

Under Poverty and Conflict: Well-being of Children Living in the East of Turkey

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Abstract

Children living in armed conflict zones are often exposed to political violence and other risk factors that may be caused or exacerbated by the conflict, such as poverty and family violence. If left untreated, these experiences may cause psychological problems throughout life. This study investigates the psychological well-being of children living in the low-intensity armed conflict zone in Turkey in relation to their adverse experiences. We collected data from 409 caregivers for their children (236 girls) aged 5.5 to 18 years ($M = 11.50$, $SD = 3.65$). Caregivers provided information regarding their children's emotional and behavioral problems (internalizing, externalizing and total problems, post-traumatic stress symptoms -PTSS), income, family violence and armed conflict experiences. Caregivers reported moderate levels of problems among children. The prevalence of subclinical/clinical ($T \geq 60$) scores were 14.3% for internalizing, 12.6% for externalizing and 14% for total problems, and 7.9% for PTSS. Notably, almost all families resided in extreme poverty. The prevalence of family violence was 36%. Children were frequently exposed to conflict-related events. Hierarchical regressions showed that, after controlling for the role of demographic variables and other risk factors, income predicted total problem level ($\beta = -.10$), and family violence (β 's = .17 to .26) and armed conflict (β 's = .13 to .20) experiences predicted internalizing, externalizing and total problems, and PTSS levels. Our findings suggest that family violence and armed conflict pose a significant risk to children's psychological well-being and inform intervention strategies and policy decisions to promote welfare in such disadvantaged contexts.

Keywords: internalizing problems, externalizing problems, post-traumatic stress symptoms, armed conflict, poverty, family violence, childhood

Public Policy Relevance Statement

Adverse life experiences such as war, poverty, and family violence substantially threaten the development and well-being of children throughout their life course. In this study, we identified prominent risk factors for the psychological well-being of children living in a low-intensity armed conflict zone, rather than a full-blown war. Policymakers, as well as public health and social workers, should regard these findings to tailor effective early-stage interventions, remedial efforts, and policy decisions to promote the well-being of children living in a zone of low-intensity armed conflict.

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Contemporary wars originate from the armed conflicts within a country, instead of between nations, resulting in battles fought in streets and villages that serve to transform habitats into war zones (Pedersen, 2002). With the changing characteristics of warfare, children have become the deliberate targets of armed conflict rather than accidental damage (the United Nations Children's Fund - UNICEF, 1996). Consequently, at least half of the civilian victims of armed conflicts have been children. Alarmingly, in 2015 alone, 16 million babies (i.e., 1 in 8 of all births) were born in the middle of armed conflict, and at least 250 million children (i.e., 1 in 9 in the world) lived within a conflict zone (UNICEF, 2016). Armed conflicts create an environment where children are often repeatedly exposed to life-threatening and violent events. Beyond armed conflict, children experience malnutrition, impoverishment, unsafe or inadequate housing, and lack of access to health services and education, as well as parental distress, maltreatment, and domestic violence. Altogether, armed conflicts threaten the development and well-being of children throughout several, if not all, layers of their ecological system (Betancourt & Khan, 2008), and the negative outcomes hold the capacity to result in long-term consequences unless addressed by effective intervention programs and policies.

Turkey is one of the countries where the development and well-being of some children can be under threat due to armed conflict and other stressors that may be caused or exacerbated by the conflict, such as poverty and family violence. Since the mid- 1980s, the east of Turkey has been under the influence of low intensity armed conflict, particularly felt in rural areas, as well as political tension and socioeconomic adversity. Following the failure of years-long negotiation and peace talks, the conflict reignited in July 2015 in both rural areas and cities, dramatically altering the lives of people living in the region, including children. The present study aimed to

investigate factors that pose a risk to the psychological well-being of children living in the east of Turkey, which serves to inform research, practice, and policy to improve the life quality of children and families, particularly those residing in armed conflict zones.

Armed Conflict

Children living in armed conflict zones may experience life-threatening situations; injuries; malnutrition; maltreatment; bereavement; separation from family, home, friends, school, or community; and in many cases, a combination of several such events (Macksoud & Aber, 1996; UNICEF, 1996). Explosions, shootings, bombings, landmines, or attacks may cause severe injuries in children, which may sometimes result in permanent disability. This means long-term or lifetime loss of physical capacity, prolonged suffering, hospitalization, and rehabilitation. During or after the conflict, children may also be deprived of life-sustaining materials, such as food, water, shelter, and vaccines. Children become easier targets for physical abuse as well as sexual abuse in the context of an armed conflict, which may cause sexually transmitted diseases, pregnancy, and unsafe abortions (Pedersen, 2002), in addition to the psychological trauma. Conflicts also bring impoverishment, unsafe or inadequate housing, and lack of access to health services and education and disrupt family functioning (Betancourt & Khan, 2008; Boothby, 2008).

During and after an armed conflict, children may display acute stress responses, which can be considered as natural reactions to traumatic events. Chronic and severe conflict experiences, on the other hand, may result in immediate, and even prolonged, psychological problems among children, such as post-traumatic stress disorder (PTSD), internalizing problems (e.g., depression, withdrawal, anxiety), and externalizing problems (e.g., antisocial and aggressive behaviors; for a review, see Dimitry, 2012). Indeed, in a systematic review,

Attanayake and colleagues (2009) indicated that the prevalence of mental health disorders was higher among children who experienced war compared to the general youth population.

Exposure to an armed conflict in childhood also increases susceptibility to both physical and psychiatric disorders in adulthood (e.g., Llabre, Hadi, Greca, & Lai, 2015; Sack, Him, & Dickson, 1999). Another pathway by which armed conflict may lead to detrimental psychological outcomes in children is through parents' exposure to the armed conflict, even in cases when children were not directly exposed to the conflict. Studies showed that parental trauma resulting from exposure to an armed conflict might be transmitted to subsequent generations through epigenetic mechanisms (Bowers & Yehuda, 2016) or through narratives (Fargas-Malet & Dillenburger, 2016), increasing the susceptibility of children to psychological problems (Daud, Skoglund, & Rydelius, 2005).

A wealth of research has been devoted to identifying and investigating the factors that are associated with the severity and duration of the psychological problems that conflict-exposed children experience. Among them, the nature and degree of armed conflict incidences (e.g., Macksoud, 1992; Smith, Perrin, Yule, Hacam, & Stuvland, 2002; Thabet & Vostanis, 1999); personal characteristics such as age, gender, coping skills, and previous exposure to trauma (e.g., Betancourt & Khan; Masten & Narayan, 2012; Shaw, 2003); and ecological factors such as socioeconomic status, parental influences, and cultural/contextual characteristics (Barber, 2008; Betancourt & Khan, 2008; Boothby, 2008; Miller & Jordans, 2016) are highlighted as prominent factors determining child outcomes. Some of these environmental stressors, including poverty, substandard and unsafe housing, impaired parenting, family violence, and lack of social support, might have a strong influence on child well-being above and beyond their armed conflict

experiences. In Sri Lanka, Fernando, Miller and Berger (2010) showed that abuse and material deprivation predicted PTSD level in children more strongly than war exposure.

Poverty

Poverty is a major risk factor for child well-being in multiple domains and via several pathways (Aber, Morris, & Raver, 2012; Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997). Two of the most common approaches examining the link between poverty and children's well-being mainly focus on the family unit and parental behaviors. Accordingly, income falling lower than the poverty line serves to decrease the investment of parents in their children's development by reducing opportunities for parents to provide an intellectually stimulating environment (e.g., the purchase of books and toys), day-care or preschool education, and also nonmonetary goods (e.g., time spent with children; Becker, 1981). Another pathway highlights the impact of poverty on parents' stress and childrearing practices. Living in poverty is associated with increased economic pressure, financial insecurity, and unemployment, all of which may lead to marital conflict (Conger, Ge, Elder, Lorenz, & Simons, 1994), as well as high levels of distress, depression, and anxiety in parents (McLoyd, Jayaratne, Ceballo, & Borquez, 1994); abuse and neglect (Gillham et al., 1998); and harsh or unresponsive parenting (McLeod & Shanahan, 1993). Hence, poverty exerts its adverse effect on the well-being of children through parental investment level, parental well-being, and parenting practices, leading to non-optimal social, emotional, and cognitive development.

Biological/neurobiological and environmental/contextual perspectives also provide a broader understanding of the link between poverty and child well-being by taking additional factors into account, such as birth weight, malnutrition, chronic stress, allostatic load, and household and neighborhood characteristics. For instance, prenatal poverty is linked to lower

birth weight (Strully, Rehkopf, & Xuan, 2010), which is predictive of various negative outcomes across the life course, such as infant mortality, poor health in childhood and adulthood, lower educational attainment, and lower social status in adulthood (Brooks-Gunn & Duncan, 1997; Case, Fertig, & Paxson, 2005). Malnutrition may impair brain development (e.g., axon and synapse growth) and function (e.g., neurotransmitter syntheses) in children (Prado & Dewey, 2014), and further, it predicts their education level, socioeconomic status, and health in adulthood (Akresh, Lucchetti, & Thirumurthy, 2012). Poverty also sets the stage for exposure to repeated or chronic stressors, which may lead to dysfunctions in the stress response system known as the hypothalamic–pituitary–adrenal (HPA) axis and allostatic load, increasing the likelihood of the development of health problems and psychological disorders (e.g., depression, anxiety) both in childhood and adulthood, even if the quality of life has been improved in the following years (Bick et al., 2012).

Research suggests that the physical environment and neighborhood in which children reside are important factors in their wellbeing. Poverty is associated with adverse environmental conditions, such as low housing quality, inadequate heating and sanitary conditions, crowding in the household, exposure to environmental pollutants and toxins (e.g., mercury, lead), chronic and loud noise, few resources for development (e.g., parks, playgrounds, libraries, health-care or education facilities), and social disorganization (e.g., high rate of crimes and unemployment). In his review, Evans (2006) documented that housing quality, crowding, exposure to toxins, and chronic noise are associated with cognitive deficits and higher levels of emotional and behavioral problems in children as well as less parental responsiveness and monitoring, higher child maltreatment, and psychological distress in adults. Moreover, a more extended period of living in substandard housing was associated with stronger associations for all such outcomes (Evans,

2006). Likewise, general neighborhood poverty (as opposed to an individual's level of household poverty) is also associated with adverse developmental outcomes in children (Brooks-Gunn & Duncan, 1997; Evans, 2006), as well as with higher psychosocial stress and allostatic load in adolescents (Brody, Lei, Chen, & Miller, 2014) and adults (Schulz et al., 2012). Additionally, living in a neighborhood characterized by violence and disorder may lead to social, emotional, and cognitive problems in children (Duncan, 1996; Leventhal & Brooks-Gunn, 2000; Sharkey, Tirado-Strayer, Papachristos, & Raver, 2012) as well as lower academic achievement (Milam, Furr-Holden, & Leaf, 2010).

Family Violence

Family violence is a broad term utilized to describe abuse and violence against a family member by another in a domestic setting, including child abuse and domestic violence (a.k.a. intimate partner violence). Systematic and meta-analytic reviews show that exposure to child abuse and witnessing domestic violence increase the likelihood of a full range of psychological problems for children (e.g., Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008; Kitzmann, Gaylord, Holt, & Kenny, 2003). Child abuse and domestic violence often co-occur, and factors such as socioeconomic hardship, parental substance use, and other adverse conditions in the surrounding community increase the likelihood of family violence (for review, Herrenkohl et al., 2008). Supporting this claim, Catani, Schauer, and Neuner (2008) reported that a history of war exposure predicted family violence in samples from Afghanistan and Sri Lanka.

The Context in the East of Turkey

Armed conflict. Since the 1980s, the east of Turkey has been under the influence of a low-intensity armed conflict between the Turkish state and the non-state Kurdish armed forces which has resulted in numerous periods of combat, particularly in rural areas. Kurds are the

largest non-Turkish ethnic minority group in Turkey, constituting 17.2% of the overall population, and mainly reside (60%) in the eastern part of Turkey (Eryurt & Koç, 2015).

According to the report of the Human Rights Inquiry Committee of the Grand National Assembly of Turkey (2013), between 1984 and 2012, the conflict culminated in more than 35 thousand deaths in 14 cities of the region. Between 1986 and 2005, around 1 million people were displaced from these cities (Hacettepe University Institution of Population Studies, 2006). During this period, many families migrated from the conflict zone to urban areas, which posed other difficulties, such as socioeconomic adversity, discrimination, child labor, and an increased instance of drop-outs from schools (e.g., Basak Culture and Art Foundation, 2010; Sevim, 2001; Yüksek, 2011). These difficulties were accompanied by problems in adaptation, language and communication, and psychological well-being in children and adolescents (Basak Culture and Art Foundation, 2004).

In 2013, a negotiation and ceasefire period started, raising hopes for a lasting peace; however, negotiations ended, and armed conflict resumed in summer 2015. For the 1-year period from August 2015 to August 2016, the Human Rights Foundation of Turkey (2016) reported 111 officially confirmed, open-ended and day-long curfews in at least nine cities in the east of Turkey, affecting at least 1.67 million residents in the region. At least 355 thousand residents were forced to leave their cities, and at least 321 people (79 children) lost their lives. During this time, hundreds of thousands of youths might have been exposed to direct or indirect conflict-related incidents, such as combats; physical injuries; the death or injury of family members, relatives, or significant others; separation from family members, relatives, or friends; or residence or school changes. Moreover, the Educators for Peace Initiative (2015) reported that at least 325 thousand children in the region were devoid of education during the autumn of 2015.

Socioeconomic adversity. Turkey overall holds critically high rates of child poverty and material deprivation, with the most severe poverty observed in the eastern part of Turkey (Gürsel, Uysal, Kökkızıl, 2016). According to a report of Bahçeşehir University Center for Economic and Social Research (Gürsel et al., 2016), in 2014, 36% of children under age 16 in Turkey were experiencing severe material deprivation. Contrasting sharply, in the eastern regions of Turkey, severe material deprivation rates ranged from 49% to 55%, indicating that child poverty is a critically alarming problem in this area.

The Income and Living Conditions Survey of the Turkish Statistical Institute (2017) reported that the eastern cities, particularly those affected from the armed conflict, had the lowest rates of annual equivalized household disposable income both in 2015 and 2016. Furthermore, according to the Turkey Demographic and Health Survey in 2013, people living in the east of Turkey have been challenged with substantial socioeconomic underdevelopment, as indicated by lowest rates of urbanization, household wealth, educational attainment, and literacy and the highest rates of fertility and early childhood mortality in Turkey (Hacettepe University Institute of Population Studies, 2014).

Family violence. An epidemiologic study conducted in three cities in the western part of Turkey shows that child abuse and neglect are prominent risk factors for the well-being of 11- to 16-year-old children, with prevalence rates as high as 58% for exposure to physical abuse and 31% for witnessing domestic violence (e.g., Sofuoğlu et al., 2014). Low parental education and the number of children in the household were stated as factors associated with child abuse (e.g., Güler, Uzun, Boztaş, & Aydoğan, 2002; Ulukol, Kahilogullari, & Sethi, 2014). These studies also indicated the co-occurrence of child maltreatment and physical abuse of women in the domestic setting. Physical abuse of women, on the other hand, was reported to be higher in the

eastern part of Turkey, with the prevalence rates ranging from 47% to 53%, whereas the average rate of abuse in Turkey was 39%; and the rate was higher among illiterate women (52%) and among women who had low welfare status (47%; Jansen, Yüksel, & Çağatay, 2009).

The Current Research

As summarized above, the extant literature shows that exposure to armed conflict may cause immediate, and even long-term, detrimental outcomes on the psychological well-being of children. Additionally, poverty and family violence, too, are risk factors for child outcomes, and they mostly go hand in hand in armed conflict zones. This exemplifies the need for a research in eastern Turkey, where the development and well-being of some children can be under threat due to low-intensity armed conflict, poverty, and family violence. Despite a history of socioeconomic and political adversities in the region, the psychological functioning of children living in the east of Turkey has not been studied before. There are only a few studies which focused primarily on the experiences of children who have migrated from the east of Turkey to conflict-free cities within the country (Basak Culture and Art Foundation, 2004; 2010; Sevim, 2001; Yüksek, 2011). However, these studies mainly investigated the migration-related problems that children experienced, such as socioeconomic hardship, difficulties in education, and psychosocial adjustment. Besides, they were conducted several years after the families migrated, and their findings are thus not informative regarding the experiences of children still residing in the region or about the role of living in conflict zone in well-being of children in the context of poverty and family violence. Such knowledge, on the other hand, is essential to know the adversities and associated psychological problems that children experience and to help in the formulation of best practices, including specific intervention strategies and potential policy decisions, regarding the well-being of these children.

With this broader perspective, the current study aimed to investigate the psychological well-being of children living in the east of Turkey in relation to the prominent risk factors in the region - poverty, family violence and low-intensity armed conflict - which tend to co-occur. Particularly, the present study first examined the levels of emotional and behavioral problems (i.e., internalizing problems, externalizing problems, total problems, and post-traumatic stress symptoms) in 6- to 18-year-old children. However, solely reporting the level of these problems in children who lived in cities where armed conflict was experienced would not be informative by itself. Therefore, we compared the level of emotional and behavioral problems in children living in the conflict zone with the results of another research study (i.e., Saçan, Artan, Erol, & Şimşek, 2014) that reported the level of these problems in children living in other disadvantaged contexts, such as child-rearing institutions and low-income families. Next, we aimed to explore the factors that were linked to emotional and behavioral problems in children. Because the literature highlights the importance of poverty, family violence, and armed conflict in child well-being, we examined the emotional and behavioral problems in children in relation to household income and children's family violence experiences and armed conflict experiences (e.g., battles, injury, armed assault, residence or school change, separation from family members). Then, we further investigated the predictive value and relative importance of these risk factors in emotional and behavioral problems in children.

Method

Participants

Data were collected from 409 households in three conflict-affected cities of Turkey: Diyarbakir ($n = 291$), Hakkari ($n = 99$) and Van ($n = 19$). The majority of the data (70%) were collected in city centers, whereas 30% were collected in towns and villages. Participant selection

criteria were: 1) to have a child (target child) between the ages of 6 and 18 living in the household; and 2) the child does not have a clinically diagnosed developmental disorder (e.g., cognitive impairment, autistic spectrum disorder). The sample included 409 primary caregivers (393 mothers, 5 fathers, and 11 close relatives) who gave information about their children ($N = 409$; 236 girls) aged 5.5 to 18 years ($M = 11.50$, $SD = 3.65$).

In terms of family composition, 91.7% of the children came from intact families, 2.4% had separated or divorced parents, and 5.9% had lost their fathers. The majority of children (96.6%) had at least one sibling, with the number of siblings ranging from 0 to 13 ($M = 3.85$, $SD = 2.31$). In 56.9% of the families, the Kurdish language was reported as the primary language spoken in the household between the family members, and Turkish was also spoken. And in 16% of the families, Turkish was the primary language, and Kurdish was also spoken. Twenty-one percent of the parents reported Kurdish as the only spoken language in family, and 5.7% reported speaking only Turkish within the family.

The families were from very disadvantaged socioeconomic backgrounds in terms of the education level and employment status of the caregivers, monthly household income, household size/crowding, fertility rate (i.e., number of children), and health-care status. Fifty-four percent of the caregivers were illiterate, 13.5% were literate but did not complete primary school, 21.9% completed primary school, 5.4% completed secondary school, 3.7% finished high school, and only 1% had a university degree. The majority of caregivers were unemployed (94.9%), and one (0.2%) was retired. Twenty caregivers (4.9%) had paid work, and among them, only 12 (2.9%) had a full-time job. Among the jobholder caregivers, 17 had low-status occupations (e.g., janitor, driver), whereas three were working in established professions (e.g., preschool teacher, public officer). Monthly household income was in general very low: For 75.1% of the families, the

monthly income was below the minimum wage (1,300 TRY; ~430 USD), 22.7% had a monthly income ranging from 1,300 to 2,800 TRY (~430 to 925 USD), seven families (1.7%) had a monthly income ranging from 2,801 to 4,800 TRY (~925 to 1,590 USD), one family (0.2%) had a monthly income ranging from 4,801 to 7,300 TRY (~1,590 to 2,417 USD), and one family (0.2%) had a monthly income ranging from 7,301 to 10,300 TRY (~2,417 to 3,410 USD).

Households were generally crowded, with up to 17 people in some houses and an average of 7 people ($M = 7.08$, $SD = 2.52$, range = 2 to 17). The number of children ranged from 1 to 15 children, with an average of 5 ($SD = 2.38$). The health-care status of families also reflected the disadvantaged conditions; the majority (61%) utilized a green card (i.e., health-care entitlement issued by the Ministry of Health for poor citizens to receive health services), and 3.7% were without any health insurance at all.

Measures

Caregiver reports were used in the assessment of background information as well as children's emotional and behavioral problems, income, family violence experiences, and armed conflict experiences. Descriptive statistics are presented in Table 1.

*** Insert Table 1 about here ***

Background information form. Caregivers completed a background information form where they provided information about the child (e.g., age, gender, education, siblings), caregiver's background (e.g., relation to the child, age, education, employment status, marital status), and household characteristics (e.g., monthly household income, household size, language, health-care and social security status).

Emotional and behavioral problems. The Child Behavior Checklist/6-18 (CBCL/6-18) developed by Achenbach and Rescorla (2001; adapted to Turkish by Erol & Şimşek, 2007) was

used to measure emotional and behavioral problems in children. The CBCL/6-18 is composed of 118 items that parents/caregivers rate on a 3-point Likert-type scale (from 0 = *not true* to 2 = *very true/often true*) to indicate whether the item describes their child currently or within the past 6 months. The CBCL/6-18 involves eight subscales: anxious/depressed (13 items), withdrawn/depressed (8 items), somatic complaints (11 items), rule-breaking behavior (17 items), aggressive behavior (18 items), social problems (11 items), thought problems (15 items), and attention problems (10 items). From these subscales, two broad dimensions of emotional and behavioral problems are identified: internalizing problems (i.e., anxious/depressed, withdrawn/depressed, and somatic complaints; 32 items) and externalizing problems (i.e., rule-breaking behavior, and aggressive behavior; 35 items). In addition, a total problem score is calculated by summing the scores from all items. Subscales oriented to the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* of the American Psychiatric Association can also be derived from the CBCL/6-18, including a subscale indicative of PTSD symptoms (13 items). Although the CBCL/6-18 was not originally developed for the assessment of trauma symptomology, the CBCL-PTSD subscale is considered as to be heuristic for the evaluation of trauma symptoms among children (Milot et al., 2013; Erol & Şimşek, 2007).

Accordingly, in the present study, we computed scores for internalizing problems (Cronbach's $\alpha = .86$), externalizing problems (Cronbach's $\alpha = .91$), total problems (Cronbach's $\alpha = .96$), and post-traumatic stress symptoms (PTSS; Cronbach's $\alpha = .77$) for each child.

Income. As an indicator of poverty, the monthly household income was rated on an 8-point scale ranging from 1 = *below 1,300 TRY* (~430 USD; the minimum wage in Turkey at the time of data collection;) to 8 = *above 18,000 TRY* (~5,960 USD).

Family violence experiences. We developed a questionnaire to assess family violence experiences of children. Through yes/no questions, caregivers provided information on whether their child was directly exposed to (i.e., personally experienced) an event of physical abuse in the home (e.g., beating, slapping, or kicking) and whether the child was indirectly exposed to domestic violence by witnessing physical abuse (e.g., beating, slapping, or kicking) against another family member in the domestic setting. Based on these questions, we created a variable to indicate the exposure severity as 0 = *no exposure*, 1 = *indirect exposure*, 2 = *direct exposure*. Next, caregivers who reported violence exposure rated the frequency of indirect and direct exposure choosing from the options of *once*, *a few times*, and *very often*. From these ratings, we created two 4-point scale variables, one for indirect exposure and one for direct exposure, where 0 indicated *not applicable* (for those with no exposure), 1 indicated *once*, 2 indicated *a few times*, and 3 indicated *very often*.

For each child, a family violence experience score was calculated based on the frequency and exposure severity of abuse experiences. We first calculated an ‘indirect exposure’ score by multiplying the frequency score (i.e., 0 = *not applicable* to 3 = *very often*) with the exposure severity score (i.e., 0 = *no exposure*, 1 = *indirect exposure*). Then, we calculated a ‘direct exposure’ score by multiplying the frequency score (i.e., 0 = *not applicable* to 3 = *very often*) with the exposure severity score (i.e., 0 = *no exposure*, 2 = *direct exposure*). A total ‘family violence experience score’ was then obtained by summing the weighted scores for the indirect and direct exposure scores, where higher scores indicated higher levels of family violence experience. If a child did not experience family violence, a score of 0 was given. A child, on the other hand, who witnessed abuse very often [3 (i.e., *very often*) x 1 (i.e., *indirect exposure*) = 3]

and personally experienced abuse once [1 (i.e., *once*) x 2 (i.e., *direct exposure*) = 2] received a score of 5.

Armed conflict experiences. Caregivers were asked to complete two questionnaires where they provided information about the armed conflict experiences of their children. These experiences included conflict-related events (e.g., battle, armed assault) as well as incidents such as residence or school change or separation from parents or close associates that took place due to battles and curfews.

Conflict-related events. To assess the type and frequency of conflict-related events that children experienced, we created a questionnaire by using a selection of items from the Childhood War Trauma Questionnaire (CWTQ), which was developed by Macksoud (1992) to measure the type and frequency of war-related experiences that Lebanese children were exposed to during the civil war. The CWTQ is composed of two main sections: General Information and War Experiences. The General Information section assesses demographic characteristics, and the War Experiences section includes 45 traumatic events under 10 trauma categories: displacement, emigration, separation from parents, exposure to shelling or combat, bereavement, witnessing violent acts, suffering physical injuries, victim of violent acts, involvement in the hostilities, and extreme deprivation. For each event, a score of 1 is given if the child experienced the event, and a score of 0 is given if the child had no such experience. A total ‘number of war traumas’ variable was calculated for each child by adding the scores from these events.

In the current study, we used 14 conflict-related events from the CWTQ that were appropriate for the context of Turkish-Kurdish conflict and two additional conflict-related events that could be common in the armed conflict zone in Turkey (i.e., being forced to participate in the protests and being intercepted by the armed forces while walking). This led to a total of 16

events. Considering that a traumatic event might have been experienced on different levels (e.g., personal experience with a traumatic event, witnessing it, or learning about it; see the Life Events Checklist developed by Gray, Litz, Hsu, & Lombardo, 2004), we assessed children's experiences for each event on two exposure levels: direct (i.e., personal experience) and indirect (i.e., witnessing the event, or hearing that it happened to a close associate). Accordingly, caregivers reported whether their child was indirectly or directly exposed to an event or not. Caregivers then rated the frequency of the exposure to the event on a 3-point Likert-type scale ranging from 1 = *once* to 3 = *very often*.

From questions assessing children's exposure to conflict-related events, we created a variable to indicate the exposure severity as 0 = *no exposure*, 1 = *indirect exposure*, 2 = *direct exposure*. Next, we created two 4-point scale variables for the frequency of indirect exposure and direct exposure, ranging from 0 = *not applicable* (for those with no exposure) to 3 = *very often*. Similar to the calculation of the family violence experience score, for each conflict-related event, we calculated an 'indirect exposure' and 'direct exposure' score as multiplying the frequency score by the exposure severity. The scores for indirect and direct exposure were then summed to obtain an overall exposure score for that particular event. For instance, a child who witnessed a conflict-related event once [1 (i.e., *once*) x 1 (i.e., *indirect exposure*) = 1] but did not personally experience the same event [0 (i.e., *not applicable*) x 2 (i.e., *direct exposure*) = 0] received a score of 1 for that event. The scores from conflict-related events were used in the calculation of an overall 'armed conflict experience' score.

Residence/school change and separation. In a separate questionnaire, we assessed the occurrence of other experiences that many children were exposed due to the battles and curfews in the region. This included residence change, school change, parental separation, and separation

from other close associates. Through yes/ no questions, caregivers responded to whether their child experienced a residence or a school change and whether the child was separated from parents (i.e., mother, father, or both) or close associates (e.g., siblings, friends, and relatives). If the child experienced the event, caregivers were asked to provide additional information regarding the reason (e.g., “Why did the child change residence?”), the frequency (e.g., “How many times did the child change residence?”), and the age of the child (e.g., “How old was the child when he or she changed residence?”). To be used in the calculation of the overall ‘armed conflict experience’ score, children were given scores for their experiences of residence change and school change (i.e., 0 = *no change*, 1 = *once*, and 2 = *twice or more*) and separation from parents and other close associates (i.e., 0 = *no separation*, and 1 = *separated*).

From these two questionnaires, we calculated an overall ‘armed conflict experience’ score, by summing the scores that children were given regarding their experiences of conflict-related events, residence change, school change, separation from parents, and separation from close associates, where higher scores indicated higher levels of armed conflict experience.

Procedure

After obtaining the approval of the Ethics Committee for Social Sciences, Koç University (Protocol Number 2016.080.IRB3.051), the data were collected with interviews at one time point, between June and October 2016. Random house visits and exponential non-discriminative snowball sampling were used to reach the participants. Because the literacy rate was low in the region, particularly among women (Hacettepe University Institute of Population Studies, 2014), we recruited research assistants to conduct one-on-one interviews. The majority of assistants (89.5%) were native Kurdish-Turkish bilingual speakers, and all met the criterion of having previous experience collecting data in social/field studies. The study material was in Turkish, but

the assistants administered them in the language that the participant preferred. In cases where the participant only spoke Kurdish or did not understand the item/question in Turkish, the assistants orally translated them in Kurdish. Assistants were given training for data collection by the first author before the field study started and were provided with a guideline (e.g., for simultaneous Kurdish translations).

Research assistants read the informed consent to the caregivers and explicitly informed them that they had the right to stop the interview at any time, avoid answering any questions, and subsequently withdraw any data that they gave. After receiving the oral consent of caregivers, the forms and scales were administered. In compensation for their participation, the caregivers were given 20 TRY (~6.5 USD) worth of shopping cards.

Data Analysis Plan

We first examined the levels of emotional and behavioral problems in children and calculated the prevalence rates for these problems. For this, we obtained *T* scores for internalizing problems, externalizing problems, total problems, and PTSS, and we used these scores to determine whether children's score fell within the normal, subclinical or clinical range provided for a representative Turkish sample (Erol & Simsek, 2007). Next, we compared the emotional and behavioral problem scores of children sampled in this study with the scores of children sampled in another study from other disadvantaged contexts in Turkey (Saçan, Artan, Erol, & Şimşek, 2014) that used the same measurement tool (i.e., CBCL/6-18 parent form) and age range (6 to 18 years) as the current study. We used independent samples *t*-tests for this comparison. Then, we examined the relations between children's age and emotional and behavioral problems via the Pearson product-moment correlation coefficients. Gender

differences in emotional and behavioral problems in children were examined via the analysis of variance (ANOVA).

After providing frequency and detailed descriptions of the children's exposure to risk factors (i.e., income, family violence, and armed conflict), we examined the partial correlations between the emotional and behavioral problems in children and income, family violence experiences, and armed conflict experiences, controlling for child's age. Then, we used hierarchical regression to explore the predictive value of the three risk factors (in Step 2) in emotional and behavioral problems over and above child's age and gender (controlled for in Step 1). We conducted the regression analyses separately for internalizing problems, externalizing problems, total problems, and PTSS.

Results

Emotional and Behavioral Problems

As presented in Table 1, children manifested moderate levels of internalizing problems, externalizing problems, total problems, and PTSS. The prevalence rates were calculated based on the cut-off scores of a representative Turkish sample (Erol & Simsek, 2007): For internalizing, externalizing and total problems, scores that fell below the 84th percentile ($T < 60$) were considered *normal*, scores between the 84th and 90th percentile ($T = 60$ to 63) were considered *subclinical*, and scores above the 90th percentile ($T > 63$) were in the *clinical* range. For PTSS, scores that fell below the 93rd percentile (T value < 65) were considered *normal*, scores between the 93rd and 97th percentile ($T = 65$ to 69) were considered *subclinical*, and scores above the 97th percentile ($T > 69$) were in the *clinical* range. Accordingly, in our sample, 10.1% of children were in the clinical range and 4.2% were in the subclinical range for internalizing problems; 11.6% of children fell in the clinical range and 1% were in the subclinical range for externalizing

problems; 10.3% of children fell in the clinical range and 3.7% were in the subclinical range for total problems; 4.7% of children were in the clinical range and 3.2% were in the subclinical range for PTSS.

Because we were interested in understanding the severity of emotional and behavioral problems experienced by children in our sample relative to those who experienced other forms of disadvantages, in the next step of our analysis, we compared the level of emotional and behavioral problems in children sampled in the present study with those of children sampled from child-rearing institutions in Turkey and children from low-income families (i.e., Saçan et al., 2014). Among children in institutions ($n = 65$), 3.1% were under institutional care from 13 to 36 months of age, 24.6% from 3 to 6 years of age, and 72.3% from 6 years of age and older because of disruption of family unit (58.5%), poverty (18.5%), abuse and neglect (13.8%), or other reasons (9.2%). Children in the low-income group ($n = 81$) were living in the central part of Turkey, and their families were receiving financial aid. To compare problem scores of children in these groups, we used the mean and standard deviation scores reported for these samples (i.e., institution, low-income in Saçan et al., 2014) and the ones in our study and conducted independent samples *t*-test. Compared with the institution-reared children, the children in our sample manifested significantly higher levels of internalizing problems, $t(469) = 6.21, p < .001$; externalizing problems, $t(469) = 2.26, p = .02$; and total problems, $t(469) = 4.45, p < .001$. Likewise, the scores of children sampled in the current study were also higher for internalizing problems, $t(485) = 1.95, p = .05$; externalizing problems, $t(485) = 3.72, p < .001$; and total problems, $t(485) = 3.95, p < .001$, in comparison to the scores of children from low-income families living in the central part of Turkey in the study of Saçan et al. (2014).

Zero-order correlations showed that the child's age was not associated with internalizing problems and PTSS. The correlations of age with externalizing problems and total problems were significant and negative (see Table 1).

The ANOVA revealed significant gender differences in the level of internalizing and externalizing problems. Accordingly, compared with boys ($M = 12.98$, $SD = 9.73$), girls ($M = 15.36$, $SD = 8.62$) were reported to manifest higher levels of internalizing problems, $F(1, 403) = 6.76$, $p = .01$, $\eta_p^2 = .02$. Boys ($M = 13.30$, $SD = 10.71$) were also reported to display higher levels of externalizing problems compared with girls ($M = 10.43$, $SD = 8.18$), $F(1, 403) = 9.32$, $p = .003$, $\eta_p^2 = .02$. There was no significant gender difference for total problems and PTSS, F 's = 0.09 to 0.37, p 's = *ns*.

Frequency of Risk Factors

As outlined in the section on participants, the caregivers reported very low levels of monthly household income. According to the Income and Living Conditions Survey of the Turkish Statistical Institute (2018), the median household disposable income for a family of four was 5,693 TRY (~1,885 USD) in the financial year ending 2016. This means that income lower than this indicated poverty for a family of four. Furthermore, income 50% lower than the poverty threshold indicates extreme poverty (see Aber et al., 2012). Based on this definition, extreme poverty threshold in Turkey in 2016 was 2,847 TRY (~942 USD) for a family of four. Regarding this, in our sample, 97.8% of the families resided in what can be classified as extreme poverty, and 1.7% of the families were in poverty.

According to caregiver reports, at some point in their lives, 36% of the children were exposed to family violence. Overall, 29.1% of the children were directly exposed to physical abuse in the home. Among children who were exposed ($n = 114$), 83.3% experienced physical

abuse on more than one occasion. Also, 10.5% of children were indirectly exposed to (i.e., witnessed) physical abuse against family members in their household. The rate of children who were exposed to both direct and indirect forms of family violence was 3.6%.

Caregivers also reported that their children were directly or indirectly exposed to various forms of conflict-related events at some point in their lives. The frequency of these conflict-related events that children were exposed to is presented in Figure 1. Overall, 88.5% of the children were directly exposed to combat. Among them ($n = 346$), 78.3% were frequently (i.e., a few times or more) amid combat. Many children experienced attacks on their house, school, or both. Sixty-five of the children experienced at least one attack on their house, and 24.5% were exposed to house attacks frequently. For nearly half of the children (48.5%), schools were reported as attacked or ruined; 15.8% frequently experienced attacks on their schools. About 82% of the children ($n = 320$) were reported to be deprived of fundamental needs (e.g., food, water, shelter, and clothing) because of the combat exposure and extended curfews. Furthermore, 9.2% of the children were physically assaulted by the armed forces. Caregivers reported that children were also indirectly exposed to certain events: 15.6% witnessed or heard an event including armed assault, 14.7% witnessed or heard someone experiencing injury/disability because of politic violence and conflict, and 14.8% witnessed or heard a sudden and violent death. In addition, 22.4% of the children witnessed someone being taken into custody or heard that a close person was detained, and 24.7% witnessed or heard an arrest.

Additionally, caregivers reported that because of exposure to the reignited armed conflict between 2015 and 2016, 77.5% of the children changed their residence at least once ($M = 1.80$, $SD = 1.55$, range = 0-8), while 40.6% of the school-age children ($n = 397$) changed their school at least once ($M = 0.60$, $SD = 0.83$, range = 0-3). Also, 15.6% of the children could not attend

school for a period ranging between 1 and 12 months ($M = 7.90$, $SD = 4.11$). During and after the reignited armed conflict and curfews between 2015 and 2016, 21.3% of children were separated from at least one of their parents, and 35.4% of children were separated from close associates such as siblings, friends, or close relatives.

*** Insert Figure 1 about here ***

Predictors of Emotional and Behavioral Problems

Partial correlations, controlling for age (see Table 1), revealed that income was significantly and negatively correlated with internalizing, externalizing, and total problems in children but was not associated with PTSS. The levels of both family violence and armed conflict that children experienced were positively correlated with their internalizing problems, externalizing problems, total problems, and PTSS levels.

To better understand the contribution of risk factors to the emotional and behavioral problems in children, we carried out hierarchical regression analyses with internalizing problems, externalizing problems, total problems, and PTSS as outcome variables. Because emotional and behavioral problems tend to vary with a child's age and gender, we controlled for them in Step 1; and then, in Step 2, we examined the predictive value of income, family violence experience, and armed conflict experience over and above the child's age and gender (see Table 2).

Internalizing problems. Gender significantly predicted internalizing problems in Step 1, with $R^2 = .02$, $F(2,385) = 3.20$, $p = .04$. In Step 2, gender, family violence experiences, and armed conflict experiences further added to the prediction of internalizing problems (total variance accounted for, $R^2 = .11$, $F(5,382) = 9.32$, $p < .001$). In addition, income was a marginally significant predictor of internalizing problems. These findings showed that girls and

children who experienced higher levels of family violence and armed conflict displayed higher levels of internalizing problems. Also, children whose families had higher income displayed slightly lower levels of internalizing problems.

Externalizing problems. Age and gender significantly predicted externalizing problems in Step 1, with $R^2 = .03$, $F(2,385) = 6.07$, $p = .003$. Adding risk factors in the second step significantly contributed to the model, $R^2 = .15$, $F(5,382) = 13.53$, $p < .001$, and gender, family violence experiences, and armed conflict experiences significantly predicted externalizing problems in children. Age and income were also marginally significant predictors. Accordingly, boys and children who had higher levels of family violence and armed conflict experiences displayed higher levels of externalizing problems. Children who were older and those whose families had higher income manifested slightly higher levels of externalizing problems.

Total problems. Age was a significant predictor of total problems in the first step, $R^2 = .02$, $F(2,385) = 3.68$, $p = .03$. In Step 2, adding risk factors significantly contributed to the model, $R^2 = .15$, $F(5,382) = 13.83$, $p < .001$, and age, income, family violence and armed conflict experiences significantly predicted total problems. These findings revealed that children who were younger, whose families had lower income, and who had higher levels of family violence and armed conflict experiences manifested higher levels of total problems.

PTSS. Introducing demographic variables to the regression equation in Step 1 did not significantly contribute to the model, $R^2 = .00$, $F(2,385) = 0.19$, $p = ns$. In Step 2, family violence experience and armed conflict experience significantly contributed to the model, $R^2 = .10$, $F(2,383) = 12.80$, $p < .001$. Children who experienced higher levels of family violence and armed conflict manifested higher levels of PTSS.

Overall, when all variables included, the models accounted for 11% of the variance in internalizing problems, 15% of the variance in externalizing problems, 15% of the variance in total problems, and 10% of the variance in PTSS.

*** Insert Table 2 about here ***

Discussion

To the best of our knowledge, the current study was the first to examine the psychological well-being of children living in the east of Turkey. This region has been under the influence of substantial poverty and political tension, and low-intensity armed conflict has resulted in periods of combat in rural areas. In 2015, the conflict reignited in both rural areas and cities, and families and children were sometimes caught in the crossfire. Following the battles and curfews, this study was conducted to 1) examine the level of emotional and behavioral problems in children and 2) investigate the role of prominent risk factors in the region -poverty, family violence, and armed conflict- in these problems.

According to the caregiver reports in our study, the children in our sample manifested moderate levels of emotional and behavioral problems. However, the levels of internalizing, externalizing, and total problems they displayed were significantly higher compared with the level of these problems previously reported for children sampled from other disadvantaged contexts in Turkey, such as childrearing institutions and low-income families (Saçan et al., 2014).

The caregivers in our sample reported that their children were frequently exposed to the risk factors under examination: poverty, family violence, and armed conflict. In line with the earlier studies, a lower level of income (e.g., Jansen et al., 2009) and a higher level of armed conflict exposure (Catani et al., 2008) were associated with a higher level of family violence

experience. Literature suggests that socioeconomic hardship may cause or exacerbate psychological distress within the family members (McLoyd et al., 1994) and result in harsh or unresponsive parenting (McLeod & Shanahan, 1993). It is also suggested that the armed conflict environment may create a culture of violence (e.g., Fernando et al., 2010; Somasundaram, 2007). Combined, socioeconomic hardship in the armed conflict zone might increase the incidence of abuse and violence in households. Yet compared with the earlier studies conducted in the conflict-free cities in Turkey (e.g., Sofuoğlu et al., 2014), the prevalence of family violence was lower in the current sample. This might be due to the culture of violence created by the armed conflict context or the feudalism that has governed the region for a long time, which may change the norms and attitudes regarding violence and lead to normalization of violence. Relatedly, caregivers' understanding and perception, and subsequently reporting, of abuse and violence might have differed from the general population.

We explored poverty, family violence, and armed conflict as possible predictors of emotional and behavioral problems; however, poverty (as indicated by very low income levels in the majority of our participants) did not appear to play a significant role in these outcomes. Although the association of lower income with internalizing, externalizing, and total problems was significant, it was quite weak. And when examined together with family violence and armed conflict, its predictive value became nonsignificant, except a significant but low beta coefficient for total problem scores. This finding contradicts the literature that clearly and consistently reveals the detrimental effects of poverty on children's psychological well-being and development (Aber et al., 2012; Bradley & Corwyn, 2002; Hackman & Farah, 2009). In many systematic reviews and meta-analyses (e.g., Brooks-Gunn & Duncan, 1997; Letourneau, Duffett-Leger, Levac, Watson, & Young-Morris, 2013; Piotrowska, Stride, Croft, & Rowe, 2015),

poverty is emphasized as a critical factor that plays a major role in early internalizing and externalizing problems. It is highly likely that this unexpected finding that appeared for our sample was due to the very low variance in this variable. The families in our sample all had very low incomes. Seventy-five percent of the caregivers reported an income that was below the minimum wage, and 23% reported the second-lowest level of income. Such a low variance might degrade the results, preventing us from reliably examining associations between variables (Tabachnick & Fidell, 2012). However, in line with the literature (e.g., Dimitry, 2012; Herrenkohl et al., 2008), the other two risk factors, family violence and armed conflict experiences, were found to be significant predictors of emotional and behavioral problems in children.

Taken together, these findings indicate the critical role of family violence and armed conflict experiences, and potentially poverty, in emotional and behavioral problems in children and highlight the need for intervention programs and policies to improve the life quality of children and families living in the east of Turkey. On the other hand, our models accounted for 10% to 15% of the variance in child outcomes, and a substantial amount of variance remains unexplained by the factors that we examined in this study. Future research that examines additional factors may help to explain more variation in emotional and behavioral problems in children. These factors would include individual factors, such as temperament (Oldehinkel, Hartman, De Winter, Veenstra, & Ormel, 2004) and self-regulation (Lengua, 2003), as well as familial/environmental, factors such as childrearing practices (McLeod & Shanahan, 1993) and parent– child attachment (Roelofs, Meesters, ter Huurne, Bamelis, & Muris, 2006), parental stress (Costa, Weems, Pellerin, & Dalton, 2006), intergenerational transmission of stress

(Bowers & Yehuda, 2016), and peer relations (Bukowski, Brendgen, & Vitaro, 2007), as well as the interactions among these factors.

This study is, to our knowledge, the first study to investigate the psychological well-being of children living in the eastern part of Turkey in relation to their adverse experiences. Therefore, this study contributes to the progress of developmental science in Turkey by filling a significant gap in the literature and to the general well-being of children in Turkey. In addition, this study provides information about child well-being in a zone of low intensity conflict rather than full-blown war, thereby contributing to the general literature on child development in war zones. The associations between family violence, poverty, and armed conflict exposure provided new understandings related to the normalization of violence in families, informing future research and practice. In showing that family violence and armed conflict experiences, and potentially poverty, are linked to the psychological functioning of children, the present study has implications both at the individual and societal level. Childhood trauma and socioeconomic adversity might cause substantial individual costs in childhood and adulthood, such as increased susceptibility to illness and psychological issues (e.g., Bick et al., 2012), but also societal costs, such as increased medical expenses for the treatment of health and psychological problems or expenses for special education (e.g., Fang, Brown, Florence, & Mercy, 2012). Having established the role of exposure to poverty, family violence, and armed conflict experiences, interventions can assist families living in the eastern part of Turkey to ensure their recovery and, at the same time, reduce the burden on society that results from adverse outcomes.

The lack of standardized measures in Kurdish and low literacy in the region were challenges for the current study. To compensate, we recruited native Kurdish–Turkish bilingual assistants for data collection, who administered the materials via face-to-face interviews in the

language that participants preferred. The reports of the assistants revealed that four caregivers preferred to answer the questions in Kurdish, whereas the rest completed the measures in Turkish and asked once or twice for clarification in Kurdish. Although there might be variations in Kurdish translations, we minimized this by providing the assistants with guidelines and common terminology for Kurdish translation. Nevertheless, the translation and standardization of the psychological measures in Kurdish will be needed for future research.

The current study provided rich data for understanding the risks of living in a low-intensity armed conflict zone regarding child well-being. However, its cross-sectional nature limited the ability of the study to examine the trajectories of the psychological well-being of children in time and to provide more conclusive observations. In future work, a longitudinal research methodology can be implemented to prevent this limitation. Future studies should also investigate other factors that may pose a further risk for the well-being of children living in an armed conflict zone, particularly childrearing practices, parent– child attachment, and parental stress. Research on other developmental outcomes, such as the cognitive development of children and their academic attainment, and also on the factors that may contribute to children’s resilience, would provide a more comprehensive picture to formulate intervention programs and policies to promote child wellbeing in this disadvantaged environment.

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Table 1

Descriptive Statistics, Zero-Order Correlations and Partial Correlations Between Study Variables Controlling for Age

Variables	Age	1	2	3	4	5	6	7
1. Internalizing problems (0-64)	-.02	-	.49***	.81***	.84***	-.11*	.23***	.23***
2. Externalizing problems (0-70)	-.11*	.49***	-	.87***	.66***	-.13**	.31***	.20***
3. Total problems (0-236)	-.14*	.81***	.87***	-	.86***	-.14**	.32***	.23***
4. PTSS (0-26)	-.04	.84***	.66***	.86***	-	-.09	.24***	.25***
5. Income (1-8)	.02	-.11*	-.13**	-.14**	-.09	-	-.12*	-.06
6. Family violence experience (0-9)	-.06	.23***	.32***	.32***	.25***	-.13*	-	.26***
7. Armed conflict experience (0-150)	-.01	.23***	.20***	.23***	.25***	-.06	.26***	-
N	409	406	406	406	406	409	392	408
Mean	11.50	14.34	11.65	44.15	7.22	1.28	1.35	17.32
SD	3.65	9.16	9.42	26.44	4.64	0.53	2.02	9.76
Min	5	0	0	0	0	1	0	0
Max	18	54	47	157	25	5	7	51

Note. PTSS = posttraumatic stress symptoms. Pairwise deletion operation was performed regarding the missing values in the data (n 's = 389 to 409). Hyphens represent the diagonal. Below the diagonal, zero-order correlations are presented; above the diagonal, partial correlations controlling for children's age are presented.

* $p < .05$. ** $p < .01$. *** $p < .001$.



Table 2

Hierarchical Regression Analysis for Variables Predicting Emotional and Behavioral Problems in Children

Variables	DV: Internalizing Problems			DV: Externalizing Problems			DV: Total Problems			DV: PTSS		
	β	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2
<i>Step 1</i>												
Age	-.03			-.11*			-.14**			-.03		
Gender ^a	.13*	.02	.02*	-.14**	.03	.03**	-.02	.02	.02*	-.00	.00	.00
<i>Step 2</i>												
Age	-.01			-.09 ⁺			-.11*			-.01		
Gender ^a	.13**			-.13**			-.01			-.00		
Income	-.09 ⁺			-.09 ⁺			-.10*			-.06		
Family violence experience	.17**			.26***			.26***			.18***		
Armed conflict experience	.19***	.11	.09***	.13**	.15	.12**	.16**	.15	.14**	.20***	.10	.10***

Note. DV = dependent variable; PTSS = posttraumatic stress symptoms. Listwise deletion operation was performed regarding the missing values in the data ($n = 387$).

^a Boys were coded as 0; girls were coded as 1.

⁺ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Armed Conflict Events

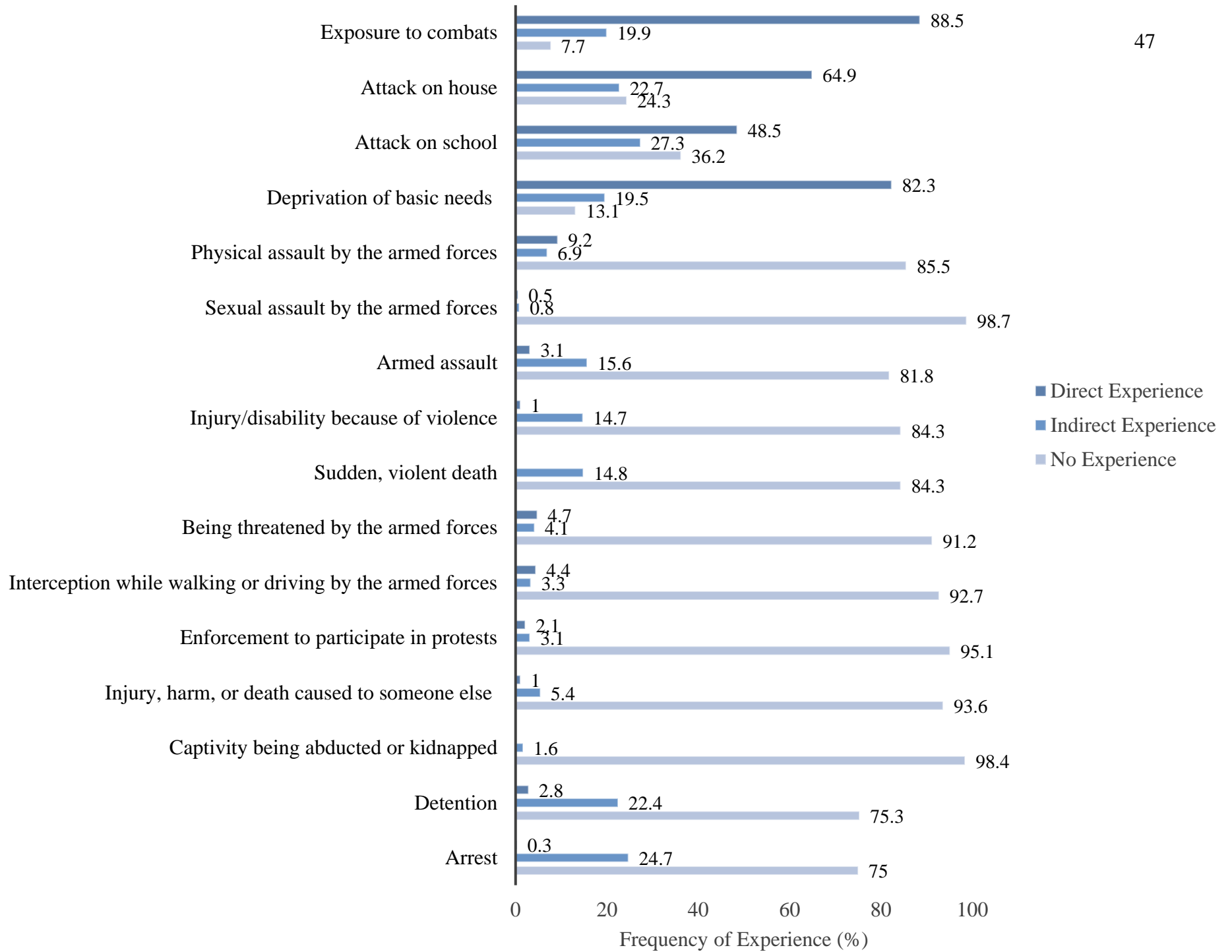


Figure 1. Frequency of conflict-related events to which children were directly or indirectly exposed.