Child Protection and Practice 11 (2026) 100361

Contents lists available at ScienceDirect

Child Protection and Practice

journal homepage: www.sciencedirect.com/journal/child-protection-and-practice

Mental health of preadolescents in western Ukraine: feasibility and acceptability of a school-based psychosocial intervention during war

Oleksandr Avramchuk [a], Olha Germanovych [b], Olha Ivanenko [b], Olga Uralova [b], Marina Lisenberg [c], Olena Mukha [b], Yuliya Stadnytska [a,b], Richard J. Davidson [d], Perla Kaliman [d,e,*]

[a] Department of Clinical Psychology, Ukrainian Catholic University, Ilariona Svjentsits'koho St, 17, Lviv, Lviv Oblast, 79000, Ukraine
[b] Ukrainian Mindfulness Association, Lviv, Ukraine
[c] Attentia Mindfulness, Paroissien 2012 PB 3, Buenos Aires, 1429, Argentina
[d] Center for Healthy Minds, University of Wisconsin-Madison, 625 W. Washington Ave., Madison, WI, 53703, USA
[e] Universitat Oberta de Catalonia (UOC), Rambla del Poblenou, 156, Barcelona, 08018, Spain

ARTICLE INFO

Keywords:
Adverse childhood experiences
War
Trauma
Psychological well-being
Children
Psychosocial intervention
Mindfulness
Compassion

ABSTRACT

Background: Children living in conflict zones experience high levels of psychological distress. Schools can provide an accessible setting for support, yet evidence on the effectiveness of school-based interventions in active war contexts remains limited.
Objectives: To evaluate children's well-being and internal coping resources during the war in Ukraine and to examine the feasibility of a school-based program designed to enhance psychological well-being in preadolescents.
Participants and setting: The study involved 81 children aged 10–12 years from schools in Lviv, Ukraine.
Methods: Adverse Childhood Experiences (ACEs), post-traumatic stress disorder (PTSD) symptoms, quality of life, self-compassion, and mindfulness traits were assessed using standard questionnaires and validated psychometric scales. The intervention program, delivered at school, focused on mindfulness, self-compassion, social connection, sense of purpose, and trauma processing. Acceptability and perceived impact were explored post-intervention among children, families, and school staff.
Results: 42% of children reported four or more ACEs. 39.5% of children exceeded the clinical cutoff for probable PTSD on the Children's Revised Impact of Event Scale CRIES-8, with differences observed between boys and girls. Higher levels of self-compassion and mindfulness were associated with lower PTSD symptoms. Children, families, and school staff reported improvements in children's well-being, emotion regulation, and social functioning after the intervention.
Conclusions: Our work provides preliminary evidence of the feasibility and acceptability of a school-based intervention designed to promote children's psychological well-being and mental health during ongoing war, with positive perceived impacts reported by children, families, and school staff. Interventions incorporating mindfulness and self-compassion training may represent promising approaches for reducing trauma-related symptoms in children exposed to adversity. Larger controlled studies using standardized measures are needed to assess effectiveness before broader dissemination can be considered.

1. Background

Ongoing armed conflict and chronic instability place an estimated 473 million children worldwide under sustained and overwhelming stress conditions (Save the Children, 2024). Across conflict-affected regions, children are exposed to repeated experiences of violence, displacement, family separation, bereavement, chronic insecurity, and environmental devastation. These shared realities threaten healthy development and long-term mental health and deprive children of safety, predictability, and emotional security (Layne et al., 2025; A

This article is part of a special issue entitled: War on Children published in Child Protection and Practice.

* Corresponding author. Center for Healthy Minds, University of Wisconsin-Madison, 625 W. Washington Ave., Madison, WI, 53703, USA.
E-mail address: pkaliman@uoc.edu (P. Kaliman).

https://doi.org/10.1016/j.chipro.2026.100361
Received 25 May 2026; Received in revised form 5 October 2026; Accepted 8 October 2026
Available online 9 October 2026
2950-1938/© 2026 The Authors. Published by Elsevier Inc. on behalf of International Society for Prevention of Child Abuse and Neglect. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

Sourander et al., 2026). The war-related exposome, which includes prolonged displacement, repeated air raid alerts, loss of caregivers, family-level adversity, breakdown of health services, economic hardship, damaged infrastructures and instability of schooling, creates conditions of sustained psychosocial adversity (Devakumar et al., 2014; Ferrara et al., 2025). Exposure to armed conflict during childhood and adolescence has been consistently linked to elevated risks of post-traumatic stress disorder (PTSD), depression, anxiety, self-harm, suicidality, digital media consumption, and substance use (Pfeiffer et al., 2024; Shoshani & Kor, 2026; Sourander et al., 2024).

Although substantial research exists on child and adolescent mental health in non-war and post-conflict settings, these findings cannot be directly generalized to contexts of ongoing armed conflict, which present distinct and intensified stressors (Zhang et al., 2025). With one in six children currently living in war-affected areas and facing serious risks to their mental health, their inclusion in mental health research is essential. Following Russia's invasion of Ukraine in February 2022, the scale and intensity of war-related stressors affecting children and adolescents expanded dramatically. A large cross-sectional study of 8096 Ukrainian adolescents living both within Ukraine and in exile, documented high levels of depression, anxiety, and trauma-related symptoms, with displaced adolescents showing particularly elevated psychiatric burden (Goto et al., 2024). Similarly, a large cross-sectional study involving 2766 adolescents aged 11–17 years, found markedly higher levels of war-related trauma exposure among youth living in the conflict-affected Donetsk region compared with peers in central Ukraine (Osokina et al., 2023). Over 60% of adolescents reported witnessing armed attacks, nearly 14% experienced direct violence, and more than 25% were forcibly displaced. These exposures were associated with increased prevalence of PTSD, severe anxiety, and moderate-to-severe depressive symptoms, underscoring the profound psychological toll of prolonged conflict on adolescent mental health. Similarly, a national survey of parents conducted one year after the invasion reported clinically significant levels of PTSD, anxiety, depression, attention-deficit/hyperactivity disorder, and conduct problems among children aged 3–17 years (Naeem et al., 2025).

Despite the magnitude of mental health needs among war-exposed children, access to specialized psychological services remains limited in conflict-affected settings. This gap highlights the critical importance of integrating psychosocial support into children's everyday environments. Schools represent a unique platform for mental health promotion and trauma-informed prevention. As institutions that reach large numbers of children, schools in emergencies serve as first-line psychosocial support spaces that can facilitate early detection of distress, foster resilience, provide psychosocial support, and help mitigate the long-term consequences of war-related trauma (Betancourt et al., 2013). Integrating evidence-based, school-based mental health interventions may therefore play a pivotal role in protecting the well-being of children exposed to armed conflict and reducing the impact of war-related adversity (Alzaghoul et al., 2022).

A recent study across five Ukrainian regions reported that school administrators, teachers, psychologists, social pedagogues, and students expressed strong support for integrating trauma-informed interventions to promote mental health into school policy, while highlighting major barriers such as limited resources, staff burnout, stigma, and insufficient teacher training (Gorbunova et al., 2025). In this context, this study examines the mental health status of preadolescent children attending public schools in Lviv, a city in western Ukraine that is geographically distant from active frontline combat and has experienced comparatively fewer direct armed attacks than eastern and southern regions of the country. However, children and families in Lviv remain exposed to pervasive war-related stressors, including air raid alerts, missile strikes, frequent power outages, lack of heating during the winter, damaged civilian infrastructure, displacement of loved ones, prolonged uncertainty, and the military deployment of family members. To help address these challenges and provide psychological support, we also explored the feasibility and acceptability of a school-based program to promote psychological well-being and mental health in preadolescents, based on themes such as emotional awareness, understanding mental processes, self-compassion, social connection, and a sense of purpose in life, with a particular focus on strategies for coping with stress and processing trauma.

2. Methods

2.1. Participants and Procedure

Eighty-one children aged 10 to 12 years from two public schools in Lviv were recruited between September and November 2024. Schools were selected based on willingness to participate and logistical feasibility. Prior to data collection, informational meetings were held with parents or legal guardians to explain the study aims, procedures, and ethical safeguards. During classroom meetings, children received information about the study's purpose in age-appropriate language, with emphasis on the voluntary, non-clinical nature of participation and its lack of connection to academic evaluation. Children were informed that they could withdraw from the study at any time without consequences and were given opportunities to ask questions before and during participation. Written informed consent was obtained from parents or legal guardians and children before participation.

All procedures complied with ethical standards for research involving minors. The study protocol was reviewed and approved by the Ethics Committee of the Ukrainian Catholic University (UCU), approval number 1/24-cp, dated 7 September 2024. Inclusion criteria required children to be aged 10 to 12 years, provide verbal or written assent, have parental or guardian consent, and possess the ability to read and understand Ukrainian, the language of the questionnaires. Children were excluded if they withdrew assent at any stage, had severe cognitive or neurodevelopmental impairments that precluded independent completion of questionnaires, or were experiencing an acute psychiatric crisis or other clinical condition that could be exacerbated by discussing trauma-related experiences. All assessments were administered with the support of psychologists trained in trauma-informed care and working with children exposed to adverse experiences.

2.2. Measures

2.2.1. Adverse childhood experiences (ACEs)

ACEs were assessed using the Pediatric Adverse Childhood Experiences and Related Life Events Screener (PEARLS) (Koita et al., 2018), a 19-item instrument evaluating exposure to traumatic, unsafe, or developmentally adverse experiences across family, community, and social-environmental contexts, including the original ten ACE categories of abuse, neglect, and household dysfunction.

2.2.2. Trauma-related symptoms

We used two validated instruments to evaluate trauma-related symptoms. The Children's Revised Impact of Event Scale (CRIES-8) (Perrin et al., 2005) assessed intrusion and avoidance symptoms, with the Ukrainian adaptation demonstrating high internal consistency (Cronbach's $\alpha = 0.881$) and reliability (ICC = 0.870) (adapted Ukrainian translation from the Institute of Mental Health of the Ukrainian University of Kyiv in cooperation with the Institute of Child and Family Development and The Children and War Foundation (https://www.childrenandwar.org/measures). A double translation of the Child PTSD Symptom Scale – Version 5 (CPSS-5) (Foa et al., 2018) was carried out by the Department of Clinical Psychology of Ukrainian Catholic University, showing good reliability in the Ukrainian version (Cronbach's $\alpha = 0.711$; ICC = 0.919).

2.2.3. Health-related quality of life

We used the KIDSCREEN-27 questionnaire (Ravens-Sieberer et al.,

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

2014), which measures physical well-being, psychological well-being, parent relations and home life, peer relationships and social support, and school environment. The Ukrainian version demonstrated high internal consistency (Cronbach's α = 0.897; ICC = 0.890) (adapted translation provided by the official website: https://www.kidscreen.org/). Physical Well-being subscale evaluates the child's perceived physical health and the extent to which physical limitations interfere with daily activities. The Psychological Well-being subscale captures emotions, life satisfaction, emotional balance, self-perception and psychological discomfort. The Parent Relations and Home Life subscale measures the quality of the relationship with parents, perceived emotional support, family cohesion, and the child's sense of autonomy. The Social Support and Peers subscale assesses the quality of interactions with peers, perceived acceptance, the child's ability to establish and maintain friendships, availability of social support and involvement in social activities. The School Environment subscale examines the child's perception of the school setting, including feelings of safety, academic engagement, and support from teachers.

2.2.4. Self-compassion

We used the Self-Compassion Scale Short Form for Children (SCS-SF) (Sutton E., Schonert-Reichl K.A., Wu A.D., 2018). The original six subscales (self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification) were retained to preserve conceptual consistency. Reliability of the Ukrainian adaptation was strong (Cronbach's α = 0.893; ICC = 0.850). The adapted translation was carried out by the Department of Clinical Psychology of Ukrainian Catholic University (Kuzikova et al., 2024). The Self-Kindness subscale assesses the ability to extend warmth, understanding, and nonjudgmental support toward oneself during times of difficulty, failure, or emotional pain. The Common Humanity subscale reflects the recognition that suffering and personal shortcomings are universal aspects of human experience, promoting a sense of connectedness. The Mindfulness subscale evaluates the ability to maintain balanced, non-reactive awareness of complex thoughts and emotions, without over-identifying with them or suppressing them. The Self-Judgment subscale measures harsh self-criticism, self-blame, and tendencies to evaluate oneself negatively in response to setbacks or perceived inadequacies. The Isolation subscale captures feelings of being alone or disconnected from others when experiencing suffering, emphasizing perceived separation rather than shared human experience. The Over-Identification subscale assesses the extent to which individuals become overwhelmed by negative thoughts and emotions, amplifying distress through rumination and emotional fusion.

2.2.5. Mindfulness

Mindfulness trait was measured using the Mindful Attention Awareness Scale for Adolescents (MAAS-A) (Brown et al., 2011), with the Ukrainian version demonstrating good internal consistency and reliability (Cronbach's α = 0.827; ICC = 0.818). This adapted translation was carried out by the Department of Clinical Psychology of Ukrainian Catholic University.

2.3. Feasibility of school program to promote mental health in pre-adolescents

We explored the feasibility of a program incorporating age-appropriate activities designed to enhance children's psychological well-being. The program consisted of 12 sessions to be carried out over 2 months, starting with 2 sessions per week the first month, and one session per week during the second month. Each session had a duration of 2 h. The program was delivered to two groups of students (Group 1: n = 17/5 girls and 12 boys/April–June 2025; Group 2: n = 15/7 girls and 10 boys/January–March 2026). Participants were preadolescent children aged 10-12 years, corresponding to grades 5 and 6 in the Ukrainian school system.

Building upon our previous work (Kaliman et al., 2022; Roque-Lopez et al., 2021), the content of the program was structured around four interrelated pillars of well-being identified as beneficial for psychological well-being (Dahl et al., 2020): (i) *mindful awareness* (sessions 1 and 2), defined as the development of focused and flexible attention to both external environments and internal signals such as bodily sensations, thoughts, and emotions; (ii) *insight* (sessions 3 and 4), aimed at understanding how thoughts elicit emotional and behavioral responses, identifying maladaptive beliefs and cultivating perspective taking; (iii) *connection* (sessions 5 and 6), aimed at strengthening feelings of gratitude, interconnection, and compassion toward oneself and others; and (iv) *sense of purpose* (sessions 7 and 8), involving the cultivation of meaning, personal values, self-confidence and engagement in purposeful actions. The themes of each session were developed through playful interactive activities, artistic expression and yoga-inspired exercises. During sessions 9 through 12, previously introduced practices were further reinforced and integrated, and additional activities specifically designed to support the processing and regulation of difficult emotions were introduced, including Emotional Freedom Techniques (EFT) (Blacher, 2023; Lambert et al., 2022), the Butterfly Hug (Artigas & Jarero, 2008), guided imagery exercises (Zehetmair et al., 2019). Each session included several moments of structured sharing circles, which provided children with opportunities to reflect on their experiences and to identify concrete ways to integrate newly acquired skills into their daily lives. Every session concluded with a brief, playful challenge designed to encourage children to practice the skills just learned, referred to as “superpowers”, in their daily lives until the next session.

The group program was delivered jointly by a team composed of three licensed psychologists with extensive experience in trauma-informed and mindfulness-based interventions for children. Prior to program implementation, all instructors completed a two-month teacher training covering the theoretical foundations, objectives, and practical content of the 12 program sessions, ensuring standardized delivery and fidelity to the intervention protocol.

2.4. Statistical analysis

Descriptive statistics were computed to characterize the sample, including means and standard deviations for continuous variables and frequencies and percentages for categorical variables, covering demographic characteristics, ACE prevalence, and scores on all psychometric measures. Normality assumptions were assessed, and when variables deviated from normal distributions, nonparametric Mann–Whitney U tests were used. Associations between trauma-related symptoms (CRIES-8, CPSS-5), health-related quality of life (KIDSCREEN-27), self-compassion (SCS-SF), and mindfulness (MAAS-A) were evaluated using Spearman's rank-order correlation coefficients. Linear regression analyses were conducted to examine the predictive role of ACE exposure on trauma-related symptoms, well-being outcomes, and internal psychological resources. All statistical analyses were conducted using jamovi (Version 2.6.26; The jamovi project, 2024).

3. Results

3.1. Participants

The assessment of PTSD symptoms, quality of life, self-compassion, and mindfulness traits included 81 children aged 10–12 years (M = 10.7, SD = 0.6). The sample comprised 66.7% girls (n = 54) and 33.3% boys (n = 27). The mean age was 10.7 years (SD = 0.6) for girls and 10.7 years (SD = 0.7) for boys. Due to the absence of data on participants' gender identities, our study employs the terms “sex,” “boys,” and “girls” to denote sex assigned at birth. Regarding family composition during the war, 51.9% of children continued to live with both parents, 32.1% lived with their mother only, and 16.0% were cared for by other relatives (e.g., grandparents, older siblings, or extended

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

family). All participants had resided in Ukraine for the past 6 months at the time of the study, and eight participants came from families of internally displaced persons. Overall, 64% of children identified as Christians. The demographic data that we could collect are summarized in Supplementary Table 1.

3.2. Adverse childhood experience (ACE) screening

Children completed the Pediatric ACEs and Related Life Events Screener (PEARLS), which assessed exposure to 19 types of adverse childhood experiences, including 10 core ACEs traditionally associated with family dysfunction, abuse, and neglect, as well as nine additional ACEs reflecting broader social and contextual vulnerabilities. Fig. 1 presents the cumulative number of ACEs for the total sample and by sex, based on the complete 19-item questionnaire (Fig. 1A) and for the standard 10-category ACE questionnaire derived from the original CDC–Kaiser ACE Study (Felitti et al., 1998) (Fig. 1B), to enable comparison with previous studies. The population examined in the present study showed markedly high levels of adversity, with a prevalence of four or more ACEs of 42% according to the full PEARLS questionnaire, and 30%, when only the original 10 ACEs were considered.

Supplementary Figure 1 summarizes the prevalence of the different types of ACEs in the sample. The most frequently reported experiences across the total sample were emotional neglect (ACE-2: "Have you ever felt unsupported, unloved, and/or unprotected?") and witnessing psychological or physical violence against their parent/caregiver (ACE-7: "Have you ever seen or heard a parent/caregiver being screamed at, insulted, or physically harmed?"), each endorsed by 43% of participants.

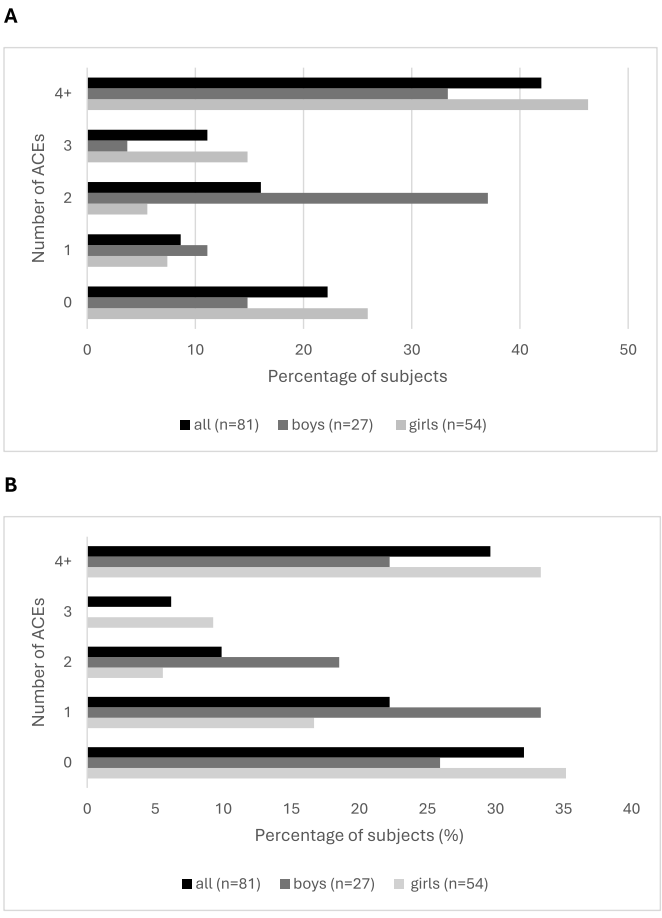


Fig. 1. Pediatric ACEs and Related Life Events Screener (PEARLS) – Teen Self-Report. A. ACE exposure using the 19 item PEARLS self-report B. ACE exposure of the 10 original ACE categories.

Among the nine additional ACEs, the most frequently reported experiences in the total sample were discrimination (ACE-12: 26%) and living with a parent/caregiver with a serious physical illness or disability (ACE-16: 25%), Notable sex differences were observed for ACE-4 (verbal humiliation or insults from parents/caregivers; 30% girls vs. 19% boys) and ACE-5 (parental substance misuse; 24% girls vs. 7% boys). Certain experiences were reported exclusively by girls, including sexual abuse (ACE-9: 7% vs. 0%), housing problems (ACE-13: 15% vs. 0%), and separation from a parent/guardian due to migration or foster care (ACE-15: 4% vs. 0%).

3.3. Psychometric assessment

Table 1 summarizes the total scores (mean ± SD) and sex differences for all psychometric measures, including measures of trauma-related symptoms (CRIES-8, CPSS-5), health-related quality of life (KIDSCREEN-27), self-compassion (SCS-SF), and mindfulness (MAAS-A).

3.3.1. Trauma-related symptoms

On the CRIES-8, the mean score for the total sample was 14.21 (SD = 9.05) (Table 1), below the clinical cutoff of 17 for probable PTSD (Perrin et al., 2005). However, 39.5% of children (n = 32) reached or exceeded this threshold. By sex, 33.3% of boys (9/27) and 42.6% of girls (23/54) scored above the cut-off. On the CPSS-5, the mean score was 17.75 (SD = 9.77), with 11.1% of boys (3/27) and 11.1% of girls (6/54) exceeding the reference cut-off of 31 for identifying probable PTSD diagnosis (Foa et al., 2018). No statistically significant sex differences were observed on mean scores for these scales.

3.3.2. Health-related quality of life

We used the KIDSCREEN-27 to cover five domains: physical well-being, psychological well-being, parent relations and home life, social support and peers, and school environment (Table 1). A significant sex difference emerged for psychological well-being, with boys reporting higher scores than girls. No significant sex differences were observed in the other health-related quality of life domains.

3.3.3. Self-compassion

The Self-Compassion Scale-Short Form (SCS-SF) was used to assess children's capacity for self-kindness, mindfulness, and a sense of common humanity, as well as their tendencies toward self-judgment, isolation, and over-identification (Table 1). A significant sex difference was found on the Self-Kindness subscale, with boys scoring higher than girls. No other subscales differed by sex.

3.3.4. Mindfulness

Mindfulness trait was assessed using the Mindful Attention Awareness Scale for Adolescents (MAAS-A), which measures conscious awareness of the present moment (Table 1). No statistically significant sex differences were observed.

3.4. Scale correlations

Cross-correlation analyses among scores of all self-report measures show that higher levels of trauma-related symptoms were consistently associated with poorer psychological well-being and diminished internal psychological resources. The CRIES-8 and CPSS-5 PTSD symptom scales were positively correlated with each other, while all dimensions of health-related quality of life (KIDSCREEN), as well as self-compassion (SCS-SF-C) and mindfulness (MAAS-A), showed significant positive correlations with one another (Table 2).

Trauma-related symptoms were inversely related to psychological well-being, with stronger associations observed for CPSS-5 than for CRIES-8. In addition, CRIES-8 was associated with lower perceived quality of the school environment, whereas CPSS-5 demonstrated a

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

Table 1
Mental health-related and well-being self-report measures in total sample and by gender.

Scale	All participants (n = 81)		Girls (n = 54)		Boys (n = 27)		Mann-Whitney U		Effect Size
	Mean	SD	Mean	SD	Mean	SD	Statistic	p	
CRIES-8-Common	14.21	9.05	14.00	9.42	14.63	8.42	691	0.703	
CPSS - V	17.75	9.77	17.52	10.24	18.22	8.92	697	0.748	
KIDSCREEN-27 Physical Well-being	15.36	4.12	14.80	3.76	16.48	4.63	537.00	0.054	
KIDSCREEN-27 Psychol. Well-being	23.58	4.99	22.33	4.73	26.07	4.62	420.00	0.00*	0.42
KIDSCREEN-27 Parent Real. & Home Life	23.12	8.32	22.61	9.13	24.15	6.42	591.00	0.17	
KIDSCREEN-27 Social Support & Peers**	13.83	3.66	13.61	3.61	14.26	3.78	636.00	0.35	
KIDSCREEN-27 School Environment	12.60	2.97	12.72	3.00	12.37	2.96	684.00	0.65	
SCS-SF-c: common	2.83	0.78	2.79	0.83	2.92	0.69	626.00	0.30	
SCS-SF-c: Self-Kindness Items	2.79	1.08	2.56	0.98	3.26	1.13	476.00	0.01*	0.35
SCS-SF-c: Self-Judgment Items	2.57	1.06	2.63	1.10	2.46	1.00	679.00	0.61	
SCS-SF-c: Common Humanity Items	2.77	1.02	2.73	0.96	2.83	1.14	695.00	0.73	
SCS-SF-c: Isolation Items	2.86	1.14	2.76	1.19	3.07	1.02	602.00	0.20	
SCS-SF-c: Mindfulness Items	3.34	0.89	3.36	0.83	3.30	1.02	694.00	0.72	
SCS-SF-c: Over-identification Items	2.67	1.01	2.71	1.05	2.59	0.93	698.00	0.75	
MAAS-A	3.67	0.80	3.72	0.80	3.55	0.81	674.00	0.58	

Children's Revised Impact of Event Scale (CRIES-8); Child PTSD Symptom Scale – Version 5 (CPSS-5); KIDSCREEN-27, measures physical well-being, psychological well-being, parent relations and home life, peer relationships and social support, and school environment; Self-Compassion Scale – Short Form (SCS-SF); Mindful Attention Awareness Scale for Adolescents (MAAS-A).

Table 2
Cross correlation among scores of self-report measures.

		CRIES-8-	CPSS - 5	KIDSCREEN 27 Physical Well-being	KIDSCREEN 27 Psychol. Well-being	KIDSCREEN 27 Parent Real. & Home Life	KIDSCREEN 27 Social Support & Peers	KIDSCREEN 27 School Environment	SCS-SF-c	MAAS -A
CRIES-8-Common	Spearman's rho	—								
	df	—								
	p-value	—								
CPSS - V	Spearman's rho	0.696***	—							
	df	79	—							
	p-value	0.001	—							
KIDSCREEN 27 Physical Well-being	Spearman's rho	−0.094	−0.209	—						
	df	79	79	—						
	p-value	0.405	0.061	—						
KIDSCREEN 27 Psychol. Well-being	Spearman's rho	−0.221*	−0.395***	0.683***	—					
	df	79	79	79	—					
	p-value	0.047	0.001	0.001	—					
KIDSCREEN 27 Parent Real. & Home Life	Spearman's rho	−0.15	−0.372***	0.631***	0.749***	—				
	df	79	79	79	79	—				
	p-value	0.182	0.001	0.001	0.001	—				
KIDSCREEN 27 Social Support & Peers	Spearman's rho	−0.114	−0.174	0.578***	0.689***	0.762***	—			
	df	79	79	79	79	79	—			
	p-value	0.31	0.12	0.001	0.001	0.001	—			
KIDSCREEN 27 School Environment	Spearman's rho	−0.301**	−0.209	0.299**	0.442***	0.429***	0.514***	—		
	df	79	79	79	79	79	79	—		
	p-value	0.006	0.061	0.007	0.001	0.001	0.001	—		
SCS-SF-c	Spearman's rho	−0.275*	−0.477***	0.549***	0.794***	0.780***	0.661***	0.323**	—	
	df	79	79	79	79	79	79	79	—	
	p-value	0.013	0.001	0.001	0.001	0.001	0.001	0.003	—	
MAAS-A	Spearman's rho	−0.449***	−0.463***	0.305**	0.382***	0.413***	0.314**	0.354**	0.470***	—
	df	79	79	79	79	79	79	79	79	—
	p-value	0.001	0.001	0.006	0.001	0.001	0.004	0.001	0.001	—

Children's Revised Impact of Event Scale (CRIES-8); Child PTSD Symptom Scale – Version 5 (CPSS-5); KIDSCREEN-27, measures physical well-being, psychological well-being, parent relations and home life, peer relationships and social support, and school environment; Self-Compassion Scale – Short Form (SCS-SF); Mindful Attention Awareness Scale for Adolescents (MAAS-A).

specific negative association with parent relations and home life (Table 2).

Self-compassion was inversely associated with trauma-related symptom severity. Higher scores on both PTSD-related scales corresponded to lower overall self-compassion (Table 2).

Mindfulness, as measured by the MAAS-A, showed significant negative associations with both CRIES-8 and CPSS-5, indicating that greater trauma-related symptom severity was linked to lower levels of

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

mindful awareness (Table 2).

Taken together, these findings indicate that PTSD-related symptoms among preadolescents are systematically related to diminished well-being across emotional, relational, and self-regulatory domains.

3.5. ACEs as predictors of trauma symptoms and psychoemotional well-being

Regression analyses were conducted to examine the extent to which ACEs predicted trauma-related symptoms, health-related quality of life, and internal psychological resources. In these analyses, all 19 ACE types were entered simultaneously as predictors. Only a small number of individual ACEs significantly accounted for variance in the outcomes, suggesting that the overall explanatory power of the models arises from the combined contribution of multiple ACEs (Supplementary Tables 2–8).

The proportion of explained variance was 54% for the CRIES-8 ($R^2 = 0.54$, $F(19, 60) = 3.69$, $p < 0.01$) and 63% for the CPSS-5 ($R^2 = 0.63$, $F(19, 60) = 5.38$, $p < 0.01$) (Supplementary Table 2), indicating that ACEs were strongly associated with trauma-related distress in preadolescent children. For the CRIES-8, the strongest independent predictor was ACE-10 (family structure instability; $p < 0.02$ $\beta = 0.42$). For the CPSS-V, ACE-19 significantly predicted more trauma symptoms (interpersonal violence; $p < 0.01$ $\beta = 0.30$) (Supplementary Tables 3 and 4).

Self-compassion (SCS-SF-c) and mindfulness (MAAS-A) were also significantly associated with ACEs, with models explaining 50% and 47% of the variance, respectively (SCS-SF-c: $R^2 = 0.50$, $F(19, 60) = 3.17$, $p < 0.01$; MAAS-A: $R^2 = 0.47$, $F(19, 60) = 2.65$, $p < 0.01$) (Supplementary Table 2). The strongest predictor was ACE-2 for both self-compassion and mindfulness (feeling unsupported, unloved, and/or unprotected; $p < 0.01$ $\beta = -0.43$; $p < 0.04$ $\beta = -0.30$, respectively) (Supplementary Tables 5 and 6).

Similarly, regression models for the KIDSCREEN-27 subscales showed significant overall effects for physical well-being ($R^2 = 0.38$, $F(19, 60) = 1.97$, $p < 0.05$) and psychological well-being ($R^2 = 0.47$, $F(19, 60) = 2.76$, $p < 0.01$) (Supplementary Table 2). No single ACE category emerged as a uniquely significant predictor in these models (Supplementary Tables 7 and 8).

3.6. Feasibility of school program to promote mental health in pre-adolescents: perceived benefits from children, families and school staff

A subgroup of thirty-four children (girls, n = 12; boys, n = 22) participated in the school program. The school where the program was conducted did not have to close or suspend in-person classes due to direct damage from attacks. However, some sessions had to be rescheduled because of war-related disruptions, including power and heating outages. Additionally, during air-raid alarms and other security threats, students and teachers occasionally had to go to shelters instead of classrooms, disrupting the school day and leading to temporary cancellations for safety reasons. Despite these obstacles, all 12 sessions of the program were successfully completed for the two group of students.

At the end of the program, 34 children answered a satisfaction questionnaire (Supplementary Table 9). All children (100%) reported enjoying the program “a lot” or “very much” and 97% indicated that it helped them feel better. Similarly, 91% of participants reported a strong interest in participating in future similar programs, 97% indicated that they clearly understood the program's instructions and activities, 91% felt heard during the sessions, and 91% expressed intentions to apply what they had learned. Most participants also indicated that they would recommend the program to another child (91%). These results suggest a high level of engagement, content comprehension, and perceived benefit among participants.

Twenty-three families completed the feedback questionnaire at the end of the program (Supplementary Table 10). Most families (91%) reported observable changes in their children's emotions and indicated that children shared at home what they learned (96%). Families observed improvements in children's ability to manage frustration and anger (91%). Regarding social interactions, 78% of families noticed significant improvements in how children engaged with peers or adults. 91% of families found that the program was valuable for their child's well-being.

Twenty-one members of the school staff answered a feedback questionnaire at the end of the program (Supplementary Table 11). They reported positive outcomes regarding the program's social and emotional impact on students (95%), with 81% noting that students applied strategies learned during the program and 76% observing improved classroom coexistence (24% were unable to determine an effect in this domain). Eighty-one percent of school staff observed that the program facilitated teaching, particularly in group dynamics and conflict management. Ninety percent found the program valuable, and 100% expressed a desire for its continuation at the school. The school principal remarked, “What the children learned in this program will remain in their minds, hearts, and experience.”

4. Discussion

This study contributes to a growing literature documenting children's psychological well-being during an active full-scale war, under conditions of chronic and uncontrollable exposure to adversity (Aldabbour et al., 2026; Hazer & Gredebäck, 2023; Martsenkovskyi et al., 2023; Zasiekina et al., 2025).

Children exposed to war are at heightened risk for trauma (Zasiekina et al., 2025). In the sample studied here, a substantial proportion of the children fell within ranges indicative of PTSD risk. The discrepancy in PTSD symptom prevalence between the two PTSD symptom scales used in this study may reflect differences in their scope and thresholds for identifying clinically relevant trauma-related symptoms. The CRIES-8 is a brief screening measure designed to assess trauma-related symptoms of intrusion and avoidance in children (Perrin et al., 2005), whereas the CPSS-5 assesses a broader range of PTSD symptoms across the DSM-5 symptom clusters (i.e., intrusion, avoidance, negative alterations in cognition and mood, alterations in arousal and reactivity, and associated functional impairment) (Foa et al., 2018). The two measures therefore capture overlapping but not identical levels of trauma-related distress, which may explain the different prevalence estimates. These findings highlight the importance of interpreting screening results cautiously and recognizing relevant trauma-related symptoms even when children do not reach the threshold on a more comprehensive PTSD symptom measure (McLaughlin et al., 2015) and suggest that interventions promoting mental health and psychosocial well-being may be relevant for children in conflict settings, even in the absence of a full PTSD diagnosis.

Our findings are consistent with the ecological framework proposed by Miller and Rasmussen, which posits that mental health in the context of armed conflict is shaped not only by conflict exposure but also by daily stressors caused or worsened by the armed conflict and by adverse childhood experiences unrelated or indirectly related to armed conflict (Miller & Rasmussen, 2010, 2024). At a global level, exposure to adverse childhood experiences is highly prevalent, with evidence suggesting that 13% of the adult population has encountered four or more ACEs during their lifetime (Hughes et al., 2017). In comparison, children in the present study exhibited substantially higher rates, with prevalence estimates approximately two-to threefold higher, depending on the questionnaire used (original 10 ACEs vs. full PEARLS). Girls reported a higher prevalence of cumulative ACEs (4 or more) than boys in both questionnaires, a pattern consistent with previous studies in conflict and non-conflict settings (Felitti et al., 1998; Haahr-Pedersen et al., 2020). Consistent with the findings in the FinnBrain Birth Cohort (Kataja et al., 2025), in our study, overall adversity showed more influence than single ACE types in trauma-related symptoms, well-being, and internal

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

psychological resources. Nevertheless, some family-related adversities appeared particularly relevant. Emotional neglect (ACE-2: feeling unsupported, unloved, and/or unprotected) was the strongest predictor of lower self-compassion and mindfulness. Likewise, family structure instability (ACE-10) was the strongest independent predictor of trauma symptoms measured by the CRIES-8. Consistent with these findings, we observed significant inverse correlations between trauma symptoms and family relations, suggesting that positive family relationships may mitigate the psychological impact of chronic adversity. However, our cross-sectional design does not allow causal inferences regarding these potential protective effects. Further longitudinal research and larger samples are needed to clarify the specific mechanisms through which family environments may support children's mental health under conditions of ongoing armed conflict-related adversity.

Regarding gender differences, boys reported significantly higher psychological well-being and greater self-kindness than girls. This pattern may be explained by a combination of developmental and sociocultural factors, such as greater emotional awareness, increased societal pressures, and higher levels of self-criticism among girls (Ferrari et al., 2023; Li et al., 2024; Twenge et al., 2022). We found a significant inverse correlation between trauma symptoms and psychological well-being, family relations, and school environment, underscoring that supportive family relationships and positive school environments may buffer chronic stress and enhance emotion regulation, thereby mitigating trauma-related symptoms. Similarly, we observed that self-compassion and mindfulness were inversely associated with trauma-related symptoms, suggesting that these traits, by fostering a sense of safety, common humanity, and nonjudgmental acceptance, may represent a protective mechanism under conditions of chronic adversity. These findings converge with our previous work conducted in Argentina and other studies, where higher levels of mindfulness and compassion similarly emerged as protective factors against PTSD symptoms in children exposed to adversity (Kaliman et al., 2025; Turk & Acet, 2026). These transcultural similarities observed across markedly different sociopolitical contexts are consistent with a potential role for mindfulness and self-compassion in supporting adaptive attentional and emotional regulation and reducing self-criticism in the context of trauma (Liu et al., 2024; Vidal et al., 2024). Future longitudinal studies are needed to determine whether these internal resources predict or promote lower psychological distress over time in the context of ongoing adversity.

Without adequate protection and support, prolonged exposure to war-related stressors may lead to enduring consequences for children's emotional regulation, mental health, overall well-being throughout the lifespan as well as intergenerational consequences (Devakumar et al., 2014). Urgent action is required to design, deliver, and evaluate interventions that can address the needs of children exposed to armed conflict, while generating evidence to guide policy initiatives. In this context, here we examined the feasibility and acceptability of a 12-session mental health promoting school program in Lviv, Ukraine. Our initiative aligns with UNICEF's Education in Emergencies framework, which recognizes schools as safe, child-friendly settings that can provide children with safety, stability, basic services, and mental health and psychosocial support, helping them cope with adversity and trauma in crisis settings (UNICEF, https://www.unicef.org/education/emergencies). Specifically, our program was intentionally designed to first strengthen emotional regulation and psychosocial protective resources and subsequently introduce trauma-informed strategies to help children process potentially traumatic experiences. This sequential approach is consistent with phase-orientated trauma-informed approaches, which emphasize strengthening stabilization and psychological resources before proceeding to trauma-focused processing (Willis et al., 2023).

In our study, the intervention component lacked a control group and prospective psychometric assessments due to the ongoing armed conflict. In this context, we considered that war-related factors that were difficult for us to monitor or control in real time could influence the outcomes independently of the intervention (e.g., repeated air raid alerts, loss of caregivers, family-level adversity, economic hardship, and damaged infrastructure). Indeed, under these circumstances, even if changes in PTSD symptoms or psychological well-being had been observed, it would not have been possible to determine whether such changes were attributable to the intervention or to concurrent war-related stressors. Consequently, we limited the post-intervention assessment to implementation outcomes appropriate for feasibility research, namely acceptability and perceived benefits, explored from the perspectives of children, caregivers, and school staff. Reliance on participant's satisfaction and second-party evaluations offered a pragmatic and ethically sensitive approach to capture indicators of feasibility and acceptability. The perceived benefits in psychological well-being, emotional regulation, social behavior, and classroom coexistence reported by children, family members, and school staff suggest that the intervention may have strengthened adaptive coping capacities not only at the individual level but also within relational and institutional contexts. However, larger controlled studies using standardized measures are needed to assess the effectiveness.

Key strengths of this study include the collection of data during an active armed conflict and the use of multiple instruments to characterize children's baseline psychological distress and internal resources. A further strength was the implementation of a structured school-based psychosocial program to explore its feasibility, acceptability, and perceived benefits. The study provides preliminary evidence that such an intervention can be delivered within existing school settings despite the practical challenges of ongoing conflict and that it was viewed positively by children, family members, and school staff.

Limitations of this study include the cross-sectional design of the psychometric assessment and the relatively small, sex-imbalanced sample, which limit the generalizability of the findings. A major limitation of our study is that psychometric assessments were not conducted at the end of the intervention. We fully acknowledge that the exploration of subjective perceived benefits presented here is susceptible to social desirability and expectancy biases and cannot substitute for standardized psychometric assessments to establish intervention efficacy. Therefore, the absence of post-intervention and follow-up psychometric assessments precludes any evaluation of changes in mental health outcomes and persistence or evolution of potential effects over time. Future randomized controlled longitudinal studies with larger samples are required to evaluate the efficacy of the program in improving psychosocial well-being and mental health. A further limitation is the use of the Pediatric ACEs and Related Life Events Screener (PEARLS) Teen Self-Report in children aged 10–12 years, although the instrument is primarily recommended for individuals aged 12 years and older. Its use in younger children may have introduced age-related comprehension and reporting biases, particularly for complex or sensitive experiences. Although the local Ethics Committee considered the instrument appropriate for this age group in the context of this study, ACE estimates should nevertheless be interpreted with caution. Future research should use or validate age-appropriate measures of childhood adversity. Regarding the intervention, program sessions occasionally had to be rescheduled because of power outages and air raid alerts; however, these disruptions did not substantially affect intervention delivery, which was completed as planned.

In conclusion, this study highlights the psychological burden borne by preadolescent children living under chronic war conditions, even in regions geographically distant from main frontline combat. Our work provides preliminary evidence of the feasibility and acceptability of a school-based intervention designed to promote children's psychological well-being and mental health during ongoing war, with positive perceived impacts reported by children, families, and school staff. Interventions incorporating mindfulness and self-compassion training may represent promising approaches for reducing trauma-related symptoms in children exposed to adversity. This study provides a basis for progressive implementation of the program in schools, accompanied by rigorous assessment through controlled longitudinal studies to assess its

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

efficacy before broader dissemination can be considered.

5. Implications for policy and practice

Children affected by armed conflict experience high levels of psychological distress with far-reaching health and social implications, making mental health support an urgent priority. Scalable, low-threshold, and non-stigmatizing trauma-informed group interventions are particularly relevant, as access to systematic screening and specialized services is often constrained in conflict-affected settings. At the policy level, this underscores the need to prioritize preventive psychosocial support programmes for children within national education systems and humanitarian response plans.

When accessible, schools may provide a practical platform for delivery, offering structure and continuity. However, implementation is often hindered by damaged infrastructure, population mobility, disruptions to schooling, and the psychological burden on educators. These constraints underscore the need for flexible, adaptable approaches, particularly modular sessions within well-structured programs that can be delivered intermittently or integrated into existing classroom activities, as well as hybrid or remote formats when needed.

From a practice perspective, multimodal group interventions that combine mindfulness, compassion-based and trauma-informed approaches with playful activities, body awareness exercises, and artistic expression may be well suited to children in vulnerable contexts. In our experience in the present feasibility study, children often bring these well-being strategies back into their homes and share them with their families, helping to extend the impact of the intervention beyond the school context. Ideally, the involvement of families should be considered an integral part of these approaches. However, in war-affected settings, this can be challenging, as families are often exposed to multiple ongoing stressors that constrain their availability to participate. To address this challenge, the programme described herein established an online group for parents and caregivers to share updates on its implementation, including information on content as well as photographs and videos of their children participating in activities. This approach was well received and facilitated meaningful engagement with families despite contextual constraints.

In our experience to date, the program has been delivered by psychologists external to the school system, with expertise in child trauma and mindfulness-based approaches. However, for broader and more sustainable future implementation, a more realistic model may involve training school staff. This has direct policy implications, suggesting the need for institutionalized training modules for teachers and school psychologists within in-service professional development systems, along with supervision structures to ensure quality and sustainability. Importantly, such training would not only support program delivery but also allow educators to embody the emotional regulation and relational skills, potentially benefiting their own stress management in high-burden contexts.

Our experience also suggests that multi-sector collaboration is key to feasibility. Implementing the program in Ukraine has involved partnerships between NGOs (combining program development, funding, and delivery) and collaboration with local academic institutions, such as the Ukrainian Catholic University, to support evaluation. This points to the importance of formal coordination mechanisms between education and health authorities, NGOs, and academic institutions, to avoid fragmented implementation and ensure continuity across funding cycles.

Overall, sustainable implementation depends on cross-sector collaboration, context-adapted intervention and evaluation frameworks. Such partnerships can help ensure that children living through protracted conflict have sustained access to coordinated, evidence-informed psychosocial support delivered within trusted community settings. Further research and inclusive stakeholder debate, particularly on long-term institutional embedding and cost-effectiveness, are needed to establish efficacy through well-designed randomized controlled trials and to determine whether and how such approaches can be effectively scaled and integrated in contexts of protracted crisis.

CRediT authorship contribution statement

Oleksandr Avramchuk: Writing – original draft, Formal analysis, Data curation. **Olha Germanovych:** Methodology. **Olha Ivanenko:** Methodology. **Olga Uralova:** Methodology. **Marina Lisenberg:** Methodology. **Olena Mukha:** Supervision. **Yuliya Stadnytska:** Supervision. **Richard J. Davidson:** Conceptualization. **Perla Kaliman:** Writing – review & editing, Validation, Investigation, Funding acquisition, Conceptualization.

Availability of data and materials

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

Additional authors' information

PK is the founder and director of Generation Alpha Minds (GAM), a non-profit organization which aims to develop and scientific validate psychological well-being programs for children in underserved, vulnerable communities (www.generationalphaminds.org). ML is a member of GAM. YS is the director of the NGO Ukrainian Mindfulness Association (UMA) (https://ngo-uma.com/). OM, OG, OI, and OU are members of UMA.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We are deeply grateful to Wega NGO Development for making this study possible through their financial support.

The authors extend their sincere appreciation to the schools and all the participants for their willingness to contribute to this research. Their engagement and openness were essential to the development and implementation of this study.

We would like to express our gratitude to Paula Ramirez for her support in the initial organizational phases of the project, informed by her prior experience in Ukraine as mental health consultant with the United Nations. We thank Mind & Life Europe for its continued support to Generation Alpha Minds programs.

This research was reviewed and approved by the Institutional Review Board of the Ukrainian Catholic University (IRB number 27/23; protocol number 1/24-cp; 07/09/2024).

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.chipro.2026.100361.

References

Aldabbour, B., Albardaweel, N., Mhanna, H., Alkahlout, S., Aljerjawi, A., Mousa, L., Hassan, L., Abu Btehan, R., Hamdan, A., AlHamss, B., Zomlot, D., Alshaikh Ali, S., Abuabada, A., & Dardas, L. (2026). Trauma and mental health burden of Gaza ' s displaced children during war : A cross- sectional study. *Child Adolesc Psychiatry Ment Health, 20*(1), 24–35. https://doi.org/10.1186/s13034-026-01024-5

Alzaghoul, A. F., McKinlay, A. R., & Archer, M. (2022). Post-traumatic stress disorder interventions for children and adolescents affected by war in low- and middle-income countries in the Middle East: Systematic review. *BJPsych Open, 8*(5), 1–16. https://doi.org/10.1192/bjo.2022.552

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

Artigas, L., & Jarero, I. (2008). The butterfly hug method for bilateral stimulation. https://emdrresearchfoundation.org/toolkit/butterfly-hug.pdf.

Betancourt, T. S., Meyers-Ohki, S. E., Charrow, A. P., & Tol, W. A. (2013). Interventions for children affected by war: An ecological perspective on psychosocial support and mental health care. *Harvard Review of Psychiatry, 21*(2), 70–91. https://doi.org/10.1097/HRP.0b013e318283bf8f

Blacher, S. (2023). Emotional Freedom Technique (EFT): Tap to relieve stress and burnout. *Journal of Interprofessional Education and Practice, 30*, 6–9. https://doi.org/10.1016/j.xjep.2023.100599

Brown, K. W., West, A. M., Loverich, T. M., & Biegel, G. M. (2011). Assessing adolescent mindfulness: Validation of an adapted mindful attention awareness Scale in adolescent normative and psychiatric populations. *Psychological Assessment, 23*(4), 1023–1033. https://doi.org/10.1037/a0021338

Dahl, C. J., Wilson-mendenhall, C. D., & Davidson, R. J. (2020). The plasticity of well-being : A training-based framework for the cultivation of human flourishing. *Proc Natl Acad Sci U S A, 117*(51). https://doi.org/10.1073/pnas.2014859117

Devakumar, D., Birch, M., Osrin, D., Sondorp, E., & Wells, J. C. K. (2014). The intergenerational effects of war on the health of children. *BMC Medicine, 12*(1), 1–15. https://doi.org/10.1186/1741-7015-12-57

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE)Study. *American Journal of Preventive Medicine, 14*(4), 245–258. https://doi.org/10.1016/j.amepre.2019.04.001

Ferrara, P., Zona, M., Giardino, I., Scaltrito, F., Pettoello-Mantovani, C., & Cammisa, I. (2025). The silent wounds of war: Psycho-physical impacts and international legal implications for children in conflict zones. *Global Pediatrics, 14*, Article 100287. https://doi.org/10.1016/j.gpeds.2025.100287

Ferrari, M., Beath, A., Einstein, D. A., Yap, K., & Hunt, C. (2023). Gender differences in self-compassion: A latent profile analysis of compassionate and uncompassionate self-relating in a large adolescent sample. *Current Psychology, 42*(28), 24132–24147. https://doi.org/10.1007/s12144-022-03408-0

Foa, E. B., Asnaani, A., Zang, Y., Capaldi, S., & Yeh, R. (2018). Psychometrics of the child PTSD symptom Scale for DSM-5 for trauma-exposed children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 47*(1), 38–46. https://doi.org/10.1080/15374416.2017.1350962

Gorbunova, V., Klymchuk, V., & Faryma, O. (2025). Developing the Mental Health Sensitive School Concept: Insights from focus group discussions. *PLOS Mental Health, 2*(7), Article e0000368. https://doi.org/10.1371/journal.pmen.0000368

Goto, R., Pinchuk, I., Kolodezhny, O., Pimenova, N., Kano, Y., & Skokauskas, N. (2024). Mental health of adolescents exposed to the War in Ukraine. *JAMA Pediatrics, 178*(5), 480–488. https://doi.org/10.1001/jamapediatrics.2024.0295

Haahr-Pedersen, I., Perera, C., Hyland, P., Vallières, F., Murphy, D., Hansen, M., Spitz, P., Hansen, P., & Cloitre, M. (2020). Females have more complex patterns of childhood adversity: Implications for mental, social, and emotional outcomes in adulthood. *European Journal of Psychotraumatology, 11*(1). https://doi.org/10.1080/20008198.2019.1708618

Hazer, L., & Gredebäck, G. (2023). The effects of war, displacement, and trauma on child development. *Humanities and Social Sciences Communications, 10*(1), 1–19. https://doi.org/10.1057/s41599-023-02438-8

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health, 2*(8), e356–e366. https://doi.org/10.1016/S2468-2667(17)30118-4

Kaliman, P., Álvarez-López, M. J., Lisenberg, M., Acosta, M. A., Simkin, D. A., & Martínez-Vivot, R. (2025). Protecting young minds: Insights on pre-adolescents' mental health from a school-based study in Argentina. *Child Protection and Practice, 6*, Article 100227. https://doi.org/10.1016/j.chipro.2025.100227

Kaliman, P., Cosín-Tomás, M., Madrid, A., Roque López, S., Llanez-Anaya, E., Papale, L. A., Alisch, R. S., & Davidson, R. J. (2022). Epigenetic impact of a 1-week intensive multimodal group program for adolescents with multiple adverse childhood experiences. *Scientific Reports, 12*(1), 1–16. https://doi.org/10.1038/s41598-022-21246-9

Kataja, E. L., Tuulari, J. J., Karlsson, L., Sinisalo, S., Autere, T. A., Perasto, L., Juusola, A., Salama, E., Aatsinki, A. K., & Karlsson, H. (2025). Measuring adverse childhood experiences by interviewing children at 9 and 10 years of age: Prevalence, concordance with mother-reports, posttraumatic stress disorder symptoms, and subjective experience of being asked about adverse childhood experiences in. *Journal of Experimental Child Psychology, 256*, Article 106238. https://doi.org/10.1016/j.jecp.2025.106238

Koita, K., Long, D., Hessler, D., Benson, M., Daley, K., Bucci, M., Thakur, N., & Harris, N. B. (2018). Development and implementation of a pediatric adverse childhood experiences (ACEs) and other determinants of health questionnaire in the pediatric medical home: A pilot study. *PLoS One, 13*(12), 1–16. https://doi.org/10.1371/journal.pone.0208088

Kuzikova, S., Zlivkov, V., Lukomska, S., Shcherbak, T., & Kotukh, O. (2024). Psychological support of the individual in wartime: A textbook. *Digital Library National Academy of educational sciences of Ukraine*.

Lambert, M., Smith, S., Moss, S., & Kirshbaum, M. (2022). Emotional freedom techniques (Tapping) to improve wellbeing and reduce anxiety in primary school classrooms. *Australian Journal of Teacher Education, 47*(3), 72–92. https://doi.org/10.14221/ajte.2022v47n3.5

Layne, C. M., Sloan-Pena, G., Dixon, K., Bell, L., Barrientos, B., Schapiro, S., Nalluri, A., Mandadi, R., & Etuk, I. (2025). Bereavement, loss, and grief in war-exposed children and adolescents: A review and implications for assessment, intervention, and Policy. *Psychiatry, 88*(3), 220–239. https://doi.org/10.1080/00332747.2025.2530315

Li, W., Beath, A., Ciarrochi, J., & Fraser, M. (2024). Gender based adolescent self-compassion profiles and the mediating role of nonattachment on psychological well-being. *Current Psychology, 43*(10), 9176–9190. https://doi.org/10.1007/s12144-023-05049-3

Liu, C., Lin, P., & Xiong, Z. (2024). Self-Compassion and psychological flourishing among college students: The mediating role of hope and the moderating role of emotion regulation. *Behav Sci (Basel), 14*(12), 1149. https://doi.org/10.3390/bs14121149

Martsenkovskyi, D., Karatzias, T., Hyland, P., Shevlin, M., Ben-Ezra, M., McElroy, E., Redican, E., Vang, M. L., Cloitre, M., Ho, G. W. K., Lorberg, B., & Martsenkovsky, I. (2023). Parent-Reported posttraumatic stress reactions in children and adolescents: Findings from the mental health of parents and children in Ukraine Study. *Psychological Trauma. Theory, Research, Practice, and Policy, 16*(8), 1269–1275. https://doi.org/10.1037/tra0001583

Mclaughlin, K. A., Koenen, K. C., Friedman, M. J., Ruscio, A. M., Karam, G., Shahly, V., Stein, D. J., Hill, E. D., Petukhova, M., Alonso, J., Andrade, H., Angermeyer, M. C., Borges, G., Girolamo, G. De, Graaf, D., Demyttenaere, K., Florescu, S. E., Mladenova, M., Posada-villa, J., … Kessler, R. C. (2015). Sub-threshold post traumatic stress disorder in the WHO World Mental Health Surveys. *Biological Psychology, 77*(4), 375–384. https://doi.org/10.1016/j.biopsych.2014.03.028

Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: Bridging the divide between trauma-focused and psychosocial frameworks. *Social Science & Medicine, 70*(1), 7–16. https://doi.org/10.1016/j.socscimed.2009.09.029

Miller, K. E., & Rasmussen, A. (2024). War exposure, daily stressors, and mental health 15 years on: Implications of an ecological framework for addressing the mental health of conflict-affected populations. *Epidemiology and Psychiatric Sciences, 33*(e78), 1–10. https://doi.org/10.1017/S2045796024000830

Naeem, A., Sikder, I., Wang, S., Barrett, E. S., Fiedler, N., Ahmad, M., Nguyen, U. S. D. T., Martsenkovskyi, D., Holovanova, I., Hicks, M. H. R., & Haque, U. (2025). Parent-child mental health in Ukraine in relation to war trauma and drone attacks. *Comprehensive Psychiatry, 139*, Article 152590. https://doi.org/10.1016/j.comppsych.2025.152590

Osokina, O., Silwal, S., Bohdanova, T., Hodes, M., Sourander, A., & Skokauskas, N. (2023). Impact of the Russian invasion on mental health of adolescents in Ukraine. *Journal of the American Academy of Child & Adolescent Psychiatry, 62*(3), 335–343. https://doi.org/10.1016/j.jaac.2022.07.845

Perrin, S., Meiser-Stedman, R., & Smith, P. (2005). The Children's Revised Impact of Event Scale (CRIES): Validity as a screening instrument for PTSD. *Behavioural and Cognitive Psychotherapy, 33*(4), 487–498. https://doi.org/10.1017/S1352465805002419

Pfeiffer, E., Garbade, M., & Sachser, C. (2024). Traumatic events and posttraumatic stress symptoms in a treatment-seeking sample of Ukrainian children during the war. *Child and Adolescent Psychiatry and Mental Health, 18*(1), 1–9. https://doi.org/10.1186/s13034-024-00715-1

Ravens-Sieberer, U., Herdman, M., Devine, J., Otto, C., Bullinger, M., Rose, M., & Klasen, F. (2014). The European KIDSCREEN approach to measure quality of life and well-being in children: Development, current application, and future advances. *Quality of Life Research, 23*(3), 791–803. https://doi.org/10.1007/s11136-013-0428-3

Roque-Lopez, S., Llanez-Anaya, E., Álvarez-López, M. J., Everts, M., Fernández, D., Davidson, R. J., & Kaliman, P. (2021). Mental health benefits of a 1-week intensive multimodal group program for adolescents with multiple adverse childhood experiences. *Child Abuse & Neglect, 122*, 1–11. https://doi.org/10.1016/j.chiabu.2021.105349

Shoshani, A., & Kor, A. (2026). A longitudinal Study of the associations between War exposure, psychiatric symptoms, digital engagement, and substance use in adolescents. *Journal of Adolescence, 98*(1), 272–280. https://doi.org/10.1002/jad.70060

Sourander, A., Silwal, S., Osokina, O., Hinkka-Yli-Salomäki, S., Hodes, M., & Skokauskas, N. (2024). Suicidality and self-harm behavior of adolescents during the early phase of the War in Ukraine. *Journal of the American Academy of Child & Adolescent Psychiatry, 63*(12), 1204–1214. https://doi.org/10.1016/j.jaac.2024.03.015

Sourander, A., Silwal, S., Westerlund, M., Hodes, M., Heinonen, E., Hinkka-Yli-Salomäki, S., Yaschchyshyna, Y., Putyatin, G., Scott, J., Skokauskas, N., & Osokina, O. (2026). Mental health of Ukrainian adolescents after Russian invasions. *JAMA Pediatrics, 2*(180), 187–193. https://doi.org/10.1001/jamapediatrics.2025.5094

Sutton, E., Schonert-Reichl, K. A., Wu, A. D., & L, M. S. (2018). Evaluating the reliability and validity of the self-compassion Scale short form adapted for children ages 8–12. *Child Indicators Research, 11*, 1217–1236. https://doi.org/10.1007/s12187-017-9470-y

Turk, F., & Acet, P. (2026). The role of self-compassion and mindfulness in the association between adverse childhood experiences and psychological distress: A meta-analytic mediation analysis. *Child Abuse & Neglect, 173*, Article 107886. https://doi.org/10.1016/j.chiabu.2026.107886

Twenge, J. M., Haidt, J., Lozano, J., & Cummins, K. M. (2022). Specification curve analysis shows that social media use is linked to poor mental health, especially among girls. *Acta Psychologica, 224*, Article 103512. https://doi.org/10.1016/j.actpsy.2022.103512

Vidal, J., Ciudad-Fernández, V., Navarrete, J., Soler, J., Schmidt, C., Molinari, G., & Cebolla, A. (2024). From self-criticism to self-compassion: Exploring the mediating role of two emotion dysregulation variables in their relationship to depressive symptoms. *Current Psychology, 43*(32), 26539–26547. https://doi.org/10.1007/s12144-024-06325-6

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

Willis, N., Dowling, C., & O'Reilly, G. (2023). Stabilisation and phase-orientated psychological treatment for posttraumatic stress disorder: A systematic review and meta-analysis. *European Journal of Trauma & Dissociation, 7*(1), Article 100311. https://doi.org/10.1016/j.ejtd.2022.100311

Zasiekina, L., Griffin, A., Blakemore, S. J., Hlova, I., & Bignardi, G. (2025). Prevalence of war-related posttraumatic stress disorder in adolescents: A systematic review and meta-analysis. *European Journal of Psychotraumatology, 16*(1), 1–14. https://doi.org/10.1080/20008066.2025.2497167

Zehetmair, C., Tegeler, I., Kaufmann, C., Klippel, A., Reddemann, L., Junne, F., Herpertz, S. C., Friederich, H.-C., & Nikendei, C. (2019). Stabilizing techniques and guided imagery for traumatized Male refugees in a German State registration and reception Center: A qualitative Study on a Psychotherapeutic Group intervention. *Journal of Clinical Medicine, 8*(6), 894. https://doi.org/10.3390/jcm8060894

Zhang, A. X. D., Osokina, O., Silwal, S., Skokauskas, N., Sourander, A., & Hodes, M. (2025). Editorial Perspective: Prioritizing child and adolescent mental health research in the context of war. *Child and Adolescent Mental Health, 30*(3), 275–277. https://doi.org/10.1111/camh.70002

Downloaded for Anonymous User (n/a) at University of Wisconsin-Madison from ClinicalKey.com by Elsevier on November 02, 2026. For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.