RESEARCH ON EFFECTS OF THE COVID-19 PANDEMIC ON FAMILIES WITH CHILDREN IN SERBIA

Third wave of research
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1 Introduction

In 2020, the whole world experienced a challenge without a precedent in recent history, caused by the health crisis due to the COVID-19 pandemic. Almost all levels of social functions suffered enormous and core changes. The most visible and immediate changes hit the healthcare system, but also the financial parameters of all countries, as well as the lifestyle, education and work routines of ordinary people. Recent studies report on key effects of the COVID-19 pandemic on Serbia: Serbia showed short-term resistance to changes caused by the pandemic and the ability to recover; however, the effects of the pandemic can in the future have further negative effects. There is also some potential for strategic improvement in the areas of healthcare, IT infrastructure related to education, the economy and living environment.

In order to contribute to the thorough research on the effects of the pandemic on families with children, UNICEF conducted longitudinal research on families with children aged 0 to 17 living in the territory of Serbia in the period 2020–2021. The first wave of research was conducted in April 2020, the second in July 2020, and the third and last wave was conducted in March 2021.

The significance of this research is multiple: a) the COVID-19 pandemic that struck the whole world unexpectedly dictated enormous changes to the usual lifestyle and affected the whole population, and so measuring its effects on parents, children and households is of invaluable scientific and practical importance (Khalatbari-Soltani, 2020); b) in terms of methodology, longitudinal studies represent the gold standard in research, as they allow measurement of the examined changes on the same individuals; and c) the study is, therefore, extremely important as it measures the effects of the prolonged COVID-19 crisis on society (on an identical sample of respondents).

Various crises, including the COVID-19 health crisis, struck the most vulnerable groups to the greatest extent. Current studies show that households with lower income are endangered on multiple levels by the poor conditions they live in, including multi-member and multi-generational families that share the same living space (making it impossible for elderly or vulnerable family members to isolate) increasing the risk of infection and reducing the possibility of distancing and respecting the safety measures; and social deprivation that

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determines irregular and less healthy diet, and difficulty in obtaining hygiene products or securing the necessary healthcare. Even before the pandemic, studies indicated that economic deprivation was frequently linked to lower educational status; therefore, it can be presumed that education correlates with healthcare literacy, which has been shown to be crucial for preventing the disease caused by the COVID-19 virus. The education system has gone through an unprecedented shock since the start of the pandemic and, according to many professionals, will have both short-term and long-term consequences. Various modalities of distance learning were introduced, and it remains to be measured how this transformation will affect functional literacy of children in the days to come. However, the experts expect some positive influences, too, such as the potential to increase digital literacy, reduction of the digital gap and improvement of teachers’ digital skills. Meta-analyses conducted before the pandemic indicated that the economic crisis is a significant stressor and that it has negative effects on mental health. We can only presume what effects the global pandemic and economic deprivation might leave on people’s mental health in the future.

This study aims to enable identification of: a) areas most severely struck by the pandemic and the prolonged crisis; and b) groups that have been most hit by the effects of the pandemic. This will, to a great degree, contribute to identification of those who are most vulnerable, but also help to develop further activities aimed at improving the position and welfare of groups who are the biggest losers in this situation. This study is trying to measure what the socio-economic effects of the crisis are on the whole population of parents with children, taking into consideration that the pandemic has spread all over the world, as well as the effects of the crisis on access to healthcare, education and social protection services, parenting, and mental health of children and parents/guardians.

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METHODOLOGY AND SAMPLE SELECTION
2 Methodology and sample selection

This research is a longitudinal study of the socio-economic effects of the COVID-19 pandemic in Serbia. The data collection methods were computer-assisted telephone interviews (CATI) and online interviews where respondents themselves filled out the questionnaire.

The data for the first wave of research were collected from 21 to 28 April 2020. At that time, a total of 1,823 households were interviewed and the data were collected on a total of 3,149 children. The survey was answered by mothers or guardians of children aged 0 to 17, supplying answers to questions related to the household, themselves and the children they look after as mothers or guardians.

In the second wave of research, the same households that took part in the first wave were contacted and the questionnaire was answered by the same respondents, supplying answers for children included in the first and second waves. The data for the second wave were collected in the period from 29 June to 9 July 2020. The response rate was 58% in comparison to the first wave; i.e., a total of 1,061 households were interviewed and the data on 1,862 children were collected.

In the third wave of research, the same households that took part in the first and second waves were contacted, and the questionnaire was answered by the same respondents, supplying answers for children included in the first and second waves. The data for the third wave were collected in the period from 5 to 15 March 2021.

It is important to state that during the three waves the reference period was changed. This is to say that in the first wave, the interviewed households rated certain current phenomena, i.e., the new situation, in the second wave they were asked to rate the month before the survey, while the third wave examined the changes during the three months preceding the survey.

As the time difference in data collection between the first and the third (last) waves is almost a year, some children did not belong to the same category that they were put into previously. So, in the third wave, the data for children who turned 18 between the end of the second wave and the start of the third wave were not collected. Furthermore, the children from threshold-age categories, when they turned 7 or 13 years of age, were placed in the following age category and with reference to that, their parents/guardians answered the

<table>
<thead>
<tr>
<th>Table 1. Response rate/participation in research from one wave to the other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of households</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Response rate (wave on wave)</td>
</tr>
<tr>
<td>Number of children aged 0–17</td>
</tr>
<tr>
<td>Number of children aged 0–6</td>
</tr>
<tr>
<td>Number of children aged 7–12</td>
</tr>
<tr>
<td>Number of children aged 13–17</td>
</tr>
</tbody>
</table>
questionnaire for the age group that the child belonged to at the moment when data were being collected. In the third wave, the response rate was 41% in comparison to the first wave and 70% in comparison to the second wave; i.e., a total of 745 households were interviewed and the data on 1,022 children were collected.

In the third wave, 40% of households interviewed in the initial sample were tested. The highest response rate was recorded in parents/guardians with higher education (48%), from urban settlements (46%), and from Belgrade and South and East Serbia (44%).

Table 2. Response rate/participation in research between the research waves by mother/guardian’s education, type of settlement and region

<table>
<thead>
<tr>
<th>Mother/guardian’s education</th>
<th>First wave</th>
<th>Second wave</th>
<th>Third wave</th>
<th>Participation in third wave compared to the first wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary and below</td>
<td>147</td>
<td>80</td>
<td>51</td>
<td>35%</td>
</tr>
<tr>
<td>Secondary</td>
<td>957</td>
<td>517</td>
<td>349</td>
<td>37%</td>
</tr>
<tr>
<td>High/higher</td>
<td>716</td>
<td>463</td>
<td>344</td>
<td>48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of settlement</th>
<th>First wave</th>
<th>Second wave</th>
<th>Third wave</th>
<th>Participation in third wave compared to the first wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>889</td>
<td>555</td>
<td>417</td>
<td>47%</td>
</tr>
<tr>
<td>Other</td>
<td>934</td>
<td>506</td>
<td>328</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>First wave</th>
<th>Second wave</th>
<th>Third wave</th>
<th>Participation in third wave compared to the first wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgrade</td>
<td>401</td>
<td>244</td>
<td>178</td>
<td>44%</td>
</tr>
<tr>
<td>Vojvodina</td>
<td>514</td>
<td>290</td>
<td>201</td>
<td>39%</td>
</tr>
<tr>
<td>Sumadija / West Serbia</td>
<td>469</td>
<td>255</td>
<td>172</td>
<td>37%</td>
</tr>
<tr>
<td>South/East Serbia</td>
<td>439</td>
<td>272</td>
<td>194</td>
<td>44%</td>
</tr>
</tbody>
</table>

As this research is longitudinal, the sample in the third wave consisted of all households that participated in the research in all three waves (after the first wave, if the parent/guardian did not participate, they were not contacted for further waves).

The initial sample represents a single-stage stratified sample. Stratification was conducted based on four statistical regions (NUTS2 division of the Republic of Serbia excluding Kosovo and Metohija), type of settlement and the structure of the households based on the age of children.

The structure of households based on the age of children was taken from the Multiple Indicator Cluster Survey–MICS5 (Serbia MICS).

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The households were divided based on whether they had at least one child aged up to 6, at least one child aged 7 to 12, or a child aged 13 to 17. As one of the basic aims of the research was to compare the negative effects that COVID-19 had on children of various ages, the sample was allocated proportionally within these households, with 600 households with children aged 0–6, 7–12 and 13–17. Allocation of these 600 households within the statistical regions and the type of settlement was conducted based on the structure obtained pursuant to MICS5 2014 research. The allocation was conducted proportionally in accordance with their presence in the population and the size of the standard deviation of the welfare index within these households (the higher the number of households in the population and the bigger the difference in “welfare” of these households, the more households were allocated to the sample). The allocation thus obtained was corrected in order not to have fewer than 50 households in any cell. The resulting allocation is given in Table 3.

Table 3. Initial allocation of sample by type of settlement and statistical region and the type of household

<table>
<thead>
<tr>
<th>Settlement type</th>
<th>Region</th>
<th>Households with children of age:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0–6</td>
<td>7–12</td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgrade</td>
<td>93</td>
<td>80</td>
</tr>
<tr>
<td>Vojvodina</td>
<td>92</td>
<td>90</td>
</tr>
<tr>
<td>Sumadija and West Serbia</td>
<td>60</td>
<td>63</td>
</tr>
<tr>
<td>South and East Srbija</td>
<td>60</td>
<td>53</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgrade</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Vojvodina</td>
<td>75</td>
<td>84</td>
</tr>
<tr>
<td>Sumadija and West Serbia</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>South and East Srbija</td>
<td>78</td>
<td>89</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>

In the second wave, as was mentioned before, the same households were contacted as in the first wave. Post-stratification, data weighting, was done following the same principle as in the first wave; i.e., based on the structure of the household obtained from the data from the same MICS5 2014 research.

In the third wave, post-stratification was done in an identical way as in the previous two waves, by using the structure of households obtained from MICS5 2014 research. All households were distributed into 7 categories, depending on whether they had children from one of the 3 targeted age groups, 4 statistical regions and 2 groups of urban settlements where the households were. Thus, weighting was obtained based on 56 cells (4 statistical regions, 2 types of settlements and 7 categories of households), in order for the structure of obtained households to reflect the structure of the population. The obtained structure of the sample in the third wave is given in Table 4.
The weighting was normalized to reflect the number of children in the sample.

Table 4. Frequency of households by their structure depending on the number of children, region and type of settlement where the households were located, obtained from MICS5 2014 research

<table>
<thead>
<tr>
<th>Region</th>
<th>Settlement</th>
<th>Household composition³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>001 010 011 100 101 110 111</td>
</tr>
<tr>
<td>Belgrade</td>
<td>Urban</td>
<td>67 59 36 122 10 67 4</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>20 21 17 23 3 11 1</td>
</tr>
<tr>
<td>Vojvodina</td>
<td>Urban</td>
<td>66 72 40 101 8 39 11</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>50 44 31 56 6 32 7</td>
</tr>
<tr>
<td>Sumadija and West Serbia</td>
<td>Urban</td>
<td>75 63 37 85 4 32 7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>68 41 37 80 6 40 5</td>
</tr>
<tr>
<td>South and East Serbia</td>
<td>Urban</td>
<td>76 43 26 72 9 33 3</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>55 34 38 48 4 25 7</td>
</tr>
</tbody>
</table>

Subsequently, the weight was multiplied by the number of children in the household and normalized to reflect the sample of children within the households. This way, the weight was obtained to reflect the number of children in Serbia of the given age.

The comparisons of the first, second and third waves were conducted on the sample of only those respondents who participated in all three waves of research (N=745 by wave). For all three samples the third wave weighting was used.

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³ The codes consist of three binary digits, the first of which denotes that the household has at least one child aged up to 6 (1-has, 0-does not have), the second digit means that the household has at least one child aged 7 to 12, and the third that there is at least one child aged 13–17; i.e. code 110 means that the household has children aged up to 6 and up to 12 years of age.
SUMMARY
3 Summary

3.1 Effects on households with children

3.1.1 Socio-economic indicators

- In the third wave of research, the negative impact of the pandemic on household income was somewhat softened, but it is still present: in the third wave, 64% of households report that in the last 3 months there had been no change in their income (the same was expressed in the second wave of research), while reduction of income as a consequence of the pandemic is still stressed by one fourth of households with children aged up to 17 (in the second wave this percentage was 28%). The percentage of income reduction is on a similar level as in the previous wave of research (mostly up to 30% of household income). Almost half (47%) state in at least one wave of research that there was a reduction of income in the household, while one fourth state that it was the case in two waves of research. Only one third of households did not experience any income changes in their household as a result of the COVID-19 pandemic during all three research waves.

- Economic instability was most pronounced in the poorest households (with the lowest total monthly income), which cannot cope with sudden financial expenses. In terms of the change in income, the following can be noticed: a) a decline in income during at least one wave of research is more often mentioned by households with the lowest total monthly income and those that cannot cope with sudden expenses; b) a decline in income during two research waves is again most often stated by households with the lowest income; and c) an increase of income in the third wave is more often mentioned by households with the highest income.

- Regarding the impact of the pandemic on the ability to pay the rent or credit instalments, which was noted in the second wave of research, in the third wave its impact remains present: while in the first wave 49% of households were registered as having more difficulty in paying for these expenses than before the pandemic, the second and third waves saw almost the same percentage of households (31% in the second and 32% in the third wave) with these difficulties. Another indicator that the pandemic has a negative impact on the ability to pay the rent or a loan is the fact that the difficulty in paying these costs regularly was expressed by half (53%) of the households with this type of monthly expenses in at least one research wave, while this difficulty was stated during all three research waves by 11% of respondents.

- Unplanned expenses as a result of the pandemic are still present: the third research wave noted that they are present in one fourth of the households, which is almost the same percentage as in the previous two waves (28% in the first wave, 27% in the second wave). In the last wave of research, these expenses returned to the level they were during the state of emergency and account for an average 25% of the monthly household income (which is somewhat lower than in the second wave.
when they amounted to 29% of the monthly income). However, a year after the start of pandemic, their structure has completely changed: in the last research wave they primarily referred to the expenses of healthcare services (77%) and significantly less to other categories present in the previous two research waves (hygiene materials, food, minor house repairs). Although in each individual research wave about one fourth of the households said that there were some unplanned expenses, the real scope of the pandemic can be seen from the fact that more than half of households (52%) had these expenses during at least one research wave. In the third wave, these expenses are more often mentioned by households with children from Belgrade (36%) and generally households with children from urban parts of Serbia (28%), while their presence is significantly less frequently registered in households in Vojvodina (13%) and rural areas (16%).

- **Measures to reduce costs are still present:** the most frequently used measures that households resorted to in order to cut costs during the pandemic were related to buying children’s toys (38%), saving on buying books (29%), as well as children’s education (24%), and rationing related to electric power (23%) and food (22%). In the third wave of research, somewhat more frequently mentioned is rationing in relation to children’s books, power bills and food for the whole household. About one fourth of households (24%) report that at least once in the research period they had to resort to cutting costs for food for all family members. In at least one wave of the research, respondents claimed that they were implementing harsher cuts on power bills (29%) and house heating (31%) than cuts on food/hygiene. The measures during at least one wave are most present in the area of children’s education: more than half of households (54%) state in at least one research wave that they reduced expenditures on children’s toys, while somewhat less than a half say that they reduced the expenditures on children’s education (41%), followed by books (37%) and tuition (30%).

- **The main survival strategy is still spending savings and is present in 59% of households** (55% in the second research wave). Borrowing money is in second place, present in 31% of households whose income has been reduced by 10% or more, which is significantly higher than 18% in the second wave. Selling property as the survival mechanism was resorted to very rarely (3%).

- In order to improve the financial situation of the family, households mainly decided to try and find employment for unemployed members (33%), to limit the time their children spent in front of the TV or computer (19%) or to reduce the number of rooms in the home that were heated (17%).

- In terms of indicators of material deprivation, almost no differences can be seen between the research waves: the majority of households can afford to have a meal with meat, chicken or fish every other day (93%), 74% can afford to pay their bills on time, while 61% can cope with extra expenses up to the amount of RSD 13,900. However, when indicators of material deprivation are observed during the research period, it can be noted that there is no material deprivation on each of the three indicators in all three waves of research in less than one third of households (29%).

- Although mothers/guardians less frequently report a change in employment status during all three research waves (89%...
report that there have been no changes in employment status since the beginning of the pandemic until today), by comparing the status of mothers/guardians within the three waves, we obtain a different finding: in only 44% of the households was exactly the same employment status of mothers/guardians registered in all three waves, which indicates that the epidemic did have an impact on this status (in terms of job loss, leave, furlough, etc.).

- In the third wave, we note the trend of mild improvement of material status of mothers/guardians: there is a decrease in the proportion of households with an income drop for mothers/guardians (13% as opposed to 18% in the second wave). In three quarters of households an impact of the pandemic on the income of mothers/guardians was not registered. If there was a decrease in income of mothers/guardians, it was mainly a decrease of up to 30%. However, if we observe the changes during the whole research period, just half of the households registered unchanged income of mothers/guardians between the three research waves, and if we register just the changes higher than 10%, unchanged income status was registered in two thirds of the households.

3.1.2 Indicators of family life and parenting

- More than half (57%) of the families with children spend time together to the same degree as they did before the pandemic. In comparison to the previous research wave, in the third wave there is a higher percentage of households that spend more time together than was the case before the pandemic (37% as opposed to 25% in the second wave), but it is not nearly close to that of the time of the state of emergency (77% in the first research wave).

- In terms of parenting experiences, in the third wave there is again an increase in the percentage of parents who state that parenting feels much harder than before the outbreak of the pandemic (36%), and after a drop in the second wave (16%), it again reaches the level it had during the state of emergency (36%). Additionally, when observed across time, it was registered that 58% of mothers/guardians experienced difficulty in carrying out their parental duties in at least one research wave.

- Mothers/guardians are concerned most about health of their children (80%), a finding similar to in previous waves (76% in the second, 81% in the first). In the last wave, there was a more pronounced concern about the state of mental health (38% in the third wave, 27% in the second and 36% in the first). Concerns related to education, mental state and development are more present in parents from urban areas, more educated parents and parents of schoolchildren. Worries related to economic issues are most often expressed by families with the lowest income, those on social welfare and those who cannot afford to pay for unexpected expenses. Worries related to family disagreements are reported by 4% of parents (3% in the second, 4% in the first wave). These worries are somewhat more often stated by parents from Belgrade.

- In the third wave, along with physical health (77%), mothers and guardians are noticeably much more concerned about the state of their own mental health (40%, as opposed to 30% in the second wave). A higher percentage of mothers/guardians
notice deterioration in their own mental state in the third wave of research (29%) (19% in the second and 24% in the first wave). It is similar when it comes to physical health: although the majority claim that nothing has changed (65%), the percentage of those who assess their current physical state as worse than before has increased significantly (30% in comparison to 15% in the second wave).

- Support for mothers/guardians in the third wave has weakened: one third (33%) state that they have no support or help (26% in the second wave). Furthermore, members of their family as part of the support system are less mentioned than in the previous wave (61% in the third, 69% in the second wave).

3.2 Efekti epidemije kovida-19 na decu 0 do 17 godina

3.2.1 Pristup dece uslugama i nezi

- A positive trend in accessing healthcare services continues: in the third wave, out of 55% of the children that needed these services, 87% managed to obtain them (72% in the second and 70% in the first wave). There were no changes in comparison to previous waves, in that the service of specialist doctors is the medical service most often missed, while the main reason why it was impossible to access healthcare services was the fact that the medical centre did not provide the required service. Observed throughout the period of research, the service of medical care during at least one wave was most often lacking in the youngest children, up to 6 years of age (21%), while these services were somewhat more accessible for older children (12% of children aged 7–12 and 11% of children aged 13–17 could not access the necessary healthcare institutions during at least one research wave).

- The pandemic did not significantly impact the use of private doctors’ services: 78% of parents whose children are up to 17 years of age do not use the private doctors’ services, and among those who do there was no noticeable impact of the pandemic on the use of this service.

- After the state of emergency was lifted, an improvement in access to social welfare services was noticed: 88% of child users aged up to 17 had access to necessary services, which is higher than in the second wave of research, when 77% of users had this access. Among children who are users of social welfare services, 3% (n=6) had the need for this service.

- Mothers predominantly take care of children aged 0 to 6 (67%), although this is slightly less than in the period when the state of emergency was in effect (76%). Between the waves, there is a continuous fall in the of share of mothers/parents who spend more than 3 hours in activities with their children (71% in the first wave, 51% in the second wave and 45% in the third wave). In the third wave, unemployed mothers/guardians have again spent more time in activities with children in comparison to employed mothers or those with one child.

- After preschool institutions were reopened, 79% of preschool children that do not yet attend preparatory preschool programmes returned to these institutions: 55% attend it regularly, while 24% do so less regularly than before.
Attending preschool preparatory programme is significantly higher: 90% of children of this age during this school year attend preparatory preschool programme.

- **The prevailing sentiment among parents (57%) is that the epidemiological situation did not have any impact on the quality of work of preschool institutions.** Communication with teachers was assessed as useful (84%) in both research waves.

- **The majority of parents with children aged 7–17 (66%) assess that distance learning effected a decrease in a child’s motivation to learn.** Along with lack of motivation, most parents (58%) think that distance learning also negatively impacted the quality of their children’s learning process. What they state as the problems of distance learning are child’s mood (19%), lack of a work atmosphere at home (18%) and high expectations and requirements by teachers (14%).

- **Parents with children aged 7–17 mostly do not notice improvements in distance learning in comparison to the first period of the pandemic: 48% think that nothing has changed, while 39% notice that this form of learning is now better organized.**

### 3.2.2 Mental health of children

- **The pandemic worsened the mental state of almost one fifth of children (17%), and this is now assessed as being worse than before the pandemic.** This refers mainly to older children (13–17), in households with lower income, from Belgrade and other urban areas. Worsening of mental health in at least one research wave was noticed in 23% of children aged 13–17, 19% of children aged 7–12 and 12% of those aged 0–6.

- **There is also a noticeable increase in children facing difficulties in focusing:** in the third wave this problem was registered in 29% of children, compared with 22% in the second wave.

The combined teaching method did not have an impact on reduction of help that parents and family members offer to their child while learning: 32% of parents state that they are still helping their child, while 31% had not helped their child in the previous period, and combined teaching did not change anything in this respect. Parents’ help in at least one research wave was registered in 70% of households with children aged 7–12 and in 40% of households with children aged 13–17.

- **The pandemic did not increase the percentage of children having private tutors alongside regular schooling:** 22% of children aged 7–17 had private classes.

- **In their free time, children most often engage in various activities, which include spending time outdoors (68%), but also using digital devices (18%), while 14% almost always spend their free time using these devices.** As expected, the use of digital devices is more present among children aged 13–17.

- **Most parents (60%) are of the opinion that schooling during the pandemic will have a negative impact on further education of their child.**

The problem with focusing is significantly present among schoolchildren: 43% of children aged 7–12 and 44% of those aged 13–17 experienced this change in at least one wave of research.

- **In terms of individual difficulties noticed in at least one wave of research, those most present among children were nervousness and irritability:** 36% of children aged up to 6 experienced these in at least one wave of research, while the same was noticed among 42% of children aged 7–12 and 44% of those aged 13–17.
ANALYSIS OF COVID-19 PANDEMIC EFFECTS ON HOUSEHOLDS WITH CHILDREN
4 Analysis of COVID-19 pandemic effects on households with children

As mentioned before, this study researches the general effects of the pandemic on whole households with children aged 0 to 17 in Serbia and the effects of the pandemic on children (based on their parents’ assessment). Within the indicators that are followed on the household level, we monitored socio-economic indicators (family life, parenting, etc.) and health indicators (including mental health). Among indicators measuring the effects of the pandemic on children, we observed the children’s access to medical, educational and social protection services.

4.1 Effects on households with children

4.1.1 Socio-economic indicators

Household total income

The study monitors long-term effects of the pandemic, and it is clear that after the initial shock, the socio-economic situation has still not returned to the pre-pandemic level. When it comes to total household income, in the past three months, the negative impact of the pandemic on income was somewhat softened, but it is still present: 64% of households report no income changes in the last three months (the same as in the second wave of research), while a reduction in income because of the pandemic is stated by one fourth of households with children up to the age of 17 (in the second wave, this percentage was 28%). The percentage decrease is on a similar level as in the previous wave of research (predominantly up to 30%). The households that most frequently report a decrease in income are those with three or more children.

Graph 4.1.1. Effects of the COVID-19 pandemic on household income – comparison of waves; data in percentages

Does the COVID-19 situation affect household income? / Has anything changed regarding income of the household in the last month/last 3 months?
Base: Total target population for all three waves, n=745

<table>
<thead>
<tr>
<th>Wave</th>
<th>YES, income has increased</th>
<th>NO</th>
<th>DOES NOT WANT TO ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st wave</td>
<td>54</td>
<td>64</td>
<td>2</td>
</tr>
<tr>
<td>2nd wave</td>
<td>44</td>
<td>64</td>
<td>7</td>
</tr>
<tr>
<td>3rd wave</td>
<td>43</td>
<td>64</td>
<td>12</td>
</tr>
</tbody>
</table>

By what percentage is the income reduced? Base: Those whose household income has reduced, n=331 for first wave (44% of population of first wave), n=210 for second wave (28% of population of second wave), n=178 for third wave (24% of population of third wave)

<table>
<thead>
<tr>
<th>Wave</th>
<th>Up to 30%</th>
<th>31%-50%</th>
<th>More than 50%</th>
<th>DOES NOT WANT TO ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st wave</td>
<td>43</td>
<td>31</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>2nd wave</td>
<td>62</td>
<td>24</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>3rd wave</td>
<td>64</td>
<td>21</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Effects of the pandemic are even more visible when we observe the changes within households: almost half (47%) report a decrease in income in at least one research wave, while one fourth (26%) state the same change in two research waves (along with lack of income increase in other waves). An increase in income in at least one research wave (along with lack of decrease in income in other waves) is stated by only one tenth of households. A decrease in income in all three research waves is stated by 11% or every ninth household. Only one third of households (34%) did not experience any changes in household income as a consequence of the COVID-19 pandemic during all three research waves.

Almost half of the households (48%) did not experience any changes in the three waves of research or there was a change within the scope of +/- 10% of their previous income, so it is safe to say that the pandemic did not have a more significant influence on the income of this part of the population. On the other hand, households that report a decrease in income in at least one wave most often state (43%) that this decrease was over 10%.

In all three research waves, households rated their income during the month that preceded the interview within the following three ranges: below €300, €300 to €600, and more than €600; so additional analysis observed the changes within this scope in all three research waves. Analysing the income of households in this manner, it is noticeable that more than half of households (56%) report an income that belongs to the same range during all three research waves – which indicates that the changes that were detected did not influence income in terms that it moved to another range (either lower or higher).
It is somewhat encouraging that two thirds of households report an income that is ranked the same in the first and the third wave, which indicates that if there were any changes in income between these two periods, the income has returned to the same group as it was in the first research wave.

**Graph 4.1.4. Effect of the COVID-19 pandemic on household income – specific income changes; data in percentages; Base: Total target population for all three waves, n=745**

<table>
<thead>
<tr>
<th>Income range</th>
<th>1st wave</th>
<th>3rd wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than €600 in 1st wave and less than €300 in 3rd wave</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Decrease of income range over 3 waves</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Same income range in 1st and 3rd waves</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>No change of income range during 3 waves</td>
<td>56</td>
<td>56</td>
</tr>
</tbody>
</table>

**Economic instability is most striking in the poorest households** (those with the lowest total monthly income), which cannot cope with sudden financial expenses. In terms of changes in income, the following can be noticed: a) a drop in income in at least one wave of research is more often stated by households with the lowest total monthly income and those who cannot cope with sudden expenses; b) a drop in income in two research waves is most often reported by households with the lowest income; and c) an increase in income in the third wave is most often reported by households with the highest income.

**Paying the rent**

Difficulty in paying the rent or mortgage in the period of three months prior to research is reported by one third of households with children that have this type of monthly expenses. In this area, there was no difference in comparison to the previous wave of research, when the same difficulty was experienced by 31% of this population, but this percentage is much lower than during the first wave, when 49% of the households that paid rent or mortgage reported that these payments were more difficult to meet than before the pandemic. Therefore, the negative effects of the pandemic were most visible and highest right after the pandemic was announced, but there is also a constant negative effect on paying the rent reported by one third of households.

**Graph 4.1.5. Regular rent or mortgage payment – comparison of waves; data in percentages**

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>1st wave</th>
<th>2nd wave</th>
<th>3rd wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same as before the COVID-19 epidemic</td>
<td>45</td>
<td>63</td>
<td>65</td>
</tr>
<tr>
<td>More difficulty than before the COVID-19 epidemic</td>
<td>49</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>More easily than before the COVID-19 epidemic</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Doesn’t know/Doesn’t want to answer/ Not applicable</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Was your household able to settle the lease/rent during COVID-19 time over the last month/last three months? Base: Those whose status of ownership over the housing unit in which they live is rent, mortgage or other, n=86 for first wave (12% of population of first wave), n=88 for second wave (12% of population of second wave), n=88 for third wave (12% of population of third wave)
The data show that difficulty in paying the rent, mortgage or loan instalments was experienced in at least one research wave by more than half of the households that have this kind of expenses, while this difficulty in all three waves was stated by somewhat more than 10% of respondents.

Graph 4.1.6. Regular rent or mortgage paying – changes in the research period; data in percentages; Base: households that rent the living premises or pay mortgage in at least one research wave, n=117 (16% of total target population)

Unplanned expenses and ability to pay them

Unplanned expenses as a consequence of the COVID-19 pandemic were registered in one fourth of households with children in Serbia, which is a similar proportion as in the previous two research waves (first wave 28%, second wave 27%). In households with such expenses, they account for 25% of monthly income, and this is the share that they had in the first wave of research (26%).

In the third research wave, these expenses are more often reported by households with children from Belgrade (36%) and more generally households with children from urban parts of Serbia (28%), while these expenses are much less frequently reported by households in Vojvodina (13%) and in rural areas (16%).

During the three research waves, the structure of these expenses has changed significantly: in the third wave (about a year after the pandemic was declared) households report a higher degree of unplanned expenses related to healthcare services (77%, as opposed to 29% in the first and 32% in the second wave). Other unplanned expenses that the households report are hygiene products (30%), food (22%) and minor house repairs (20%). These expenses are on the same level as in the second wave, but significantly less frequent than during the state of emergency period.

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10 The percentage of population included in the analysis is according to the criteria: (A household whose living space has the status of a rented space or had a mortgage attached to it in the first wave) or (A household whose living space has the status of a rented space or had a mortgage attached to it in the second wave) or (A household whose living space has the status of a rented space or had a mortgage attached to it in the third wave).
What were the categories of unexpected expenses that you had in the last month/last 3 months due to the COVID-19 pandemic? – Multiple answers; Base: Households that had any unexpected expenses, n=211 for first wave (28% of population of first wave), n=203 for second wave (27% of population of second wave), n=175 for third wave (23% of population of third wave)

Although about one fourth of households in each research wave reported unplanned expenses, the real impact of the pandemic is illustrated by the fact that more than half of the households (52%) had these expenses in at least one research wave, while a somewhat lower percentage (48%) state that they had no such expenses. Some 5% of households had unplanned expenses in all three waves of research.

Graph 4.1.8. Unplanned household expenses due to COVID-19 – changes during the research period; data in percentages; Base: Total target population for all three waves, n=745
Financial coping mechanisms

The pandemic forced households with children to resort to various coping mechanisms. The most frequent rationing measures used during the third research wave were related to children’s toys (38%), spending less on books (29%) and on children’s education (24%), using less electrical power (23%) and cutting down on food costs (22%). In the third wave, in comparison to the second one, spending less on children’s books is more frequent, as is the case with electricity costs and food costs for the whole household (in comparison to the previous two waves).

Graph 4.1.9. Financial coping mechanisms – comparison between the waves; data in percentages

Due to the COVID-19 pandemic, have you reduced your monthly spending on the following products in the consumer basket – answer YES; Base: Those whose household income has reduced by 10% or more due to the COVID-19 crisis, n=291 for first wave (39% of population of first wave), n=345 for second wave (46% of population of second wave), n=155 for third wave (21% of population of third wave).

Food/hygiene: About one fourth of households (24%) report that at least once in the period of research they were forced to cut food costs for all family members, while a smaller percentage report that they were not forced to resort to any measures in any of the three research waves (13%). The percentage of households cutting costs for food continuously in this period (in all three waves) is almost negligible.
Graph 4.1.10. Financial coping mechanisms – measures to cut costs in various segments (food, hygiene) – changes during the research period; data in percentages; Base: Those whose household income has reduced by 10% or more in any of three waves, n=414 (56% of target population)

Heating/power bills: Households report that they cut costs for electricity bills (29%) and heating (31%) to a higher percentage than for food/hygiene, while 12% of households did not resort to these cost-saving measures in any of the three waves (12% did not cut down on their electricity use, 13% did not cut down on heating of their living space).

Graph 4.1.11. Financial coping mechanisms – measures to cut costs in various segments (heating and electricity) – changes during the research period; data in percentages; Base: Those whose household income has reduced by 10% or more in any of three waves, n=414 (56% of target population)

Children’s education/entertainment: in comparison to other areas where costs were cut, a higher percentage of households were forced to cut spending on children’s education and entertainment.

More than half of the households (54%) report that in at least one research wave they reduced spending on children’s toys, while slightly less than half report that they reduced spending on children’s education (41%), books (37%) and children’s tuition fees (30%).

As expected, spending was reduced the most by households with the lowest income, and the least by households with the highest income and where mothers/guardians are employed. Significantly less than other
households, those with income over €600 report reducing costs by cutting down the time that children spend in front of a computer/TV. Statistically significantly more respondents report that they cut costs by going to bed earlier, and this response was given by households with the lowest income, lower than €300, and with lower educational status of mothers/guardians. Households with these characteristics also report on reducing the costs by reducing the number of rooms that they heat.

**Graph 4.1.12. Financial coping mechanisms – measures to cut costs in various segments (children’s education and entertainment) – changes during the research period; data in percentages; Base: Those whose household income has reduced by 10% or more in any of three waves, n=414 (56% of target population)**

<table>
<thead>
<tr>
<th>Reduced monthly spending due to the COVID-19 epidemic over all 3 waves</th>
<th>3</th>
<th>2</th>
<th>&lt;1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced monthly spending due to the COVID-19 epidemic in at least 1 wave</td>
<td>54</td>
<td>37</td>
<td>30</td>
<td>41</td>
</tr>
<tr>
<td>Did not need to reduced monthly spending due to the COVID-19 epidemic over all 3 waves</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

- Toys
- Children’s books
- Children’s tuition fees
- Spending on children’s education

**Coping mechanisms**

Households report more intensively on coping strategies in the last, third wave: 31% of households whose income was reduced by 10% or more state that they had to borrow money (significantly more than the 18% in the second wave), while 59% report they were forced to spend their savings (55% in the second wave). Selling their assets in order to cope with the crisis is reported less frequently (3%).

**Graph 4.1.13. The effects of the COVID-19 pandemic on households’ spending their savings and borrowing money – comparison between the second and third waves; data in percentages**

Were you forced to do any of the following due to the COVID-19 epidemic: Base: Those whose household income has reduced by 10% or more due to the COVID-19 crisis, n=345 for second wave (46% of population of second wave), n=155 for third wave (21% of population of third wave)

<table>
<thead>
<tr>
<th>Spend savings</th>
<th>Yes</th>
<th>55</th>
<th>59</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>44</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Refusal</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Borrow money</th>
<th>Yes</th>
<th>18</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>81</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Refusal</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
In order to improve their economic situation, households with income reduced by 10% or more in the third research wave most frequently tried actively to find a job for unemployed members of the household (33%), reduced the time their children were allowed to spend in front of TV and computers (19%) and reduced the number of rooms they heated (17%).

In comparison to the first and second waves, when the households expressed that they had plans about how to save money, the third wave of research explored the measures taken, and these mostly do reflect previously made plans. Measures noticeably failed when it came to asking for financial aid from the Centre for Social Work, which was planned by 10% of households and realized by just 1%. Additionally, previously, 10% of households planned to discontinue courses their children attended (language, hobbies, dance), while 15% of households with income reduced by 10% or more did so.

Graph 4.1.14. Planned and implemented cost-cutting measures – three waves; data in percentages

In addition to the above savings on products, services and energy, have you done any of the following to save money – answer YES; Base: Those whose household income has reduced by 10% or more due to the COVID-19 crisis, n=291 for first wave (39% of population of first wave), n=345 for second wave (46% of population of second wave).

<table>
<thead>
<tr>
<th>Measure</th>
<th>1. wave</th>
<th>2. wave</th>
<th>3. wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Try to find a job for unemployed household members</td>
<td>35</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Reduce the amount of time children spend in front of a TV/computer</td>
<td>21</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Reduce the number of rooms you heat</td>
<td>15</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Go to sleep early to save electricity, energy and other energy products</td>
<td>11</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Try to ask for material assistance from the Centre for Social Welfare or the..</td>
<td>7</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Unsubscribe children from language, dance, hobbies classes</td>
<td>7</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Try to find a job for your children</td>
<td>6</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>
Material deprivation

When it comes to indicators of material deprivation, there are almost no visible differences between the three different research waves.

One fourth of households in the third wave report that they cannot afford to pay the bills on time, and this percentage is similar to that in the second wave, when 22% of households claimed they could not.

There were no differences registered between the research waves in terms of whether a household could afford a meal with meat, chicken, fish, or vegetarian substitute every other day: this is claimed by 93% of respondents in the third and first wave and 92% in the second wave.

The percentage of households that can afford to cover an unexpected cost of RSD 13,900 from their household budget is at the same level as in the second wave (61%) and higher in comparison to the first wave, when half of the households stated they were able.

Graph 4.1.15. Material deprivation indicators – comparison of waves; data in percentages

When material deprivation indicators are observed within the same household in all three research waves, it was noted that there was no material deprivation on each of the three indicators in all three waves of research in fewer than one third of households (29%).

About half of households with children in Serbia state that they did not have any difficulty in paying their bills on time in all three waves of research (54%). A somewhat lower percentage (41%) state that they could afford to pay for an unexpected expense of RSD 13,900 from their household budget in all three research waves.
Graph 4.1.16. Material deprivation indicators – changes during the research period; data in percentages; Base: Total target population for all three waves, n=745

| Materially deprived over 3 waves by all variables | 1 |
| Not materially deprived over 3 waves by none of the variables | 29 |
| Not materially deprived over 3 waves by MD3 (unable to pay households on time due to financial difficulties) | 54 |
| Not materially deprived over 3 waves by MD2 (unexpected cost of RSD 13,900 that would be paid from the households budget) | 41 |
| Not materially deprived over 3 waves by MD1 (meal with meat, chicken, fish once in two days) | 88 |

Mothers/guardians less often state that there was a change in their employment status in all three waves: 3% of mothers/guardians report that they lost their jobs. Somewhat less than 90% report that nothing in their employment status has changed since the beginning of the pandemic up to now.

However, when the status of mothers/guardians in all three waves is compared, somewhat different findings appear: in just 44% of households there was an identical employment status of mothers/guardians in all three waves, which indicates that the pandemic did affect this status. Although quite low, it was noted that there was job loss in at least one wave without a new job being found in the meantime (2%). No change in employment status in all three waves is most often reported by households with the highest income and least often by households that find it difficult to cope financially with unexpected expenses (in these households the changes in employment status were most frequent).

Graph 4.1.17. Changes in employment status of mother/guardian – changes during the research period; data in percentages; Base: Total target population for all three waves, n=745

| Was unemployed and found a new job then did not lose the job in remaining waves | <1 |
| Loss of employment in at least one wave and did not find new job in remaining waves | 2 |
| No change in employment status over all three waves | 44 |

The findings further indicate that there has been some improvement in the material status of mothers/guardians, in that the third wave shows further decrease in the number of households that experienced a drop in income of mothers/guardians (13% as opposed to 18% in the second...
wave), with a simultaneous increase in the percentage of households that experienced an increase in income in the reference period (12%, as opposed to 4% in the second wave). As for the decrease in income, it is mainly a drop of up to 30%, which is stated by 58% of mothers/guardians who had a drop in their income in the past three months.

Graph 4.1.18. Effects of the COVID-19 pandemic on mother/guardian’s income – comparison of waves; data in percentages

Does the new situation caused by the COVID-19 epidemic affect the income of the mother/guardian? / Has anything changed regarding the income of the child’s mother/guardian in the last month/last 3 months? Base: Total target population for all three waves, n=745

By what percentage has the income reduced? Base: Child’s mother/guardian whose income reduced, n=181 for first wave (24% of population of first wave), n=132 for second wave (18% of population of second wave), n=96 for third wave (13% of population of third wave)

Even though individual waves register about 75% of households with no changes in income for mothers/guardians, a slightly different picture of the effects is obtained if we observe the changes within the same household. This is to say that a drop in income for mothers/guardians in at least one of the research waves is registered in one third of households, and it is mainly a significant reduction (more than 10%).

Graph 4.1.19. Effects of the COVID-19 pandemic on mothers/guardians’ income – changes in income during the research period; data in percentages; Base: Total target population for all three waves, n=745

Only half of households had stable income in three waves, and if we register only changes within +/- 10%, no changes in income were registered in two thirds of households.
Graph 4.1.20. Effects of the COVID-19 pandemic on mothers/guardians’ income – changes in income during the research period (changes of 10% increase or more and 10% or more decrease or changes within +/- 10%); data in percentages; Base: Total target population for all three waves, n=745

<table>
<thead>
<tr>
<th>Change Description</th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease of income over three waves (10%)</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Increase of income in third wave by 10% and more</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>At least one wave increase of income over 10% no decrease of income over 10%</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>At least two waves decrease of income over 10% in one of three waves</td>
<td>6</td>
<td>9</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>At least one wave decrease of income over 10% no increase of income over 10% in other waves</td>
<td>9</td>
<td>28</td>
<td>8</td>
<td>45</td>
</tr>
<tr>
<td>Income within +/- 10% over all three waves</td>
<td>66</td>
<td>66</td>
<td>66</td>
<td>198</td>
</tr>
</tbody>
</table>

4.1.2 Family life and parenting indicators

Family life

The third wave of research shows that families most often spend time together to the same extent as they did before the pandemic (57%). However, after the fall seen in the second research wave, the third wave again shows an increase in households which state that they spend more time together than before the pandemic (37% in comparison to 25% in the second wave), but this percentage does not reach that of during the state of emergency and the lockdown (77% in the first wave of research).

Graph 4.1.21. Effects of the COVID-19 pandemic on time that family members spend together – comparison of waves; data in percentages

Do the family members spend more time together during the COVID-19 pandemic/ in the post-emergency period/ in the last 3 months compared with the period before the pandemic? Base: Total target population for all three waves, n=745

<table>
<thead>
<tr>
<th>Time Comparison</th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much less than before the pandemic</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Less than before the pandemic</td>
<td>1</td>
<td>13</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>The same as before the pandemic</td>
<td>2</td>
<td>15</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>More than before the pandemic</td>
<td>21</td>
<td>60</td>
<td>57</td>
<td>138</td>
</tr>
<tr>
<td>Much more than before the pandemic</td>
<td>25</td>
<td>37</td>
<td>37</td>
<td>100</td>
</tr>
</tbody>
</table>

1. wave
2. wave
3. wave
Parents/guardians state that they are frequently engaged in activities related to securing the needs of family members and offering different kinds of support or group activities. After the initial increase in time spent on different activities in the first wave, in the third one, as in the second one, most respondents state that the pandemic did not affect the time spent on different activities with their families.

Graph 4.1.22. Time spent together with families for mothers/guardians – comparison of waves; data in percentages

How do you spend time with your family during the COVID-19 pandemic/ in the post-emergency period/ in the last 3 months compared with the period before the pandemic? Base: Total target population for all three waves, n=745

Overall, in the third wave, as in the second one, the majority of parents do not experience the effects of the pandemic on their feelings about parenting (60% in the third and 67% in the second wave of research). Nevertheless, it is important to stress that in the third wave of research, the percentage of mothers/guardians stating that parenting feels harder than in the period before the pandemic increases and returns to the level measured during the state of emergency: this opinion is expressed by 36% of mothers/guardians, as opposed to 16% during the second wave. Furthermore, this impression is more often registered among parents who live in Belgrade, in South and East Serbia, and have lower income.
Has parenting/guardianship during COVID-19 time/ in the post-emergency period/ in the last 3 months been easier, the same as before or harder than before the epidemic? Base: Total target population for all three waves, n=745

- I feel that it is easier for me now:
  - 1st wave: 14
  - 2nd wave: 17
  - 3rd wave: 4

- I feel that it is the same as before:
  - 1st wave: 50
  - 2nd wave: 67
  - 3rd wave: 60

- I feel that it is harder now:
  - 1st wave: 16
  - 2nd wave: 36
  - 3rd wave: 36

The prolonged duration of the pandemic leads to fatigue in parenting and difficulties in balancing all roles in changed circumstances, as is indicated by the fact that over half (58%) of mothers/guardians expressed difficulties in performing parenting roles and duties in at least one wave of research, while 7% of mothers/guardians expressed this feeling in all three waves.

Parents/guardians’ concerns related to children

At the time of the pandemic, mothers / guardians’ biggest concern was the health of their children, and this concern was expressed in all research waves by the biggest percentage of them: in the first wave by 80%, in the second by 76% and in the third wave by 81% of households. In the third wave of research there is a growing concern about a number of factors: concern for mental well-being and consequences related to stress (38% in the third wave, 27% in the second and 36% in the first), education (45% in the third wave, 34% in the second and 38% in the first), development (26% in the third, 15% in the second and 21% in the first wave) and socializing (42%, 37%, 42% respectively in the three research waves).

Concerns related to education, mental health and development are more present among parents from urban areas, parents with higher education and parents with schoolchildren.
Continuous isolation as a consequence of the pandemic keeps the concerns about economic issues on a stable level and is present in all three research waves (23%). Concern over economic issues is most often expressed by families with the lowest income, those who are recipients of social welfare and cannot afford to pay for unexpected expenses.

Concerns over family disputes were reported by 4% of parents (3% in the second and 4% in the first wave). These concerns were somewhat more often expressed by parents from Belgrade.

When it comes to concerns related to themselves personally, physical and mental health are the focus of mothers/guardians to a higher degree than in the second wave of research and the same as in the first wave: concerns over physical health are expressed by 77% of parents/guardians (79% in the second and 76% in the first wave), while concerns over mental health are registered in 40% of parents/guardians (30% in the second wave and 37% in the first). Concerns over material needs come third (36%).

Mothers/guardians from urban areas and Belgrade are somewhat more often concerned about their mental health. Mothers/guardians who are unemployed and households with lower income are somewhat less concerned about mental health; among this population, concerns related to financial issues are more noticeable.
What are your major concerns about yourself during the COVID-19 epidemic time/ in the post-emergency period/ in the last 3 months? – Multiple answer; Base: Total target population for all three waves, n=745;

<table>
<thead>
<tr>
<th>Concern</th>
<th>1. Wave</th>
<th>2. Wave</th>
<th>3. Wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>76</td>
<td>70</td>
<td>77</td>
</tr>
<tr>
<td>Material/financial needs</td>
<td>34</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>Mental health and stress-related consequences</td>
<td>37</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Stability of employment</td>
<td>23</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>Nutrition</td>
<td>12</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Disagreements in the family</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>I do not have any special concerns about the COVID-19 epidemic</td>
<td>7</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>
4.1.3 Health indicators: mental, physical health of mothers/guardians

In the third wave, the percentage of mothers/guardians who express deterioration in mental health in the previous period is on the increase. While about 65% express the same level of physical and mental health in comparison to the period before the pandemic, about 30% report that there has been some deterioration in both physical and mental health. Most often this is reported by better educated respondents from Belgrade and those who live in urban settlements, with children from all age groups and those with lower income.

Graph 4.1.27. Mental and physical health of mothers – comparison of waves; data in percentages

![Graph showing mental and physical health changes](image)

Regarding the assessment of mental-health status through different periods, approximately half of mothers/guardians state that they did not feel any change in their mental health during all three research waves. Some 6% of mothers/guardians considered that their mental health was much worse during at least one wave of the research period.

Graph 4.1.28. Mental and physical health of mothers – changes during the research period; data in percentages; Base: Total target population for all three waves, n=745

![Graph showing mental health changes during research periods](image)
In the third wave, the percentage of mothers/guardians with no support or help in looking after their children is on the increase, and one third of population reports this. For mothers/guardians, family was the most frequent source of support in looking after the children during the pandemic, and the percentage has remained relatively stable during the research period: in the third wave 61% of mothers/guardians identify this type of support (69% in the second wave). To a much lower degree, this support comes from friends (17%). Family as the source of support in looking after the children is most available in rural areas in South and East Serbia (which is as expected, due to the lifestyle of multi-generational households). Lack of help in this area is most experienced by families in Belgrade and urban areas more generally.

Since the outbreak of the pandemic, respondents were not inclined to seek professional psychological help. Even though it is a particularly small percentage, an increase can be noted in the number of mothers/guardians who indicate that they asked for help in the third wave of research (10%, as opposed to 6% in the second wave). Most often, mothers/guardians of children of all age groups from Belgrade sought help. The outcome of the search for professional help in mental health was not positive in almost half of mothers/guardians. The reasons why they did not get help are most often lack of information/unfamiliarity but also because this kind of help was not available.
4.2 Effects of the COVID-19 pandemic on children aged 0 to 17

This chapter will present the effects of the pandemic on children aged 0 to 17 in Serbia, from the point of view of their mothers/guardians.

4.2.1 Access to children’s institutions and services

In comparison to previous waves, a much easier access to healthcare services is recorded: 48% of children were able to get all the necessary healthcare services, and this percentage represents a significant improvement in comparison to the second wave, when only 24% of children were able. Accessibility is also visible when we look at the population of children that needed health services: out of 55% of children that needed these services, 87% managed to access them (72% in the second and 70% in the first wave). No changes in comparison to previous waves were registered in services of specialist doctors as the kind of medical service that was most often lacking, and this was because the medical centre did not offer the requested service or because the medical worker was not available.

Graph 4.2.1. Children’s access to healthcare services during the COVID-19 pandemic, in the last month and the last three months – comparison of waves; data in percentages

<table>
<thead>
<tr>
<th></th>
<th>1. wave</th>
<th>2. wave</th>
<th>3. wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>16</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>The question does not apply to us because the child has not required health services</td>
<td>77</td>
<td>67</td>
<td>45</td>
</tr>
</tbody>
</table>

Although a significant improvement of availability of health services was registered in the last research wave, it is also important to observe the availability of these services in individual households over a period of time. This analysis confirmed that health services, during at least one wave, were the most unavailable for the youngest children up to the age of 6 (21%), while they were slightly more available for older children (12% of children aged 7–12 and 11% of children aged 13–17 did not have access to the necessary healthcare institutions during at least one research wave).
The pandemic did not significantly influence the use of private doctors’ services: in the period before the pandemic, 37% of children up to the age of 12 used private doctors’ services, while these services were used by 16% of the children in the last three months. Private doctors’ services are most frequently used in urban areas, in the Belgrade region, by parents with higher education and high income.

Graph 4.2.3. Using private doctors’ services – third research wave; data in percentages

The pandemic did not significantly influence the use of private doctors’ services: in the period before the pandemic, 37% of children up to the age of 12 used private doctors’ services, while these services were used by 16% of the children in the last three months. Private doctors’ services are most frequently used in urban areas, in the Belgrade region, by parents with higher education and high income.

Graph 4.2.3. Using private doctors’ services – third research wave; data in percentages

When the state of emergency was lifted, this contributed to greater availability of social welfare services for children who are their users. In the three months preceding the research, among children aged up to 17, 17% of users were registered out of whom 88% had access to all social welfare services; while in the second wave of research, 77% of the users were able to access these services.
Out of 17% of children that were registered in the third wave as users of social welfare services, 3% had the need for new services during the three months preceding the research. New services (1% of total children population, n=6) included, primarily, visits by a divorced parent and services in the community for children with disabilities, which to a high degree were obtained.

Among the latest services that the children needed but did not obtain (2%, n=19) are procedures and measures for protection from violence and regulations regarding visits by a divorced parent (19% out of 2%, n=4), for financial reasons (19% out of 2%, n=4) and disruption caused by the institution itself (17% out of 2%, n=3).

Psychological well-being

For almost one fifth of children (17%), the pandemic caused deterioration of their mental state, and it is now assessed as being worse than before the pandemic. These are, to a higher percentage, children of older age (13–17) and in households with lower income, from Belgrade and other urban areas.

Graph 4.2.5. Mental state of children in comparison to the period before the pandemic – third wave of research; data in percentages

How do you assess the current mental state of the child compared with the period before the COVID-19 pandemic? – third wave survey; Base: Households with children aged 0 to 17 years, n=986
It appears that in terms of mental health, the most vulnerable are older children; i.e., that the danger of mental health being harmed due to the pandemic increases with age. Deterioration of mental health in at least one research wave was noted in 23% of children aged 13–17 and 19% of children aged 7–12. In accordance with this, most households with the youngest children (54%) report that there were no changes in their child’s mental state.

Parents report that in the past month children experienced nervousness and irritability (32%) and difficulties in focusing (29%), while slightly fewer reports are made about feelings of loneliness (21%) and anxiety (18%). In the third wave there is a noticeable increase in children with difficulties focusing: this problem was registered in 29% of the children compared with 22% in the second wave.

In the past month has the child been faced with any of these difficulties? Has the child been faced with any of these difficulties in the last 3 months? – Answer YES; Base: Households with children aged 0 to 17 years for two waves, n=986
The effects of the pandemic on children’s mental health were noticeable even when observed through the transition from one research wave to the next. From individual difficulties, noticed in at least one wave, it seems that children most often experienced nervousness and irritability: 36% of children aged up to 6 experienced this difficulty in at least one research wave, compared with 42% of children aged 7–12 and 44% of children aged 13–16.

Difficulty focusing was significantly present among school-age children: 43% of those aged 7–12 and 44% of those aged 13–17 experienced this change in at least one wave of research.

Graph 4.2.8. Mental well-being of children – changes during the research period – second and third waves of research; data in percentages; Base: Households with children aged 0 to 6 years (n=384, 52% of household population), Households with children aged 7 to 12 years (n=377, 51% of household population), Households with children aged 13 to 17 years (n=311, 42% of household population)

<table>
<thead>
<tr>
<th>Type of changes in mental well-being of children aged 0 to 6 years</th>
<th>Type of changes in mental well-being of children aged 7 to 12 years</th>
<th>Type of changes in mental well-being of children aged 13 to 17 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes - in both waves</td>
<td>Yes - in both waves</td>
<td>Yes - in both waves</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>14</td>
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<tr>
<td>5</td>
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<td>17</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Yes - in at least one wave</td>
<td>Yes - in at least one wave</td>
<td>Yes - in at least one wave</td>
</tr>
<tr>
<td>10</td>
<td>36</td>
<td>44</td>
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<tr>
<td>19</td>
<td>19</td>
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<tr>
<td>21</td>
<td>11</td>
<td>42</td>
</tr>
<tr>
<td>No - over both waves</td>
<td>No - over both waves</td>
<td>No - over both waves</td>
</tr>
<tr>
<td>81</td>
<td>81</td>
<td>81</td>
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<tr>
<td>57</td>
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<td>57</td>
</tr>
<tr>
<td>72</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Difficulty focusing</td>
<td>Nervousness and irritability</td>
<td>Restlessness and anxiety</td>
</tr>
<tr>
<td>Feeling of loneliness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specific parameters for children aged 0 to 6

In the third wave of research, the percentage of children aged 0–6 who needed healthcare services in the past month increased in comparison to previous research waves in 2020 (67% in the third wave, 41% in the second and 36% in the first).

Along with this, the third wave registered an increase in the availability of healthcare services: 87% of the children who needed them were able to obtain them (61% in the second and 70% in the third wave). Positive changes are visible in almost all demographic groups. Among children who could not access the required healthcare services, the majority are from Belgrade, which is consistent with the results obtained in previous waves.
The children who needed healthcare services but could not get them (9%, n=21), as was the case in previous waves, most often needed the service of specialist doctors (which has now become the most important service unavailable to children) and paediatricians for curative service. However, the immunization process for children aged up to 6 has somewhat stabilized, as in the last wave only 1% of parents reported that the healthcare service related to vaccination was not available. When it comes to reasons why the required services were not available, there were no new replies registered: the most frequent answer was that the healthcare centre did not provide that service, unavailability of healthcare worker and parents’ hesitancy. Significant demographic differences were not registered.

The use of private doctors’ services did not increase due to the pandemic: these services were used by 44% of parents before the pandemic and 21% in the three months before the research.

Graph 4.2.9. Access of children aged 0–6 to healthcare services during the COVID-19 pandemic in the last month and last three months – comparison of waves; data in percentages

Graph 4.2.10. The use of private doctors’ services, children aged 0–6 – third research wave; data in percentages
The need for social welfare services for children up to the age of 6 during the COVID-19 pandemic was similar to the previous wave (17%), but better availability of these services was registered in the third wave of research: 94% of children who are users of these services managed to get the required social welfare services, compared with 78% of users in the second wave. The need for new social welfare services was not registered in the last three months in children of this age.

Graph 4.2.11. Access of children aged 0–6 to social welfare services during the COVID-19 pandemic in the past three months – comparison of the second and the third wave; data in percentages

The services that these children did not manage to get (1% of total population, n=2) referred to visits by a divorced parent.

Mental well-being

During the three months prior to the research, children up to the age of 6 most often experienced nervousness and irritability (24%), while other difficulties were registered less frequently. There were no differences in comparison to the second research wave.

Graph 4.2.12. Mental well-being of children 0–6 years of age – comparison of the second and the third wave; data in percentages

The majority of mothers/guardians are of the opinion that the current mental state of their child is the same as it was during the pandemic (81%), but the third wave of research registered 10% of children who have had a deterioration in comparison to the period before the pandemic.
Mother/guardian’s interaction with children

During the whole research period, mothers have predominantly taken care of children aged up to 6. However, it is noticeable that this percentage was the highest during the state of emergency (76%), and in the second and the third wave it was somewhat lower (66% in the second, 67% in the third wave). As was the case in the second wave, there is a stable percentage of those who state that in the previous period, their child was looked after by his/her grandparents (18% in the second, 17% in the third wave), and this was particularly stressed by employed mothers/guardians. When only the results of the second and the third wave are examined, it can be seen that there is a significant difference between the employed and unemployed mothers / guardians, in that employed mothers / guardians less often take care of the children during the day and more frequently rely on the children’s grandparents for help.

Graph 4.2.14. Looking after the children aged up to 6 during the COVID-19 pandemic – comparison between waves; data in percentages

Who most often cared for the child during the day over the last month? Base: Households with children aged 0 to 6 years in all three waves, n=265 for the first wave, n=265 for the second wave, n=235 for the third wave
When it comes to playing, reading and other activities with children up to the age of 6, the data indicate that mothers/guardians spent time with their children playing or reading somewhat more than in the second wave but less than in the first research wave. Between the waves, there is a continuous drop in the share of mothers/guardians who spent more than three hours in shared activities with their children. In the third wave, it was unemployed mothers/guardians who spent more time in these activities with their children than employed mothers and mothers with one child.

Graph 4.2.15. Playing, reading and other activities with children aged up to 6 during the day – comparison between waves; data in percentages

Specific parameters for children aged 7 to 12

In the third wave of research, in the population of children aged 7 to 12 there is a significantly higher need for and availability of healthcare services: more than half needed these services (as opposed to 30% in the second and 20% in the first wave), and among them 89% managed to get these services (76% in the second and 65% in the first wave).

A somewhat smaller availability was registered in the Sumadija region, while in Belgrade and urban areas it was higher.

Graph 4.2.16. Children 7–12 access to healthcare services during the COVID-19 pandemic, in the past month and the past three months – comparison of waves; data in percentages
In terms of type of healthcare services that children aged 7 to 12 needed but could not access (5%, n=24), as was the case in previous waves, these most often refer to services of specialist doctors and primarily because the requested service was not available in the healthcare centre. As in other age groups, the pandemic did not significantly affect the level of using services provided by private doctors: 33% of the parents of children aged 7 to 12 state that they used these services before the pandemic, while in the past three months it was the case in 13%. Families from Belgrade and those with higher education state that they used private doctors’ services somewhat more than other groups.

Graph 4.2.17. Using private doctors’ services, children aged 7–12 – third research wave; data in percentages

Did you use the service of a private doctor for the health care of your child before the COVID-19 pandemic? Base: Households with children aged 7 to 12 years for third wave, n=423

Did you use the service of a private doctor for the health care of your child the last 3 months? Base: Households with children aged 7 to 12 years for third wave, n=423

In the third research wave, among the population of children aged 7 to 12 it was registered that 18% were users of social welfare services, out of whom 84% managed to access these services. This represents certain improvement in comparison to the period during the COVID-19 pandemic, when access to social welfare services was available for 79% of users.

Graph 4.2.18. Access of children aged 7–12 to social welfare services during the COVID-19 pandemic, in the past three months – comparison of the second and the third wave; data in percentages

Has your child been able to access all the necessary social welfare services during the COVID-19 epidemic? / Has your child been able to access all the necessary social welfare services in the last 3 months? Base: Households with children aged 7 to 12 years for two waves, n=423
In the past three months, among children who are users of social welfare services, 6% of them needed new services (2% of the total population, n=5). These were services for children with disabilities and regulations referring to visits by a divorced parent, which in most cases were carried out.

**Mental well-being of children**

Children of this age more often, as stated by their parents, faced difficulties in mental well-being in comparison to younger children. *Most often they experienced nervousness and irritability (36%), difficulties focusing (36%), feelings of loneliness (23%), while one fifth experienced restlessness and anxiety*. A deterioration in comparison to the previous wave of research was registered in terms of nervousness (36% in the third and 28% in the second wave of research).

**Graph 4.2.19. Mental well-being of children aged 7–12 – comparison of the second and the third wave; data in percentages**

<table>
<thead>
<tr>
<th>Mental Well-being</th>
<th>2. Wave</th>
<th>3. Wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling of loneliness</td>
<td>24%</td>
<td>23%</td>
</tr>
<tr>
<td>Restlessness and anxiety</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Nervousness and irritability</td>
<td>28%</td>
<td>36%</td>
</tr>
<tr>
<td>Difficulty focusing</td>
<td>30%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Most parents of children aged 7 to 12 (75%) assess that the mental state of the child was unchanged in comparison to the period before the pandemic. However, in almost one fifth of the children in this age group, deterioration in mental state was recorded in comparison to the period before the pandemic, which is an indicator of the negative long-term effects of the pandemic and changed circumstances that the children live in.

**Graph 4.2.20. Mental state of children aged 7–12 in comparison to the period before the pandemic – third research wave; data in percentages**

<table>
<thead>
<tr>
<th>Mental Well-being</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better</td>
<td>2%</td>
</tr>
<tr>
<td>Same</td>
<td>5%</td>
</tr>
<tr>
<td>Worse</td>
<td>18%</td>
</tr>
<tr>
<td>Refusal</td>
<td>75%</td>
</tr>
</tbody>
</table>
Specific parameters for children aged 13 to 17

In this age group (13–17), as was the case in the previous one, access to healthcare services has been easier than in the period before the state of emergency and during 2020, but there has also been a general increase in need for healthcare services. **Half of the children** included in the research had a need for healthcare services and most of them (88%) managed to get these. Children aged 13 to 17 and from households with monthly income higher than €600 more often than others assess that healthcare services were not available.

Graph 4.2.21. Access of children aged 13–17 to healthcare services during COVID-19, in the past month and in the past three months – comparison of waves; data in percentages

<table>
<thead>
<tr>
<th></th>
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<th>2. wave</th>
<th>3. wave</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12</td>
<td>25</td>
<td>42</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>The child required no health services</td>
<td>76</td>
<td>84</td>
<td>52</td>
</tr>
</tbody>
</table>

In terms of the types of healthcare services that children aged 7 to 12 required but could not obtain (5%, n=24), as registered in previous waves, the required services were most often specialist doctors’ services, and they were not able to get the service as it was not available in the health centre.

Among children aged 13 to 17, in the third wave 14% were welfare services users, which is slightly lower in comparison to the second wave when the registered percentage in this population was 24%. Similar to other age groups, in the last wave there is a noticeable increase in the share of users who had access to necessary welfare services: access to services was available for 86% of users (75% in the second wave).

Graph 4.2.22. Private doctors’ services, children aged 13–17 – third research wave; data in percentages

<table>
<thead>
<tr>
<th></th>
<th>1. wave</th>
<th>2. wave</th>
<th>3. wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>2</td>
<td>76</td>
</tr>
<tr>
<td>The question does not apply to us because the child has not required health services</td>
<td>86</td>
<td>76</td>
<td>86</td>
</tr>
</tbody>
</table>
The need for new services in the last three months was rarely expressed (only 2% of users, 1% of total population). Services not obtained (2% of total population, n=6) are visits by a divorced parent.

**Mental well-being**

Among the population of children aged 13 to 17, there is an increasing trend in the percentage of children who have difficulty focusing (36% in comparison to 25% in the second wave) and a feeling of loneliness (25%, as opposed to 19% in the second wave). Other difficulties that children experienced were nervousness and irritability (32% in the third and 34% in the second wave), while one fifth experienced restlessness and anxiety.

The feeling of loneliness, nervousness and irritability, as well as problems trying to focus are slightly more often expressed by children in urban areas, while restlessness and anxiety were more frequently expressed in families that stated they had a problem in dealing with unexpected costs.

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**Graph 4.2.23. Mental well-being in children aged 13–17 – comparison of the second and the third wave; data in percentages**

Has the child been faced with any of these difficulties last month? / Has the child been faced with any of these difficulties in the last 3 months? – Answer YES; Base: Households with children aged 13 to 17 years for two waves, n=296 for second wave, n=328 for third wave

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>2. wave</th>
<th>3. wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling of loneliness</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Restlessness and anxiety</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Nervousness and irritability</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>Difficulty focusing</td>
<td>25</td>
<td>36</td>
</tr>
</tbody>
</table>

Although most parents of children aged 13 to 17 (73%) state that the pandemic did not influence the mental well-being of their children, in almost one fifth of children a worse mental state was registered in comparison to the period before the pandemic.

**Graph 4.2.24. Mental state of children aged 13–17 in comparison to the period before the COVID-19 pandemic – third research wave; data in percentages**

How do you assess the current mental state of the child compared with the period before the COVID-19 pandemic? (third wave survey); Base: Households with children aged 13–17 years, n=328

- Better: 22
- Same: 73
- Worse: 5
- Refusal: 0
4.2.2 Educational indicators

Almost all children aged 7 to 17 took part in distance learning (70% in the third research wave, 23% during the spring of 2020).

It is worrying that the majority of mothers/guardians consider that children became less motivated to learn during the pandemic (66%), while only 28% state that there was no change in their motivation. The negative impact of online teaching on motivation to study was somewhat more present in households from urban areas and those with reduced income during the pandemic.

Along with worse motivation to study, worse quality of learning is also noticeable. According to more than half of mothers/guardians (58%), children studied worse than before the pandemic. Worse quality of studying is particularly stressed by parents with higher education, employed parents and those from urban areas.

Graph 4.2.25. Effects of distance learning on motivation of children aged up to 17 – third research wave; data in percentages

- Has become more motivated to learn: 6
- No change compared to the period before the pandemic: 28
- A little less motivated: 38
- Significantly less motivated: 28

Graph 4.2.26. Quality of studying – third research wave; data in percentages

- Child learns much worse: 15
- Child learns worse: 43
- Same as before: 35
- Child learns better than before: 5
- Child learns much better than before: 2

RESEARCH ON EFFECTS OF THE COVID-19 PANDEMIC ON FAMILIES WITH CHILDREN IN SERBIA / ANALYSIS OF COVID-19 PANDEMIC EFFECTS ON HOUSEHOLDS WITH CHILDREN
The ranking list of the biggest problems in online learning is mostly unchanged: mood (19%), lack of work atmosphere at home (18%), high expectations by teachers (14%), inconsistency in scheduling online classes and examinations by teachers (14%) and technical problems with the internet (11%). In the third wave it is also registered that teachers had higher expectations and requirements in comparison to the second wave (14% in comparison to 9% in the second wave).

Graph 4.2.27. Distance learning problems – comparison of the second and the third wave; data in percentages

In comparison to the period during the lockdown, mothers/guardians mostly see no differences (48%), while a certain percentage (39%) assess that distance learning has improved, was better organized and that it was easier for children to study better.

Graph 4.2.28. Improvements in distance learning – third research wave; data in percentages

The introduction of combined teaching (online/offline) did not lead to significant changes in parents’ role in offering help to children while studying.
However, when we look at the transition of behaviour during waves, it is noted that parents’ help with online learning was not lacking: in 70% of households with children aged 7 to 12 who had distance learning and 40% of the same households with children aged 13 to 17, it was registered that family members helped children to understand the learning material during online teaching in at least one research wave.

Graph 4.2.30. Help in understanding and acquiring the learning material – the second and the third research wave; data in percentages; Base: Households with children aged 7–12 years who have studied using distance learning (n=360, 48% of household population)), Households with children aged 13–17 years who have studied using distance learning (n=309, 41% of household population).

Shorter classes (30 minutes) were perceived differently by mothers/guardians, as there is no consistency in their assessment. Somewhat more than one third (36%) have clearly negatively assessed shortening of classes (as they thought children learned less this way), 31% report that the teaching in this format is highly dependent on the competence of the teacher, one fourth (25%) thought that it was the same as before, as the teachers got used to this form of teaching, while 8% assessed that it was better than before (clarifying that the children could focus better if the classes were shorter).
Hiring private tutors is specific for our educational system and it seems that the pandemic did not have greater influence on these activities. It is very important to stress that about 30% of the population pay for private tutor classes alongside regular education of their children. A high percentage of mothers/guardians do not use the services of private tutors (71%): 11% report that they paid for private classes to a higher degree than before; 10% have private tutors to the same degree as before.

The majority of children engaged in physical activities and spent time outside (68%), particularly children from the older age group (13 to 17) and from poorer families. However, 14% of children were almost constantly using digital devices (computer, mobile phone, tablet), while 19% of children were often spending time on digital devices but also engaged in other activities or interests (hobby, painting, reading...).
According to the majority of mothers / guardians (60%) of children aged 7 to 17 who participated in distance learning, the pandemic will have a negative effect on their child’s education, while 31% report that there would be no long-term consequences on their further education. Those who report most often about the negative impact of online education on children’s further education are families from urban areas, with employed mothers/guardians, while the poorest households frequently assess positive effects of online schooling, as it helps children develop new skills.

Graph 4.2.33. Free time – third research wave; data in percentages

How does your child spend his/her free time (when his/her distance classes and study obligations are over)? – third wave survey; Base: Children aged 7–17 years who have studied using distance learning, n=699 (93% of population aged 7 to 17 years)

- Child is almost always on one of the digital devices (computer, tablet, mobile phone) - 14%
- Child often uses digital devices, but also has some activities that are related to some of his/her special interests (hobbies, painting, reading books...) - 18%
- A bit of everything, including daily physical activities and staying outside - 68%

Graph 4.2.34. Online schooling effects of the pandemic on the child’s further education – third research wave; data in percentages

How do you think this period of schooling during the pandemic will affect your child’s further education? – third wave survey; Base: Children aged 7–17 years who have studied using distance learning, n=699 (93% of population aged 7 to 17 years)

- It will have a positive impact, because it has developed some new skills - 9%
- It will not have much of an impact on future schooling - 31%
- It will have a negative impact - 60%
**Specific parameters for children aged 0 to 6**

Preschool is attended by 69% of children aged 0 to 6.

**Graph 4.2.35. Preschool attendance – comparison of the second and the third wave; data in percentages**

The share of children who do not attend preschool programmes is higher in households where mothers/guardians have primary or lower education and in households where mothers/guardians are unemployed and whose monthly income is lower than €300.

More than half of the children (55%) who attend a preschool institution but do not attend preparatory preschool programme returned to these institutions after they reopened in May 2020, one fifth did not do so, while 24% returned but are attending it less frequently than before. **Moreover, the majority of parents with children from the latter group (57%) think that the epidemiological situation did not affect the quality of schooling**, one third think that the change in working circumstances had a certain negative impact on the quality, while 11% assess that the sanitary and hygienic measures which were introduced have significantly impacted the quality of educational work.

The children who did not return to preschool institutions (8% of total population, n=19) mainly did not do so because they were provided with safe conditions to stay at home.

**Attending a preschool programme was much more a characteristic of this group: 90% of the children of this age who attended this programme did the same in the three months before the research** (this figure could be the consequence of the fact that this programme was compulsory).

Finally, **when it comes to communication with teachers and how useful their advice and suggestions were, most mothers/guardians (84%) assess that they were useful.** More significant changes in comparison to the second wave were not recorded (84% expressed that advice and suggestions were extremely useful both in the second and the third research wave).
Graph 4.2.36. Assessment of preschool teachers’ support – comparison of the second and the third wave; data in percentages

How useful to you and to your family was preschool teachers’ support to learning through play at home and advice?
Base: Children aged 0–6 years who usually attended a preschool institution; n=169 for second wave (64% of population aged 0 to 6 of second wave), n=161 for third wave (69% of population aged 0 to 6 of third wave)

<table>
<thead>
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<th></th>
<th>2. wave</th>
<th>3. wave</th>
</tr>
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<td>Very useful</td>
<td>43</td>
<td>41</td>
</tr>
<tr>
<td>Mainly useful</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>USEFUL (SUM+)</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>NOT USEFUL (SUM-)</td>
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<td>6</td>
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<tr>
<td>Mainly not useful</td>
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<td>3</td>
</tr>
<tr>
<td>Not useful at all</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>we were not in contact with teachers / we got no advice or support</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Graph 4.2.37. Effects of distance learning on motivation of children aged 7–12 – third research wave; data in percentages

How did distance learning affect your child’s motivation to learn compared to the pre-epidemic period? – third wave survey;
Base: Children aged 7–12 years who have studied using distance learning, n=376 (89% of population aged 7–12)

<table>
<thead>
<tr>
<th>Motivation Change</th>
<th>2. wave</th>
<th>3. wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has become more motivated to learn</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>No change compared to the period before the pandemic</td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>
Almost two thirds of parents with children aged 7 to 12 who participated in distance learning assess that it resulted in lower quality of learning, and one third do not.

Graph 4.2.38. Quality of learning – third research wave; data in percentages

Compared to regular school attendance (before the pandemic), how would you compare the quality of a child’s learning during distance learning? – third wave survey; Base: Children aged 7–12 years who have studied using distance learning, n=376 (89% of population aged 7–12 years)

- Child learns much worse: 14
- Child learns worse: 48
- Same as before: 34
- Child learns better than before: 2
- Child learns much better than before: 2

The biggest problem with distance learning is the lack of a work atmosphere at home (23%) (especially in urban areas and households with employed mothers), but also the mood of children (21%). Other things that are stressed were high expectations by teachers (12%) and inconsistencies in teachers’ schedules (9%) as well as technical problems (11%).

Graph 4.2.39. Problems with distance learning – second and third research waves; data in percentages

- Mood (in this situation, learning was not his/her first priority): 25, 21
- Lack of work atmosphere at home: 21, 23
- Technical problems with devices or the internet: 11, 11
- High expectations and requirements from teachers: 10, 12
- Inconsistency of teachers regarding scheduling online classes and examinations: 6, 9
- Inability to organize his/her time: 6, 8
- Lack of skills to use digital devices: 0, 4
- Unavailability of the internet: 0, 1
- Something else: 6, 11

What is the biggest problem for your child during distance learning? Base: Children aged 7–12 years who have studied using distance learning, n=418 for second wave (99% of population aged 7 to 12 years for second wave), n=376 for third wave (89% of population aged 7 to 12 years for third wave)
As for organization of distance learning, parents do not have a unanimous prevailing attitude: while 41% think that this form of schooling was better organized, 47% assess that nothing has changed in comparison to spring 2020.

Combined method of teaching

Parents mostly agree that the introduction of combined teaching did not affect the amount of help they were providing for their children while studying: 35% state that they still help their child, while 12% did not help them before.

As for shortened duration of classes, there is no unanimous attitude expressed by parents: 37% think that this change made children study less, 27% think that it depends on the way that the teachers adapted to the change, while 29% are of the opinion that the teachers adapted their teaching methods to this circumstance. A somewhat more positive assessment of shorter classes was given by unemployed mothers/guardians.
A great majority of parents (83%) with children aged 7–12 who had distance learning did not pay for any private classes. Among those who did, there are somewhat more of those who did it more often than before the pandemic.

Among the population of children aged 7 to 12 who had distance learning, most engage in different activities in their free time (75%), one tenth use some digital device almost all the time, while 15% use digital devices but also engage in other activities. Somewhat more frequent use of digital devices in combination with other activities was noted among children in urban areas and children whose parents have higher education.
How does your child spend his/her free time (when his/her distance classes and study obligations are over)? – third wave survey; Base: Children aged 7–12 years who have studied using distance learning, n=376 (89% of population aged 7 to 12 years)

- Child is almost always on one of the digital devices (computer, tablet, mobile phone) - 10%
- Child often uses digital devices, but also has some activities that are related to some of his/her special interests (hobbies, painting, reading books...) - 15%
- A bit of everything, including daily physical activities and staying outside - 75%

The majority of parents (59%) are of the opinion that this form of distance learning during the pandemic will have negative effects on further education of their child. This attitude is particularly strongly expressed by parents from urban areas of the country.

Specific parameters for children aged 13 to 17

Distance learning, via computer, phone or tablet was practised by all children (99%): 90% during this school year, and 9% during spring 2020.

This form of schooling affected the decline in motivation of children to study: this opinion is shared by 61% of the parents with children aged 13 to 17 who had this type of schooling. One third of parents are of the opinion that distance learning did not affect the child’s motivation to study, and this attitude is more often expressed by parents from rural areas.
Graph 4.2.46. Effects of distance learning on motivation to study of children aged 13–17 – third research wave; data in percentages

How did distance learning affect your child’s motivation to learn compared to the pre-epidemic period? – third wave survey; Base: Children aged 13–17 years who have studied using distance learning, n=323 (98% of population aged 13 to 17 years)

- Has become more motivated to learn: 8
- No change compared to the period before the pandemic: 31
- A little less motivated: 33
- Significantly less motivated: 28

Furthermore, more than half of the parents think that distance learning caused a decline in the quality of learning, while 36% did not notice any difference in quality in comparison to regular school attendance.

Graph 4.2.47. Quality of child’s learning – third research wave; data in percentages

Compared to regular school attendance (before the pandemic), how would you compare the quality of a child’s learning during distance learning? – third wave survey; Base: Children aged 13–17 years who have studied using distance learning, n=323 (98% of population aged 13 to 17 years)

- Child learns much worse: 16
- Child learns worse: 38
- Same as before: 36
- Child learns better than before: 8
- Child learns much better than before: 2

The top-ranked problem for this age group of children is inconsistency of teachers regarding online schedules and examinations (19%), followed closely by children’s mood (16%) and high expectations from teachers (15%). Parents report technical problems slightly less than during the state of emergency (11%, as opposed to 19% in the second research wave – it appears that these kinds of problems were the easiest to solve during the pandemic). Lack of work atmosphere at home is most often mentioned by parents with high education, and technical problems by households from rural areas and those with lower income. These are mentioned the least by households from Vojvodina.
Half of the parents with children aged 13 to 17 who had online schooling this school year do not notice any difference in comparison to the previous year, while 38% notice better organization, which led to improved quality of learning for children. Poorer organization is stated by 14% of the parents, and this is expressed somewhat more often by parents from urban areas.

According to parents/guardians, the combined method of teaching did not bring any significant novelties or improvement in children’s learning: about half of the parents did not help their children before, so the pandemic did not change anything in this regard; while 28% state that introducing the combined method of teaching did not change anything, as they still help their child often.
Parents have a divided opinion with regard to shorter classes and their impact on the quality of education: the same percentage (35%) of respondents think that this form of teaching meant that the children are learning less as think that the effect of this method of teaching on learning depends on the extent to which teachers’ adapted their teaching to this circumstance. One fifth think that there was no impact as the teachers have adapted the programme, while 8% think there was a positive influence of this form of teaching on children’s attention.

Paying for private tutors is somewhat more frequent in this age group in comparison to younger groups: before the pandemic, 38% of parents paid for private classes for children aged 13–17. Since the beginning of the pandemic, 10% of parents stopped paying for private classes, while the same percentage of parents who paid for private classes did so more often than before the pandemic (13%) and did so to the same extent (13%).
Graph 4.2.52. Paying for private classes – third research wave; data in percentages

Do you currently pay for ‘private’ classes for your child? – third wave survey; Base: Children aged 13–17 years who have studied using distance learning, n=323 (98% of population aged 13 to 17 years)

- Yes, more often than before the epidemic: 13%
- Yes, to a similar extent as before the epidemic: 13%
- Yes, but to a lesser extent than before the epidemic: 2%
- We stopped paying for private lessons: 10%
- We haven’t paid for private lessons before, so we are not paying for them now: 62%

The majority of children aged 13–17 (59%) spend their free time in different activities, including physical activity. However, as expected, among children aged 13–17 a higher level of use of digital devices in their free time was registered in comparison to younger age groups: one fifth of children almost always use one of these devices, while a similar percentage (22%) do so along with other activities.

Graph 4.2.53. Free time – third research wave; data in percentages

How does your child spend his/her free time (when his/her distance classes and study obligations are over)? Base: Children aged 13–17 years who have studied using distance learning, n=323 (98% of population aged 13 to 17 years)

- Child is almost always on one of the digital devices (computer, tablet, mobile phone): 19%
- Child often uses digital devices, but also has some activities that are related to some of his/her special interests (hobbies, painting, reading books...): 22%
- A bit of everything, including daily physical activities and staying outside: 59%

The majority of parents with children aged 13–17 (61%) assess that the schooling during the pandemic will have a negative effect on further education of their child, 11% think that this impact will be positive, while less than one third (28%) do not perceive a more significant effect.
Graph 4.2.54. Effects of distance learning during the pandemic on further education of a child – third research wave; data in percentages

How do you think this period of schooling during the pandemic will affect your child’s further education? – third wave survey; Base: Children aged 13–17 years who have studied using distance learning, n=323 (98% of population aged 13 to 17 years)

- It will have a positive impact, because it has developed some new skills (learning, using computers)
- It will not have much of an impact on future schooling
- It will have a negative impact

Negative effects during the pandemic are somewhat more stressed by mothers/guardians from urban areas, while those from rural areas to a higher degree than the total population think that there will be no impact whatsoever.
GEOGRAPHIC DIMENSION OF PANDEMIC EFFECTS ON HOUSEHOLDS WITH CHILDREN AGED 0 TO 17 IN SERBIA
The pandemic and the global crisis have not had the same effect on all groups. The specificities of the effects of the pandemic on the measured indicators were monitored by geographic parameter and place of residence. The findings show that the negative effects of the pandemic surpass the positive effects (even though there have also been some positive changes during the research period).

The strongest negative effects of the pandemic in all three research waves were registered in households from Belgrade, and these are visible in the following parameters:

Socio-economic parameters (most often refer to the decrease in total household income; most unexpected costs; most healthcare costs; most households and mothers / guardians who report having financial difficulties; most cutbacks on food for the whole family; more reports of borrowing money);

Health parameters (worse mental and physical health of mothers/guardians, including mental health deterioration, as well as more active search for professional help);

Psychological parameters (difficulties in parenting; the least help and support in looking after the children; most frequent mental healthcare concerns and financial issues).

There have been fewer positive changes during the three research waves in Belgrade households, and among these positive changes is the positive impact on parent–child interaction (more time is spent with children) and the least changes in the employment status of mothers/guardians.

Other regions are not differentiated by numerous specificities, but there are some regularities:

In Vojvodina, respondents reported more healthcare expenses, but also an increase in income.

South and East Serbia regions report economic difficulties to the highest degree; a decrease in income of mothers/guardians, as well as changes in total household income (most unstable economic situation); difficulties in providing meat or fish meals at least once in two days.

Regardless of specific regions it seems that the pandemic had a more negative effect on urban than rural areas:

Households from urban areas report more about economic problems (paying the rent, unexpected expenses, borrowing money as the strategy for overcoming economic problems); but these households also more often mention concerns around healthcare, mental state and in relation to health (they more often seek professional help in the mental health domain). In the parenting domain, households from urban areas did not have help and more often report difficulties in performing parenting duties. Conversely, in rural areas, respondents less often report changes in employment and job losses as they are more often self-employed. In the health domain they less often report deterioration of mental health. However, in rural areas the household income is lower, and they more often mention increased healthcare expenses.
It is interesting that regional differences are smaller and less often statistically significant when parameters referring to children are compared: education and healthcare indicators. 

Education indicators point to some differences in the types of settlement. In urban settlements there are the following specificities:

Parents are more often dissatisfied with online schooling.

Parents, more often than those from rural settlements, assess the correlation of quality and efficacy of online schooling with teachers’ competence; i.e., they are more critical of teachers and more demanding when it comes to teachers.

Parents report on the negative effects of online schooling on further education of their child.

Children spend more time on digital devices in their free time.

Parents more often report the lack of a work atmosphere at home.

In terms of children’s health, in urban settlements there are these specificities: nervousness and irritability are more often emphasized, as well as difficulties focusing and generally worse mental state of children.

Rural households report that there were fewer changes on different parameters related to children in comparison to the period before the pandemic. By monitoring education indicators in households from rural settlements, the following can be reported: better experience with and better evaluation of distance learning, more positive assessments that this type of schooling will have positive effects on further education, less frequent reports on lack of a work atmosphere at home, but more frequent technical problems during online learning. In terms of health indicators, rural households report on fewer changes on different parameters related to children in comparison to the period before the pandemic.

Other observations

Unlike individual measured parameters that refer to the region and place of residence (urban/rural type of settlement), there were no significant differences in the summary indicators in all three waves of research. Some differences in the measured indicators were noticed on the type of settlement (urban/rural), as well as in Belgrade and Vojvodina, while other geographical regions (Sumadija and West Serbia; South and East Serbia) were not different by any indicator.

Most significant changes were recorded in the following aspects:

**Economic indicators:**

Households in Belgrade statistically significantly report more on reduction of expenses on children’s education (tuition fees).

**Access to healthcare and other institutions and services:**

In Belgrade and more generally in urban areas, there are more frequent reports that the child could not access all necessary healthcare services during the pandemic, in at least one wave of research.

In Vojvodina, households/guardians most often report that the children had access to necessary healthcare services.

In Vojvodina, respondents are the least concerned for their health due to the pandemic.

**Education:**

Households from rural areas and from Vojvodina report the least that children returned to preschool institutions after the pandemic (this is true for at least one or two research waves).

Belgrade has the highest percentage of children who returned to preschool institutions.
CONCLUSIONS
6 Conclusions

This study monitors the effects of the COVID-19 pandemic on households with children aged up to 17 in Serbia, in three waves of research during 2020–2021. The results of the study indicate that the effects of the pandemic are multiple on all measured parameters.

In order to follow the summary findings for all three waves in this study and to enable following the changes in general by key indicators, indices of changes were prepared and used in all waves. Key indicators were: socio-economic, healthcare (including mental health) and educational. The transition of key factors was followed through three waves.

A) Socio-economic indicators show that the negative effects in economic aspects have most seriously struck households that are generally most vulnerable – the poorest households (with income lower than €300, with mothers/guardians with lower education, and households that could not afford unplanned financial expenses). Despite this fact, there was no significant increase in seeking social welfare help by households with children. Particularly struck were households with lower income in Belgrade: they mention more often that they borrowed money, had to cut food costs for household members, had financial expenses for healthcare services and other unexpected costs.

B) Psychosocial indicators show that the pandemic had the most negative effects on households in urban areas, particularly in Belgrade. Mothers/guardians from these households most often report that it is hard for them to deal with parenting, that they are concerned and had physical and mental challenges in the research period. Mothers/guardians from this region had more difficulty in parenting during the pandemic, probably partly because less help was available to them. In urban areas, the concerns related to mental health are higher: mothers/guardians report more often about the presence of all aspects of mental changes in children.

C) Access to healthcare services indicators show that access was more difficult in urban areas and Belgrade, in all three waves, mostly in the domain of specialist services and in younger children.

D) Educational indicators: online learning created problems in education due to lack of a work atmosphere at home, or changes in the child’s mood and options for following online learning. The least satisfied with online learning are educated mothers/guardians, who also met with greatest difficulties in parenting. Households in urban areas of Serbia reported more often that they were not satisfied with online learning and are concerned how this type of learning will affect further education of their children. Younger children in preschool institutions have somewhat specific needs, resulting in challenges during the pandemic: children from rural areas and Vojvodina returned the least to preschool institutions after the state of emergency was lifted, which can have a negative effect on their socialization in the future.

Taking into consideration all that was stated above, we can only partially speak about specific categories of losers and winners in this pandemic. The biggest losers in the economic sense are poor households, whose status and position were not good even before
the pandemic. Faced with existential and financial worries, they reported less about difficulties in the mental state of children or their own mental health. Analysing psychological indicators, the biggest losers are households from urban areas and Belgrade. This finding refers to deterioration of children’s general mental health, but also to specific mental difficulties such as anxiousness and inability to focus.

We can further conclude that the crisis struck households from rural areas the least, and this holds true for all three research waves (we cannot speak about winners in this case). This can be explained by the nature of this health crisis, which was caused by the spread of the COVID-19 virus primarily in highly populated areas where close contact between people is most frequent. Medical recommendations to respond to the pandemic focused on social and physical distancing, which means that the urban areas were particularly vulnerable as the usual family lifestyle and household functioning changed drastically, primarily in the cities. This is why reporting on negative effects of the pandemic is somewhat lower in rural households on almost all parameters. There are no particular differences for the region of Sumadija / West Serbia, which can implicitly indicate that households from this part of Serbia were least exposed to negative effects during the pandemic.
7 Recommendations

Based on this research, we can make recommendations in different areas of life and aspects of society’s functioning, as well as communication strategies.

7.1 Recommendations for state institutions

Area: Healthcare
Increase the availability of psychosocial support for parents. This is not necessarily specialist psychiatric help, but rather crisis counselling or online workshops/seminars that would provide skills for overcoming the stress related to the current psychosocial challenges that households with children up to the age of 17 face during the COVID-19 pandemic. An online format will enable a wider scope of participants and potentially higher availability for these workshops/seminars.

Increase the availability of psychosocial support for overcoming parenting challenges. The COVID-19 pandemic is presenting new parenting challenges and the need to juggle professional and family obligations. As children were focused on online reality, this has limited potential parental control. Thus, online workshops/seminars are recommended with an aim of discussing parenting challenges and improving parenting skills in changed living circumstances. An online format will enable wider participation and potentially higher availability of these programmes.

In the healthcare domain, it is necessary to improve the availability of specialist healthcare examinations, which will probably be feasible once the pandemic starts to slow down. Special attention should be paid to protective healthcare of children aged up to 6 (particularly immunization).

Simplify procedures for obtaining health certificates so that children can return to preschool institutions after being absent due to sickness or other reasons.

Area: Education
Organize workshops/seminars for learning and learning strategies. Make use of digitalization and the internet for promotion of interactive educational programmes for children of all ages. The COVID-19 pandemic increased the number of children who joined the online world for the first time (especially younger children), using it as a platform to learn and socialize. Focusing on the online world requires navigation and coordination by professionals or parents, particularly in the case of the youngest children. Possibly, there could be educational tasks for groups of children (group learning, group tasks), which would lead to integration of the educational process and socialization.

Digital literacy is becoming increasingly important for young people. This is why we recommend online workshops/seminars with an aim of encouraging digital literacy. An online format enables a wider scope of participation and potentially higher availability of these workshops/seminars.

As for the teaching process and the responsibility of the teaching staff, it is recommended to engage in continuous improvement of online teaching.
There are a few especially important questions: adapting the teaching of different teachers and balancing the requirements for different subjects and grading criteria done by educational panels in educational institutions. In order to improve all of the above, organizing teachers’ seminars and workshops is advisable. Support for the principles of distance learning should be systematic (continuous) and not short-term. Organize workshops for parents, with the aim of adapting spatial/time/organizational family activities to educational requirements.

**Area: Economy/employment**

Economic help should be directed and focused towards the most vulnerable groups (help should not be distributed to all groups equally). One possible strategy could be short-term financial help for the population groups that are most vulnerable to the effects of economic crisis.

**Area: Social welfare**

Improve communication about social welfare (conditions, ways of obtaining it). Most vulnerable groups should be actively presented with all potential types of economic help that the State is already providing.

### 7.2 General population – communication material

**Parents**

- Identify economic/social / psychological/health problems and challenges.
- Seek economic/social/psychological/healthcare help if needed.
- Seek professional help if needed (both for the parent and the child).
- Do not avoid regular preventive medical check-ups (both for the parent and the child); act in accordance with medical recommendations.
- Spend quality time with children; make an extra effort to understand educational questions that the children may have.

**Youth and Children**

- Use digitalization to improve education (make use of the better availability of educational and cultural content during the pandemic).
- Communicate with peers outdoors or online with meaningful and inspiring topics.
- Clearly articulate and ask for help from parents in all spheres of life.
- Have open conversations with teachers about educational difficulties, if there are any; look for help from teachers who are willing to cooperate.