

## Acknowledgement

#### Authors

Alexandros Lordos, Georgia Christou, Eleni Anastasiou, Andrii Dryga, Kostas Fanti & Herve Morin.

#### **Special Thanks**

The study has benefitted from the valuable inputs of many colleagues throughout UNICEF, Centre for Sustainable Peace and Democratic Development (SeeD) and beyond, including adolescent development specialists, clinical psychologists, school psychologists and field professionals.

Within SeeD, thanks go to the following for providing input, and for interpreting and contextualising the data: Alexander Guest, Dr Maria Symeou, Oksana Lemishka and Dr Ilke Dagli-Hustings.

We would also like to express our special thanks of gratitude to UNICEF Ukraine and especially to Mr. Bohdan Yarema.

Lastly, special thanks go to the Ukrainian Institute for Social Research after Oleksandr Yaremenko (UISR).

Cover photo credit to Keytion on Unsplash.

The Department of Psychology of the University of Cyprus and SeeD wish to acknowledge the financial support of the European Union to UNICEF Ukraine which made this project possible.

# Acronyms and abbreviations

**ESPAD** European School Survey Project on Alcohol and Other Drugs

GCAs Government-Controlled Areas

HBSC Health and Behaviour in School-aged Children

**MoES** Ministry of Education and Science of Ukraine

**ODD** Oppositional Defiant Disorder

PTSD Post-Traumatic Stress Disorder

SeeD Centre for Sustainable Peace and Democratic Development

UISR Ukrainian Institute for Social Research after Oleksandr Yaremenko

**UNICEF** United Nations Children's Fund

# Contents

Acronyms and abbreviations	3
Contents	4
Key terms and Definitions	5
1. Executive Summary	6
2. Introduction	8
2.1. The context of eastern Ukraine	8
2.2 The Impact of Macrosystemic and Microsystemic Adversities on Children, Adolescent	s and
Youth	9
2.3 The Role of Multisystemic Resilience Capacities	10
2.3.1 Individual Capacities	10
2.3.2 Family Protective Factors	11
2.3.3 School Protective Factors	11
3. Methodology	12
3.2 Participants and Recruitment	13
3.3 Procedure	13
3.4 Instruments	14
4. Findings	15
4.1 The Relationship between Conflict Exposure and Family Violence and Abuse	15
4.2 Mental Health and Peaceful Living Trajectories based on Adversity Exposure	17
4.2.1 Different Sub-groups of Resilient and Fragile Adolescents	18
4.3 Protective Factors which differentiate Resilient Adolescents from Fragile Adolescents	20
5. Discussion and Recommendations for Future Evidence-based Advocacy and Practice	25
6. Annex	26

## Key terms and Definitions

**Adolescents**: the term adolescents in UNICEF is used for young people aged 10 to 19 years. However, the vast majority of adolescents that participated in the study were aged between 14 and 19.

Areas near the contact line: the study defines areas near the contact line as areas within 15 kilometres of the contact line in the government-controlled areas (GCAs) of Donetsk and Luhansk oblasts. Oblasts are administrative units within Ukraine.

**Internalising problems**: internalising problems are defined in this study as anxiety, depression, and post-traumatic stress disorders (PTSD).

Life Skills: UNICEF defines Life skills as psychosocial abilities for adaptive and positive behaviour that enables individuals to deal effectively with the demands and challenges of everyday life.

## 1. Executive Summary

This report focuses on conflict resilience in Ukrainian adolescents. Knowledge and data on the impact of conflict on the human capital and well-being of adolescents are limited, whilst attention has only recently shifted toward adolescence as a critical developmental stage of life. Conflict-exposed adolescents are a challenging population for resilience research, in that the shock of war adds to the idiosyncratic burden of adversities in the microsystem. What is at stake for youth in such environments is not only their psychosocial adaptation but also to what extent they will mature into tolerant and constructively engaged citizens, despite the polarised environment they grew up in. Earlier cross-sectional research by the Centre for Sustainable Peace and Democratic Development (SeeD) in collaboration with United Nations Children's Fund (UNICEF) Ukraine provided important insights for stakeholders and policymakers regarding several individual and contextual sources of resilience. However, due to the nature of the study, it was not possible to detect those individuals who, while negatively affected by experiences of adversity initially, eventually exhibited delayed recovery and resilience. This has reiterated the need for longitudinal research which would be useful in differentiating adolescents who were resilient throughout their adversities from those who were initially vulnerable but later exhibited delayed recovery and resilience.

This study's main aim is to coinvestigate adolescents' psychosocial and civic adaptation in the midst of macrosystemic and microsystemic adversities, specifically, exposure to armed conflict and to abusive family environments. Our resilience analysis seeks to detect processes of delayed recovery and investigate the extent to which adolescents will mature into mentally healthy and constructively engaged citizens in the midst of conflict-related and family-related adversities. A longitudinal analysis was conducted using data collected in 2018 and 2019 from 2045 Ukrainian adolescents between ages 14 and 19 (M = 15.7, SD = .8) recruited from 200 randomly selected schools in 8 oblasts; Dnipropetrovsk, Zaporizhzhia, Kyiv, Lviv, Mykolaiv, Kharkiv, and GCAs of Donetsk and Luhansk oblasts.

Results demonstrated that family abuse was more likely to be experienced by adolescents who were exposed to conflict hardship compared to those who were not. This suggests the presence of cumulative risk pathways, where conflict hardship increases the risk for family abuse with the two adversities then interacting to influence outcomes. Exposure to conflict hardship, whether in combination with family abuse or on its own, causes not only detrimental effects on mental health but also on peaceful attitudes to outgroups. As conflict hardship is combined with family abuse, poor mental health outcomes become more likely.

Additionally, it was shown that developmental outcome transitions from the first to the second year of the study are more frequently maladaptive than adaptive in Ukrainian adolescents. This reiterates the need to find more effective ways of encouraging and promoting the recovery and resilience of conflict-exposed adolescents. In this regard, several individual and contextual factors were found to explain a considerable proportion of adolescents' resilience. Importantly, these resilience-promoting individual and contextual capacities were strongly correlated, suggesting that they are not separate and independent phenomena. Contextual factors which were found to have the strongest association with individual resilience capacities included; family connectedness, teacher support and living a child-friendly city.

Some of the identified differences in capacities between resilient and recovering adolescents concern levels of self-regulation skills. Recovering adolescents displayed lower distress tolerance and emotion regulation, as well as lower paternal monitoring and paternal positive parenting compared to their resilient peers. Nevertheless, recovering adolescents seem to have intact expressive communication and cooperation skills, self-esteem and gratitude, as well as sufficient amounts of maternal support, peer support and teacher support which may play an essential role in helping them cope through their adversities and gradually recover. Adolescents with fragile peaceful living displayed the highest levels of maladjustment, in terms of life skills, lower executive functions, self-esteem and emotion regulation.

This study's findings provide important implications for evidence-based policy and practice for conflict-exposed youth who are also impacted by other microsystemic adversities, specifically in terms of entry points for multisystemic interventions to prevent maladaptive psychosocial and civic outcomes. Main recommendations to achieve multisystemic resilience in conflict-exposed adolescents in eastern Ukraine include strengthening family systems, nurturing student-teacher relationships, and enhancing adolescents' participation in a community, while leveraging these contextual protective factors to further cultivate the social, emotional and cognitive skills of adolescents, at the individual level. Detailed results, practical implications and recommendations for evidence-based advocacy and practice are discussed in depth in the Findings and Discussion sections of this report.

Lastly, this study expands the body of evidence on adolescents' recovery and resilience in Ukraine and provides key practical and clinical implications which can further inform policy and programming. Specifically, we hope this study will inform programming for adolescent development and protection in Ukraine, particularly in conflict-affected regions of the country, as well as contribute new knowledge and insights on adolescents' psychosocial adaptation in the face of conflict.

#### 2. Introduction

#### 2.1. The context of eastern Ukraine

Since the outbreak of conflict in eastern Ukraine in 2014, ongoing hostilities have been impacting the lives of people in the region. The ongoing conflict has blighted the living conditions of people living near the contact line, by infringing on their fundamental rights, including their access to adequate housing, clean water, heating, lighting, cooking energy, essential medicine and health services, as well as undermining their social and economic rights due to a number of measures being put in place<sup>1</sup>.

The conflict in Donetsk and Luhansk oblasts of eastern Ukraine is continuing to impact children and adolescents physically, socially, and psychologically. Children and adolescents in eastern Ukraine experience frequent shelling in their school environment, landmines, as well as the constant presence of armed military personnel. Some of the risks and adversities impacting children and youth include; the lack of infrastructure, high unemployment, extreme poverty and the closedown of schools forcing thousands of children to study remotely or enrol in schools of safer areas<sup>2</sup>. During the first three months of 2019, attacks on schools have seen an increase by four times compared to the four months of 2018, whilst these incidents have had a traumatising effect on youth in eastern Ukraine<sup>3</sup>. The plight faced by adolescents and children in eastern Ukraine is without a doubt putting their mental health at considerable risk, with the prevalence of trauma being pervasive, especially among internally displaced persons (IDPs)4. Importantly, our previous findings showed that conflict exposure was associated with poor mental health in adolescents in eastern Ukraine<sup>5</sup>. Dimensions of higher risk of developing maladaptive ways of coping with stress in Ukrainian adolescents include: substance abuse, begging, unsafe sexual behaviours, behavioural problems, aggression, fear, concentration problems, reduction in calorie intake and lastly participation in sex work<sup>6</sup>. In line with these results, our previous study found that conflict exposure was linked to increased behavioural problems (e.g., substance use, risky sexual behaviours), internalising problems (e.g., anxiety, depression, self-harm) and reduced levels of well-being, quality of life and life satisfaction<sup>7</sup>.

<sup>&</sup>lt;sup>1</sup> OSCE Special Monitoring Mission to Ukraine. (2017). Hardship for conflict-affected civilians in eastern Ukraine. Retrieved from

https://www.osce.org/ukraine-smm/300276?download=true <sup>2</sup> Dumcheva, A., Sakovych, O., Savchuk, S., Ursu, O., Zalanova, Z., Svavolya, Y., ... Kippa, M. (2019). The State of Youth in Ukraine Analytical Report compiled by the Un Working Group on Youth. UN in Ukraine Publications. Retrieved from http://www.un.org.ua/en/publications-and-reports/un-in-ukraine-publications/4743-the-state-of-youth-in-ukraine; Organization for Human Rights (2015). Studies Under Fire. Retrieved from https://www.hrw.org/report/2016/02/11/studying-under-fire/attacksschools-military-use-schools-during-armed-conflict

<sup>&</sup>lt;sup>3</sup> Sorokopud, N., Thompson, G., & Sharpe, M. (2019). Attacks on schools quadruple in conflict-hit eastern Ukraine. Retrieved from https://www.unicef.org/press-releases/attacks-schools-quadruple-conflict-hit-eastern-ukraine-unicef; Lordos, A., & Hyslop, D. (2020). The Assessment of Multisystemic Resilience in Conflict-Affected Populations. In Multisystemic Resilience: Adaptation and Transformation in Contexts of Change. Oxford: Oxford University Press.

<sup>&</sup>lt;sup>4</sup> Ukrainian Institute of Research of Extremism (2015). Children of War: Research on Problems of Childhood in Ukraine in  $\underline{\text{Conditions of Military Aggression. Retrieved from http://uire.org.ua/wp-content/uploads/2015/06/Children-of-war.pdf}$ <sup>5</sup> Lordos, A., Morin, H., Fanti, K., Lemishka, O., Guest, A., Symeou, M., Kontoulis, M. & Hadjimina, E. (2019) "An evidence-based analysis of the psychosocial adaptability of conflict-exposed adolescents and the role of the education system as a protective environment", Ukraine: United Nations Children Fund (UNICEF); Lordos & Hyslop, 2020

<sup>&</sup>lt;sup>6</sup> UNFPA. (2014). A project on providing psychosocial rehabilitation, as well as the development of safe behavior skills for 83 adolescents from Donetsk and Luhansk, a study to obtain information on adolescent awareness of HIV, safe behavior, including the use of condoms and post-project interviews. Retrieved from

http://www.un.org.ua/images/Youth\_in\_emergencies\_UNFPA\_Case\_study\_-\_UKRAINE.pdf; UNICEF. (2014). Rapid assessment of the psychosocial status of children in four cities of Donetsk oblast for the preliminary information on the impact that the crisis has on children and families.

<sup>&</sup>lt;sup>7</sup> Lordos et al., 2019

# 2.2 The Impact of Macrosystemic and Microsystemic Adversities on Children, Adolescents and Youth

Several challenges have been found to be significantly affecting the mental health of children and adolescents exposed to macro-systemic adversities. Internalising problems such as fear and distress<sup>8</sup>, as well as more serious problems such as anxiety, depression and post-traumatic stress symptoms<sup>9</sup> are frequently manifested in conflict-affected children. In addition to psychological symptoms, exposure to ethnic-political conflict and violence seems to be linked to the development of maladaptive externalising behaviours that involve impulsivity, delinquency and aggression<sup>10</sup>. Researchers studying Palestinian and Bosnian adolescents found that those exposed to political violence developed aggressive behaviour<sup>11</sup> and reported being more violent<sup>12</sup>. In line with these findings, our previous study pertaining to multidimensional resilience in conflict suggested that adolescents exposed to conflict hardship are at risk of becoming more polarised through negative feelings towards outgroups<sup>13</sup>.

Research on the impact of micro-systemic adversity such as family violence or abuse on conflict-affected adolescents is scarce, yet, there is a well-established connection in the literature between family violence and abuse and negative outcomes of adolescent development, independently of context<sup>14</sup>. Hence, family violence and abuse may be hypothesised to be exacerbating the effects of conflict exposure and particularly the normalisation of violence, thus impairing adolescents' readiness for peaceful living and civic engagement. Moreover, another salient hypothesis is that conflict hardship can amplify family abuse and then the two together can have an even greater impact on adolescents. Some preliminary work was carried out in the mid-1990s and specifically in a study which examined the impact of a number of risk factors along with ethnic-political violence on behavioural problems in Palestinian children. It was concluded that the number of family-level risk factors was significantly related to the number of behavioural problems that the children exhibited. Family-level risk factors included

\_

<sup>&</sup>lt;sup>8</sup> Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: Protective processes and pathways to resilience. International Review of Psychiatry, 20(3), 317–328; Slone, M., & Shechner, T. (2009). Psychiatric consequences for Israeli adolescents of protracted political violence: 1998-2004. Journal of Child Psychology and Psychiatry, 50(3), 280–289.

<sup>&</sup>lt;sup>9</sup> Gupta, L., & Zimmer, C. (2008). Psychosocial intervention for war-affected children in Sierra Leone. British Journal of Psychiatry, 192(3), 212–216; Slone, M., & Shoshani, A. (2010). Prevention Rather Than Cure? Primary or Secondary Intervention for Dealing With Media Exposure to Terrorism. Journal of Counseling & Development, 88(4), 440–448; Finzi-Dottan, R., Dekel, R., Lavi, T., & Suali, T. (2006). Posttraumatic stress disorder reactions among children with learning disabilities exposed to terror attacks. Comprehensive Psychiatry, 47(2), 144–151; Finzi-Dottan, R., Dekel, R., Lavi, T., & Suali, T. (2006). Posttraumatic stress disorder reactions among children with learning disabilities exposed to terror attacks. Comprehensive Psychiatry, 47(2), 144–151; Abdeen, Z., Qasrawi, R., Nabil, S., & Shaheen, M. (2008). Psychological reactions to Israeli occupation: Findings from the national study of school-based screening in Palestine. International Journal of Behavioral Development, 32(4), 290–297; Dubow, E. F., Boxer, P., Huesmann, L. R., Shikaki, K., Landau, S., Gvirsman, S. D., & Ginges, J. (2010). Exposure to Conflict and Violence Across Contexts: Relations to Adjustment Among Palestinian Children. Journal of Clinical Child & Adolescent Psychology, 39(1), 103–116

<sup>&</sup>lt;sup>10</sup> Muldoon, O. T. (2004). Children of the Troubles: The Impact of Political Violence in Northern Ireland. Journal of Social Issues, 60(3), 453–468; Achenbach, T. M., & Edelbrock, C. S. (1981). Behavioral Problems and Competencies Reported by Parents of Normal and Disturbed Children Aged Four Through Sixteen. Monographs of the Society for Research in Child Development, 46(1), 1

Qouta, S., & El Sarraj, E. (1992). Curfew and children's mental health. Journal of Psychological Studies, 4, 13–18.
 Barber, B. K. (2008). Contrasting portraits of war: Youths varied experiences with political violence in Bosnia and Palestine. International Journal of Behavioral Development, 32(4), 298–309

Lordos, A., Symeou, M., Anastasiou, E., Morin, H., Fanti, K., Lemishka, O., Guest, A., Machlouzarides, M. and Sikki, M. (2020).
 Promoting Life Skills as a Source of Resilience for Conflict-affected Adolescents in Ukraine: Manuscript unpublished.
 Moylan, C. A., Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Russo, M. J. (2010). The Effects of Child Abuse and Exposure to Domestic Violence on Adolescent Internalizing and Externalizing Behavior Problems. Journal of Family Violence, 25(1), 53–63.

physical violence, marital violence, verbal aggression, maternal depression and maternal sense of incompetence. It was therefore concluded that behavioural problems were mostly exhibited by those children who had experienced both forms of adversity<sup>15</sup>. Earlier cross-sectional research in conflict-affected eastern Ukraine revealed that family abuse was found to be a risk factor for adolescents' negative psychosocial outcomes. Specifically, it was found that family abuse contributed directly to deteriorating mental health, resulting in both internalising and behavioural problems<sup>16</sup>. It was also demonstrated that family abuse had a negative impact on adolescents' overall well-being, increased their risk of dropping-out of school and diminished their motivation for non-violent civic engagement<sup>17</sup>.

## 2.3 The Role of Multisystemic Resilience Capacities

More recently, there has been an increase in multisystemic perspectives on resilience in an effort to respond to the far-reaching and knock-on effects of humanitarian crises<sup>18</sup> such as the conflict in eastern Ukraine. Understanding resilience through a multisystemic lens reiterates the need to investigate various protective and mitigating factors that contribute to adolescents' psychosocial adaptation against conflict hardship, including individual capacities as well as capacities across diverse supportive systems, including within schools, at home and in the community.

### 2.3.1 Individual Capacities

A closer look into the literature on protective factors, reveals that a number of different life skills and character strengths may be associated with resilience to conflict<sup>19</sup>. In our previous preliminary study measuring life skills<sup>20</sup>, we concluded that adolescents with a balanced life skills profile were found to be more likely to exhibit multidimensional resilience in the midst of conflict<sup>21</sup>. Specifically, those adolescents who were found to be peacefully active but with deteriorating mental health demonstrated the same levels of skills as resilient adolescents in communication, negotiation and critical thinking, yet, lower levels of self-regulation skills. On this basis, it was suggested that those adolescents with an unbalanced life skills profile may pose a higher risk of developing psychological difficulties in times of armed conflict. In line with these findings, our previous study in Ukraine found that adolescents who exhibit resilience amidst conflict exposure are more likely to have supportive relationships with peers, be emotionally connected to their school, have inter-dependent values, collaborative problem-solving skills and tolerance of diversity<sup>22</sup>.

<sup>17</sup> Lordos et al., 2019

10

.

<sup>&</sup>lt;sup>15</sup> Garbarino, J., & Kostelny, K. (1996). The Effects of Political Violence on Palestinian Children's Behavior Problems: A Risk Accumulation Model. Child Development, 67(1), 33.

<sup>&</sup>lt;sup>16</sup> Lordos et al., 2019

<sup>&</sup>lt;sup>18</sup> Masten, A. S., & Obradović, J. (2008). Disaster Preparation and Recovery: Lessons from Research on Resilience in Human Development. Ecology and Society, 13(1); Masten, A. S. (2014). Global perspectives on resilience in children and youth. Child Development, 85(1), 6–20; Gunderson, L. (2010). Ecological and Human Community Resilience in Response to Natural Disasters. Ecology and Society, 15(2); Brown, K. (2014). Global environmental change I. Progress in Human Geography, 38(1), 107–117; Welsh, M. (2014). Resilience and responsibility: governing uncertainty in a complex world. The Geographical Journal, 180(1), 15–26; Lordos & Hyslop, 2020

 <sup>19</sup> Lordos & Hyslop, 2020
 20 Communication, negotiation, cooperation, distress tolerance and hopeful outlook, self-management, problem-solving, decision making, critical thinking, creativity, kindness, respect for diversity and participation.

<sup>&</sup>lt;sup>21</sup> Lordos et al., 2020 <sup>22</sup> Lordos et al., 2019

### 2.3.2 Family Protective Factors

A previous examination of the role of parenting styles and parental warmth in moderating of pathways from exposure to conflict hardship and mental health symptoms in Israeli adolescents concluded that although the exposure was linked to psychological distress and internalising and externalising symptoms, maternal authoritativeness and warmth mitigated the effects of conflict hardship exposure on mental health. In contrast, the study showed that maternal authoritarianism as opposed to authoritativeness intensified the link between conflict exposure and externalising symptoms<sup>23</sup>.

#### 2.3.3 School Protective Factors

In a study examining positive school climate as a resilience factor in armed conflict zones, the researcher sought to investigate the contribution of school experience and school climate to adolescent students' coping with violence and its effect on the development of PTSD and post-traumatic growth (PTG). Results from this study showed that school safety and level of school facilities predicted lower levels of both PTSD and PTG, whilst school connectedness and teacher support were found to make a positive contribution to PTG<sup>24</sup>.

Whilst seminal contributions have been made in the past by our research team in collaboration with UNICEF Ukraine which provided vital practical implications for stakeholders and policy makers regarding individual and contextual sources of resilience, due to the cross-sectional nature of our previous study, a number of questions regarding adolescents' psychosocial adaptation remain to be addressed. To fill this gap, this study aims to focus on the co-investigation of multiple types of adversity (i.e., conflict hardship and family violence), outcomes (i.e., mental health and peaceful living) and sources of resilience in Ukrainian adolescents.

-

<sup>&</sup>lt;sup>23</sup> Slone, M., & Shoshani, A. (2017). Children Affected by War and Armed Conflict: Parental Protective Factors and Resistance to Mental Health Symptoms. Frontiers in Psychology, 8.

<sup>&</sup>lt;sup>24</sup> Yablon, Y. B. (2015). Positive school climate as a resilience factor in armed conflict zones. Psychology of Violence, 5(4), 393-401

### 2.4 Scope of the Study

This report is based on the longitudinal analysis of data that were collected in the second and third planned waves of a large-scale population study of conflict-exposed adolescents in Ukraine.

This study aims to differentiate adolescents who were resilient through their adversities from those who were initially vulnerable, but later recovered. In addition, this study seeks to examine to what extent adolescents will mature into mentally healthy and constructively engaged citizens in the midst of conflict and relevant adversities.

Figure 1 shows the research questions which this study seeks to answer.

### 2.5 Practical Implications

This report will expand the body of evidence on adolescents' recovery and resilience in eastern Ukraine. It will provide important practical insights which further inform policy and particularly, programming to support adolescent development and

Is family abuse more likely to be experienced by adolescents also exposed to conflict hardship, compared to adolescents not exposed to conflict hardship?



What trajectories of civic and mental health outcomes can be expected in adolescents experiencing different combinations of conflict hardship and family abuse?

Which are the different sub-types of resilience and fragility we can detect?



## Which protective and fragility factors most differentiate groups of adolescents?

(i.e., resilient adolescents – who display immediate or delayed recovery to combinations of conflict hardship and family abuse – from fragile adolescents – who display persistent maladjustment after such adversity exposure)

Figure 1. Research Questions.

protection in Ukraine, as well as contribute new knowledge and data on adolescents' adaptation in the face of conflict.

## 3. Methodology

In order to address the knowledge gap in multisystemic longitudinal research and make recommendations for future evidence-based advocacy, it was decided that this study should focus on exploring adolescent development among the same Ukrainians, over two time points. For the first time point, data were collected during the first academic term of 2018-2019. For the second time point, data were collected during the first academic term of 2019-2020.

#### 3.1 Ethical Considerations

The research team thoroughly reviewed all ethical considerations to ensure the protection of children's rights during the study. UNICEF contracted the Ukrainian Institute for Social Research after Oleksandr Yaremenko<sup>25</sup> (UISR), a leading institute accredited for conduct of national surveys and with substantial experience in school-based surveying to provide expert advice on the questionnaire formulation and its translation. UISR is the institute which gathered the first wave of data for the Eastern Ukraine Social Cohesion and Reconciliation (SCORE) survey. UISR is also the

<sup>&</sup>lt;sup>25</sup> http://www.uisr.org.ua

Ukrainian accredited institute for the European School Survey Project on Alcohol and Other Drugs<sup>26</sup> (ESPAD) and leads Ukraine's data collection for the Health and Behaviour in School-aged Children<sup>27</sup> (HBSC), both cross-national studies taking place in 35 and 48 countries respectively. UISR carried out an initial independent ethical review of the questionnaire developed by the research team following which the questionnaire was revised before being pilot tested in students in Bila Tserkov. Approval for the survey was obtained from the Commission on Psychology and Pedagogy of the Scientific-Methodical Council of the Ministry of Education and Science of Ukraine<sup>28</sup>. Before administering the paper-based questionnaire regional field managers from the UISR National network received a full-day training. Students were then informed about the objectives of the study, how the data would be used and informed that participation was on a voluntary basis, that not all the questions needed to be answered and that they could withdraw at any time. Each student received a questionnaire and an individual envelope in which they sealed their completed questionnaire. All individual envelopes of the class were then sealed by the interviewer in a second envelope prior to the return of the teacher in the room.

### 3.2 Participants and Recruitment

Participants were recruited from 200 randomly selected schools, in 8 oblasts in eastern, southern, central and western Ukraine: Dnipropetrovsk, Zaporizhzhia, Kyiv, Lviv, Mykolaiv, Kharkiv, and GCAs of Donetsk and Luhansk oblasts. A total of 7846 participants were recruited from the second wave (in this study, referred to as time 1) and a total of 8645 participants were recruited from the third wave (in this study, referred to as time 2).

The sample population of time 2 was formed on the basis of the sample population of time 1, thus, taking into account the transition of students to the next level. During the second time of data collection between the academic year of 2019-2020, the researchers ensured that each class had participated in the survey the year before- prior to administering the questionnaire to students. From those two samples, responses of 2047 participants were successfully matched across both phases. Two adolescents were excluded from the analysis for excessive missing data. Therefore, data from 2045 participants were used for this study's longitudinal analysis. Participants' ages ranged from 14 to 19 (M = 15.7, SD = .77), with 42.6% (N = 872) identified as male and 57.4% (N = 1173) as female. Approximately half of the sample (49.4%) was recruited from the GCAs of Donetsk and Luhansk oblasts in eastern Ukraine, where the armed conflict is ongoing for the sixth consecutive year. This

was done to ensure that adolescents who were significantly exposed to the conflict and its far-reaching socio-economic hardships were included in the sample. Participant demographics can be found in Figure 2.

#### 3.3 Procedure

Pupils were informed about the study and how their data would be used and stored and were asked to decide whether they

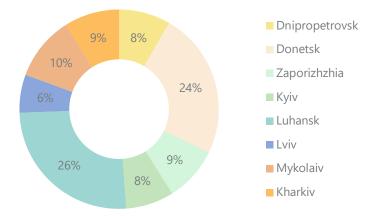


Figure 2. Participants' Demographics by oblast.

were interested to participate or not. Also, head teachers in all participating schools were informed about the study and had to consent for data collection.

<sup>&</sup>lt;sup>26</sup> http://www.espad.org

<sup>&</sup>lt;sup>27</sup> http://www.hbsc.org

<sup>&</sup>lt;sup>28</sup> http://www.mon.gov.ua

No financial incentives were given to pupils to take part in the research and they were informed that they had the right to refuse participation or withdraw at any time. Each pupil filled a paper-and-pencil questionnaire which was then sealed in an enveloped and returned to the researcher on-site. All the participant envelopes were sealed in a second envelop by the responsible researcher prior to the teacher's return to the classroom. This procedure was carried out at both time points with the assistance of 79 enumerators from UISR.

#### 3.4 Instruments

A self-report questionnaire was administered to pupils of grades 9 to 11 in Ukrainian language. The average duration of filling the questionnaire was approximately 49 minutes. Constructs of interest were measured through scales comprised of up to 7 items with each item exploring a separate aspect of a specific dimension. For instance, psychological abuse was measured using three items that tapped into different aspects of the indicator which were included in the questionnaire; specifically, adolescents were asked to indicate whether anyone in their family or anyone living in their home (a.) screamed at them loudly and aggressively, (b.) called them mean names or cursed them and (c.) threatened to leave or abandon them. In the same manner, three items measured physical abuse, and three items measured sexual abuse. An extensive literature review was conducted and expert local input on adolescent development and on the impact of conflict in eastern Ukraine was also utilised to select the most relevant indicators which can be found in Figure 3.

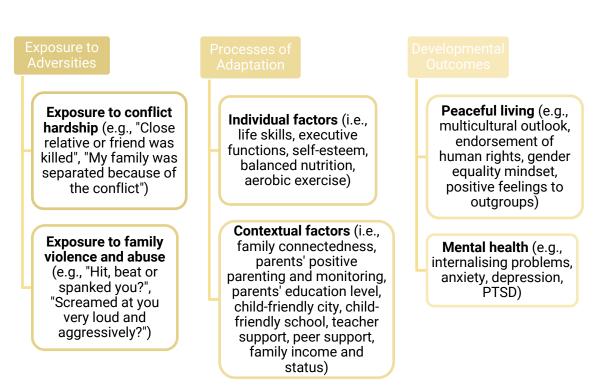


Figure 3. Indicators used for this study.

Figure 4 summarises mean scores for exposure to conflict hardship disaggregated by oblast.

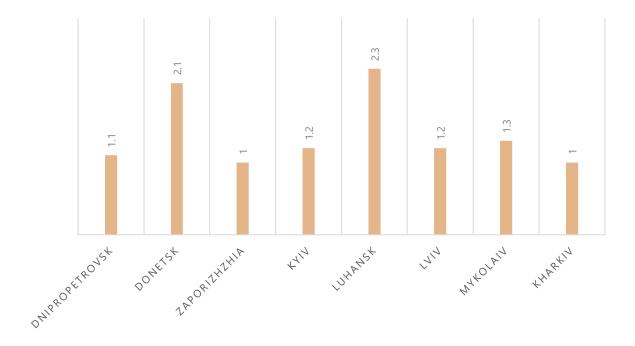


Figure 4. Mean scores<sup>29</sup> for Exposure to Conflict Hardship by Oblast, scores out of 10.

## 4. Findings

The following findings are presented in accordance with the above-mentioned research questions.

# 4.1 The Relationship between Conflict Exposure and Family Violence and Abuse

Is family abuse (i.e., physical, sexual, psychological and domestic) more likely to be experienced by adolescents also exposed to conflict hardship compared to those not exposed to conflict hardship?

After conducting a series of statistical analyses<sup>30</sup>, it was clear there was a significant difference between adolescents not exposed to conflict hardship compared against adolescents exposed to significant conflict hardship, on measures of family violence and abuse (i.e., physical abuse, sexual abuse, psychological abuse and domestic violence). Specifically, we found that physical abuse, sexual abuse and psychological abuse played a significant role in the difference between the groups of adolescents, whereas, domestic violence was not significantly different between the groups did

 $^{29}$  All scores on the graphs are out of 10, where 10 means the phenomena is observed strongly and prevalently, and 0 means it is not observed whatsoever.

<sup>&</sup>lt;sup>30</sup> A one-way between-groups multivariate analysis of variance (MANOVA) was conducted to investigate the prevalence of exposure to family violence and abuse in the three groups of adolescents. Preliminary analyses (i.e., assumptions of normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices and multicollinearity) showed that there were no serious violations.

not play a significant role<sup>31</sup>. Therefore, those adolescents who were highly exposed to conflict experienced more family violence and abuse compared to the other two groups. These results provided evidence for our first hypothesis which suggested that family violence and abuse is more likely to be experienced by those adolescents who were exposed to conflict hardship compared to those who were not. Figure 5 shows the effect of conflict hardship on psychological abuse.

The association of high conflict hardship with elevated family abuse validates the emphasis of this study on co-investigating the two types of risk factors. Often, when investigating adolescent adaptation in contexts of conflict, the research emphasis is on how the conflict itself is affecting adolescent mental health and other outcomes. The association of conflict exposure with elevated abuse suggests the presence of cumulative risk conflict where pathways, hardship increases the risk for family abuse, with the two risk factors then interacting to influence adolescent outcomes.

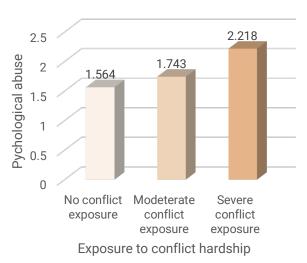


Figure 5. The effect of Conflict Hardship on Psychological Abuse, scores out of 10.

A second set of analyses<sup>32</sup> were conducted to further address the extent to which family

violence and abuse and conflict hardship predict adolescent outcomes. This was done to test two hypotheses (a.) a mediation hypothesis - that the impact of conflict hardship on outcomes is mediated by increased levels of family abuse and (b.) an interaction hypothesis - that conflict hardship and family abuse interact to produce more severe outcomes. The outcome variables were average mental health or peaceful living over the period (i.e., taking the average of time 1 and time 2 scores). Results showed that increased levels of family abuse partially mediated adolescents' mental health outcomes, however, did not mediate their peaceful living outcomes. No other interaction effects were identified. These findings demonstrate the amplifying effect of conflict hardship on family abuse, and from there on to more severe mental health problems in children and adolescents. The findings provide evidence for future advocacy on protecting family systems in times of conflict hardship to prevent mental health problems in children and youth.

<sup>&</sup>lt;sup>31</sup> Physical abuse (F (2, 2042) = 8.42, p < .05, η<sup>2</sup>= .01), sexual abuse (F (2, 2045) = 9.68, p < .05, q<sup>2</sup>= .01) and psychological abuse (F (2, 2045) = 10.79, p < .05, q<sup>2</sup> = .01) reached statistical significance, whereas, domestic violence did not reach statistical significance.

 $<sup>^{32}</sup>$ A set of hierarchical linear regression analyses were carried out. Conflict hardship was added at step 1, while family abuse was added at step 2. When family abuse was added to the model, the standardised coefficient for the impact of conflict hardship on mental health dropped from -0.116 (p < 0.01) to -0.070 (p < 0.01), thus providing evidence of a partially mediated effect.

# 4.2 Mental Health and Peaceful Living Trajectories based on Adversity Exposure

Which trajectories of civic and mental health outcomes can be expected in adolescents experiencing different combinations of conflict hardship and family

Two sets of analyses were conducted on the developmental outcomes at time 1 and time 2<sup>33</sup>. From the first set of analyses that were conducted on the outcomes at time 1, three profiles of adolescents emerged; the first included those with high rates of peaceful leaving and low mental health, the second included those with low peaceful living and high mental health and the third included

adolescents that reported both high rates of peaceful living and mental health. From the second set of analyses that were conducted on the outcomes at time 2, three similar profiles of adolescents emerged; as in time 1, the first profile included adolescents with high rates of peaceful living and low mental health, the second included those who reported low peaceful living and high mental health and the third profile included those with both high peaceful living and mental health.

Figure 6 illustrates that a three-profile solution was found as the best fit at both times: 1 and 2.

In order to investigate the transition between the above profiles from time 1 to time 2, further analysis<sup>34</sup> was conducted. Overall, the majority of participants in the sample exhibited high mental health and peaceful living across the two time points (N = 1349, 66%). However, a significant number of participants exhibited low mental health and high peaceful leaving across the two time points (N = 359, 17.6%), while a smaller number of participants exhibited high mental health and low peaceful living across the

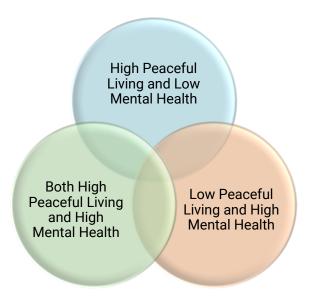


Figure 6. Three profile solution as the best fit after conducting Latent Profile Analysis on developmental outcomes at both time 1 and time 2 (2018 and 2019).

two time points (N = 92, 4.5%). Smaller groups were identified, comprised of adolescents who transitioned from one state to another, for instance from experiencing mental health difficulties to being well-adjusted all round (N = 28, 1.4%) or conversely from being well-adjusted to experiencing a deterioration in their mental health (N = 68, 3.3%). Figure 7 on the next page illustrates these results.

The Latent Transition Analysis revealed that, where adolescents in Ukraine are transitioning from one developmental outcome profile to another, such transitions are more frequently maladaptive than adaptive. Specifically, many more adolescents are transitioning from being well-adjusted to displaying poor mental health or reduced peaceful living, than the other way around where adolescents transition to positive multidimensional adjustment. Furthermore, several adolescents are transitioning between maladaptive states, from poor mental health to poor peaceful living, and vice versa. This should be a cause of concern and should represent a call to action to find more effective ways for the promotion of recovery and resilience amidst exposed adolescents. While these challenges are real, we should not lose sight of the fact that the many more adolescents

\_

<sup>&</sup>lt;sup>33</sup> Two sets of Latent Profile Analyses (LPA) were conducted using Mplus software programme version 8 (Muthén & Muthén, 2012) on the development outcomes at the two time points.; Muthén, L. K., & Muthén, B. O. (2012). Mplus user's guide (7<sup>th</sup> ed.). Los Angeles, CA: Author.

<sup>34</sup> A Latent Transition Analysis (LTA) was conducted.

remain well-adjusted despite and across these adversities, already displaying remarkable resilience in times of extreme adversities. As we will discuss below, well-adjusted and resilient adolescents can serve as role models, in our efforts to identify pathways to resilience for those who are currently struggling in their efforts to cope.

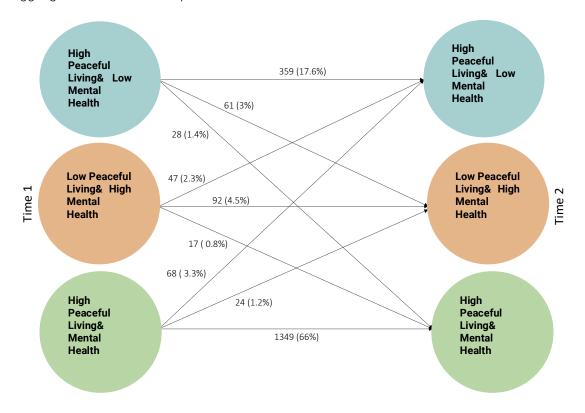


Figure 6. Results from Latent Transition Analysis (LTA).

### 4.2.1 Different Sub-groups of Resilient and Fragile Adolescents

Which are the different sub-groups of resilient and fragile adolescents we can detect?

To investigate this question, four groups of adolescents were created based on their adversity experiences; no exposure to adversity, exposure to conflict hardship, exposure to family violence or abuse and exposure to both conflict-related and family-related adversities. The next step involved running a test to examine the relation between the trajectories of civic and mental health outcomes and different combinations of conflict hardship and family abuse<sup>35</sup>. From this test, it was revealed that the relation between the outcomes and the various combinations of adversity was significant. The following five groups of different combinations of adaptation and fragility and adversity exposure were yielded based on results of the test.

Specifically, it was observed that approximately 14.7% (N = 300) of the total sample of adolescents still exhibit fragile mental health after being exposed to adversity, whilst 7.6% (N = 155) still exhibit fragile peaceful living after adversity exposure. Thirty-seven participants (1.8%) of the total sample exhibited delayed recovery after being exposed to adversity. Importantly, a significant number of adolescents (N = 652, 31.9%) remained resilient amidst adversity at both time points. Lastly, 697

<sup>-</sup>

 $<sup>^{35}</sup>$  A Chi-square test of independence was performed to examine the relation between the trajectories of civic and mental health outcomes and different combinations of conflict hardship and family abuse. The relation between these variables was found to be significant,  $X^2$  (24, N = 2045) = 198.74, p < .05.

(34.1%) participants reported being well-adjusted without being exposed to any type of adversity. The remaining 10% (N = 204) of the sample was comprised of participants who were not exposed to any adversity, however exhibited varied civic and mental health outcomes.

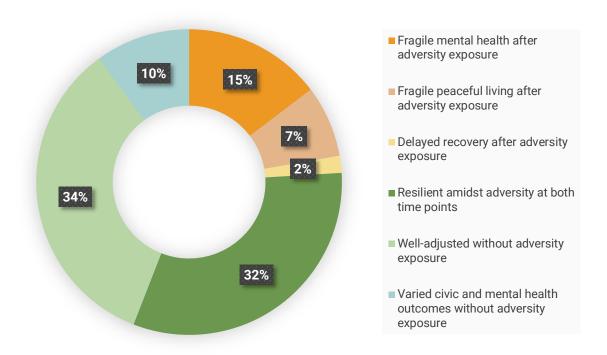


Figure 7. Groups of various combinations of adaptation and fragility based on adversity exposure.

# 4.3 Protective Factors which differentiate Resilient Adolescents from Fragile Adolescents

Which protective factors most differentiate resilient adolescents – who display immediate or delayed recovery to combinations of conflict hardship and family abuse – from fragile adolescents – who display persistent maladjustment after such adversity exposure?

As discussed above, participants were divided into five groups according to their recovery stage (Group 1: fragile mental health after adversity exposure, Group 2: fragile peaceful living after adversity exposure, Group 3: delayed recovery after adversity exposure, Group 4: well-adjusted with no adversity exposure, Group 5: well-adjusted after adversity exposure, therefore resilient). A number of individual and contextual factors (see Figure 9 for a summary overview) have been found to significantly differ between resilient and recovering adolescents, as well as between recovering adolescents and those who still display fragility after adversity exposure<sup>36</sup>. In addition, tables 1 and 2 show in detail the comparisons between the different recovery groups and the factors which have been found to be significantly different between them.

From these results, it is clear that those adolescents who are exhibiting fragile peaceful living after being exposed to adversity are also displaying the lowest levels of emotion regulation. Furthermore, selfesteem was found to be lower among the fragile groups compared to the non-fragile ones. Additionally, fragile adolescents and those who displayed delayed recovery have reported lower scores on balanced diet compared to resilient adolescents and those who were well-adjusted without adversity exposure. Non-fragile adolescents have reported higher scores on family connectedness, maternal paternal monitoring, and maternal and paternal positive parenting, with those adolescents displaying fragile peaceful living reporting the lowest levels on these indicators. Lastly, resilient and well-adjusted adolescents reported higher teacher support compared to fragile ones. Adolescents with fragile peaceful living reported the lowest overall teacher support.

Distress tolerance
Expressive
communication
Cooperation
Gratitude
Self-management
Emotion regulation
Planning
Task initiation
Inhibition
Self-esteem
Balanced nutrition
Gender

Family connectedness Paternal monitoring Teacher support Paternal positive parenting Maternal positive parenting Maternal monitoring Child-friendly city Child-friendly school Peer support Family income

**Sontextual factors** 

Figure 8. Individual and Contextual Factors which have been found to explain a considerable amount of the total variance in the overall resilience of adolescents.

The investigation of protective factors, and their association with profiles of fragility, recovery and resilience, has revealed, as expected strong associations of positive adaptation and resilience with numerous individual and contextual factors.

<sup>36</sup> Indicators have been ordered according to effect size power, from largest to smallest. The magnitudes of effect sizes are taken from Cohen (1988); Cohen, J. (1988). Statistical power analysis for the behavioural sciences. Hillsdale, NJ: Erlbaum.

At the level of life skills, this includes interpersonal competencies such as cooperation and expressive communication and competencies related to the self and one's life outlook, such as self-management, distress tolerance and gratitude. Furthermore, all components of executive functioning, including planning, inhibition, task initiation and emotion regulation, were significantly associated with resilience and positive adaptation, while self-esteem and maintaining balanced nutrition are also predictive of resilience. At the level of contextual factors, a positive and connected family environment, a supportive school environment and a child-friendly city, are all associated with positive adaptation and resilience. These findings, which are consistent with numerous international studies on resilience, suggest entry points for multisystemic interventions to prevent maladaptive psychosocial and civic outcomes in adolescents exposed to conflict hardship and other related adversities.

It is important to note that individual and contextual resilience-promoting capacities are not separate and independent phenomena. Strong correlation has been identified between most contextual resilience capacities and the various individual capacities, suggesting the presence of processes and mechanisms of adaptation, possibly bidirectional, that operate across system levels. Figure 10 illustrates how individual factors contribute to contextual factors and vice versa.

Out of all the contextual capacities, family connectedness, teacher support and living in a child-friendly city have the strongest overall association with individual capacities. This may mean that such contextual resources serve as incubators in which adolescents can activate their skills, competencies, and identities, or it may mean that individual capacities enable youth to access such contextual capacities more effectively. In any case, a focus on strengthening family systems, strengthening the relationships of students with their teachers, and strengthening the participation of young people in their communities, while simultaneously helping them to cultivate their individual skills for, through and as a result of these relationships, would be a credible roadmap towards building more resilient adolescents in the context of multi-system adversities.

	Group 1 ( <i>N</i> = 300) Fragile Mental Health	Group 2 (N = 155) Fragile Peaceful Living	Group 3 ( <i>N</i> = 37) Delayed Recovery	Group 4 ( <i>N</i> = 697) Well-Adjusted	Group 5 ( <i>N</i> = 652) Resilient
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Variable					
Distress tolerance	6.0 <sup>b</sup> (2.3)	5.0 <sup>a</sup> (2.6)	6.1 <sup>b</sup> (2.1)	7.0° (2.1)	7.0° (2.0)
Expressive communication	6.1 <sup>a</sup> (2.2)	5.5 <sup>a</sup> (2.4)	7.4 <sup>b</sup> (1.9)	6.8 <sup>b</sup> (2.0)	6.8 <sup>b</sup> (2.1)
Cooperation	5.9 <sup>a, b</sup> (2.4)	5.2a (2.7)	6.6 <sup>b, c</sup> (2.0)	6.8° (2.2)	6.5 <sup>b, c</sup> (2.2)
Gratitude	6.2 <sup>a, b</sup> (2.4)	5.5 <sup>a</sup> (2.7)	6.8 <sup>b, c</sup> (2.1)	7.0° (2.1)	6.8 <sup>b, c</sup> (2.2)
Self-management	4.9a (2.2)	4.7a (2.3)	5.3 <sup>a, b</sup> (1.9)	5.8 <sup>b</sup> (2.2)	5.7 <sup>b</sup> (2.1)
Emotion regulation	5.0 <sup>b</sup> (2.6)	2.5 <sup>a</sup> (2.5)	5.7 <sup>b</sup> (2.4)	7.1° (2.2)	6.8° (2.3)
Planning	6.4 <sup>b</sup> (2.1)	5.5 <sup>a</sup> (2.6)	6.8 <sup>b, c</sup> (2.2)	7.4° (1.7)	7.3° (1.7)
Task initiation	6.0 <sup>b</sup> (2.4)	5.2a (2.8)	6.4 <sup>b, c</sup> (2.5)	7.3 <sup>d</sup> (2.1)	7.1 <sup>c, d</sup> (2.1)
Inhibition	6.2 <sup>a, b</sup> (2.0)	5.7a (2.2)	6.8 <sup>b, c</sup> (1.6)	7.1° (1.9)	6.9° (1.9)
Self-esteem	5.9a (2.4)	4.6a (2.7)	7.0 <sup>b</sup> (1.8)	7.2 <sup>b</sup> (2.0)	6.9 <sup>b</sup> (2.2)
Balanced nutrition	5.2a (2.2)	4.9a (2.5)	4.5a (2.4)	6.4 <sup>b</sup> (2.2)	6.1 <sup>b</sup> (2.3)
Gender	6.5 <sup>a, b</sup> (4.8)	7.8 <sup>b</sup> (4.2)	7.3 <sup>b</sup> (4.5)	5.3ª (5.0)	5.1ª (5.0)

Table 1. Results from one-way analysis of variance (ANOVA) **comparing recovery groups** (Group 1: fragile mental health after adversity exposure, Group 2: fragile peaceful living after adversity exposure, Group 3: delayed recovery after adversity exposure, Group 4: well-adjusted with no adversity exposure, Group 5: well-adjusted after adversity exposure, therefore resilient) **and individual factors** which have been found to have a medium to large effect size. (Cohen, 1988). "M" stands for mean, SD for standard deviation. "N" indicates the number of participants in each group.

Superscripts denote whether means for each variable are statistically similar or different. Same superscript implies scores are statistically identical, different superscript implies scores are significantly different.

	Group 1 (N = 300) Fragile Mental Health	Group 2 ( <i>N</i> = 155) Fragile Peaceful Living	Group 3 ( <i>N</i> = 37) Delayed Recovery	Group 4 ( <i>N</i> = 697) Well-adjusted	Group 5 ( <i>N</i> = 652) Resilient
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Variabl <b>e</b>					
Family connectedness	7.2 <sup>b</sup> (2.1)	6.5 <sup>a</sup> (2.6)	8.3° (1.8)	8.7° (1.8)	8.2° (2.1)
Paternal monitoring	5.7 <sup>a, b</sup> (3.1)	4.9 <sup>a</sup> (3.4)	6.4 <sup>b, c</sup> (3.3)	7.6 <sup>d</sup> (2.9)	7.0 <sup>c, d</sup> (3.1)
Teacher support	4.6 <sup>b</sup> (3.1)	3.2° (3.1)	5.3 <sup>b, c</sup> (2.9)	6.1° (3.0)	5.8° (3.0)
Paternal positive parenting	6.3 <sup>a, b</sup> (3.1)	5.6° (3.3)	6.7 <sup>b, c</sup> (3.4)	8.1 <sup>d</sup> (2.7)	7.5 <sup>c, d</sup> (3.0)
Maternal positive parenting	8.1ª (2.3)	7.6a (2.6)	9.0 <sup>b</sup> (1.6)	9.2 <sup>b</sup> (1.4)	8.8 <sup>b</sup> (2.0)
Maternal monitoring	7.6° (2.3)	7.2° (2.5)	8.4 <sup>b</sup> (2.0)	8.8 <sup>b</sup> (1.8)	8.4 <sup>b</sup> (2.1)
Child-friendly city	6.1 <sup>a, b</sup> (2.0)	5.5 <sup>1</sup> (2.1)	6.3 <sup>b, c</sup> (2.0)	7.0° (1.9)	6.5 <sup>b, c</sup> (2.1)
Child-friendly school	5.4 <sup>a, b</sup> (1.4)	5.0° (1.6)	5.4 <sup>a, b</sup> (1.6)	6.0 (1.6)	5.7 <sup>b, c</sup> (1.7)
Peer support	6.0° (2.7)	6.0° (3.1)	7.1 <sup>b</sup> (2.9)	7.3 <sup>b</sup> (2.6)	6.8 <sup>a, b</sup> (2.7)
Family income	6.1ª (2.2)	5.7ª (2.3)	6.5 <sup>b, c</sup> (2.3)	7.0° (2.1)	6.5 <sup>a, b, c</sup> (2.1)

Table 2. Results from one-way analysis of variance (ANOVA) **comparing recovery groups** (Group 1: fragile mental health after adversity exposure, Group 2: fragile peaceful living after adversity exposure, Group 3: delayed recovery after adversity exposure, Group 4: well-adjusted with no adversity exposure, Group 5: well-adjusted after adversity exposure, therefore resilient) **and contextual factors** which have been found to have a medium to large effect size (Cohen, 1988). "M" stands for mean, SD for standard deviation. "N" indicates the number of participants in each group.

Superscripts denote whether means for each variable are statistically similar or different. Same superscript implies scores are statistically identical, different superscript implies scores are significantly different.

	Distress tolerance	Expressive communication	Cooperation	Gratitude	Self- management	Emotion regulation	Planning	Task initiation	Inhibition	Self esteem	Balanced nutrition	Average association of each Contextual Resilience Capacity with all Individual Resilience Capacities
Family connectedness	0.22	0.23	0.25	0.34	0.27	0.19	0.15	0.23	0.17	0.35	0.24	0.24
Teacher support	0.20	0.18	0.25	0.26	0.24	0.23	0.15	0.23	0.17	0.28	0.18	0.22
Child-friendly city	0.21	0.22	0.29	0.33	0.20	0.10	0.07	0.11	0.08	0.28	0.18	0.19
Maternal monitoring	0.15	0.16	0.20	0.27	0.22	0.10	0.11	0.18	0.12	0.27	0.17	0.18
Child-friendly school	0.19	0.22	0.26	0.30	0.21	0.07	0.05	0.12	0.07	0.25	0.17	0.17
Maternal positive parenting	0.18	0.17	0.22	0.29	0.18	0.11	0.06	0.12	0.09	0.31	0.17	0.17
Paternal positive parenting	0.13	0.14	0.21	0.24	0.18	0.16	0.10	0.17	0.13	0.26	0.18	0.17
Paternal monitoring	0.13	0.12	0.17	0.20	0.20	0.18	0.13	0.20	0.15	0.23	0.19	0.17
Peer support	0.20	0.23	0.29	0.28	0.17	0.10	0.03	0.09	0.10	0.24	0.12	0.17
Family income	0.10	0.13	0.10	0.15	0.16	0.11	0.09	0.13	0.06	0.14	0.14	0.12

Figure 9. Correlations between Individual Factors that contribute to Resilience against Contextual Factors that contribute to Resilience.

# 5. Discussion and Recommendations for Future Evidence-based Advocacy and Practice

In our analysis of results, it was shown that exposure to both microsystemic and conflict-related adversities is associated with worse adolescent outcomes, as predicted in the study's hypotheses. Specifically, adolescents that were exposed to both adversities were the least likely to display stable high scores on both outcome dimensions, the most likely to display deteriorating mental health over time, and the most likely to display a pattern of stable low mental health. Having said that, it should be noted that adolescents that were only exposed to conflict hardship, but not family abuse, also displayed significantly worse outcomes than adolescents not exposed to any adversity, therefore the direct risk from exposure to conflict hardship only should not be under-estimated. Taking these findings into consideration, a first line of defence in efforts to protect conflict-exposed adolescents should be to protect the integrity of their family system, and of relations within the family, to prevent incidents of abuse which could further comprise adolescent development, even beyond what is expected from conflict exposure only.

The contrast between resilient adolescents – who have displayed consistently positive outcomes throughout the period of adversity and recovering adolescents - who displayed poor adaptation immediately after exposure to adversity but have since demonstrated positive growth, reveals sources of fragility as well as possible mechanisms of recovery. As for sources of fragility, recovering adolescents display reduced distress tolerance and emotion regulation skills when compared against their resilient peers. In terms of contextual factors, recovering adolescents tend to display a specific deficit in terms of paternal monitoring and paternal positive parenting. These challenges - difficulties in self-management combined with lack of paternal guidance and support through the adversity - perhaps explain their initially poor adjustment. However, a characteristic profile of strengths might be explaining their gradual recovery, in contrast to other peers who remain maladjusted: Specifically, recovering adolescents appear to have intact skills for expressive communication and cooperation, along with self-esteem and gratitude, which combined might be enabling them to access environmental sources of support to gradually improve how they are coping through their adversities. Maternal support, peer support and teacher support, also seem to be associated with a recovering profile. These findings suggest that a path to recovery for adolescents who are struggling in the face of conflict-associated adversity, might be to start by building up their support-seeking skills, namely their ability to speak about what bothers them, the ability to collaborate with helpers, and a mindset of gratitude and acceptance towards those who are supporting them, as well as acceptance of their own self-worth, while at the same time making available the presence of a supportive helper, who might be a constructive peer, a warm parent, or a kind teacher who is willing to devote time to provide counsel and support. The findings are in line with other international studies on processes of recovery in adolescence, and with programs that have been developed to support youth re-integration and recovery, which are based on similar principles.

The contrast between different groups of still-maladjusted adolescents, those who display poor mental health and those who display low peacefulness, reveals more severe overall impairment in the low peacefulness group. Specifically, these adolescents display the lowest life skills, the worst executive functions, and the lowest self-esteem, while being most differentiated from other groups by extremely low levels of emotion regulation. Similarly, this group is the most cut-off from environmental support networks, most clearly so in the dimensions of family connectedness and teacher support. Reaching out to this group of adolescents represents a great challenge indeed. Given that the only contextual support indicator in which they score similarly to other groups is peer support, one possible entry point might be through programs that emphasise peer-to-peer engagement and outreach. Peer-to-peer support programs are widely used to support adolescents with externalising problems, so perhaps relevant best practices could be adapted for use with conflict-exposed adolescents.

## 6. Annex

# Appendix 1. Glossary of Adolescent Component indicators

Indicator	Indicator Description
Aggression	Extent to which one is aggressive in daily life, such as frequently getting
	into fights and confrontations.
Anxiety	Degree to which one feels anxious and insecure to an extent that the
	person finds it hard to stop worrying and relax.
Bullying	Exposure - repeated over a period - to negative behaviour by one or other
	persons including in person or online harassment and physical violence.
Civic Behaviour	Readiness for positive, non-violent, civic engagement.
Depression	Degree to which one feels depressed or very sad.
Exposure to conflict	Degree to which one feels exposed to the conflict through being close to
	regions that are subject to shelling, having family members participating in
	the conflict, or experiencing family division because of the conflict
Exposure to domestic	Exposure to abusive incidents in the household from one family member
violence	towards another.
Life satisfaction	The degree to which a person feels satisfied with his/her life overall.
Parental Involvement	Parental involvement refers to the amount of participation and connection
	a parent has when it comes to a child's social and academic life.
Parental Monitoring	Refers to parents being aware and supervising their adolescents' activities
	(at school, at home, with friends and peers) and communicating their
	concerns to their adolescent child.
Parental Warmth	Parental warmth is about parents providing their adolescents with regular
	support, speaking to them in a positive and friendly manner.
Peer support	The extent to which one feels supported by and can rely on peers for
	support.
Physical abuse	Exposure to physical abuse from parent, sibling or caregiver.
Post-Traumatic Stress	Experiencing persistent mental and emotional stress that is triggered after
Disorder	exposure to a traumatic or dangerous event.
Psychological abuse	Exposure to psychological abuse from parent, sibling or caregiver.
Quality of life	The way a person evaluates different aspects of his/her life in terms of
	mood, relations with others, and goals and the degree to which a person
	feels satisfied with his/her life.

Readiness for non-	Willingness to engage in civic and political matters using non-violent
violent civic	means, and to participate in local youth initiatives to play a role in public
engagement	affairs relevant to one's interests such as youth councils.
School connectedness	The extent to which one feels connected to peers and teachers in the school context.
Sexual abuse	Exposure to sexual abuse from parent, sibling or caregiver.
Substance use	Frequency of tobacco, alcohol or drug use.
Teacher support	The amount of help, concern and friendship the teacher directs toward the students.
Unsafe sexual	Inclination to engage in unprotected sex with multiple partners.
behaviour	
Victimisation	Directly experiencing bullying in the form of repeated physical, verbal or psychological attack or intimidation that is intended to cause fear, distress, or harm.

The opinions expressed in this publication are those of the contributors, and do not necessarily reflect the policies or views of UNICEF and/or the European Union.

The designations employed in this publication and the presentation of the material do not imply on the part of UNICEF the expression of any opinion whatsoever concerning the legal status of any country or territory or of its authorities or the delimitations of its frontiers.

Extracts from this publication may be freely reproduced with due acknowledgement using the following reference:

Alexandros Lordos, Georgia Christou, Eleni Anastasiou, Andrii Dryga, Kostas Fanti & Herve Morin. The Impact of Conflict-Associated Hardship and Family Abuse on Adolescent Civic and Mental Health Outcomes: Investigating Entry Points for Multisystemic Resilience in Ukraine. *UNICEF*, 2021

