

# MENTAL HEALTH ISSUES, NEEDS, AND CHALLENGES FACED BY CHILDREN AND ADOLESCENTS DURING PUBLIC HEALTH EMERGENCIES: A STUDY BASED ON THE PERSPECTIVE OF EDUCATORS

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**Abstract:** *Public health emergencies, including catastrophic events such as pandemics and natural disasters, as well as the rise of diseases caused by high-threat pathogens result in specific and often critically threatening situations (WHO, 2023). This study aimed to examine the perception of educators (e.g., teachers and trainers) in Croatia regarding the mental health issues, needs, and challenges faced by children and adolescents during public health emergencies, as well as the risk and protective factors associated with mental health issues. Data was collected using two focus groups that included a total of 12 educators (e.g., teachers, sports trainers, kindergarten teachers, and so on) who work with children and adolescents. The results were analysed using thematic analyses and showed that the symptoms observed most often in children were fear, anxiety, depression, eating disorders, sleep problems, behavioural problems, and concentration problems. Educators also provided insights into the broader context in which these symptoms were evident and highlighted their personal need for additional support and education. Furthermore, they listed various protective and risk factors that, in their opinion, could influence the coping abilities of children faced with a crisis. These findings are important for the creation of programmes that aim to protect the mental health of children during and after public emergencies, as well as to train those working with children in order to help them recognise the needs of children and adolescents and find ways of providing help.*

**Keywords:** *mental health, pandemic, crisis, educators, qualitative study*

## INTRODUCTION

Public health emergencies include outbreaks of infectious diseases (e.g., COVID-19), natural disasters (e.g., earthquakes, floods), bioterrorism, as well as chemical and radiological incidents (WHO, 2023). The COVID-19 pandemic, which started in March 2020, caused abrupt changes in school life, affecting children, teachers, and parents (Hrvatski zavod za javno zdravstvo, 2020). Because of emergency measures such as lockdowns, schools and kindergartens were closed and schools had to switch to an online learning format, leaving many of the educators unprepared. According to UNESCO (2021), the COVID-19

pandemic affected more than 1.6 billion students and youth globally, causing lasting effects on their education. In Croatia, the situation was made even harder with yet another public health emergency (i.e.) two earthquakes that occurred in 2020. These earthquakes caused an additional burden on the school system since many schools were damaged. This resulted in the prolongation of online learning for some children, while others had to change schools, leading to additional changes in their environment. Due to the pandemic, social distancing measures were introduced and the social lives of children and adolescent were restricted as they faced isolation from peers and teachers. According

to a rapid systematic review of 83 articles (Loades et al., 2020), during this time, many children and adolescents experienced loneliness and faced an increased risk of depression and anxiety. Many scientific studies have shown that, although many children and adolescents show resilience and the ability to recover rapidly after public health emergencies (Rider et al., 2021), stressors related to these situations can have adverse psychological effects with serious consequences on mental health and well-being, both during and after the public health emergency. Racine et al. (2021) conducted a meta-analysis of 29 studies involving 80,879 youth from across the globe and found that the prevalence of depression and anxiety symptoms during the COVID-19 pandemic had doubled compared to pre-pandemic estimates. The authors also reported higher prevalence rates later in the pandemic, in older adolescents, and in girls. Harrison et al. (2022) confirmed these findings in their systematic review and pointed out the high burden of anxiety and depression, especially in low-and middle-income countries. A systematic review by Kauhanen et al. (2023) examined mental health changes in children and young people before and during the COVID-19 pandemic based on data from 21 studies conducted across 11 countries, including more than 96,000 respondents aged 3 to 24 years. Most studies reported longitudinal deterioration in the mental health of adolescents and young people, with increased rates of depression, anxiety, and psychological distress, increased loneliness, as well as deterioration in negative affect and mental well-being during the pandemic. The results of research conducted in Zagreb, Croatia, during the COVID-19 pandemic and after the earthquakes (Buljan Flander et al., 2021) showed that 1 out of 10 children had symptoms of anxiety and depression, while 1 in 7 children had symptoms of post-traumatic stress, with higher levels found in girls. They experienced feelings of sadness and emptiness, emotional sensitivity, difficulty concentrating, and other symptoms, suggesting the need for support to deal with these problems. Furthermore, children who experienced earthquake(s) were very disturbed by that event(s). On a scale from 1 to 6, the average

assessment of anxiety due to the earthquake was 4.45, and 58.4% of the children were assessed to be at a 5 or 6 on the scale (Keresteš, 2022).

## **Present research study**

Previous studies have clearly demonstrated that the COVID-19 pandemic and the earthquakes, which occurred in Croatia in the same time frame, left their mark on the mental health of children and adolescents. However, quantitative studies provide information about symptom prevalence and often fail to provide information about the specific context and circumstances in which these symptoms can be evidenced. The question remains regarding how these mental health issues are seen from the perspective of educators – teachers and trainers working with children. Despite social distancing measures, children did go to kindergartens, schools, and training sessions, where their educators witnessed their struggles, needs, and difficulties in real-life situations and tried to understand how they managed them. Therefore, the first research question addressed in this study was aimed at examining the perception of educators in Croatia regarding the mental health issues, needs, and challenges faced by children and adolescents during public health emergencies. The second research question was regarding triggers and protective factors that, in the opinion of educators, may harm mental health or may help prevent mental health deterioration during public health emergencies. By understanding how mental health issues of children and adolescents during emergencies are viewed by those who spend a considerable amount of time every day with these children with a specific educational task in mind, we can have a clearer picture of the situation and a better understanding of how best to model planned interventions to support both educators, as well as children and adolescents.

## **METHODS**

### **Participants**

A total of 12 educators participated in this research study: six teachers (five female) participated in the first focus group, while six trainers and

educators (four female) participated in the second focus group.

## Procedure

Focus groups were conducted as a part of the project *Protecting the mental well-being of our children during and after public health emergencies* (Prowell; Erasmus+, 2021-2023). Both focus groups were held in an online format via the Microsoft Teams platform. Samples for both focus groups were convenience samples, i.e., participants were recruited by the project team members. Purposive sampling was applied with the aim of recruiting participants who are both diverse and have sufficient insights on the research topic. Participants provided their written informed consent before the discussions. Data were collected and transcribed between August and November, 2021. Each focus group lasted for approximately 60 minutes. A discussion guide was developed based on the research objectives with two main questions: 1) In your opinion, what are the mental health issues, needs, and challenges faced by children and adolescents during public health emergencies?; and (2) What are, in your opinion, the triggers and protective factors that can negatively impact and help prevent mental health deterioration during public health emergencies?. Participants were encouraged to share their personal opinions and experiences. The discussion guide was developed based on the aims of project *Prowell* (Erasmus+, 2021-2023) and the literature review that was carried out in preparation for the project.

## Data analysis

Transcripts were analysed using thematic analysis (Braun & Clarke, 2006). Two independent researchers read both transcripts. The analysis included familiarisation with the data, the generation of initial codes, searching for themes, reviewing themes, as well as defining and naming themes. The codes were arranged into themes that were created based on the research questions and defined by an agreement between the coders before the coding process started. The themes include (1) mental health issues, needs, and challenges, and

(2) risk factors, and (3) protective factors for developing mental health problems in children and adolescents. A unit of analysis was one statement. In some statements, educators referred to more than one theme and these statements were coded using multiple codes. All disagreements were resolved through discussion and conversation between the coders, and the final decision was made based on consensus.

## RESULTS

The first research question focused on the perspectives of teachers and educators regarding the specific mental health issues, needs, and challenges faced by children and adolescents during public health emergencies such as the COVID-19 pandemic. Our findings correspond to the first theme that was coded.

Regarding challenges, educators most often mentioned the specific circumstances in which they worked with children since the start of the pandemic and described how children functioned in these circumstances. They noticed that schoolchildren needed time to adjust to the new circumstances, which included keeping their distance, moving around the school by following specific line directions, sitting alone in the class instead of sharing a bench with a peer, and so on. However, a large proportion of participants agreed that most of the children they worked with were able to adjust well to the new circumstances in a short period of time.

*“They were happy to come back to school (after lockdown), but then they saw that the return was not quite what they expected – everyone sitting alone, keeping their distance, no activities which they liked, no singing, no dancing, but they got adjusted with time.”* - Primary school teacher

Some trainers (e.g., sports trainers) pointed out that they didn't notice many problems with children compared to teachers and educators, because they spent less time with these children. Additionally, depending on the specific type of sport, they practiced in the open, and not in closed spaces, which required fewer adjustments.

*“Children have a more limited understanding of the virus and the surrounding information than adults. It is something undefined for them.”* - Kindergarten educator

Regarding specific mental health challenges, the educators mentioned that the children experienced fear, mostly related to the earthquake that some of them experienced. Fear related to the pandemic was lower.

*“School children showed fear; more about the earthquake, they were afraid if a train or a truck passed by or if a window slammed”* – Dance coach

Another challenge that some participants mentioned is that children felt tired and suffered from a lack of motivation.

*“They get tired a lot more than before the pandemic. “I don’t feel like doing anything” – they would say”*. – Dance coach

*“The number of enrolled children has dropped a lot. Before this crisis, they had a habit of coming to the training and this was lost, and they spent more time at home playing computer games, etc.”* – Football coach

Some participants mentioned that parents of kindergarten and younger schoolchildren reported that the children needed more help falling asleep, had sleep problems, and would often come to their parent’s bed at night.

*“When talking to parents of my students, I learned that a lot of children have suffered from insomnia since the earthquake.”* – Primary school teacher

For some children in high schools, educators mentioned more specific problems, such as anxiety and depression, eating disorders, and sleeping disorders.

*“Some students have fallen into depression; they have major problems with anxiety and sleep. And they have intensified some inappropriate behaviours like cutting, aggressive behaviours, and eating disorders.”* – High school teacher

Younger children were considered as being less affected by the pandemic and the earthquake, because they have a limited understanding of the

global consequences of such events and because their daily routines were minimally affected – for example, they continued to go to the kindergarten as usual. Schoolchildren had a better understanding of the situation, which might have caused more fear, and they experienced more changes in their daily routines with the need for occasional online classes. Teens and adolescents were often considered to be most affected because the new circumstances made it very difficult for them to socialise and go out with their peers, especially at an age when this is very important. Most often, the older children had a higher proportion of online classes because it was considered to be uncomplicated to organise this kind of change in their education (i.e., they did not need parental support to participate in online classes). As a result, they were the most isolated group of schoolchildren.

Educators also emphasised the lack of care for their mental health, which is considered a prerequisite for them to provide help and support to the children that they work with. They also agreed that they lacked the skills and knowledge to deal with children’s mental health problems and that there should be continuous education in this regard, not just related to the pandemic. Some of them pointed out that the knowledge that they do have, is a result of their effort to learn more.

*“I am a football coach and all I know about communication etc. I learned alone.”* - Football coach

The second research question addressed risk and protective factors that can have a negative impact or help prevent mental health deterioration in children and adolescents during public health emergencies. The findings in this section correspond to the second and third themes that were coded.

Educators named several **risk factors** that might have triggered the negative effects of the pandemic on children. Some participants mentioned that the impact of the pandemic and the earthquakes on the family situation (for example, problems in the family, financial issues, parental job insecurity, sickness in the family due to the virus or having a family member who has an in-



creased risk for severe illness from COVID-19) might have had an impact on children's mental health. Children who had a lot of family problems at home unrelated to the virus (e.g., children from families with a lot of conflicts) were also singled out as a risk group.

*"The insecurity that parents experienced, about maybe not having a job, or having to work differently, also affected the children a lot. The parent would have to leave at different times, so the children would have to stay longer in the kindergarten"* – Kindergarten educator

*"It was harder for the children whose family members were sick, so they had to be very careful whether they would infect someone (...) Also, children who had bad family situations, like a lot of conflict in the family. It seems to me that they were most affected."* – High school teacher

Some participants mentioned that parental attitudes about the COVID-19 pandemic were an important factor that affected how children managed their feelings in this situation. In particular, educators mentioned that some children experienced more fear if the parents were also experiencing more fear, both regarding the pandemic and the earthquakes. These parents would often exclude children from training because they feared for their health or followed them to school to manage their own fear of the earthquakes.

*"For me, one of the biggest risk factors was the parents. Those parents who encouraged fear about COVID in their children (...) If you come to training, you'll get COVID, if you are in the gym, there might be an earthquake, it is best if you don't go to training, don't socialise with children, don't hang out with others, and there were a lot of those kinds of parents."* - Volleyball coach

Conversely, some children's parents had an attitude that the effect of the pandemic had been exaggerated in the media and they were very relaxed. At the same time, their overly relaxed behaviour in some situations would cause anxiety in others, for example, if they sent a child with flu-like symptoms to school.

*"There are some responsible parents who leave the child at home if any of the symptoms ap-*

*pear, but there are others who send them to school when they have a cold"*. - Primary school teacher

Over-exposure of children to media coverage of the pandemic was also mentioned as a risk factor.

*"The source of (feeling nervous) is the media and the Civil Protection Headquarters (...) the children are adaptable, we know that, but to continuously have information about the number of dead and the number of infected ..."* - Dance coach

Some participants mentioned that children were unable to participate in sports as much as before the pandemic due to multiple restrictions. This was considered a risk factor for the development of mental health problems because they needed physical activity to deal with the psychological stress.

*"The fact that they restricted practicing all sports. Because, I think, these children needed to get it all out on the field, with their coaches, in situations where they are most relaxed and happiest."* - Kindergarten educator

Some participants mentioned the role played by specific characteristics of children such as tendency for perfectionism and personal reflection. In terms of gender, girls were reported to be more likely to seek help than boys.

*"Girls seek help from a school psychologist more, but they are generally more likely to seek help, while boys pretend that they do not need help."* – High school teacher

*"It seems to me that children who are very prone to perfectionism find it harder to bear all this, harder than other children. Because they could not perform all the tasks as before and have such success as they have had so far. Also, children who like to think about themselves (Who am I? What am I like?), who like to observe themselves, they seem more lost in this whole situation."* – High school teacher

Some participants mentioned that the pre-existence of mental health problems and developmental difficulties are risk factors.

*"The adjustment of children also depends on the disorders that children have. A child with*

*ADHD will have a much harder time experiencing the COVID measures (e.g., sitting in a classroom during a school break) than a child without ADHD.*” – Primary school teacher

Educators also named several **protective factors** that might have protected children from developing mental health problems, such as practicing sports and dancing, belonging to a homogenous group of peers who shared an interest in sports and spending time with them, having someone to talk to in school or kindergarten (i.e., the feeling that their voice is being heard), as well as having parents who have adaptive attitudes towards COVID-19 (i.e., parents who do not worry excessively, but who also do not diminish the seriousness of the situation).

*“Children who do sports are a very homogenous group, and they are to themselves the biggest source of support, that is their best protective factor. They socialised and spent time together during practice, this was the most important thing for them.”* - Volleyball coach

*“That their voice is heard, that they can scream and cry if they feel like it, to be nervous for a week without being judged or facing some negative consequences because they are unable to process what is going on with them.”* - Educator in the school dormitory

Some participants focused on personality traits such as introversion and mentioned that children who are more introverted were better at handling social isolation. Others mentioned the ability of some children to obey rules and have no problem completing their obligations, either because they were used to it through sports or similar activities, or because they were more independent and did not need as much parental support.

*“For introverts, this is a better situation because they don’t have to go out, they don’t have to hang out.”* – High school teacher

*“All the new rules on how to behave related to the virus were easier for children who have a lot of tasks during the day, who handle all their responsibilities well, who do not need a lot of support from their parents to fulfil their obligations. I think the athletes also coped better because they*

*are already used to order and discipline.”* – Primary school teacher

## DISCUSSION

When talking about specific challenges that children and adolescents in the context of adapting to new circumstances due to the COVID-19 pandemic and the earthquakes in Croatia, most educators mentioned difficulties in adapting to social distancing measures, online school, and practicing sports in different settings. Educators noted that the problems they most often recognised in children were fear, anxiety, and depression. Other studies conducted during this period also showed that many individuals experienced loneliness and reported an increase in the prevalence of depression and anxiety (Harrison et al., 2022; Kauhanen et al., 2023; Loades et al., 2020; Racine et al., 2021). In a systematic review of mental health outcomes and needs of children and families during pandemics before the COVID-19 pandemic, Fong and Iarocci (2020) found that social isolation and experiencing quarantine presents a substantial negative impact on child anxiety, post-traumatic stress disorder, and fear symptoms. In the present study, educators also mentioned that they noticed eating disorders, sleep problems, behavioural issues, and concentration problems in children and adolescents. A study in Croatia, which was also conducted during the COVID-19 pandemic, showed that, in children between the ages of 3 and 14 years, prolonged use of smartphones for leisure during the pandemic was negatively linked to sleep quality (Kotrla Topić et al., 2021). Raghunathan et al. (2022) found a significant, but modest, reduction in child attention, task persistence, and task engagement alongside an increase in impulsivity during the pandemic compared to the pre-pandemic period. These results showed that the observations of the participants in the present study were valid and genuine, and they also provide a context for these observations that is often missing in quantitative studies focusing on the effects of the pandemic on the mental health of children and adolescents.

Furthermore, an important observation that the educators made is their concerns about their own

personal mental health, which is considered a prerequisite for them to provide help and support to the children that they work with. Educators themselves faced severe challenges. They had to adapt to online platforms and tools: this was challenging due to a lack of training and the occurrence of technical issues, leading to greater workload and higher stress, which can harm their well-being and mental health (e.g., Harmsen et al., 2018; Jimenez, 2021), as well as increase their risk of burnout (Dabrowski, 2020). Since teachers play an important role in supporting the mental health of children and adolescents (Giles-Kaye et al., 2022; Reinke et al., 2011), their own well-being should be promoted.

As for risk factors, educators mentioned different family-related factors, such as unstable family background, maladaptive parental attitudes about the COVID-19 pandemic, and overexposure of children to media coverage of the pandemic. Quantitative studies support these findings. For example, Uy et al. (2022) found that parental fear and threat communication, as well as greater exposure to COVID-19 threat information from media, school, or friends, was associated with greater COVID-19 fear in children, regardless of age. A study conducted in Canada involving children aged 9-12 years showed that children exhibited a higher proportion of fear when their parents showed more fears and concerns about COVID-19, and these fears were related to changes in family sleep habits (Suffren et al., 2021). Fong and Larocci (2020) reported several risk factors that contributed to higher stress levels and poorer well-being during pandemics, such as financial burden during pandemics, fear over the physical and mental health of children, concerns over potential job loss, and arranging childcare. The ability of parents to help children cope with negative emotions is essential during challenging periods. Educators involved in the present study also recognised the importance of supporting children's mental health. They also mentioned potential risk factors that were more related to the children themselves, including female gender, older age, and traits such as the tendency for perfectionism, high emotional sensibility, and the

tendency for greater personal reflection, as well as pre-existence of mental health problems and developmental difficulties. In a review of studies on the effect of the COVID-19 pandemic on the mental health of children and adolescents, Samji et al. (2022) found that older adolescents and girls were more likely to experience negative mental health outcomes, and the same has been proven for adolescents living with neurodiversity and/or chronic physical conditions.

As possible protective factors, the educators involved in the present study mentioned practicing sports and dancing, socialising with peers through participation in sports, and having someone to talk to in the school or kindergarten, and feeling that their voice is being heard. These factors add up to social support, and indeed, studies show that physical exercise, access to entertainment, positive family relationships, and social support were associated with better mental health outcomes during the COVID-19 pandemic (Samji et al., 2022). Of the more specific traits, educators mentioned introversion and the ability of some children to obey rules and have no problems with completing their obligations.

Younger children were considered less affected by the pandemic and the earthquakes, mainly due to their limited understanding of global consequences and the fact that their daily routines were less affected by the pandemic. However, studies show that this is not always straightforward. For example, Schmidt et al. (2021) showed that preschoolers (1-6 years) and adolescents reported different problems, with preschoolers showing the largest increase in oppositional-defiant behaviours and adolescents in emotional problems.

This study has certain limitations, particularly due to the small sample size, limiting the possibility of providing more diversity in experiences that were reported by participants. Due to practical constraints set by the project, it was not possible to conduct additional focus groups at the time. However, to achieve a certain level of diversity, participants were recruited in a manner that aimed to balance their experience, teaching level, area of expertise (e.g., teachers or trainers), and proximity to the earthquake epicentre (including those

who have and have not been affected by the earthquake).

## CONCLUSION

This qualitative study offers insight into educators' perception of mental health challenges that children and adolescents faced during public health emergencies in Croatia in 2020 (the COVID-19 pandemic and earthquakes). Educators mentioned noticing difficulties in adapting to social distancing measures, online school, practicing sports in different settings, and specific emotions such as fear, anxiety, and depression. Additionally, educators pointed to their concerns about their own mental health. Educators also mentioned specific risk factors, namely different family-related factors such as unstable family background, maladaptive parental attitudes about the COVID-19 pandemic, and overexposure of chil-

dren to media coverage of the pandemic. As possible protective factors, educators named different activities children engaged in that could provide them with social support. Additionally, educators provided a broader perspective for understanding these challenges. Therefore, these findings are valuable for experts involved in developing programmes that are aimed at protecting the mental health of children and adolescents during and after public health emergencies, because they point to specific challenges that need to be considered in these programmes concerning children as well as educators, for example, providing social support. These findings are also beneficial for training individuals working with children and adolescents, since they point to a need for further education in mental health topics in order to empower educators to recognise their needs better and provide them with the skills to help children.



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