

ANXIETY AMONG SCHOOL-AGE CHILDREN IN WAR-AFFECTED AREAS IN UKRAINE AND WAYS TO REDUCE IT: PARENTS' VIEWS

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Abstract. *The Ukrainian-Latvian team of researchers are dedicated to commit their research to finding out parents' views on whether school-age children experience anxiety in war-affected areas in Ukraine and ways to reduce it. The research also enables to identify the most common signs of anxiety. The data collection instrument includes a web-based questionnaire developed by researchers from Ukraine using Google Forms. All researchers are involved in sharing the developed web-based questionnaire via social media networks. The research sample includes 1346 parents of school-age children from all the parts of Ukraine, namely, Central, Eastern, Western, Northern, Southern Ukraine and Kyiv. Research findings demonstrate the urgent need to implement targeted psychological and pedagogical influences (the use of technologies, methods and techniques aimed at reducing the level of anxiety in school-aged children) in the educational process of general secondary schools, regardless of whether this process is carried out face-to-face, remotely or in a blended learning format. The conducted research makes it possible to substantiate the necessity of creating a web-based support system for educators to reduce anxiety among school-age children. The current research is carried out within the project "Web-based Support System for Educators to Reduce Children's Anxiety in War-affected Areas" (Registration No GPK-07/2022).*

Keywords: *anxiety, educational process, general secondary schools, school-age children, war-affected areas in Ukraine, web-based support system for educators.*

Introduction

Undoubtedly military conflicts do irreparable harm to people living in war-affected areas but it is the children of preschool and school age who suffer the most (United Nations Children's Fund [UNICEF], 2022c). It happens because for children of different ages who have been or are in war-affected areas, war becomes a main reason for detrimental changes in the social ecology and infrastructure which are fundamental for their development, let alone that it poses a real threat to their lives (Betancourt & Khan, 2008). The sounds of gunfire, sirens and exploding bombs, the need to hide and stay in bomb shelters for a long period of time, the fear of the unknown and the stark reality have negative psychological effect on both adults and children and lead to stress and anxiety.

Researchers who explore issues of consequences of war on children are unanimous in their views (Ataullahjan, Samara, Betancourt, & Bhutta, 2020; Hall, & Ahmad, 2022; Kadir, Shenoda, & Goldhagen, 2019) that armed conflicts and displacement become a real threat to both physical and emotional wellbeing of children. Terrible events related to the hostilities and witnessed by children of different ages can cause stress and anxiety and, what is more, lead to serious consequences for their further emotional development, wellbeing and educational opportunities (International Committee of the Red Cross, 2011; Frounfelker, Islam, Falcone, Farrar, Ra, Antonaccio, Enelamah, & Betancourt, 2020; Malykhin, Aristova, & Rohova, 2022). According to World Health Organization (2021), stress is regarded as “any type of change that causes physical, emotional or psychological strain”. In a broad sense stress is a common feeling experienced by people who are under pressure, overwhelmed or unable to cope with something (UNICEF, n.d.). And although any person can experience stress to a certain degree, the way people usually respond to it has a great influence on their physical and emotional state. Moreover, it is believed (Bethere et al., 2018) that the accumulation of physical and mental problems can lead to negative consequences not only for schoolchildren, but for their parents and teachers as well. Therefore, the earlier children learn to build resilience, to manage risks, to keep themselves safe and to identify individual strategies for coping with stress, the more stable and healthier their mental state will be throughout their entire lives.

The researchers distinguish the following groups of children who are vulnerable to stress during armed conflicts, namely, (1) children who continue living in active conflict areas; (2) internally displaced children (often forcibly displaced); (3) refugee children being in host countries (Ataullahjan et al., 2020). Research conducted by O. Malykhin, N. Aristova, & J. Bondarchuk (2022) shows that as a result of hostilities in Ukraine stress may affect more groups of children: “... (1) school-age children who stayed at home in the same living conditions which they had before the war started; (2) internally displaced school-age children; (3) refuge- or asylum-seeking children; (4) forcibly displaced children; (5) children who remain in the war-affected areas”.

Considering online learning format some signs of stress may not be obvious for schoolteachers (for instance, trouble seeking, eating disorder, desire for privacy etc.) and in this regard parents' views can be crucial. Moreover, based on the idea that family relationships are very important in supporting physical and mental health of children who are in war (Betancourt & Khan, 2008) as well as in other difficult life situations including the Covid-19 pandemic (Malykhin, Aristova, & Kalinina, 2022; Topuzov, Malykhin, & Aristova, 2021), the authors of this paper took a decision to conduct research aimed at finding out parents' point of views on whether their school-age children experience anxiety caused by stress in war-affected areas in Ukraine, on the one hand, and the ways to reduce it, on the other hand.

Methodology

Instruments and Procedure

The research, which was aimed at reaching parents with school-age children, started in April 2022 and lasted till December 2022. Because of the difficult situation in Ukraine related to the war and the inability to conduct face-to-face interviews with targeted participants, the researchers took a decision to carry out a web-based survey. It was with this in mind that researchers from Ukraine developed a web-based questionnaire using Google Forms. Moreover, considering the fact that the manifestation of anxiety caused by stress can vary in children of different ages, before developing a web-based questionnaire the researchers reviewed literature relevant to the research topic with the aim to identify signs of anxiety typical for school-age children caused by stress. Thus, for instance, L. Valizadeh, A. Farnam, & M. R. Farshi (2012) investigated the symptoms of stress among children of primary school age. Publications by C. Schuman (2022) and UNICEF (2022a; 2022b; n.d.) provided information about signs of stress among children of different school ages. A detailed analysis of literature enabled to select 19 signs of anxiety which could be manifested in children of different school ages, namely, primary, secondary and high school ages.

To reach the research aim and to gather necessary information, the researchers included the following questions into the web-based questionnaire, namely:

1. *Did you and members of your family change the place of residence after a full-scale invasion of Ukraine by Russia on the 24th of February 2022?*
2. *Do you believe that your child (children) is (are) under stress because of hostilities?*
3. *Can you recognize any of the following signs of anxiety in your children (trouble sleeping, lack of concentration, deterioration of mood, strong concern about safety, eating disorder, headache, sense of guilt, irritability, sense of fear,*

constant fatigue, uncontrolled rage, worsening of academic performance, defiant behaviour, rapid fatigue, depressed mood, excessive tearfulness, emotional overexcitability, desire for privacy, strong concern about safety of relatives)?

4. *What do you usually do at home to help your children cope with stress and anxiety?*

5. *What should teachers do during the educational process to help your children cope with stress and anxiety?*

To better understand the research sample, the researchers included some demographic questions into the web-based questionnaire (namely, place of residence before the 24th of February 2022), age, gender, education and social status). The developed web-based questionnaire contained information that the participation in the web-based survey was completely anonymous.

To carry out a web-based survey a joint team made up of researchers from Institute of Pedagogy of NAES of Ukraine (Ukraine) and Rezekne Academy of Technologies (Latvia) shared the developed web-based questionnaire via various social media networks both in Ukraine and Latvia.

Participants

Altogether the research sample included 1346 parents who have children of different school age. Table 1 shows socio-demographics of web-based survey participants.

Table 1 Socio-demographics of web-based survey participants (made by authors)

Variable	Number (N=1346)	Percentage (100%)
<i>Gender</i>		
Female	1301	96.7
Male	45	3.3
<i>Age</i>		
24-30	131	9.7
31-35	363	27.0
36-40	429	31.9
41-45	253	18.8
46-50	114	8.5
51-60	42	3.1
Other	14	1.0
<i>Place of residence (before the 24th of February 2022)</i>		
Kyiv	186	13.8
East of Ukraine	79	5.9
West of Ukraine	237	17.6
North of Ukraine	48	3.6
South of Ukraine	107	7.9
Centre of Ukraine	689	51.2

<i>Education</i>		
General Secondary Education	309	23.0
Technical and Vocational Education	342	25.4
Higher Education	695	51.6
<i>Social Status</i>		
Housekeepers	319	23.7
Temporarily unemployed	119	8.8
Workers in Education	252	18.7
Public Servants	72	5.4
Workers in Agriculture	23	1.7
Public Health Workers	88	6.5
Representatives of Working Professions	151	11.2
Self-employed	76	5.7
Legal Professionals	15	1.1
Other	231	17.2

Source: own study (N=1346)

Data Analysis

To do a proper analysis of all the data collected, the researchers used methods of qualitative analysis.

Results

The first question was aimed at finding out whether web-based survey participants changed their place of residence after a full-scale invasion of Ukraine by Russia which happened on the 24th of February 2022. 70.1% of respondents stated that they did not change the place of their residence and stayed at home. 5.6% of respondents replied that they were forced to leave their homes because of hostilities and became internally displaced. 8.6% of respondents mentioned that they left their homes and lived for a definite period of time in a different region of Ukraine, but then they returned home. 6.8% of respondents pointed out that they found shelters abroad and did not plan to return home. Some respondents (7.2%) noted that after the beginning of hostilities they decided to leave Ukraine but then they took a decision to return home. These respondents attributed their decision to the fact that they found it difficult to adjust to life under new circumstances. 1.7% of respondents did not respond to this question directly. Table 2 shows the summary data concerning web-based survey participants' place of residence after a full-scale invasion of Ukraine by Russia on the 24th of February 2022.

The main aim of the second question was to solicit the views of participants whether their children were under stress because of hostilities. Answering this question 612 respondents (45.5%) stated that they did not think that their children were under stress. An entirely different picture was shown by 545 respondents (40.5%) who mentioned that their children were under stress. 189 respondents (14.0%) found it difficult to give a clear answer to this question.

Table 2 Web-based survey participants' place of residence after a full-scale invasion of Ukraine by Russia on the 24th of February (made by authors)

Variable	Number (N=1346)	Percentage (100%)
People who stayed at home	944	70.1
People who became internally displaced	75	5.6
People who returned home after living in a different region of Ukraine	116	8.6
People who found shelter abroad	92	6.8
People who moved abroad and then returned home	97	7.2
Other	22	1.7

Source: own study (N=1346)

The third question was intended to find out parent's views on signs of anxiety manifested in their children after the outbreak of war in Ukraine. Table 3, given below, gives consolidated information on existing signs of anxiety among children of different school ages according to parents.

Table 3 Parents' Opinions on Signs of Anxiety among Children of Different School Ages (made by authors)

Signs of Anxiety	Age Groups		
	Children of primary school age (N)	Children of secondary school age (N)	Children of high school age (N)
Trouble sleeping	211	239	163
Lack of concentration	254	284	156
Deterioration of mood	188	246	143
Strong concern about safety	85	112	56
Eating disorder	52	67	43
Headache	57	111	84
Sense of guilt	27	36	24
Irritability	130	177	113
Sense of fear	194	174	82
Constant fatigue	35	61	52
Uncontrolled rage	56	78	45
Worsening of academic performance	82	135	68
Defiant behaviour	58	74	31
Rapid fatigue	76	98	57
Depressed mood	32	53	38
Excessive tearfulness	103	64	26
Emotional overexcitability	114	111	52
Desire for privacy	27	69	60
Strong concern about safety of relatives	72	98	53
No signs of stress	132	138	122

Source: own study (N=1346)

Figures 1-3 provide a visual display of parents' opinions on signs of anxiety among their children of different school ages.

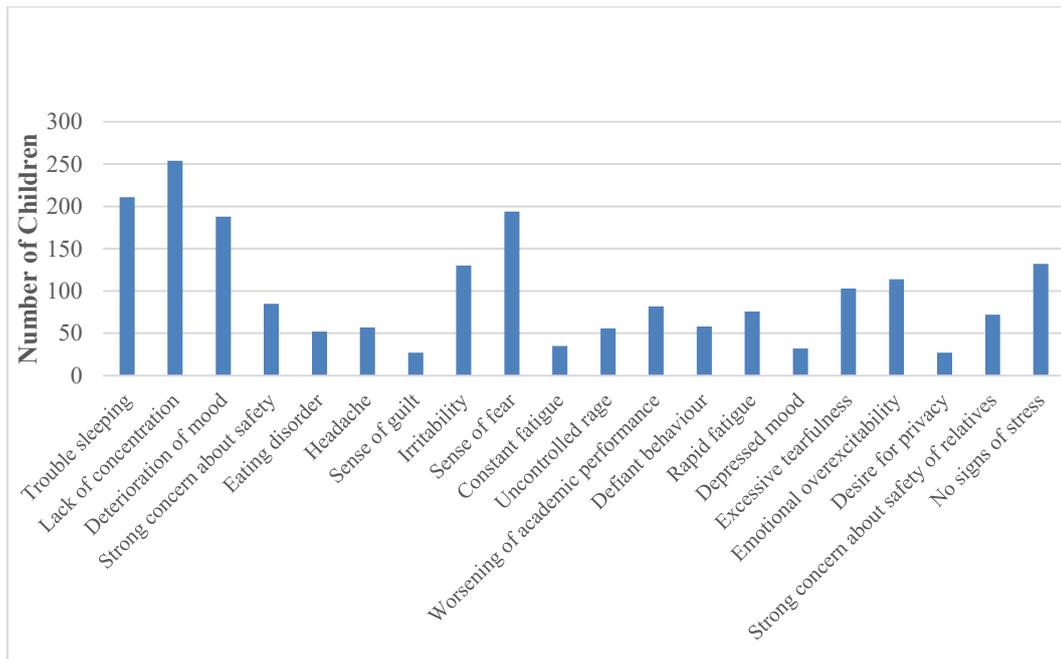


Figure 1 Parents' Opinions on Signs of Anxiety among Children of Primary School Age (made by authors)

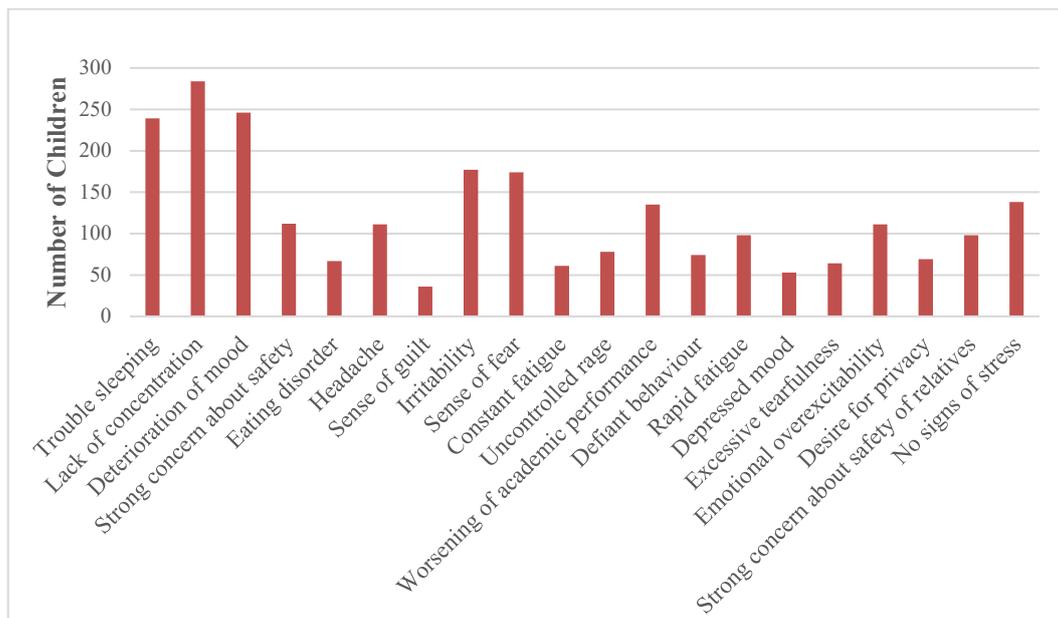


Figure 2 Parents' Opinions on Signs of Anxiety among Children of Secondary School Age (made by authors)

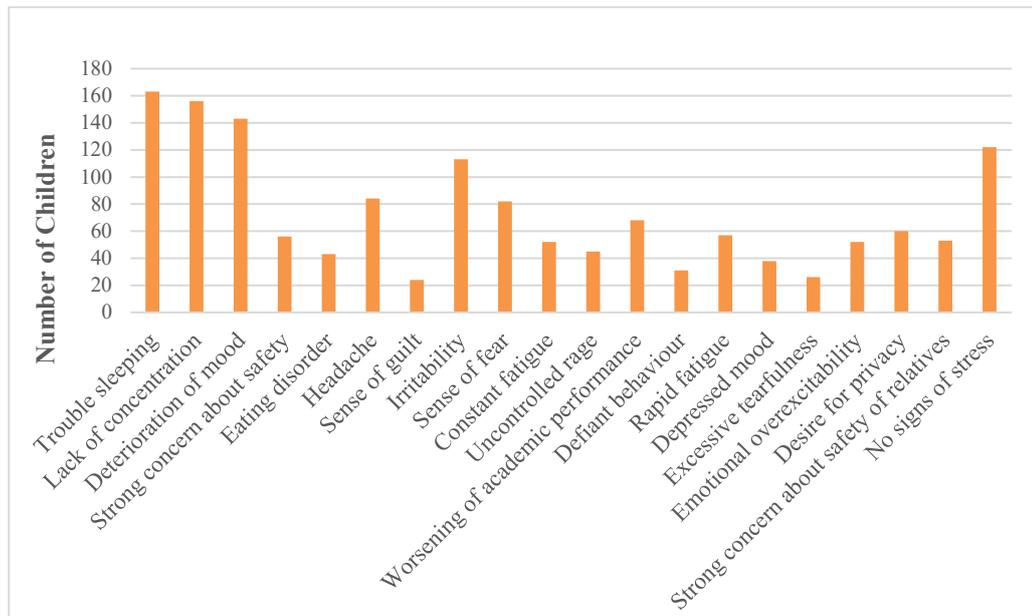


Figure 3 *Parents' Opinions on Signs of Anxiety among Children of High School Age* (made by authors)

The main aim of the fourth question was to find out whether parents did anything special at home to help their children cope with stress and anxiety. The majority of respondents (73.0%) replied that they did not do anything special except for trying to spend much time with their children organizing various recreational activities (painting and molding, playing games, walking in the park, watching cartoons or films, reading etc). 14.0% of respondents stated that although they experienced fear under given circumstances, they tried not to panic in order not to show their real emotions to their kids. These respondents strongly believed that their calmness and confidence made it possible both to reassure their children and to provide them with emotional support. Answering this question, 3.0% of respondents replied that they practiced meditation and breathing exercises to calm themselves in high stress situations. Therefore, they saw nothing wrong with practicing them with their children and thought that it would be nice to incorporate some elementary meditation and breathing techniques for stress relief into the classroom. Moreover, these respondents considered these activities very useful as they helped them teach their children to manage stress and anxiety in a healthy way, on the one hand, and to spend a good time with family, on the other hand.

The fifth question was focused on ascertaining parents' views on what teachers should do during the educational process to help your children cope with stress and anxiety considering the circumstances. 901 respondents (67.0%) noted that it would be a good idea if teachers were able to apply teaching methods and techniques aimed at developing those skills and abilities that would help children thinking for analysing problem situations and taking sound decisions. The

following examples prove the importance of implementing teaching methods and techniques aimed at reducing stress into the classroom:

P 35: *It is obvious that teachers do their best to help our children gain valuable education and their efforts are invaluable. But under conditions of war, it is of paramount importance to teach children to cope with inner negative emotions, resist stress and anxiety and not to lose the presence of mind. That is why, I am convinced that teachers, parents and children should have the opportunity to use some online resources containing free teaching materials aimed at changing negative emotions into positive and at reducing stress and anxiety.*

P 49: *Teachers have to be attentive and be able to recognize the signs of stress and anxiety in children. In order to help our children cope with stress, teachers have to be equipped with special teaching methods and techniques which can be used during classes.*

P 50: *I believe that teachers should monitor psycho-emotional state of children and be able to use some activities aimed at calming down children when it is necessary. It would be helpful if teachers constantly interact with parents.*

12.0% of respondents expressed the view that teachers should provide quality education to their children and should not raise urgent questions and uneasy subjects during classes. In response to this question 3.0% of respondents expressed the opposite opinion. They were fully persuaded that teachers should not hide the truth and should explain what happened discussing real-life situations with children. 21.0% of respondents were convinced that teachers should provide their children with psychological help and gentle handling as well as quality education.

Conclusions

The research aim was to find out parents' views on whether children of different school-age experience anxiety in war-affected areas in Ukraine and ways to reduce it. The current research enabled to identify the most common signs of anxiety among children of different school-age including trouble sleeping, lack of concentration, deterioration of mood, strong concern about safety, eating disorder, headache, sense of guilt, irritability, sense of fear, constant fatigue, uncontrolled rage, worsening of academic performance, defiant behaviour, rapid fatigue, depressed mood, excessive tearfulness, emotional overexcitability, desire for privacy, strong concern about safety of relatives. Moreover, the results obtained proved the extreme importance of exerting purposeful psychological and didactic influences (for instance, innovative technologies, methods, techniques and activities aimed at reducing stress and anxiety among children of different school age) during classes at general secondary schools regardless of the learning format

(face-to-face, remote or blended) in order to meet need of any single schoolchild. The results also provided an empirically-proven basis for developing the Ukrainian-Latvian cooperation project “Web-based Support System for Educators to Reduce Children’s Anxiety in War-affected Areas” and confirmed the need to create a website “Overcoming Stress and Anxiety Together: Teachers – Schoolchildren – Parents”. The developed web-site contains activities for teachers, parents and schoolchildren of primary, secondary and high school age. The activities posted on the website can be used both during classes and at home and are aimed at helping build emotional resilience in children, teaching them to understand a wide range of emotions, to practice positive thinking in a helpful way, to develop an optimistic attitude, to sympathize and to be attentive to each other.

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