

Rural Education in Times of War – The case of Ukraine

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ABSTRACT. The article explores rural education in the context of the Ukrainian war from 2014 to 2024, drawing insights from scientific research and media publications. It delves into how military aggression has impacted the distinctive features, challenges, and risks encountered by individuals involved in the educational process in rural schools. Moreover, it highlights the significance of creating a secure educational environment in these institutions as a crucial step in ensuring the safety and well-being of the younger generation during wartime. This includes providing adequate shelter for all educational process participants. The impact of demographic, socio-economic, and educational factors on the learning development of rural students has been identified. The article presents several aspects of the work of a rural school's principal and teaching staff with internally displaced students (war refugees); activities aimed at adapting the educational setting to continue education in crises and providing psychological assistance to children who have experienced war trauma. The study highlights the importance of guaranteeing access to rural education, providing sufficient funding, infrastructure, and technical equipment for distance (blended) learning in crises, etc. The results of the empirical study involving 50 rural principals and 202 educators from the western regions of Ukraine have identified the most common challenges in professional activity and the challenges of Ukrainian school-aged war refugee children. The tasks and prospects of rural education during wartime have been determined. It has been shown that education during war requires coordination and cooperation between state establishments, international communities, local organizations, social workers, educational managers, and independent experts to ensure maximum educational opportunities and protection of children in learning environments.

Keywords: rural education, children of war, safe educational environment, the adaptation of war refugees, war trauma, psychological assistance, pedagogical support.

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Educação do Campo em tempos de guerra: o caso da Ucrânia

RESUMO. O artigo examina a educação rural tendo como pano de fundo a guerra ucraniana de 2014 a 2024, extraindo insights de pesquisas científicas e publicações da mídia. Ele investiga como a agressão militar influenciou os aspectos singulares, os obstáculos e os riscos enfrentados por aqueles envolvidos no processo educacional em escolas rurais. Além disso, destaca a importância de estabelecer um ambiente educacional seguro nessas instituições como uma etapa crucial para garantir a segurança e o bem-estar da geração mais jovem em tempos de guerra. Isso inclui o fornecimento de abrigo adequado para todos os participantes do processo educacional. Foi identificado o impacto dos fatores demográficos, socioeconômicos e educacionais no desenvolvimento da aprendizagem dos alunos da zona rural. O artigo apresenta vários aspectos do trabalho do diretor e da equipe de professores de uma escola rural com alunos deslocados internamente (refugiados de guerra); atividades destinadas a adaptar o ambiente educacional para dar continuidade à educação em situações de crise e fornecer assistência psicológica a crianças que sofreram traumas de guerra. O documento destaca a importância de garantir o acesso à educação rural, fornecendo financiamento, infraestrutura e equipamentos técnicos suficientes para o ensino à distância (combinado) em situações de crise, etc. Os resultados de um estudo empírico envolvendo 50 diretores rurais e 202 educadores das regiões ocidentais da Ucrânia identificaram os desafios mais comuns na atividade profissional e os problemas das crianças ucranianas refugiadas de guerra em idade escolar. Foram determinadas as tarefas e as perspectivas da educação rural em tempos de guerra. Foi demonstrado que a educação durante a guerra exige coordenação e cooperação entre órgãos estatais, comunidades internacionais, organizações locais, assistentes sociais, gerentes educacionais e especialistas independentes para garantir o máximo de oportunidades educacionais e a proteção das crianças em ambientes de aprendizagem.

Palavras-chave: educação rural, crianças de guerra, ambiente educacional seguro, adaptação de refugiados de guerra, trauma de guerra, assistência psicológica, apoio pedagógico.

Educación Rural em tiempos de Guerra – El caso de Ucrania

RESUMEN. El artículo examina la educación rural en el contexto de la guerra ucraniana de 2014 a 2024, a partir de la investigación científica y las publicaciones de los medios de comunicación. Profundiza en cómo la agresión militar ha influido en los aspectos singulares, los obstáculos y los riesgos a los que se enfrentan quienes participan en el proceso educativo en las escuelas rurales. Además, destaca la importancia de establecer un entorno educativo seguro en estas instituciones como paso crucial para garantizar la seguridad y el bienestar de la generación más joven en tiempos de guerra. Esto incluye proporcionar un refugio adecuado a todos los participantes en el proceso educativo. Se ha identificado el impacto de los factores demográficos, socioeconómicos y educativos en el desarrollo del aprendizaje de los estudiantes rurales. El artículo presenta varios aspectos del trabajo del director y el personal docente de una escuela rural con alumnos desplazados internos (refugiados de guerra); actividades dirigidas a adaptar el entorno educativo para continuar la enseñanza en tiempos de crisis y a prestar asistencia psicológica a los niños que han sufrido traumas de guerra. El documento destaca la importancia de garantizar el acceso a la educación rural, proporcionar financiación, infraestructuras y equipos técnicos suficientes para el aprendizaje a distancia (semipresencial) en situaciones de crisis, etc. Los resultados de un estudio empírico en el que han participado 50 directores rurales y 202 educadores de las regiones occidentales de Ucrania han identificado los retos más comunes de la actividad profesional y los problemas de los niños ucranianos refugiados de guerra en edad escolar. Se han determinado las tareas y perspectivas de la educación rural en tiempos de guerra. Se ha demostrado que la educación durante la guerra requiere coordinación y cooperación entre los organismos estatales, las comunidades internacionales, las organizaciones locales, los trabajadores sociales, los gestores educativos y los expertos independientes para garantizar las máximas oportunidades educativas y la protección de los niños en los entornos de aprendizaje.

Palabras clave: educación rural, niños de la guerra, entorno educativo seguro, adaptación de los refugiados de guerra, trauma de guerra, asistencia psicológica, apoyo pedagógico.

“Recognizing what children understand about war is the first step in helping them cope with war and the feelings associated with it. Awareness of how children conceptualize peace can assist the professionals [...] to find ways to help children identify positive, nonviolent actions they can take in response to war.”
Kathleen Walker, Karen S. Myers-Bowman, and Judith A. Myers-Walls (2003).

“The concern for the protection of children and the respect of their rights in the face of the destructive power of military aggression and armed action, expressed in concrete actions – in particular in the various types of pedagogical, care and educational actions – is also – in the universal axiological and anthropological dimensions – a concern for the respect of elementary human dignity, the most basic concern for humanity.”
Marek Rembierz (2023, p. 67)

Introduction

In the context of the Russian-Ukrainian war (2014–2024), escalated by the full-scale military invasion of Ukraine by the Russian Federation in February 2022, educational institutions were destabilized, particularly in the east of the country (Donetsk and Luhansk regions). Rural education and schools have been significantly affected. The challenges these regions face are primarily related to safety and security issues, as in the armed conflict zone with ongoing hostilities, rural institutions are potential targets of attacks, presenting serious threats to the safety of children and teaching staff. Several remote rural schools in the region have been forced to evacuate students and relocate to safer areas (e.g. in the Center or West of the country), leading to changes in the educational process and difficulties in providing access to education. The war often results in the destruction of schools and infrastructure, such as roads, electricity, heating, and water supply, complicating the functioning of educational institutions. They must adapt to the new war challenges to ensure the safety, reliability, and accessibility of education in a crisis. In addition, the war is also causing an influx of qualified teachers from rural areas, especially when safety and working conditions become dangerous. “A certain proportion of war-affected children lose all adult protection – “unaccompanied children,” as they are known in refugee situations” (Santa Barbara, 2006). Many children dropped out of rural schools because of the war, while others were forced to move to safer rural areas in other parts of the country. They require psychological help and spiritual support from teachers, the community, and the authorities. (Nazaruk, Budnyk & Ruszkowska, et al., 2024). Therefore, an important task of the teaching community in these conditions was to

create a safe educational environment in the school and provide quality educational services to all students, as this is the key to the cultural and intellectual future of the country as whole and future generations.

The study aims to (1) analyze the real condition of rural education in martial law in Ukraine based on the analysis of scientific and media resources, (2) outline the features, challenges, and threats to rural education in times of armed aggression, (3) identify the tasks and prospects for the development of educational institutions in times of war (based on the current situation in Ukraine).

Research methods

Methods of theoretical research (abstraction, analysis and synthesis, induction and deduction, comparison) were applied to study the current state of the problem in the scientific literature and media regarding the organization of rural education in wartime.

Empirical methods (surveys, monitoring) were used to describe the condition of educational institutions' operations during crises (during the war) and certain aspects of managers and teaching staff activities in working with students and providing assistance to temporarily displaced persons (war refugees). The study presents a quantitative and qualitative analysis of the data obtained.

Instruments and Procedures

The article presents the findings of a theoretical analysis of this problem based on the monitoring of Internet resources and the study of modern scientific sources on this issue. The empirical research was conducted by the authors in western Ukraine (Ivano-Frankivsk and Lviv regions), where the largest number of families with children from the east and south of the country (where active hostilities are still ongoing) have been displaced since the beginning of the full-scale russian-Ukrainian war. The authors conducted an online survey of 50 principals and 202 teachers (of different age groups and teaching experiences). For this purpose, the author's questionnaire addressed the challenges they faced in working under martial law and the priority tasks for adapting to the educational environment to continue education in the realities of the crisis and to help children who have experienced war trauma. The survey was anonymous and conducted online using Google Forms. The sample for the

study was randomly selected from the mentioned regions. The survey results are described in the practical section of this article.

Research Results

Educational Challenges of Rural Education in Wartime

Rural education typically encompasses favorable and unfavorable aspects concerning quality standards, individual trajectory development, and interactions with students' parents (Cox, Sproles & Sproles, 1988). Consequently, rural areas often face economic challenges, particularly in less developed regions, and are marked by significantly lower infrastructure levels in comparison to urban areas. Scholars have even noted the prevalence of pests and diseases, occasional encounters with wild animal attacks on individuals, seasonal floods, and sometimes unfavorable climatic conditions in rural regions, all of which pose challenges to educational advancement (Mhishi, Bhukuvhani & Sana, 2012). In villages, there is a problem of demographic crisis, which exists in several countries, for example, in the Alpine and subalpine regions, which makes the problem of survival of small schools more urgent (Smit & Humpert, 2012).

The rural school “holds” the individuals and, in consequence, “retains” the collectivity. It is an actor who projects the collective, individual, and familiar practices marking symbolic limits of social representation and developing, in turn, a social and educational own, typical and inclusive space that must never be a currency of change to mark a border between the territorial dimension and the social one. The closing of the rural schools poses a setback in the own territorial development and the concept of territory. Nevertheless, in recent years, due to a lack of economic and financial resources, many countries of the European Union developed policies of closing (small) rural schools, forgetting that, within the institutional territorial system, their disappearance also implies the eradication of an important part of the social life of the territory (Boix, Champollion & Duarte, 2015).

The optimization of secondary rural schools (as well as small towns, institutes, and universities) is typical for Ukraine (Budnyk, Nikolaesku & Stepanova, et al., 2021). In this context, it's important to emphasize that the potential for enacting meaningful socio-economic changes in rural regions heavily relies on the advancement of education within these areas (Wallin & Reimer, 2008). Education and cultural factors play pivotal roles in shaping rural communities and fostering the development of shared cultural values among residents.

Numerous studies have shown insufficient funding for rural schools, including didactic materials for developing sensory skills, construction, technical equipment, etc. (Budnyk, Mazur & Kondur, et al., 2020). In certain Canadian provinces, for example, rural schools face such difficulties as (1) isolation from specialized services; (2) limited accessibility to quality staff, development, and university services; (3) teacher shortages; and (4) decreasing enrolment which leads to decreased funding (Wallin & Reimer, 2008).

In Africa and other developing countries, where most people live in poverty and lack access to quality education, there are economic constraints to providing free basic education for all citizens. In addition, the low socioeconomic level of parents serves as a barrier to children's education. The governments of these and other countries tend to focus education funding on urban schools, which often leaves rural education neglected (Du Plessis & Mestry, 2019).

However, small rural schools still have many advantages in developing students' abilities, working with "children at risk" or disadvantaged families, considering the smaller class sizes (Ballou & Podgursky, 1995). Moreover, unlike densely urbanized cities, rural areas typically offer a more regulated sanitary and epidemiological environment, mitigating the spread of infections, and providing greater opportunities for individualized learning and the development of students' intellectual and creative capacities. This is why, for instance, in Ukraine, some parents opt to reside in rural areas away from urban centers and consequently enroll their children in local rural schools.

In wartime, educational institutions, regardless of location, face unexpected challenges in their work. This is mainly due to accessibility factors resulting from the destruction of infrastructure, evacuation of people, or increased safety issues on the way to educational institutions. Rural areas, especially close to the conflict zones, are particularly at risk for students, teachers, and other school staff. Martial law conditions also lead to a lack of didactic resources, textbooks, computers, and access to the Internet (in the context of armed conflict and the necessity to protect the country's borders, the priority for funding is the military and defense sector, not education). In such circumstances, there's a significant migration of individuals from rural regions to urban centers or abroad, potentially impacting student enrollment numbers, thereby posing an additional challenge to the education system. In Ukraine, a considerable influx of refugee children has relocated to the western regions of the country, including rural areas, increasing the number of rural institutions.

Therefore, it's important to emphasize a major challenge encountered by rural students, which involves various forms of discrimination compared to their urban peers. Firstly, rural schools often contend with fewer financial resources than urban schools, resulting in limited access to modern materials, technology, sports equipment, and other learning resources. Secondly, in rural areas, sourcing qualified teachers for certain professional subjects can be challenging due to a limited pool of candidates and competition with urban schools; (3) there are fewer opportunities for students to participate in extracurricular activities, which significantly affects their development and acquiring the necessary competencies; (4) urban educational institutions have more resources to provide psychological and emotional support to children or adults who have experienced stress or challenges during the war due to a more developed infrastructure; (5) "... rural students might be particularly exposed to certain risks like failure and dropout, illiteracy and unfinished schooling" (Boix, Champollion & Duarte, 2015, p. 41); (6) in some cases, there is racial, ethnic, gender or other discrimination, which can be observed in both rural and urban schools, but in rural schools, children, for example, are more likely to be affected by disabilities discrimination due to the lack of universal educational approach in the institution. Therefore, to address these and other challenges in rural education in war times, it is important to outline strategies aimed at ensuring accessibility and continuity of the educational process for students, as well as overcoming discriminatory aspects still existing in rural areas.

Restrictions and threats to the functioning of Ukrainian educational institutions – the war challenges

Due to the war, educational institutions have suffered significant damage and destruction. The Ministry of Education and Science of Ukraine regularly updates this data on its platform in the form of an interactive map (<https://saveschools.in.ua/en/>). For example, by March 2024, since the beginning of the full-scale invasion, 3.793 educational institutions had been damaged by bombing and shelling, and 365 of them were destroyed (Education in War..., 2024). Most of the damaged and destroyed educational institutions are in the east and south of the country (closer to the borders with the russian occupier), primarily in Donetsk and Luhansk regions, and Kharkiv, Kherson, Dnipro, Odesa, and Zaporizhzhia regions also suffered significant losses. "Education is one of the most affected sectors in terms of losses. By August 2023, direct losses were estimated at \$9.7 billion. The largest losses from

destruction and damage to educational institutions were in Kharkiv, Donetsk, Chernihiv, Zaporizhzhia, and Kyiv regions” (Ibid.). Given that a considerable portion of schools are situated in isolated rural regions near conflict zones, which tend to be heavily militarized areas, these institutions are vulnerable to destruction, necessitating the evacuation of children. Consequently, rural schools confront specific challenges during wartime, which detrimentally impact the educational process and outcomes, even in areas where schools remain intact and operational. This is primarily due to a) budgetary constraints affecting the acquisition of educational materials, equipment, and infrastructure (e.g., computers, laboratory equipment, etc.) during times of conflict), b) the rural infrastructure is deteriorating, with inadequate transportation links and restricted access to medical and social services, thereby impacting the quality of life, health, and well-being of students. Additionally, the number of children residing in villages near the border has substantially declined due to the risk of shelling, resulting in the downsizing of classes or even the closure of schools.

A safe educational environment is the key to preserving the life and health of the younger generation in times of war

The issues of safety of educational institutions of various types and accessibility (continuity) of the educational process in severe crises are of paramount importance for education managers and all teaching staff (Machin, 2014). Amidst numerous children deprived of educational opportunities and teachers confronting the risk of shelling while teaching in conflict-affected or potentially unstable regions, there's an urgent need to carefully strategize educational procedures and establish conducive learning environments (Budnyk, 2023). This predicament is particularly acute in remote rural areas facing ongoing conflict, where families often choose not to evacuate their residences. Consequently, schools in these regions halt operations, resulting in children being deprived of schooling due to insufficient electricity or internet access. In the educational institutions (schools, colleges, universities) that have survived in those areas, training is conducted in face-to-face, remote, or mixed formats, but an important condition for organizing the educational process is the availability of a safe shelter (Budnyk, Kushniruk & Tsybulko, et al., 2022).

“As of September 2023, Ukraine had nearly 13.000 schools, with over 80% of them already equipped with shelters. According to the Ministry of Education and Science of Ukraine, approximately 7.500 schools are conducting face-to-face classes, 3.800 have adopted

a blended learning approach, and 2.500 schools are exclusively operating remotely. The situation regarding shelters is most favorable in vocational education institutions, with 95% of them equipped with shelters, including 94% of vocational, pre-university, and higher education institutions. However, only 55% of state kindergartens have shelters available. (Education in Wartime..., 2024).

Consequently, a crucial responsibility of educational management during wartime is to create a safe educational environment for students, including the arrangement of a shelter (to protect participants in the educational process during missile attacks), keeping with the necessary standards (availability of seats, smartphone charging facilities, bathrooms, water, etc.)

In Ukraine, in the area of military conflict in the east of the country, there are certain differences between the learning environment in urban and rural areas: (a) cities generally have modern infrastructure, access to more educational facilities, and greater opportunities to provide safety measures for students with the help of patrolling police officers or others, (b) while rural areas, unless they are in an active war zone, are less likely to be attacked due to the lack of strategically important critical infrastructure. In any case, the management and teaching staff should ensure that students have reliable access to protective facilities in the face-to-face format to protect their lives and safety in all areas of the country where martial law has been announced.

The impact of demographic, socio-economic, and educational factors on students' performance

Students in rural areas, unfortunately, in different countries have fewer chances to receive a quality education compared to their peers living in large cities (Reeves & Bylund, 2005). This is evidenced by the PISA results, demonstrating how various factors (socio-economic, demographic, technological, etc.) can influence students' progress.

For example, 15-year-old students in rural areas of Ukraine lag behind their urban peers in reading skills by almost five years, in science by four years, and in mathematics by more than four and a half years. This gap is sometimes referred to as a result of differences in the socio-economic status of adolescents living in different types of communities.

"... In Ukraine, students from the lowest socio-economic backgrounds are nearly three times as likely as their peers from higher socio-economic backgrounds to score below the

basic level in mathematics, comprising approximately 25% of the student population. Average grades in mathematics also vary significantly depending on the type of institution students attend. In lyceums, gymnasiums, and specialized schools, the average score is 457, which is 23 points higher than for students in general education schools and educational centers, and 58 points higher than for students in technical schools, colleges, and vocational education institutions. Students attending vocational education institutions lag behind students enrolled in lyceums, gymnasiums, and specialized schools by approximately three years. This discrepancy is also noticeable in the areas of reading and science, as evidenced by the results of an international study (International study..., 2023).

However, there are “some positive results, with particular emphasis on the fact that the success level of rural students may be the same as, or even higher than, that of their urban counterparts, while certain rural areas improve in terms of sustainability and become less isolated and better developed” (Boix, Champollion & Duarte, 2015, p. 41). The researchers prove that “the school’s socioeconomic context is not a reliable yardstick to be used to determine and/or measure schools’ performance as rural schools can also outperform urban schools”, so it is important to monitor carefully the activities of both urban and rural schools in terms of funding, teacher professional development, and the quality of educational services (Reeves & Bylund, 2005).

The conditions of war can impact the student population in rural areas in various ways. On one hand, the influx of students into rural educational institutions in certain regions stems from the evacuation of residents from areas directly affected by active hostilities. Furthermore, the escalation of the military situation prompts families with children to relocate from major urban centers to adjacent rural areas, resulting in a temporary surge in student enrollment in rural schools. However, such phenomena are sometimes since increased instability or traffic restrictions may lead to reduced access to urban educational facilities for children, which also may force parents to choose rural schools for their children. Thus, rural education may also face economic challenges in creating conditions for internally displaced persons from other regions of the country (war refugees). Mostly, these trends are temporary. Therefore, increasing the number of students in rural educational institutions in wartime requires additional efforts from the authorities, local communities, and schools to ensure quality education, safety, and the provision of necessary resources for students’ learning and development (Ballou & Podgursky, 1995). Conversely, due to the conflict, a considerable

number of families with children from various regions have fled the country and are presently residing abroad temporarily (Nazaruk, Ruszkowska & Budnyk, et al., 2024). Consequently, rural schools may encounter another challenge: a reduced number or even a complete absence of students in classrooms during wartimes.

In times of war, students' academic progress is significantly impacted by the timely and effective use of educational technologies especially in distance or blended learning (Budnyk, 2023). It is no coincidence that at different stages of education transformation, particularly in crises, M. Fullan (2007) usually identifies three components that have a significant impact on the achievement of results: 1) use of new or revised materials such as curriculum materials or technologies; 2) new teaching approaches or strategies; 3) changing beliefs or attitudes. Nevertheless, the success of an educational institution is also determined by the educational manager's competencies in the innovation process, which "must be properly led and managed" (Fullan, 2007). Therefore, the next part of the study presents some aspects of the empirical analysis of this phenomenon.

Results of the empirical research

Expanding on our research, we conducted a survey among school principals in the western region of Ukraine, focusing on 50 respondents from the Ivano-Frankivsk and Lviv regions. These areas have experienced a significant increase in internally displaced persons following the onset of the Russian-Ukrainian war. The sample comprised principals from educational institutions situated in small towns (with populations of up to 20 thousand inhabitants) and villages. Respondents exhibited a range of tenure in their roles: 40% had 1–5 years of experience, 4% had 6–10 years, 20% had 11–15 years, and 36% had 15 years or more. The survey involved 80% female respondents and 20% male respondents, reflecting the predominantly female gender composition within the education sector in this country. This enabled us to ensure the representativeness of the sample in examining the preparedness of educational institution leaders to navigate management challenges in critical scenarios. For the study, we designed a questionnaire featuring multiple-choice questions.

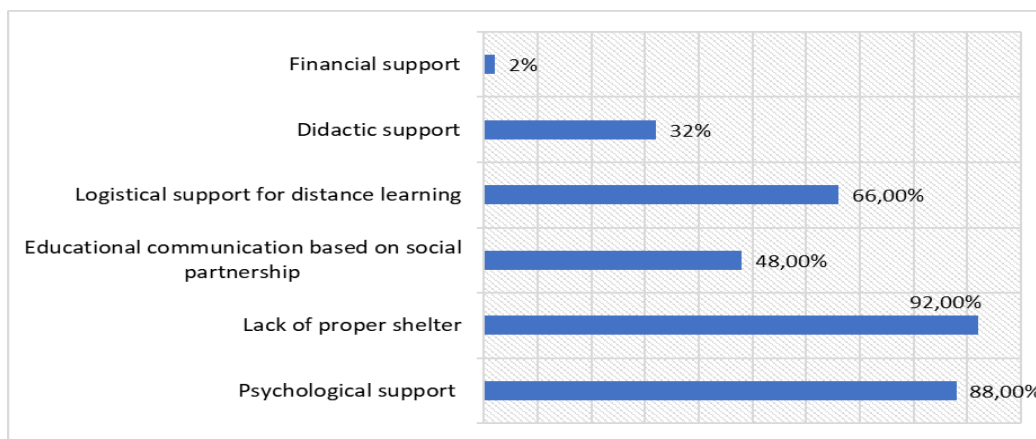
In our study, we queried rural school principals about the most crucial assistance students require when studying amidst wartime conditions (Fig. 1). The overwhelming majority of respondents highlighted the necessity of offering psychological support to all

participants in educational activities (88%), along with the imperative to establish a secure learning environment (92%).

In response to the question, “What types of protective structures have you equipped in the educational institution to ensure face-to-face learning for students during wartime?” 47 individuals, constituting 94%, indicated that they had worked to create the simplest protective shelters (basement or cellar premises). Individual responses from respondents indicate that in their locality, there is the possibility of arranging special shelters, including anti-radiation structures and dual-purpose facilities with protective anti-radiation properties. Only 2% of respondents admitted that the listed structures are absent in the school, meaning that students are forced to study in a remote format.

Concerning the technical challenges associated with implementing online learning in rural schools, 66% of principals noted (Fig. 1) the absence of reliable internet, computers, or tablets necessary for students’ remote education. Among these, 32% highlighted the necessity for didactic support to facilitate teaching in crises (during wartime) and to improve the professional expertise of the teaching staff in this regard.

Figure 1 –The greatest educational deficits of Ukrainian war refugee children (according to the principals of educational institutions).



Source: Authors’ research

Considering the significant number of students seeking refuge from other regions of Ukraine, educational leaders, particularly in rural areas, have initiated a range of measures to provide children with educational support and facilitate their successful adaptation to the new academic environment. Among these efforts, respondents highlighted various measures: implementing safety protocols (such as preparing basement areas to serve as shelters while

maintaining sanitary standards) – noted by 74% of respondents; repurposing school facilities like classrooms and gymnasiums as temporary sleeping areas for displaced families with children (56%); disseminating information to all stakeholders in the educational process and developing clear protocols for staff actions in response to the conflict and air safety alerts (74%); and coordinating the provision of complimentary hot meals and medical services for war refugees (70%).

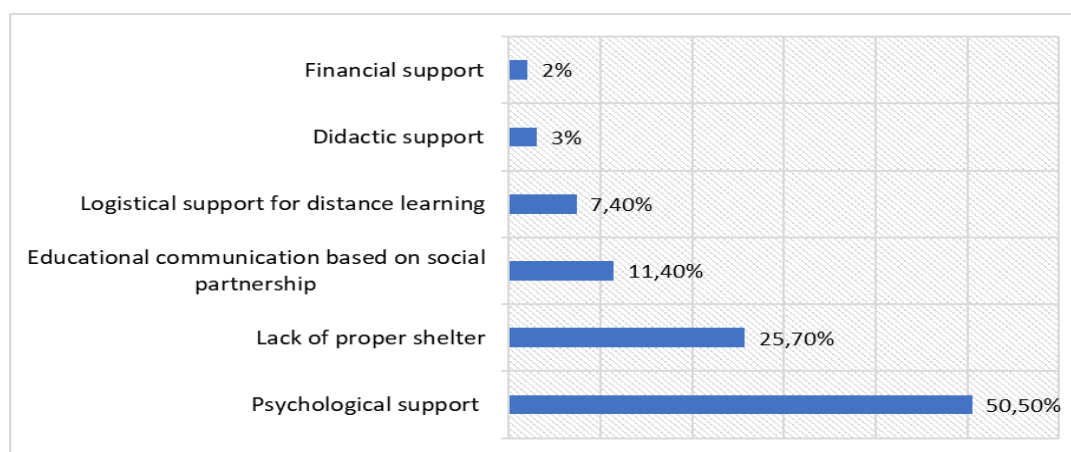
A significant number of principals (66 %) reported that students, teachers, and parents were actively involved in volunteering, with schools setting up humanitarian aid centers for internally displaced children and their families (warm clothes, food, mattresses, bedding, toys, books, etc.). Furthermore, considerable emphasis has been placed on offering moral and spiritual backing to the military personnel safeguarding Ukraine’s independence and freedom. To achieve this, school administrators or faculty (occasionally in cooperation with parents) have launched significant charitable endeavors. These include activities like weaving camouflage nets for soldiers, involving students, parents, and volunteers (62% participation rate). Additionally, children have personally crafted souvenirs (25%), designed “motivational” cards and talismans for Ukrainian soldiers (66%), and made “trench” candles (46%), among other initiatives. In certain educational institutions, a summer camp was established for internally displaced children during the summer break (20%), while local history (tourist) excursions were arranged (36%) to aid students in coping with psychological “overload” and stress disorders stemming from the trauma of war. Substantial focus is placed on delivering psychological support to students and their families who have been most affected by the conflict (92%). Engaging them in various activities, including artistic and aesthetic ones, serves as a means for them to express both positive and negative emotions and sentiments, thereby helping them to cope with the trauma of war. (Walker, Myers-Bowman & Myers-Walls, 2003).

We developed a separate questionnaire for pedagogical staff (202 people) working in the same regions of Ukraine as our respondents. They also represented different age groups and had different work experience (from 1 to 30 years), as well as different positions (teachers, social workers, educators, psychologists, etc.). It was noted that 142 respondents (70.3%) had experience working with students who were internally displaced from other regions due to the war, while 29.7% indicated that there were no such children in their class. In this regard, it is worth mentioning the research conducted by C. M. Somo (2024), who

identified three categories of refugee children: (1) children who suffer from war trauma, (2) children who live in perpetual fear and anxiety, and (3) war-related violence ignites aggressive behaviors in children. According to the teachers, these were the students compelled to relocate and attend classes at their schools.

In response to the question “What kind of assistance do war refugee children need the most?” respondents (50.5%, totaling 102 individuals) pointed to the need for psychosocial support, as these children have experienced various traumas, sufferings, losses, stress, fear, etc. 25.7% (52 respondents) noted that their institutions lack safe shelters to continue face-to-face learning, and only 4 individuals (2%) believe that these children require financial assistance within the educational institution. Given that numerous families with children lack a home to return to, owing to the occupation or constant destruction of significant territories in Ukraine, they encounter material and technical obstacles concerning remote learning. This includes the necessity for laptops or other devices for studying, as disclosed by 11.4% of teachers (23 individuals) (Fig. 2).

Figure 2 –The greatest needs of Ukrainian war refugee children (according to teachers).



Source: Authors' research

As we can see, moral and spiritual meanings, as well as psychosocial support to underage war refugees and their families, remain at the forefront (Hart, 2009). The psychological trauma during wartime is commented on by Kyiv cardio surgeon Dr. Igor Mokryk: “Children are psychologically adaptable, they adjust to reality, but war leaves imprints on their psyche.” Therefore, an important task for parents and the educational

community is to “help children endure the war,” “We must ensure that it does not leave a negative trace in their memory.” (Kardiochirurg, 2023).

The impact of the war “... on childhood may adversely affect the life trajectory of children far more than adults. Consider children who lose the opportunity for education during war, children who are forced to move into refugee or displaced person camps, where they wait for years in miserable circumstances for normal life to resume, if it ever does. Consider a child disabled in war; they may, in addition to loss of a limb, sight, or cognitive capacity, lose the opportunity of schooling and of a social life ... Long after the war has ended, these lives will never attain the potential they had before the impact of war” (Santa Barbara, 2006).

Another research conducted among educators in the eastern and southern regions of Ukraine (Budnyk & Delenko, et al., 2023) indicates the existence of psychological traumas among war refugee students: 58.8% of all respondents highlighted the significance of this issue; 19.1% consistently experience effects of stress and negative experiences, while 10.3% occasionally feel them; a majority of respondents (54.4%) report frequently discussing war-related topics with children, with 22% doing so always, and only 2.9% never engaging in such discussions. Therefore, it is no coincidence that, as noted above, principals of educational institutions paid considerable attention to the implementation of appropriate measures involving all participants in the educational process (Machin, 2014) to build resilience in difficult military realities (Chandi & Ferrari, 2013).

Conclusions

The study suggests the following recommendations concerning rural education development amidst wartime conditions, using modern Ukraine as an illustration.

During times of war, education requires coordination and collaboration among governmental entities, international and local institutions, educational administrators, social workers, and impartial specialists to ensure optimal educational prospects and safeguard the well-being of children within the learning setting. It is essential to ensure educational accessibility, adequate funding, infrastructure, technical equipment, and other necessities for the education system.

The main objective of organizing education during wartime is to establish and maintain measures that guarantee the safety of all participants in educational interactions, particularly when conducting face-to-face or blended instruction. If transitioning to remote learning, it's crucial to establish an appropriate digital platform for interaction, and relevant content, develop a structured timetable, integrate synchronous and asynchronous learning, and provide access to cutting-edge technologies, among other necessities. It is equally important to create appropriate educational and methodological materials, including for individuals with special educational needs, as well as to provide social and emotional support to families who have experienced war trauma and are in greatest need of overcoming stress, fear, despair, depressive disorders, etc. At the same time, it is necessary to promote the professional development of teachers to work with students with learning disabilities or psychological disorders due to the war. This prevents them from fully adapting to the team or the educational environment of the educational institution. Therefore, it is also necessary to create accessible and equal opportunities for all participants in pedagogical interaction to prevent discrimination and inequality of opportunities in rural and urban areas.

The Government of Ukraine and international NGOs are taking active steps to assist rural schools in conflict zones, including reconstruction of infrastructure, psychological support, and safe learning environments. However, the situation remains a serious challenge for the country's education system. Although the war can be challenging for the development of rural schools, effective strategies and support from the authorities, local communities, and international partners can contribute to improving the conditions and quality of education in these institutions. We hope that this research will be useful for scholars and educators around the world in crisis or war-affected countries.

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