Among the known applications, respondents most frequently reported using Google Family Link, Family Keeper, antivirus programmes, and their own "physical" supervision. In addition to parental control applications, parents can use protection or restriction features built into device operating systems. The extent to which these are used is shown by the results of this study: 46.4% of respondents confirmed using built-in parental control or restriction features, 48.1% do not use them, and 1.3% do not know whether they use them. In Bošnjak's study, some respondents also stated that they use user accounts, parental controls on mobile phones, and parental protection that prevents a child from installing anything without the parent entering a password. Similar results were reported by Marić,[51] who found that respondents identified specific settings offered by mobile devices themselves as parental protection, such as Screen Time and password settings.

In addition to the research results presented, five hypotheses were formulated for the study. However, the results showed no statistically significant differences in parental protection of children by age, gender, place of residence, or level of education. These results are consistent with the findings of a study conducted in 2014 by Dumančić et al.,[52] which also showed that there is no statistically significant difference in parents' level of education regarding children's online protection with respect to parents' age, gender or educational attainment, and that parents in urban areas are better educated about children's online protection than

[47] KASPERSKY, 2021.
[48] INTERNET MATTERS, 2023.
[49] BOŠNJAK, 2024.
[50] MARIĆ, 2022.
[51] Ibid.
[52] DUMANČIĆ, 2014.

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parents in rural areas. Furthermore, Ivančić[53] found that parents monitor Internet use more closely for female children. In her study, as well as in the present study, results showed that parental attitudes on this issue are most often neutral. This was demonstrated by 48.7% of respondents who neither agreed nor disagreed with the statement, while a larger proportion of parents (30.7%) disagreed. This result is also confirmed by the findings of this master's thesis, in which, as already mentioned, the fifth hypothesis was rejected, as no statistically significant difference in parental protection of children was found with respect to the child's gender.

Conclusion

This study confirmed previous research and showed that there is no statistically significant difference in parental protection of children on the internet concerning parents' age, gender, place of residence, level of education, or their child's gender. Consequently, all research hypotheses were rejected. The most remarkable statistically significant difference is evident in responses to the question of whether parents believe they devote sufficient attention to protecting their child online. Regarding age, younger parents are more likely to believe they devote adequate attention to protecting their child than older parents. The same view is held by parents living in rural areas and by those with lower levels of education. A worrying finding of the study is that more than half of respondents (61.4%) stated that their child has their own mobile device; it should be emphasised that these are children attending the first to fourth grades of primary school. Likewise, respondents stated that their child first accessed the Internet between the ages of three and five, and received their first digital device before starting the first grade (between six and seven years of age). Accordingly, it might be expected that parents are mainly familiar with and actively use parental control measures for children's online activities; however, the research data showed that only slightly more than half of respondents (61.8%) use a parental control application. Parental protection of children online is a crucial topic. It should be discussed more frequently within the parenting community through the organisation of lectures and workshops to raise parents' awareness of the dangers of the internet and social networks, as well as the overall importance of protecting children online.

It is necessary to accept the fact that children today grow up with the Internet and that it is impossible to avoid its use; however, if they already use it, they should be provided with safe access to the information they need. It is essential to prevent the development of addiction, as well as the possibility of them becoming victims or perpetrators of violence on social networks. For this very reason, parents should educate themselves as much as possible about parental controls, the available applications, and the options for protecting their children online. Consequently, children should also be educated about the dangers that lurk on the internet, so that, together with their parents, they can protect themselves. There can never be too many warnings, safeguards, or education about that.

[53] IVANČIĆ, 2021.

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Absztrakt

A GYERMEKEK SZÜLŐI VÉDELME AZ INTERNETEN: EGY FELMÉRÉS EREDMÉNYEI

Ez a tanulmány a Horvát Köztársaságban az alsóbb osztályokba járó gyermekek szülei körében végzett felmérés eredményeit mutatja be, amely a gyermekek internetes szülői védelmét és a szülői felügyeleti alkalmazások használatát vizsgálta. A felmérés célja a szülők hozzáállásának feltárása volt gyermekeik online töltött idejéhez, védelméhez, valamint ahhoz, hogy a szülők biztosítják-e és hogyan biztosítják gyermekeik biztonságát az interneten. A felmérést névtelenül, egy 34 kérdést tartalmazó online kérdőív segítségével végezték. Összesen 235 szülő vett részt a felmérésben, közülük 14,6%-a férfi és 85%-a nő volt, míg 0,4%-uk úgy döntött, hogy nemet mond a kitöltésre. Az eredmények azt mutatták, hogy a gyermekek internetes szülői védelmében nincs statisztikailag szignifikáns különbség a szülők életkora, neme vagy lakóhelye tekintetében. Hasonlóképpen, nem találtak statisztikailag szignifikáns különbséget a szülők iskolai végzettsége vagy a gyermek neme alapján sem.