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## ANALYSIS OF THE CHILDREN'S MOTIVATION FOR THE INTERNET USE AND THEIR ACTIVITIES IN THE ONLINE ENVIRONMENT <sup>a</sup>

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### Abstract

The aim of this research was to explore the presence of information technologies in children's homes in Serbia and children's activities in the online environment, according to their age, gender and economic status, based on the theory of uses and gratifications. The research adopted the survey technique, investigating 979 children aged from 7 to 13 in five cities in Serbia: Belgrade, Niš, Novi Sad, Šabac and Valjevo. The results of our study indicate that children's age and economic status influence their usage of the computer and of the Internet, while both gender and age determine their preferred activities. It is established that there is a digital gap between the European and Serbian children. The lower opportunity to access the Internet may negatively affect children's academic performances. Variations in the patterns of the Internet usage between boys and girls have been narrowed, while boys still remain in higher risks to be exposed to the unsafe content and behaviour in the web space. Motivation for online activities is moderated by the children's age. Educational consequences are discussed and suggestions provided.

**Key words:** children, Internet, uses and gratifications theory, online activities, motives.

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## АНАЛИЗА ДЕЧИЈИХ МОТИВА ЗА КОРИШЋЕЊЕ ИНТЕРНЕТА И ЊИХОВИХ АКТИВНОСТИ У ОНЛАЈН ОКРУЖЕЊУ

### Апстракт

Циљ овог истраживања био је да се испита присуство информационих технологија у домовима деце у Србији, као и њихове активности у онлајн окружењу, посматрано према њиховим годинама, полу и економском статусу, засновано на теорији користи и задовољства. У истраживању је као техника коришћен упитник, док је узорак укључивао 979 деце узраста од 7 до 13 година из пет градова у Србији: Београда, Ниша, Новог Сада, Шапца и Ваљева. Резултати нашег истраживања указују на то да узраст и економски статус деце утичу на њихово коришћење рачунара и интернета, док пол и старост одређују њихове омиљене онлајн активности. Утврђено је да постоји дигитални јаз између европске и српске деце. Мања могућност приступа интернету може се негативно одразити на дечије академске перформансе. Разлике у коришћењу интернета између дечака и девојчица се смањују, али дечаци и даље остају у ризичнијем положају да буду изложени небезбедним садржајима и понашању у веб-простору. Мотивација за онлајн активности условљена је дечијим годинама. Дискутовано је о последицама за образовни сектор и предложене су могуће мере.

**Кључне речи:** деца, интернет, теорија користи и задовољства, онлајн активности, мотивација.

### INTRODUCTION

The great presence of the Internet in children's lives is clearly demonstrated by the names such as "gen.com" or "Net generation" which several authors (e.g. Gorman, Nelson, & Glassman, 2004) use when describing young generations. The data of the research undertaken in Serbia in 2010 (IREX & Ipsos Strategic Marketing) and in 2012 showed that nine out of ten persons aged 12-29 use the Internet, while the national average is about 75% (Statistical Office of the Republic of Serbia, 2014a). Regardless of the country of origin, most of the children access the Internet from their homes (Mediapro, 2006).

In addition, the findings persistently demonstrate that children's total computer exposure increases with their age (Calvert, Rideout, Woolard, Barr, & Strouse, 2005; Harris, Stracker, & Pollock, 2013), while the gender differences in computer time have not been established (Calvert et al., 2005; Rideout et al., 2010). Surprisingly, not so many studies addressed the relationship between children's (or their families') economic status and their access to computer and the Internet. A few researches (Roberts, Foehr, Rideout, & Brodie, 1999; Jackson et al., 2007) that explored this correlation revealed that the rise in income influenced the probability that a child would have a computer at home.

Furthermore, stemming from the theory of uses and gratifications we attempted to gain a better discernment of children's activities performed online. Uses and gratifications theory was defined in the early seventies by Katz, Blumler & Gurevitch (1974) and the main goal was to explain what kind of needs people can fulfil through media usage. The gratifications that audience can accomplish through media usage are numerous: usefulness, intention, selectivity according to the person's interests and resistance to influences (Blumler, 1979). Lwin et al. (2012) assert that the uses and gratifications theory is useful for understanding children's motivations for Internet usage, distinguishing three most common motives – information seeking, entertainment and socializing. In line with that, Arsenijević (2014) highlights that the media are an important agent in the shaping of the modern man, while their main roles remain to be: source of information, means of communication, learning, and entertainment.

Additionally, certain findings (Jackson et al., 2007; Livingstone & Haddon, 2012) suggest that older children are more prone to access the Internet, whereas the results on this activity according to children's gender are equivocal (Gross, 2004; Lenhart, Purcell, Smith, & Zickuhr, 2010). Concerning the gender differences, both parents and adolescents in one study (Wartberg, Kammerl, Bröning, Hauenschild, Petersen, & Thomasius, 2015) reported excessive media use more frequently for boys, while parents also emphasized that, compared to girls, boys spent more time and money using the Internet, regarded media use as more important and set wrong priorities in selecting online content. There is a consensus among scholars that girls are more focused on information and communication aspects while boys are more interested in gaming and entertainment in general (Filipović, 2010; Tsai & Tsai, 2010). With respect to children's age, it could be observed that older children tend to use more social media and informative online platforms than the younger ones (Rideout et al., 2010; Hendriyani et al., 2012).

The aim of this study is to contribute to a better understanding of the motives on why children in Serbia use the Internet in order to provide some guidelines for experts in the process of creating and establishing effective online communications directed to this specific age cohort. Furthermore, the relevance of children's age, gender and household income in the context of children's access to computer and the Internet were investigated; highlighting different availability and preferences concerning this medium, with respect to children's demographic characteristics.

This study failed to find any research related to children's patterns of Internet use in Serbia, therefore, the first part of this paper reviewed findings of other studies conducted on this matter in the USA and the EU, intending to display the relevance of the topic and to provide pertinent ground for the comparison of the results of this research. The following chapters encompass the methodology and the results, revealing peculiarities

of the subject study and analyzing the obtained data. In the final parts of the paper, some conclusions were drawn, emphasizing the educational and safety implications of the results and suggesting possible future directions for the research in this field.

## *METHODS*

### *Sampling and Ethical Considerations*

The research was conducted on 979 primary school students from five cities in Serbia. The age in the sample varied from 7 to 13 years, with an almost equal number of female (523) and male (456) respondents included in the study. The participants originated from five cities across the country: Belgrade, Novi Sad, Niš, Šabac and Valjevo (Table 1).

The survey was undertaken in six primary schools – two in the capital and one in each of the other cities. Convenience sampling was adopted and one class was chosen from each of the seven grades in every investigated school.

*Table 1. Demographic characteristics of the sample*

Characteristic	Frequency
Age (years)	
7	128
8	144
9	154
10	141
11	127
12	130
13	155
Town	
Belgrade	388
Novi Sad	134
Niš	157
Valjevo	148
Šabac	152

The main ethical aspects that have to be taken into consideration in the process of conducting research with children pertain to: their voluntary participation, the relationship of equality between the researcher and survey participant, the anonymity of the children-examinees and the confidentiality of the obtained data (Đurić, 2012). Despite the fact that there are not any legal acts that specifically regulate this field of research in Serbia (Filipović, 2011), certain national ethical codices exist, as well as the global conventions (Đurić, 2012), which served as valuable guidelines for the conduct of the subject study.

Firstly, in order to access to the children, the school principal's authorization was obtained in each school, as it was proposed in some previous studies (Davis, 2010), as well as the permission of the teachers. The methodology, goals and instruments of the research were thoroughly presented and explained to the school staff two weeks before the organization of the survey. This stage of the consultations provided valuable inputs for the improvement of the research instrument.

The interaction between the researcher and children occurred in the school's environment, which children perceive to be the safe and friendly milieu. The teacher was present during the class when the children filled in the questionnaire, making the children feel secure and protected in the presence of the unknown person (the researcher). Adopting the principle that children are equal parties in research, the examinees were invited to ask any question or request additional information; and they were explained that their participation or rejection to take a part in the research, would not affect their school result/grades in any manner.

The anonymity of the participants was guaranteed and generally achieved through the practice that the children did not write their names on the form that they filled in, but only stated their age and gender. Teachers, parents or anybody but the researchers did not have the access to the completed forms. Confidentiality of the obtained data was guaranteed too, specifically stipulated by the remark on the form: "Nobody in your school or at your home will read your answers", explaining in familiar words the principle of confidentiality to children.

#### *Methodology and Research Instruments*

Besides the position of a child in the investigation process and listed ethical considerations, there are several other aspects that were needed to be addressed from the methodological point of view. In the first place, even though the subject research is in the great extent exploratory by its nature, there are several reasons why the quantitative research technique was appraised to be the most suitable: the majority of previous relevant studies (conducted in similar conditions to ours) adopted a survey as the appropriate technique (e.g. Jackson et al., 2008; Tsai & Tsai, 2010; Rideout et al., 2010); in order to be able to use two studies (as previously stated, authors are not aware of any other studies organized in Serbia on this research topic but the IREX & Ipsos Strategic Marketing, 2010; Statistical Office of the Republic of Serbia, 2014a) undertaken in Serbia in the subject domain as the benchmark, therefore similar technique needed to be applied; finally, a principle of the economical effectiveness requested the use of the questionnaire in the investigations where the participants are highly geographically dispersed.

It should be noted that children's Internet usage was the part of the larger survey which examined children's consumption in broader sense,

and consequently, the questionnaire consisted of three sets of questions related to:

- Children's spending power – e.g. Q<sup>1</sup>: *Do you get pocket money from your parents?*, A: *Yes or No*; Q: *How much money do you get?*, A: *Under 50 RSD, 51-100 RSD, 101-200 RSD, more than 200 RSD.*
- Importance and attractiveness of brands – e.g. Q: *What is your favourite brand of sneakers?*, A: *Nike, Reebok, Adidas, Puma, Other, I don't know.*
- Attitudes towards different instruments of integrated marketing communications – e.g. Q: *Do you read magazines?*, A: *Yes or No*; Q: *What is your favourite shop? Write your answer on the line below.*

The questions provided in our instrument were adjusted to be clearly understood and easily answered. Pertaining to the fact that children of different ages vary in their concentration span and reading abilities (Miller, 1990), three different questionnaires were developed. For all three instances, a thorough explanation of how to fill in the questionnaire was provided. It was particularly stipulated that there were no right and wrong answers.

Since young children prefer visually presented information (Peracchio, 1992), the questionnaire for the children aged 7–8 (first and second grade) was in color, and consisted of 25 questions mostly offered in the “yes/no” format, represented with happy and sad faces. For example: *Do you get pocket money?* (this question was not followed by the question of the amount of money that they received, as it was the case in the questionnaire for older children, deeming that the children of this age cannot estimate correctly this level) or *Do you watch TV every day?* With regard to brands, they were not asked about the preferred brands of sneakers and jeans (as it was the case for older children), but only about sweets, while six possible answers were presented by the pictures of the particular confections.

The instrument created for the children aged 9–11 (third to fifth grade) contained 40 questions, numerous illustrations and was prepared in a black and white format. Finally, the third questionnaire, composed for the children aged 12–13 (sixth and seventh grade) included 42 questions, less graphical elements and – as opposed to the previous two which were written in Cyrillic – was written in the Latin alphabet. The questionnaire designated for older children was more thorough, investigating in greater detail the children's allowances, brand preferences and media consumption, comprising questions such as: Q: *What kind of articles do you like to read?*

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<sup>1</sup> Note: “Q:” stands for the “question”, while “A:” marks answer modalities in this section.

*You can circle several answers. I like to read about... A: Celebrities, Animals, Computer and gaming, Clothes, Tests, Games, Not listed; Q: Who is your role model? A: Mum, Dad, Brother or sister, Singer, Actor, Sportsman, I don't have a role model.*

At the end of each of the questionnaires the subject was thanked for participating in the survey and there was a maze game (adjusted to the children's age), intended to occupy the children who were faster than their peers in filling the questionnaire. The questionnaire was completed by 979 out of 987 recruited students. Eight questionnaires were incomplete, and therefore they were considered to be invalid.

With regard to the subject research topic, in order to assess the possession of the computer at home, the consumption of the Internet and performed online activities among children only direct "yes" or "no" questions were used (e.g., *Do you have a computer at home? Do you use the Internet? Do you access the Internet in order to read texts and look at pictures? Do you play games online? Do you chat? Do you send and receive e-mails?*).

## RESULTS

The statistical analysis was performed in two stages. In the first phase some descriptive statistics were obtained in order to gain better insights into the frequency of the use of the Internet and computer, considering the children's gender, hometown and age. Moreover, four purposes for the Internet use were explored, depending on the children's age and gender. The hometown was excluded from the analysis in this case, due to the assumption that the child's economic status did not affect her/his motivation to conduct various online activities. In the second stage of the analysis, a series of binary logistic regressions (BLR) was run, aiming at establishing to what extent the dependent variables (presence of a personal computer in a child's home, whether child used the Internet, whether he/she used it for each of four listed purpose) were determined by the independent variables (children's age, gender and hometown).

The frequencies of the use of different Internet contents and the ownership of a personal computer at home are displayed in the following tables (No. 2 and 3). Regarding the computer and Internet usage, it can be discerned that approximately 90% of children possessed a computer and two thirds of them accessed the Internet. The more thorough inspection of the results implied that the older children tended to use the Internet more than the younger ones, while no greater discrepancies in the subject behaviour were noticed across the genders. These observations needed to be ascertained in the subsequent BLRs.

*Table 2. Computer possession and the Internet use according to children's age, gender and hometown*

	Computer at home		Access Internet	
	Yes	No	Yes	No
Gender				
Male	395	53	303	142
Female	457	64	324	196
Total	852	117	627	338
Age	Yes	No	Yes	No
7	100	27	66	59
8	125	19	86	57
9	135	16	90	61
10	126	15	94	47
11	117	9	87	39
12	107	18	87	38
13	142	13	117	37
Total	852	117	627	338
Hometown	Yes	No	Yes	No
Belgrade	333	54	241	143
Valjevo	105	24	70	58
Nis	142	11	109	44
Novi Sad	136	12	110	38
Sabac	136	16	97	55

The findings displayed in Table 3 revealed that the children mostly browsed textual and visual content and played online games, while they were not significantly involved in social activities in the web environment. Girls appeared to pay more attention to reading and searching pictures, whereas boys were more interested in playing games. The use of the social media seemed to increase with children's age.

The first regression model questioned whether children's age, gender and economic status determined if they would have a computer at the home. Given that it is extremely difficult to obtain accurate estimates of family economic status from the school-aged youth, we turned to the national estimates of average salaries in the investigated towns. The data showed that, according to the median wages, the earnings in Belgrade and Novi Sad were the highest, in Niš and Valjevo they were the lowest, while salary in Šabac stood as the median value (Statistical Office of the Republic of Serbia, 2014b). It should be noted that the capital city (with the highest average salary of all investigated cities) was set as the reference category, and consequently the behaviour of children living in each of the other towns was compared to the behaviour of their peers living in Belgrade.



Table 3. Purposes of the Internet use according to children's age and gender

Gender	Read texts and look at pictures		Play online games		Chat		Send and receive e-mails	
	Yes	No	Yes	No	Yes	No	Yes	No
Male	125	232	169	190	51	307	54	303
Female	190	211	124	277	64	337	61	340
Total	315	443	293	467	115	644	115	643
Age	Yes	No	Yes	No	Yes	No	Yes	No
7	22	74	45	52	4	92	9	87
8	35	81	69	48	8	109	12	104
9	37	69	51	55	5	101	13	93
10	57	50	40	67	8	99	17	90
11	40	60	38	62	21	79	18	82
12	55	56	25	86	24	87	17	94
13	69	53	25	97	45	77	29	93
Total	315	443	293	467	115	644	115	643

The model was statistically significant ( $\chi^2 = 19.407$ ,  $p = 0.004$ ), indicating that the predictors, as a set, reliably distinguished between the children who did and the children who did not possess a computer. The results of the BLR (Table 4) suggested that gender was not a significant predictor, while the other two influenced the investigated variable. More precisely, with regard to children's age it can be noted that the increase in the child's age leads to a higher probability that they would possess a computer at home. Even though the hometown was a statistically significant predictor, the only significant difference was observed between the children living in Belgrade and those living in Niš. Children living in Nis were almost twice more likely to own a computer than the children living in the capital.

Table 4. Significance of children's age, gender and hometown to computer possession

Predictor	Wald	Sig.	Exp(B)
Hometown	11.659	.020*	
Valjevo	1.325	.250	1.418
Nis	3.602	.058**	1.940
Sabac	0.902	.342	0.677
Novi Sad	0.449	.503	0.764
Gender	0.252	.616	0.904
Age	6.677	.010*	0.877
Constant	22.611	.000	0.200

Note: \*significant at the 0.05 level, \*\*significant at the 0.10 level.

In the further analysis, the relationship between the Internet use and children's age, sex and the town of origin was investigated (Table 5)

and a model was statistically significant ( $\chi^2 = 41.027$ ,  $p = 0.000$ ). For every one-unit rise in children's age, the probability that he/she would use the Internet was increased by 17%. Furthermore, boys were approximately 30% more likely than girls to use this medium. Comparing children's behaviour in terms of the Internet usage between the children in Belgrade and their counterparts in other cities, it was established that the children living in Novi Sad tended to use Internet more than their peers in the capital city.

*Table 5. Significance of children's age, gender and hometown to the Internet access*

Predictor	Wald	Sig.	Exp(B)
Hometown	14.516	.006*	
Valjevo	0.129	.720	1.075
Nis	2.320	.128	1.460
Sabac	1.635	.201	0.727
Novi Sad	3.708	.054**	0.610
Gender	5.575	.018*	0.719
Age	21.253	.000*	0.850
Constant	0.798	.372	1.227

Note: \*significant at the 0.05 level, \*\*significant at the 0.10 level.

The final set of the BLRs was conducted regarding the children's activities performed in the online environment. It was examined whether each of the four investigated activities was influenced by the children's age and gender. All four BLR's models were statistically significant (Table 6).

*Table 6. Tests of models' significance*

Performed activity	Chi-square	Sig.
Read texts and look at pictures	41.511	.000
Play online games	60.950	.000
Chat	71.511	.000
Send and receive e-mails	11.209	.004

Grounded on the results of the BLRs (Table 7), several conclusions were drawn:

(a) Older children are more prone to reading texts and browsing pictures than younger ones. Girls are more than 50% more willing to access the Internet for the listed purposes than the boys.

(b) Younger children are more interested in playing online games than the older ones and boys are twice more likely than girls to take part in the given activity.

(c) Social activities in the web space were preferred by older children – thus, the increase in the children's age led to the greater use both of chat tools and e-mails.

Table 7. Significance of children's age and gender to the Internet use

Activity	Predictor	Wald	Sig.	Exp(B)
Read texts and look at pictures	Gender	7.437	.006	1.518
	Age	28.546	.000	0.814
	Constant	25.720	.000	2.728
Play online games	Gender	14.172	.000	0.557
	Age	38.157	.000	1.278
	Constant	1.243	.265	0.806
Chat	Gender	0.389	.533	0.874
	Age	57.243	.000	0.619
	Constant	114.795	.000	56.908
Send and receive e-mails	Gender	0.198	.656	0.912
	Age	10.838	.001	0.841
	Constant	75.072	.000	12.333

(d) There was no statistically significant correlation between the gender and online communication, either via e-mails or chats.

### DISCUSSION

In accordance with the principal streams of investigation in the contemporary academic literature related to the studied subjects, three domains of the children's online activities are recognized: i) changes in the digital divide among various demographic groups, ii) the relation with children's academic performance, and iii) the usage of the specific Internet tools.

Our results concerning the presence of computers in Serbian children homes are congruent with the findings of the previous research undertaken in the world (e.g., Rideout et al., 2010) and imply that computers are heavily present in children's life. However, opposite to the outcomes of the study of Roberts et al. (1999), the results of our research indicated that children living in the town with lower income were more likely to have a computer in home than the children living in the capital – the city with the highest income in the country. The one possible explanation for this result could be that the children in higher income towns are more involved in some other after-school activities (such as: language classes, sports activities, etc.), which are not available to their peers in lower income towns, therefore the parents of the latter are more prone to provide their children with computers at home. This reasoning is corroborated by the evidence established in the research of Peter & Valkenburg (2006), which demonstrated that the adolescents' with fewer socio-economic resources were more likely to get involved in online entertainment activities than the adolescents with greater socio-economic resources. Nevertheless, this finding should be confirmed by some future studies.

Serbian children are in a disadvantageous position compared to their European peers with regard to the access to the Internet, which is mainly owed to the general ICT presence and development differences across these areas. We should be aware that this finding brings certain concerns in the view of the fact that previous studies (Jackson et al., 2008; OECD, 2011) established that children's use of the ICT predicted their academic performance. Namely, the children who used the Internet more had higher scores on the PISA tests, standardized tests of reading achievement and higher grade point averages.

Not surprisingly, along with the children's age, the ICT gains in relevance for them and their preferences of the online content change. Our findings showed that the importance of information seeking versus entertainment as a motive for using the Internet is moderated by the age, i.e. younger children preferred to involve in gaming activities, while older children spent more time in online socializing. Older children also reported using the Internet more for information purposes than the younger ones. This age difference is understandable, because older children usually have more schoolwork and accordingly they may use the Internet more often to search for school-related information and help on their homework. The other reason might be also that older children browse online content – text and pictures, in order to find suitable products that they want to purchase, considering that they have more disposable income and they are more influenced by peers and brands than younger ones.

Even though information seeking, the activity which older children prefer, can be regarded as more desirable than online gaming, the activity which is favoured by younger children, certain issues should be noted. Browsing texts and pictures on the web implies that children will be exposed to a larger and more diversified online content compared to the situation when they access the Internet for online gaming, usually visiting only a few already familiar websites. The heavier usage combined with the increasing interest of the older children for the social activities in the web space, leads to the greater exposure of children to the online risks. Certain studies suggest (e.g., Livingstone, 2014) that children's concerns in the online environment are mostly associated with the content risks (to see pornographic, aggressive and other disturbing content) and violence (mainly related to cyberbullying), while the significant number of them have reported this kind of experience.

Not only do children have to be protected from the Internet content that they are unwillingly exposed to, but their selection of the online materials has to be monitored as well. This is particularly true for boys, given that in our study, boys reported to spend more time online and they were twice more likely than girls to be engaged in playing games in the web space. On the other hand, girls appeared to pay more attention to reading and searching pictures, driven by the information seeking

motivation. These results support the conclusions of Wartberg et al. (2015) which established excessive media use more frequently for boys, while their parents also emphasized that, compared to girls, boys spent more time and money using the Internet, regarded the media use as more important and set wrong priorities in selecting online content.

Recently emerged approach of the disappearing digital divide appears to have certain corroboration in the findings of our study. This approach argues that the cultural resources as defined by the adolescents' gender were consistently unrelated to how adolescents used the Internet, the effect of gender on the use of the Internet for entertainment, notwithstanding (Rees & Noyes, 2007). Since there were no statistically significant differences in the utilization of the communication tools across the genders in our study, therefore, our research failed to prove the extensively determined result that girls tend to use the social media to a higher extent than boys (Tsai & Tsai, 2010), we might conclude that the process of an increasing gender similarity takes place.

### *CONCLUSIONS*

This research aimed to help a better understanding of the information technology equipment of the children in Serbia, as well as of their preferred online activities, according to their demographic attributes; and to highlight the peculiarities that distinguish their online behaviour compared to their global counterparts. Based on the obtained results, several conclusions appear to be prominent, with regard to the children's online activities.

Firstly, in the view of the finding that Serbian children significantly lag behind their European peers in the access to the Internet, which may negatively reflect in children's academic achievements, the education sector in Serbia needs to address this issue instantly and put the digitalization process on the top of its agenda. Given that boys of all ages and younger children reported high preferences towards playing online games, interactive gaming materials can be developed and used in classrooms in order to possibly help the children's learning process. Certainly, the children's involvement in gaming activities should be limited and regulated by the responsible adults.

Moreover, due to the rise in the online risk exposure along with children's age, schools should provide children, at least older ones, with digital literacy programmes, so they can recognize threats and respond adequately to them. In addition, it is of crucial importance that parents monitor children's usage of the main information platforms and social media, even in the adolescent and pre-teenage age. The results of our study revealed also that boys are more likely to be exposed to inappropriate content and behaviour in the online environment than girls. With regard to the gender, our results tentatively suggest that the Internet use may start to

surmount gender differences, but further studies on this matter are needed in order to validate this conclusion. Besides gender, all studies in this field should include age or developmental level as a moderating variable, in order to make meaningful generalizations concerning children's use of the Internet.

Finally, some limitations of this study should be noted. First, it should be acknowledged that non-probability sampling has been used for the collection of the data for this study, which restrains drawing some general conclusions. In addition, the research could benefit from the inclusion of the parents into the study sample, since they might provide more accurate answers on certain online activities of their children. The study presented however belongs to the field rather uncovered by the local researchers, as we still face a severe lack of the knowledge on the matter. Since some insights about the children's online behavior were acquired it could be considered as a valuable benchmark for some larger studies that would deal with the same issues in the Serbian market.

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## АНАЛИЗА ДЕЧИЈИХ МОТИВА ЗА КОРИШЋЕЊЕ ИНТЕРНЕТА И ЊИХОВИХ АКТИВНОСТИ У ОНЛАЈН ОКРУЖЕЊУ

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### Резиме

Наше истраживање имало је за циљ да помогне бољем разумевању могућности приступа информационим технологијама деце у Србији, као и њихових приоритетних активности на мрежи, у складу са њиховим демографским особинама, како би се обезбедиле одређене смернице за комуникацију са њима и истакле особености по којима се разликује њихово понашање на мрежи у односу на понашање њихових вршњака у свету. О великој важности и разнородним функцијама које интернет има у дечијим животима сведоче бројна истраживања спроведена на различите теме из овог домена, како у региону тако и у свету.

Резултати наше студије о присуству рачунара у српским домовима у складу су са налазима претходних истраживања која су спроведена глобално – ови резултати указују на то да су компјутери у великој мери присутни у животу деце и са растом њихових година информационе технологије добијају на важности. Међутим, постоји значајна разлика – тзв. дигитални јаз између српске и европске деце у могућностима приступа интернету. По неким индицијама, мања могућност коришћења интернета може негативно утицати на дечије академске перформансе.

Очекивано, дечији пол није утицао на присуство рачунара у њиховим домовима. Занимљиво је приметити да, у супротности са резултатима претходних студија, резултати нашег истраживања показују да деца која живе у граду са нижим примањима чешће имају рачунар у кући него деца која живе у граду са изнад-просечним примањима (главни град). Разлог за то може се тражити у осталим слободним активностима које су деци доступне у богатијим срединама.

Слично као у случају доступности рачунара, резултати показују да и старија деца интернету приступају више него млађа. Анализа по полу показује да су дечаки склонији од девојчица да користе интернет, међутим, њихове активности се не разликују у великој мери. Дечаки више користе интернет за играње онлајн игрица, што подразумева да проводе више времена у онлајн простору. Такође су у већој мери изложени онлајн ризицима, па је неопходан већи степен праћења њихових активности. У погледу коришћења комуникационих алата нису пронађене разлике по полу, што може указивати на то да се родни јаз у том домену полако премошћава.

На основу резултата, могу се дати одређене препоруке за образовне институције и друштво у целини. Неопходно је да се процес дигитализације школа што пре спроведе, као и да се интерактивни материјали – засновани на игрицама, уведу као учила ради што ефективнијег процеса учења ђака. Континуирано се мора радити на усавршавању метода за унапређивање дечије безбедности у сајбер простору, као што је потребно да се врши и стална контрола дечијих онлајн активности, чак и у њиховом адолесцентском периоду.

Представљена студија спада у прилично неистражену област од стране локалних истраживача, где се још увек суочавамо са значајним недостатком сазнања по том питању. Студија пружа прве увиде у дечије онлајн понашање и стога се може сматрати вредном полазном тачком за будућа истраживања која се буду бавила истом тематиком.