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PERCEIVED THREATS AND DIFFICULTIES OF MOTHERS OF YOUNG CHILDREN AFTER 9 MONTHS IN A COVID-19 PANDEMIC

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Abstract. *The current coronavirus pandemic poses challenges to psychological well-being. Children and mothers of young children are especially vulnerable. The present qualitative study further extends and deepens the understanding of psychological response to COVID-19 pandemic of mothers of young children and their children (0-4 years of age). The aim of the present study is to outline perceived threats and difficulties 9 months after the COVID-19 outbreak in Bulgaria in a period of high infection rate and childcare closures. Using conceptual cluster analysis, the free text answers of 77 mothers were grouped into clusters and subclusters. Mothers of young children continue to report a wide range of perceived threats and difficulties later on in the pandemic. The most frequently perceived threats were the lockdown and social isolation of the child, the coronavirus disease itself, and the capacity of the health system. Almost half of the respondents did not perceive any difficulties. Among the other respondents the most frequently reported difficulties were the lack of social contacts, the fact that the child does not go out, childcare closures and boredom. Dynamics of experiences of the pandemic over time were examined by comparing the present results with ones from a previous study (Paunova-Markova, 2020) conducted during the first month of COVID-19 outbreak and lockdown in Bulgaria.*

Keywords: COVID-19; worries; difficulties; mothers; children; conceptual cluster analysis.

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In 2020 a novel coronavirus (COVID-19) emerged and rapidly spread around the globe. The COVID-19 pandemic caused millions of deaths and even more critical or severe cases. Most countries implemented unprecedented in scale measures in an attempt to control the spread of the disease (see, e.g., Oxford COVID-19 Government Response Tracker, Hale et al., 2020). Mask wearing, frequent disinfection, stay at home, social distancing, childcare closures, distance work and distance learning were either compulsory or recommended. Bulgaria did not make an exception and since March 2020 childcares, kindergartens, schools, restaurants, bars and cafes were closed, as well as shops except for groceries, pharmacies and supermarkets. Mass events, elective surgeries, routine medical examination, visits to playgrounds and parks (including nature parks) were prohibited. Most people started to work remotely or went on a leave. Some companies went out of business and, consequently, some people lost their jobs. In May/June 2020 Bulgaria, like other countries worldwide, started to lift some restrictions in an attempt to return to normality. However, many people continued to follow protective measures by personal choice. Also, the authorities had to periodically impose and lift measures according to the infection rate. For instance, childcare reopened in April 2020, but there was another closure in December 2020.

The coronavirus pandemic has continued for more than two years to the present moment and has had a long-term impact. As Barch (2021) wrote in an introduction to a special issue on COVID-19 and mental health 'It is somewhat cliché to note that the COVID-19 pandemic has been a life-changing experience for societies across the world, though it is true nonetheless' (p. 241). Both the outbreak and the measures pose threats to psychological well-being (Kowal et al., 2020; Wright et al., 2020b). Furthermore, there is evidence that both experience of adversities and worries about possible adversities during the COVID-19 outbreak impacted sleep quality (Wright et al., 2020a).

Since the emergence of COVID-19 many studies aimed to address the increasing mental health sequelae from COVID-19 for children and their parents, outlined to be specific vulnerable groups (Dvorsky et al., 2021; Glynn et al., 2021; Racine, Birken et al., 2020; Fontanesi et al., 2020; Raviv et al., 2021; Kerr et al., 2021; Ye, 2020; Marchetti et al., 2020; Boldt et al., 2021; Henderson et al., 2020; Ashikkali et al., 2020; Cusinato et al., 2020; Fitzpatrick et al., 2021; Patrick et al., 2020; etc.). There are substantial changes and ramifications from the coronavirus pandemic for children all over the world. However, 'the stress of these disruptions has largely fallen on the adults who care for them' (Racine, Birken et al., 2020) and a vicious circle takes place – when parents are in distress, children become distressed in turn, too (Shih, et al., 2018). Parents who experienced more negative psychological impacts from the coronavirus pandemic reported higher levels of parental burnout, lower levels of positive behaviour in children as well as greater increases in children's stress behaviours (Kerr et al., 2021). Psychological distress predicted greater parenting-related exhaustion during the COVID-19 lockdown (Marchetti et al., 2020). Having younger children also predicted greater exhaustion among parents (Marchetti et al., 2020) and was connected to worse mental and behavioural health (Patrick et al., 2020). Prior to COVID-19, many family studies have discussed how external events, such as parental employment, natural disasters, etc., impact role definitions, performance, stress, and conflict in the family (Hutter, 1985, as cited by Totkova, 2019).

Drawing on data collected before and after the COVID-19, a study focusing on young children (aged 2–7) and their parents in the USA concludes that the COVID-19 crisis has worsened parents' and children's psychological well-being (Gassman-Pines et al., 2020). 4 weeks into the lockdown, not a small proportion of Italian parents (17% from 1226 participants) experienced significant parenting-related exhaustion (Marchetti et al., 2020). The frequency of negative mood in parents' daily reports increased significantly since the start of the crisis. 27% of parents

reported worsening of their mental health after March 2020 and 14% reported worsening in their children's behaviour (Patrick et al., 2020). Increase in negative affect was observed among pregnant women and mothers of infants in Bulgaria during the COVID-19 pandemic regardless of socio-demographic factors (Hancheva et al., 2022). A study conducted in Italy with parents of children aged 5–17 is in line with the accumulated evidence and concludes that the measures to control the spread of COVID-19 and the changes in daily routine affected negatively the psychological well-being of parents, which in turn poses a significant risk for the children's well-being (Cusinato et al., 2020). A study on pre-schoolers in the USA, which compares the scores during the pandemic with the norms prior the pandemic, shows that depressive and externalising symptoms were elevated (Glynn et al., 2021). A study among children and adolescents in Italy and Spain, two of the most affected countries by COVID-19, reports that 85.7% of the parents perceived changes in the emotional state and behaviours of their children (Orgilés et al., 2020).

Mental health seems to be challenged even more when people are confronted directly with the coronavirus disease. COVID-19 exposure is associated with worse psychological well-being among children and adolescents. A study on 49 397 children from prekindergarten to 12th grade reports that COVID-19 exposure and family stressors decreased positive well-being indicators and increased negative well-being indicators (Raviv et al., 2021). There seem to be personal and contextual variables that are involved in the psychological adjustment to the current coronavirus pandemic. Parental stress, lower levels of resilience in children, changes in working conditions, as well as psychological, physical, or genetic problems of the parents are identified as risk factors for psychological maladjustments (Cusinato et al., 2020).

Some reported hardships, which families with young children have experienced during the coronavirus pandemic, are job loss, income loss, caregiving burden, and illness (Gassman-Pines et al., 2020). Emotional and behavioural difficulties in children have increased significantly during the pandemic (Racine, Cooke et al., 2020). Among children in all age groups (1-3, 4-5 and 6-12 years) was observed an increase in sleep disturbances during the pandemic (Bruni et al., 2021). Some negative changes during the pandemic among children and adolescents in Italy and Spain were worries, irritability, restlessness, nervousness, uneasiness, etc. (Orgilés et al., 2020). Young children in the age group of 3 to 6 years manifested symptoms such as clinginess and fear that a family member may get infected (Jiao et al., 2020).

Evidence suggests that in the coronavirus pandemic women are more overburdened compared to men (Dellazzana-Zanon et al., 2020; Adisa et al., 2021), perceive greater risk (Dryhurst et al., 2020), and are more vulnerable to negative mental health changes (Marconcin et al., 2022; Patrick et al., 2020; Mazza et al., 2020; Kowal et. al., 2020; Wang et al., 2020; Hristova & Karastoyanov, 2021). In line, research shows that mothers experienced more parenting-related exhaustion than fathers during the COVID-19 lockdown (Marchetti et al., 2020).

Considering the accumulated evidence, studying the psychological well-being of mothers of young children stands out to be highly relevant.

The aim of the present study is to outline what threats and difficulties did mothers of young children perceive 9 months after the outbreak in a period of high infection rate and childcare closures. Detailed understanding of COVID-19 impact on these vulnerable groups is vital for improving their psychological health and resilience.

Previous research has been conducted by Paunova-Markova (2020) with the same design and aim during the early stage of the pandemic (March 2020). The present study also examines whether experiences of the pandemic change over time. A study on public perceptions on the swine flu pandemic shows that fears were at their height in the early months and subsided over time as people became more familiar with the disease (Hilton & Smith, 2010). On the other hand, a study

on adults, comparing mental health at the very beginning of the COVID-19 pandemic and 6 months later, suggests that the detrimental consequences persisted even when lockdown measures had ended (Pieh et al., 2021). Another study reports that parents' stress increased substantially with the rise of the coronavirus pandemic at the peak of stay-at-home measures and decreased 4 months later when children returned to school; however, stress levels had not returned to pre-pandemic ones (Adams et al., 2021).

Qualitative studies have proved to be useful for gaining valuable information and in-depth understanding of response to pandemics and containment measures (e.g. Fitzpatrick et al., 2021; Paunova-Markova, 2020; Saurabh & Ranjan, 2020; Sprang & Silman, 2013). For instance, in order to understand how this unexpected crisis was experienced and made meaning of, Todorova et al. (2021) analysed narratives of people from different countries around the globe. Open-ended questions were used as prompts for stories about experiences during the pandemic, which were analysed through thematic content analysis (Todorova et al., 2021).

Procedure

The empirical data were taken from a larger three-wave study on mothers and their children under 4 years of age in the conditions of a state of emergency due to a pandemic. The larger study included qualitative (open-ended questions about the impact of the pandemic and state of emergency on mothers and their children) and quantitative measures (e.g. measures on anxiety, emotional well-being, etc.). The participants answered the open-ended questions in a written form and they could write as little or as much as they wanted, they also had the option not to answer a question. However, they were kindly encouraged to give as full and detailed answers as possible. For the first wave an e-form via Google Forms was created (in Bulgarian) and an invitation to participate, which included a link to the e-form, was posted in Bulgarian social media groups for motherhood and parenting. Participation was voluntary and no compensation was offered. Only participants who provided their contacts were invited to participate in wave two and three.

Everyone who volunteered to take part in the study has provided a written consent. The participants were informed that the data will only be used for scientific purposes, that they can terminate their participation at any moment and that they can get in touch with the leading researcher whenever they want to. Their confidentiality has been guaranteed.

A total of 77 parents took part in the third wave. The collection of the data continued for about one month (December 2020/January 2021). During this period in Bulgaria the rate of new COVID-19 cases peaked and stricter measures were imposed to control the disease, including childcare closures (nurseries, kindergartens as well as any other educational or recreational facilities).

In order to outline what threats and difficulties did mothers of young children perceive in the situation, the present study focuses on the answers to two of the open-ended questions: 1) 'What are your main concerns in the situation?', which aimed to study the perceived threats; and 2) 'What difficulties do you and your child face in the situation?', which aimed to study the hardships that mothers and children encountered. The participating parents were instructed to think about the past month when they give their answers.

Method

The free text answers on two open-ended questions of 77 people were retrieved from a larger data pool on mother-child psychological experiences during coronavirus pandemic (see 'Procedure'). The empirical data were analysed using conceptual cluster analysis – a hybrid of the classical cluster analysis and content analysis. The method is proven to be useful for qualitative studies (Zinovieva & Pepermans, 2008; Paunova-Markova, 2020; Mengov, Zinovieva, Paunova-Markova & Karaivanova, 2015; Mengov, Zinovieva, Karaivanova & Paunova-Markova, 2015). An expert analysed the empirical data to identify

and formulate concepts and ideas throughout the data (Pidgeon & Henwood, 1997). Those ideas formed groups and subgroups that are called clusters and subclusters. Furthermore, a quantitative element was included in the study by counting for each cluster or subcluster the number of respondents who gave an answer that fell into it. A certain sentence or thought of a participant could fall into multiple clusters or subclusters, according to the ideas that it contained. Finally, a percentage of the 77 total answers reviewed was calculated for each cluster or subcluster.

Participants

The analysis was conducted based on the responses of 77 mothers.

The participating mothers were aged between 25 and 44 years (M=33.13, SD=4.63). The greater part of them have completed higher education – 29,3% a Bachelor's degree and 62,7% a Master's degree; 8% have completed secondary education and 0% elementary education. The participants were from miscellaneous vocational fields. The majority of them were Bulgarian (97,4%), 2,6% - Turkish and 0% - Roma or other. At the moment of the first wave data collection (March 2020) 96% of the respondents lived in Bulgaria, 2,7% - in Germany 1,3% - in the USA, and 0% - in other countries. 60,5% resided in capital cities, 23,7% - in big cities, 11,8% - in small cities and 3,9% in villages.

Their 79 children were between 3 and 56 months of age (M=33.71, SD=12.25). Out of them 44,7% were girls and 55,3% - boys. A quarter (25%) of the children had been visiting a childcare or a kindergarten.

7,2% of the respondents have tested positive for COVID-19 themselves at the moment of the last wave data collection (December 2020/January 2021) – 1,2% of them did not have any symptoms, 4,8% had a mild COVID-19 case, and 1,2% had a moderate COVID-19 case. None had a severe case or were hospitalised. 15,7% reported that they believe they had COVID-19 without getting tested.

12,2% of the respondents had a family member who have tested positive for COVID-19 – 1,2% of them did not have any symptoms, 6,1% had a mild COVID-19 case, and 3,7% had a moderate COVID-19 case and 1,2% had a severe case or were hospitalised. 8,5% reported that they believe someone in their household had COVID-19 without getting tested.

Results

The answers of the participants to two questions ('What are your main concerns in the situation?' and 'What difficulties do you and your child face in the situation?') were grouped in typical categories – clusters and subclusters, by means of conceptual cluster analysis. The analyses revealed 18 main clusters for perceived threats and 13 main clusters for perceived difficulties. They are presented by order of frequency in Table 1.

It should be noted that not all participants gave answers sufficiently full and rich in content to extract information for the study purposes. This should be kept in mind when interpreting the calculated percentages based on the total sample (N=77). A cluster of very small frequency might still be essential and the idea contained in it – important.

What follows is a detailed presentation of clusters and subclusters – first for perceived threats and next for perceived difficulties. Exemplary answers are provided to illustrate their content.

I. Perceived threats

0. **None (N=5; 6,5%)** – 'I have no concerns'; 'Unlike [during] the first lockdown, now we are prepared both physically and mentally'.
1. **The lockdown and social isolation of the child (N=28; 36,5%)** – 'the lack of communication for my children with other children – sometimes even if I propose to my daughter to go out, she doesn't want to, she had weaned away from interactions with other children'; 'my child increasingly wants to communicate with me only – an unwillingness to communicate with other adults, so far she doesn't actually reject other children, but when asked if

Table 1

Main clusters, sorted by frequency

Perceived threats	**Perceived difficulties**
0. None (6,5%)	0. None (44%)
1. The lockdown and social isolation of the child (36,5%)	1. The lack of social contacts (35%)
2. The coronavirus disease (35%)	2. The child does not go out (22%)
3. The capacity of the health system (13%)	3. Childcare closures (18%)
4. The duration of the situation (10,5%)	4. Boredom (17%)
5. The social isolation of the mother (9%)	5. A conflict between parents‘ work and taking care of the child (10,5%)
6. The personal finances (9%)	6. Working from home with a child (10,5%)
7. Childcare closures (9%)	7.The access to medical care (6,5%)
8. The uncertainty (8%)	8. The mother experiences negative emotions (6,5%)
9. The psychological state of the mother and close others (6,5%)	9. Financial (6,5%)
10. The lack of change and novelty (5%)	10. Doing the shopping (5%)
11. Increased screen time (4%)	11. Aggravating circumstances (4%)
12. The COVID-19 vaccine (4%)	12. The constant contact with the child is a burden (4%)
13. Death (2,5%)	13. A conflict between tasks executed from home (2,5%)
14. A quarantine (1,5%)	
15. The personal work activity (1,5%)	
16. The long stay indoors (1,5%)	
17. The state‘s capacity to cope (1,5%)	
18. The lack of physical activity (1,5%)	

she wanted to play with another child she doesn't want to'.

a. **The state of the child and the effect on their development (N=18; 23,5%)** – 'I restrict my child to having few contacts (I limit them to a minimum) both with other children and with adults. I believe that this will have a negative impact on the development'; 'the lack of new experiences for the children that are so important for their development'; '[I'm worried that] as a result of the isolation, my child will have problems communicating with other children'; 'I noticed that when he went to the nursery he learned very quickly a lot of words, exercises, rules for certain things. Now there is no other child for him to observe and to try to imitate'.
b. **The readaptation (N=4; 5%)** – 'Stopping going to kindergarten and hindering the adaptation'; 'The child just got used to go to nursery and just got socialised and now we will have to go through this [process] again'; 'I think it will be hard for her to adapt again in the nursery, that is, she will go through the stress again'.

2. **The coronavirus disease (N=27; 35%)** – 'fear of getting infected'; 'not to catch coronavirus from someone coming to our home'; 'I'm worried that I won't be able to protect my family from the virus no matter how hard I try and even despite isolating ourselves.'
   a. **Someone from the family or the close circle getting sick (N=20; 26%)** – 'the health of my family and loved ones';

'for my family and our close ones not to get sick'; 'Our family not to get infected with COVID 19, even though we follow the measures, as well as not to infect our close ones'.

i. **The elderly relatives (N=4; 5%)** – 'That my parents, who are in a risk group, could get infected'; 'That our elderly relatives can get the coronavirus'.
ii. **The child (N=2; 2,5%)** – 'the health of my child'; 'that the children and I don't get sick'.

b. **Not to affect a huge number of people (N=3; 4%)** – 'Whether death cases are increasing'; 'That many people will die'.
c. **The child is worried about the coronavirus (N=1; 1,5%)** – 'He's more scared of the 'corona virus', which he envisions as a big monster. He knows it's a disease, but he also knows it's not like the other diseases.'

3. **The capacity of the health system (N=10; 13%) –** 'the hospitals not to reach their full capacity'; 'the lack of adequate medical care and the overwhelmed hospitals'; 'not to find myself in a situation where I myself or someone from my relatives or loved ones needs medical help, which, however, cannot be provided'.
   a. **The treatment in general (N=3; 4%)** – 'Due to the collapse of the health system and the transformation of multiple wards into COVID wards, I was stricken with horror one night that if anything happened to us and we needed hospital or emergency care, there would probably be no one to attend to us'; 'the inadequate medical response to all other diseases'.
   b. **The treatment of COVID-19 (N=2; 2,5%)** – 'The large number of sick people, the lack of hospital beds'; 'The lack of effective treatment for people with COVID'.
4. **The duration of the situation (N=8; 10,5%)** – 'Will this ever end?'; 'that this will continue for a long time'; 'the suspicion that "this will never end"'.
5. **The social isolation of the mother (N=7; 9%)** – 'about the lack of my social contacts'; 'the social isolation'; 'The long time spent at home, without friends, in quarantine and isolation'.
6. **The personal finances (N=7; 9%)** – 'to have money'; 'financial losses due to closing our business'; 'inability to work (unpaid leave, lack of income)'.
7. **Childcare closures (N=7; 9%)** – 'I'm worried that the kindergarten closure could go on for a long time and I don't think it's good for the kids'; 'There is nothing I can do to substitute the kindergarten'; 'That the kindergartens are closed again and the child has a great need to communicate with other children'.
8. **The uncertainty (N=6; 8%)** – 'I don't know what's coming'; '[I worry] about the future'; 'The uncertainty about the span of the measures and hence – the impossibility to plan your life'.
9. **The psychological state of the mother and the close others (N=5; 6,5%)** – 'I became very nervous, irritable, and sometimes I take it out on her [the child]'; 'the impact of the situation on the mental health of the children (and of us parents)'.
10. **The lack of change and novelty (N=4; 5%)** – 'the lack of new experiences for the children that are so important for their development … we stay at home or go to the nearby park, there is no change'; 'the monotony'.
11. **Increased screen time (N=3; 4%)** – 'he watches more TV than I would normally allow'; 'I have to offer watching kid's movies with real children more often to make up for the lack of face-to-face communication'; 'she is bored at home and she spends more and more time in front of the television, unfortunately'.
12. **The COVID-19 vaccine (N=3; 4%)** – 'hesitation in the pros and cons of the COVID 19 vaccine'.
    a. **A mistrust (N=1; 1,5%)** – 'The effects of mass immunisation. I don't have trust in the vaccines. I'm afraid of side effects.'

   b. **Achieving herd immunity (N=1; 1,5%)** – 'Whether enough people will get vaccinated'.
13. **Death (N=2; 2,5%)** – 'I live with the feeling that the lives of my loved ones are directly threatened'; 'That my parents … could get infected and fail to heal'.
14. **A quarantine (N=1; 1,5%)**
   a. **The care for the child (N=1; 1,5%)** - 'So that the children and I don't get sick because there is no one to look after them!'.
15. **The personal work activity (N=1; 1,5%)** – 'Whether I will be able to find a job'.
16. **The long stay indoors (N=1; 1,5%)** – 'Being indoors for long periods'.
17. **The state's capacity to cope (N=1; 1,5%) –** 'the inadequate financial aid for medicine and business ... In general, the political situation blocks everything'.
18. **The lack of physical activity (N=1; 1,5%)** – 'The lack of physical activity for everyone in the family'.

II. Perceived difficulties

0. **None (N=34; 44%)** – 'no difficulties'; 'we have already taken the circumstances as normal to a certain extent and we have come up with alternative ways so that we don't miss anything'.
1. **The lack of social contacts (N=27; 35%)** – 'not meeting friends and relatives'; 'a lack of regular social contacts, not being able to participate in various activities or to spend some time with our elderly relatives'; 'I have … a 4 and a half months old baby, born during the pandemic. She has never met other infants, and her grandmas and relatives have seen her only 2 times'.
   a. **Of the child with other children (N=16; 21%)** – 'The child can't play with other children because we are keeping our distance.'; 'she wants to play with kids her age, she talks to the TV instead'; 'I can't have her gather with other children and she gets nervous out of boredom'; 'There is no way I could turn into a three-year-old for my child to be happy'.
   b. **Group activities (N=3; 4%)** – 'no group activities'; 'it isn't possible to take part in various activities'; 'no activities for the children'.
   c. **The child misses going to the childcare (N=1; 1,5%)** – 'He just made friends with several kids in the kindergarten and now he has to stay at home'.
2. **The child does not go out (N=17; 22%)** – 'she doesn't go out at all'; 'we go for walks very rarely'; 'We can't go out much and we are careful. If someone coughed on the playground I take him [her son] home right away!'.
   a. **The child does not work off their energy (N=16; 21%)** – 'he's at home most of the time and he can't work off his energy'; 'due to the shorter walks, the lack of physical activity, not playing tag or playing on climbing frames, the child doesn't get tired in a healthy way and it's very difficult [for the child] to fall asleep'; 'he obviously has too much energy to use up at home'.
   b. **The child is unhappy about this (N=1; 1,5%)** – 'They [the children] stay in front of the door and they remonstrate that they can't go out'.
   c. **Insufficient physical activity (N=1; 1,5%)** – 'shorter walks, the lack of physical activity, not playing tag or playing on climbing frames'.
3. **Childcare closures (N=14; 18%)** – 'The child doesn't go to kindergarten and he is worried that his teachers are sick, he misses the other children and he can't work off his energy enough'; 'The kindergarten environment is invaluable, she [the child] wants to attend her ballet and music classes, to play with her friends'; 'the child should go to nursery because he needs communication with other children and he needs activities that are interesting to him'; 'with this constant closing and reopening of childcare I can't start to work'.
4. **Boredom (N=13; 17%)** – 'there is no change and novelty'; 'he is very bored at home... he hardly plays with any toy, he

quickly gets bored of everything'; '[it's difficult] to have fun indoors'.

5. **A conflict between parents' work and taking care of the child (N=8; 10,5%)** – '[I'm troubled] how am I going to organise my absence from work and childcare for the next 3 working days. And after that in January, if they don't reopen the nursery'.
   a. **The mother is unable to work (N=4; 5%)** - 'with this constant closing and reopening of childcare I can't start to work'; 'There is nobody else who can take care of the child when he doesn't attend nursery, so I'm on unpaid leave'.
   b. **Leaving the child with relatives for a long time so that the parents can work (N=3; 4%)** – 'Now I have to take him to his grandmothers for the whole week – he doesn't see me or his father on workdays'; 'We spent 3 weeks apart – the little child in another city with the grandparents, so that we could work and help the elder child with distance learning. We suffered from this long separation and we missed each other.'
6. **Working from home with a child (N=8; 10,5%)** – 'Combining remote work and taking care of the child'; 'Childcare closures and working from home'.
   a. **The needs of the child cannot be met (N=3; 4%)** – 'Both of us parents work from home and we don't have the time it takes to allocate to him for activities, studying, playing, raising up. He's bored, he watches more TV than I would normally allow.'; 'I can't pay enough attention to her because I work from home... We spend more time together, but unfortunately not quality time.'
7. **The access to medical care (N=5; 6,5%)** – '[there are] planned medical procedures for our child and it is impossible that they are carried out'; 'The lack of any medical assistance at all. The doctors don't answer phone calls and don't examine. There is other stuff besides the coronavirus.'
   a. **Inability to go to a medical facility with a child (N=1; 1,5%) –** '[I am] with bronchitis and I can't go to the hospital because there is no one to take care of the child while I'm gone'.
8. **The mother experiences negative emotions (N=5; 6,5%)** – 'We can't go outside without being in fear'; 'I have become very nervous, irritable, and sometimes I take it out on her [the child]'; 'Isolation is a terrible feeling'.
9. **Financial (N=5; 6,5%) –** 'I was laid off due to business difficulties in the company that I worked for'; 'Finding a job (unemployment)'; 'unpaid leave, lack of income'.
10. **Doing the shopping (N=4; 5%)** – 'shopping takes more time due to the queues'.
    a. **Going shopping with the child (N=3; 4%) –** 'shopping with two children is difficult'; 'I can't go to the store with him safely because he wants to jog everything'.
11. **Aggravating circumstances (N=3; 4%)**
    a. **Homeschooling an elder child (N=2; 2,5%) –** 'Working from home, a schoolgirl and a toddler at home - terribly difficult'; 'We spent 3 weeks apart – the little child in another city with the grandparents, so that we could work and help the elder child with distance learning.'
    b. **Having a newborn baby (N=1; 1,5%)** – 'Raising a small child and having a baby at home'.
12. **The constant contact with the child is a burden (N=3; 4%)** – 'me, the child and my husband being at home all day long – it was too much and I didn't want to spend time with my child at all'; 'getting irritable due to spending so much time together'.
13. **A conflict between all tasks executed from home (N=2; 2,5%)** – 'At the moment, the difficulties are related to not having enough time, and the child needs constant attention when at home.'; 'I can't entertain him non-stop because I have to do the cooking and other household chores.'

Discussion

The present study outlines the threats and difficulties perceived specifically by mothers of young children 9 months after the COVID-19 outbreak in Bulgaria – a period of high infection rate and childcare closures. Next, the present study provides information about the dynamics of those experiences, comparing the results with previous data, collected in the first month of lockdown in Bulgaria (Paunova-Markova, 2020).

The findings in the present study indicate that the COVID-19 pandemic constitutes a challenging period for a significant part of Bulgarian parents and children. Mothers of young children report a wide range of perceived threats and difficulties during a later stage of the COVID-19 pandemic.

Previous research from Bulgaria also shows that the COVID-19 pandemic resulted in major changes in the daily lives of mothers of young children (Paunova-Markova, 2020), of working parents with young children (Panchelieva et al., 2022) and the general population (Nacheva et al., 2022). Results from a qualitative study based on the contents of the diaries of 24 volunteers on their experiences during the early stages of the COVID-19 pandemic and lockdown (March/April 2020) indicate that the organisation of everyday activities changed significantly and stress-related behaviours were present (Nacheva et al., 2022). Nacheva et al. (2022) also identified fears related to the psychosocial consequences of the crisis – concerns about the negative impact on psychological well-being and interpersonal relationships. Some parents from the sample were concerned about the negative impact of the measures on their children. Another study (Adams et al., 2021) on common stressors among parents of children aged 5-18 years identified as stress inducing changes in children's routines, worry about the coronavirus disease, and online schooling demands.

In a qualitative study parents of children aged 1–19 years were asked about their children's problems related to emotional or behavioural difficulties and, using thematic analysis, identified numerous themes within the responses (Fitzpatrick et al., 2021). They concluded with 17 themes, including misbehaviour (35%), anxiety/stress (24%), social isolation (23%), depression (20%), academics (17%), restlessness/lack of physical activity (12%), sleep (11%), boredom/lack of engaging activities (11%), physical health (11%), attention, hyperactivity, and/or impulsivity (9%), emotion regulation (8%), lack of routine/structure (8%), dependence on caregiver(s) (8%), screen management (7%), motivation (3%), and other. Dependence on caregivers appeared to be more common among younger children. Depression and anxiety/stress, on the other hand, were more common among older adolescents. Among the 1-5 year old age group the top 5 most commonly reported problems were misbehaviour (46%), social isolation (23%), boredom (19%), needing attention (19%), and anxiety (15%). Top emotional or behavioural needs identified among the 1-5 year old age group during the pandemic were need for social interaction (29%), physical/outdoor activity (16%), mental health services (13%), school/day-care reopening (13%), and behaviour management (9%). The emotional or behavioural needs identified for the parents (caregivers) were a need for mental health services (18%), strategies for coping in general (11%), time for solitary activities and self-care (11%), strategies for relaxation and stress management (10%), and physical or outdoor activities (8%), social support and community (7%), childcare (6%), social interaction (5%), work-related support (5%), parenting support (5%), financial support or material goods (4%), routine, stability or normalcy (4%), and other. These data are in line with the data obtained in the present study.

Present data suggest that the most frequently shared fear among participating mothers was connected to the lockdown and the social isolation of the child. This cluster is four times the size of the cluster concerning the social isolation of the mother and it could be assumed that social isolation is far more detrimental to children compared to adults. The second greatest perceived threat concerned the coronavirus disease itself – get-

ting infected with COVID-19. The worries were mainly focused on the family and close friends. The third greatest perceived threat concerned the capacity of the health system. Other common fears were connected to the duration of the situation, the social isolation of the mother, the personal finances, childcare closures, the uncertainty, the psychological state of the mother and close others, and the lack of change and novelty. Some of the responding mothers were concerned about the increased screen time and the COVID-19 vaccine. Some of the mothers of young children were afraid of death due to the coronavirus disease or that they might be put in a quarantine. Other concerns that emerged in a small percentage of the respondents were connected to their work activity, the long stay indoors, the state's capacity to cope and the lack of physical activity. Some of the mothers (6,5%) did not perceive any threats in the COVID-19 pandemic.

A small proportion of the sample were infected by the virus, however, more than half of the respondents perceived the indirect consequences of the pandemic as difficulties. Nine months after the onset of the coronavirus pandemic and the related measures in Bulgaria part of the young children and their parents continued to struggle with the psycho-social impact and distress due to the 'new normality'. This finding supports what Dellazzana-Zanon et al. (2020) have reasoned: 'a large part of the population directly or indirectly affected by the COVID-19 pandemic will need support to address issues related to their mental health'.

The most frequently encountered difficulty among mothers of young children was the lack of social contacts, followed by not taking the child out (complying to 'stay at home'). No cluster concerning the impossibility for the mother herself to go out emerged and it could be assumed that children were far more affected than adults from the 'stay at home' measure.

Third and fourth largest clusters of difficulties were formed by childcare closures and boredom. Next in frequency were the difficulties perceived by working mothers – experiencing a conflict between parents' work and taking care of the child and having to work from home with a child. Some of the responding mothers perceived as difficulties during the pandemic the access to medical care, experiencing negative emotions themselves, finances, and doing the shopping. Some mothers of young children were burdened with the constant contact with the child and some experienced a conflict between all the tasks executed from home. Additional aggravating circumstances for mothers of young children are outlined in the present study: having to assist a homeschooler, and having a new-born baby.

44% of the participating mothers shared that neither they or their young children experienced any difficulties associated with the current situation. The data in the present study was collected in Bulgaria about 9 months after a state of emergency had been declared and at that time some of the initial measures were lifted. What is more, there was time to adapt to the crisis.

A lot of the perceived threats and difficulties that are outlined in the present study are also present in the accumulated literature – social isolation and boredom, being outdoors and having contact with nature, fear of the coronavirus disease, the availability and adequacy of healthcare, the conflict between tasks executed from home, working from home while taking care of the children or assisting them in distance learning, finances and physical activity.

Social isolation is perceived both as a difficulty and a threat. A possible reason is that social isolation has both immediate and long-term effects. Social distancing is among the most researched COVID-19 containment measures in social and health psychology (Nacheva, 2022). A qualitative study on 1685 adults, not specifically parents, from 15 different countries reports that the most prevalent theme in the first wave of the coronavirus pandemic was the disruption of social contacts and the theme was more prevalent in the stories of women compared to men (Todorova et al., 2021). Feelings of loneliness increased greatly during coronavirus closure (Raviv et

al., 2021). A qualitative study drawing data from diaries during the pandemic also reports feelings of loneliness, isolation and lack of social contacts among working parents from Bulgaria (Panchelieva et al., 2022). Feelings of loneliness were observed in their children during the COVID-19 home confinement by a third of the surveyed parents in Italy and Spain (Orgilés, et al., 2020).

In the literature there is raised concern about the negative impact of social distancing and social isolation. Social distancing may lead to feelings of boredom and aimlessness in life (Dellazzana-Zanon et al., 2020). Fewer perceived social connections predicted greater exhaustion among parents during the coronavirus lockdown (Marchetti et al., 2020). Isolation and loneliness during the COVID-19 pandemic induced the emotion sadness (Nacheva et al., 2022). A child protection specialist, who participated in a qualitative study regarding the experiences in connection to child welfare service delivery and well-being during the COVID-19 pandemic, stated: 'In accordance with the COVID-19 pandemic control guidelines, children only play within their household; they can't play or eat with other children. This is somehow traumatising for children because they can't visit their friends' (Tumwesigye, 2021).

Evidence from the present study suggests that social isolation is problematic both for children and their mothers, but in a different way. Social isolation of the mother and social isolation of the child emerge as two distinct clusters. Previous data also suggest that the isolation caused by the pandemic impacts people differently depending on the stage of their life cycle (Dellazzana-Zanon et al., 2020). For adults, the main impact seems to be the need to play different roles simultaneously in the family environment, without being able to rely on the usual resources for support. For children, school closures generated feelings of insecurity, irritability, anxiety, and damaged peer relationships that are essential for their development. The premise that disruption of social life may impact child development is especially disturbing since long-term consequences may be expected. Ye (2020) writes that 'even though the world has been struggling to curb the influences of the pandemic, the quarantine and social distancing policies will have long-term impacts on children'.

Advice given to parents during the coronavirus pandemic for maintaining mental health is: 'maintain social connections with family and friends by using technology or engaging in physically-distanced activities' (Racine, Birken et al., 2020). Social contacts both within and outside of the household were among the primary sources of feeling joy during the COVID-19 lockdown and served to offset the negative emotions occurring during the pandemic (Nacheva et al., 2022).

During the pandemic outdoor activities decreased for USA adolescents (Jackson et al., 2021). A study on adults who reported their emotional well-being three times a day for 21 days during the coronavirus pandemic reported that being outdoors was associated with higher emotional well-being whereas spending more time in front of a screen was associated with poorer emotional well-being (Stieger et al., 2021). A qualitative study conducted in the early stage of the COVID-19 pandemic reports that physical activity and contact with nature were primary sources of feeling the emotion joy (Nacheva et al., 2022). Evidence suggests that connection to nature boosts mental health and well-being and could be an important factor during the coronavirus pandemic (Jackson et al., 2021). Advice given on parents during the coronavirus pandemic for maintaining mental health is to 'spend time outside when possible' (Racine, Birken et al., 2020).

Previous qualitative research from Bulgaria reports fear to be the dominant emotion in the narratives about COVID-19 collected during the early stages (March/April 2020) of the pandemic (Nacheva et al., 2022) as well as later on (December 2021/January 2022) (Panchelieva et al., 2022). The most frequently reported worry out of six was that of 'catching COVID-19' (Wright et al., 2020a). Fear about one's own health (getting infected with COVID-19) along with fear about the health of loved ones were among the leading

fears expressed in the diaries of participants in another qualitative study, as well (Nacheva et al., 2022). Panchelieva et al. (2022) also reports that during the coronavirus pandemic fear included worries about the physical and emotional survival of the respondents themselves and the family members. These findings are in line with the present study. Greater worry about COVID-19 is associated with poorer mental health among early and middle age adults (Wilson et al., 2021) and the respondents of the present study are in these age groups. In some cases, the very thought of the possibility of contracting the disease appeared to provoke intense negative emotions.

About one-third of the families reported that since the beginning of the coronavirus pandemic there were cancellations or delays in their children's health care (Patrick et al., 2020). A study from Bulgaria aiming to determine the immediate effects of the COVID-19 pandemic and the measures to control it on pregnant women and mothers of babies under 6 months reports that perceived support from health institutions and adequacy of healthcare outline a worrying trend of an unstructured institutional response, bringing chaos and anxiety among these vulnerable groups (Hancheva et al., 2022).

Findings from other studies also showed that during the COVID-19 pandemic many parents experienced work–life conflict (Wang et al., 2022). Parents had to manage and balance tasks and responsibilities that would typically be shared by multiple individuals and multiple systems (Racine et al., 2020). As Dvorsky et al. (2021) reason 'schools are closed, businesses are shuttered, and families are adjusting to 24/7 interaction, while caregivers simultaneously navigate parenting, financial, and professional challenges and uncertainties'. A qualitative study reports that 68% of the working parents/caregivers stated that COVID-19 negatively impacted their work performance (Fitzpatrick et al., 2021).

Another qualitative research from Bulgaria also indicates that changes in the work regime were among the leading causes of distress for working parents during the COVID-19 lockdown (Panchelieva et al., 2022). Parents who worked from home experienced difficulties related to time management, task organisation and home setting (e.g. lack of space, appropriate furniture or electronic devices). In particular, 'the combination of work commitments and childcare was a major burden, especially for women in the family'. Stories of negative experiences and negative emotions appeared when there were temporary childcare closures. Such stories did not appear when childcare institutions functioned normally. The inability to adequately care for or help children emerges as a difficulty for working parents at such periods in the study of Panchelieva et al. (2022). It was previously observed that working from home and taking care of young children or homeschoolers at the same time seems to be particularly stressful, forcing parents to either sacrifice their children's needs or their work performance (Paunova-Markova, 2020).

Many families reported disruptions in child care during the COVID-19 pandemic and this was more prominent for those with children 0 to 5 years old compared with those with adolescents (13 to 17 years old). Nearly one-quarter of the families lost their regular child care and in most cases a parent took care of the child. There is evidence that losing regular child care during the pandemic is associated with greater negative impact for both parents and children, namely worsening of parents' mental health and children's behaviour (Patrick et al., 2020).

Mothers, being women, seem to be more affected than fathers. Evidence suggests that COVID-19 lockdown has a negative impact on work-family balance for women. The pandemic intensified the domestic workload of women, who are the ones that traditionally manage home-related tasks and activities. Women had to undertake more domestic duties during the lockdown than before the COVID-19 pandemic. Furthermore, having to perform all kinds of duties – domestic, childcare and work-related – at the same time and in the same place caused serious role conflict. Working from home has further contributed to the role conflict for women by posing severe challenges to role differentiation (Adisa et al., 2021). Previous research conducted March-

May 2020 in Bulgaria reports that women perceived higher levels of stress than men and working from home contributed further to the negative psychological impact (Hristova & Karastoyanov, 2021).

In families where parents had to handle their children's distance learning tasks in addition to household and work-related demands, the effects of the isolation were more severe (Dellazzana-Zanon et al., 2020). Parents found supervising their children's home-schooling to be frustrating (Adisa et al., 2021). Furthermore, the number of children for whom caregivers provided was associated with more problems concerning psychological well-being (Fitzpatrick et al., 2021) and higher stress level (Kowal et. al., 2020).

A qualitative study on parents and child caregivers reports that the overall household income was negatively impacted by the COVID-19 pandemic for 59% of the respondents (Fitzpatrick et al., 2021). A qualitative research on the impact of the COVID-19 pandemic on 21 working parents in Bulgaria reports that their household savings were affected, but there were not significant changes in their standard of living; nevertheless, this was associated with increased anxiety (Panchelieva et al., 2022). What is more, half of the working parents expressed worries about losing their job (Panchelieva et al., 2022). Financial strain related to the coronavirus pandemic was significantly associated with parental/caregiver depression (Fitzpatrick et al., 2021).

There is also evidence that financial difficulties can deteriorate the family environment. Parental job loss during the coronavirus pandemic increased parent-child conflict, which in turn predicts decreased positive affect and increased negative affect in children (Wang et al., 2021). Rising unemployment rates worldwide due to the COVID-19 pandemic increased the risk of child abuse. Parental job loss during the COVID-19 pandemic has been identified as the main cause for child maltreatment and physical abuse in Uganda (Tumwesigye, 2021).

Insufficient physical activity during COVID-19 lockdowns has been a topic of concern. Body weight increased significantly during the pandemic in all age groups – children, adolescents and adults (de Matos et al., 2020; Brazendale et al., 2021; Vogel et al., 2021). A systematic review on the association between physical activity and mental health during the first year of the COVID-19 pandemic, which included 31 studies, suggests that physical activity is beneficial for psychological well-being and quality of life across all age groups (Marconcin et al., 2022). A qualitative study conducted in the early stage of the COVID-19 pandemic reports that physical activity and contact with nature were primary sources of feeling the emotion joy (Nacheva et al., 2022). Home-based physical activity is recommended to be undertaken as a measure to mitigate some of the negative effects of home confinement and psychological stress during the pandemic (Amri et al., 2022; Marconcin et al., 2022).

Next, the present study provides information about the dynamics of experiences of mothers and their young children during the course of the pandemic, comparing the present results with previous data, collected during the first month of lockdown in Bulgaria (Paunova-Markova, 2020).

The total number of perceived threats that emerged through cluster analysis is approximately the same as previously. Some of the previously identified perceived threats have dropped out: worries about the economic impact, chaos in the society, conspiracy, the supply of goods, and the irresponsible attitude of people. However, new types of perceived threats have been identified: social isolation of the mother, childcare closures, a lack of change and novelty, increased screen time, and the COVID-19 vaccine. However, the majority of perceived threats at the initial stage are currently present, too. Even so, some of them have changed in size – both increases and decreases are present. A drastic increase in worry about the lockdown and social isolation of the child is observed. The cluster moves from third to first place in frequency and the percentage of frequency is three times higher. Another great increase is observed in the cluster concerning the capacity of the health system – it moves from eight place to third, rising

three times in frequency. Worries over personal finances increased as well. In contrast, more respondents did not perceive any threats compared to the first stage. Significant decrease is observed in worries about the coronavirus disease and the duration of the situation. Concerns over death, quarantine, personal work activity, and uncertainty decreased, too. No significant changes in frequency or proportion are observed in clusters concerning the psychological state of the mother and significant others, the long stay indoors for the mother and the state's capacity to cope.

The total number of perceived difficulties has decreased. Difficulties that have no longer been observed are: inability of the mother to go out, making the child understand the situation and the restrictions, the change of everyday life and 'normality', not having help from relatives, providing the meals, frequent disinfection. New types of perceived difficulties have been identified: childcare closures and the access to medical care.

The previously identified cluster that concerns the difficulty to organise the care for the child when parents go to work has grown into a cluster that contains the idea of experiencing a conflict between parents' work and taking care of the child. Subclusters emerged, as well, which reveal different aspects of the conflict. A drastic decrease in the perceived difficulty that the child cannot be in the open air is observed; furthermore, the cluster no longer contains the idea of being outdoors per se, but the idea of not going outside of the home. Another slight decrease is observed in the perceived difficulty of doing the shopping. Compared to the previous period, a greater part of the respondents reported not having any difficulty. However, in some clusters of perceived difficulties there is a slight increase. Those are: lack of social contacts, boredom, working from home while taking care of the child, finances, and the burden of the constant contact with the child. No significant changes in frequency or proportion are observed in clusters concerning aggravating circumstances, the mother's experiencing of negative emotions, and the mother's experiencing of a conflict between all tasks executed from home.

Mothers of young children continue to report a wide range of perceived threats and difficulties later on in the COVID-19 pandemic. However, there is a dynamic in the types and proportions of these threats and difficulties.

The main change in perceived threats is that the fear of the coronavirus disease itself subsided from first to second place in frequency, and concerns over the lockdown and social isolation of the child took the leading place in frequency. In contrast with the previous stage the perceived threat of the coronavirus disease could no longer be described as a fear of the unknown – the people were somewhat familiar with the novel virus and there was less uncertainty. The worry concerning the coronavirus disease itself does not take the dominant place as it did during the previous period even though the infection rate increased substantially. During the present period mothers were predominantly worried about the lockdown and social isolation of the child.

The main change in perceived difficulties is that their total number decreased and a greater proportion of the respondents did not report any difficulties. The variety of experienced difficulties has decreased since the first month of the pandemic, which could indicate that the families have adopted positive coping strategies to improve their lives in the crisis. During school closures in previous pandemics, parents became more prepared over the time and could plan appropriate activities for the children's optimal functioning and development (Miller et al., 2010). The number of difficulties experienced on an individual level is important. The accumulation of hardships that the family has experienced during the coronavirus pandemic was found to be associated with worsened parent and child psychological well-being (Gassman-Pines et al., 2020).

The new clusters of perceived difficulties that emerged seem to reflect the reintroduction of childcare closures during the period of data collection and the high infection rate. Similarly, the drastic decrease in the perceived difficulty of the child not going out most probably reflects the lift of the former measure prohibiting visits to playgrounds, nature and city

parks, etc. The current evidence suggests that probably the dynamics in psychological experiences at different stages of the pandemic reflect not only universal processes (novelty and fear of the unknown, consequent adaptation etc.), but also objective circumstances from the micro and macroenvironment – local measures to control the disease (e.g. childcare closures, promoting stay at home, prohibiting park visits and others), local COVID-19 cases rate, local political stability, local economy, overburdened health systems, employment, family cohesion, quality of family life, etc.

The findings in the present study indicate that even though there is evidence for psychological adaptation and coping among mothers of young children and their families, the COVID-19 pandemic still constitutes a challenging period for a significant part of Bulgarian parents and children. The findings support the statement that 'there will be an intense and sustained need for mental health services during and after COVID-19' (Racine et al., 2020). Some specialists have developed tools for mental health support of parents (e.g. 'Checklist for Supporting and Guiding Parents' by Racine, Birken et al. (2020) for health professionals that consult families). Intervention programs and services are also crucial to promote family well-being during and after the COVID-19 pandemic.

In conclusion, the present research further deepens the understanding of psychological response among mothers of young children and provides useful information for promotion of well-being during pandemics. However, it should be noted that the results in the present article are preliminary, in the sense that the COVID-19 pandemic is a very recent phenomenon and more research in different cultural and environmental settings is needed.

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