



Supportive Relationships in Children and Adolescents Facing Political Violence and Mass Disasters

Gil Aba¹ · Stephanie Knipprath¹ · Golan Shahar¹

Published online: 13 August 2019

© Springer Science+Business Media, LLC, part of Springer Nature 2019

Abstract

Purpose of Review We identify trends and gaps in the literature on the role of social support in the psychopathology and risky behavior of youths exposed to political violence and mass disasters. We also discuss the implications of recent research's findings and suggest directions for future research.

Recent Findings Political violence and natural disasters inflict serious blows to adolescents' mental and physical health and may have reverberating, negative impacts throughout the nested social systems in which youths develop. However, many adolescents are not adversely affected, suggesting the presence of resilience. While the beneficial effects of social support from close others are well documented, along with situations under which perceived support may even increase stress, the exact mechanisms behind social support's protective effects have not been thoroughly studied. Different personality attributes and/or different concepts of the self may possibly contribute to—or harm—youths' resilience.

Summary There is considerable variability in research on adolescents' social support in the context of political violence and mass disasters, stressors that may erode social support. Thus, further investigation of social support's protective effects via longitudinal studies is highly important.

Keywords Adolescents · Social support · Stress buffering hypothesis · Political violence · Mass disasters

Introduction

Disasters, terrorism, and other mass trauma events cause disruption to and devastation for many individuals and families worldwide [1]. Children and adolescents have the highest risk of becoming maladjusted, because they are further disadvantaged in the help seeking process by their own developmental status, as well as their lack of experience and knowledge about how to seek help [2]. Furthermore, their providers of support, who are also affected by these stressors, might be less

available to them, both emotionally and physically. Because adolescents are perceived as more capable than children to deal with stress, the former are at an even higher risk than the latter in the context of these stressors, as their distress might not be noted or attended to. Added to this consideration is the fact that adolescence is a life period characterized by marked biological, psychological, and social changes, which in and of themselves increase the risk of psychopathology and risky behavior.

Nevertheless, many adolescents survive, and even thrive, in the face of these two devastating stressors, i.e., disasters and political violence [3], suggesting the presence of resilience. Therefore, it is crucial that this concept be better understood [4]. The purpose of the present article is to review recent research on one of the building blocks of such resilience, namely, social support. We begin by briefly reviewing extant—and quite voluminous—theory and research on social support, with a focus on adolescence. Next, we turn to the role of social support in the reactions of adolescents exposed to (a) political violence and (b) mass disasters. Lastly, we point out overarching themes, gaps in the literature, and future research directions.

This paper is partly based on Gil Aba's doctoral dissertation supervised by Golan Shahar.

Gil Aba and Stephanie Knipprath share first authorship on this manuscript, whose names were ordered alphabetically

This article is part of the Topical Collection on *Child and Family Disaster Psychiatry*

✉ Golan Shahar
shaharg@bgu.ac.il; golan.shahar878@gmail.com

¹ Department of Psychology, Ben-Gurion University of the Negev, 84105 Beersheba, Israel

Social Support Theory and Research: the Basics

According to Sheldon Cohen, “social support refers to a social network’s provision of psychological and material resources intended to benefit an individual’s ability to cope with stress” (p. 676) [5]. Social support theory and research can be analyzed based on the following dimensions: the reality of the support (actually received vs. perceived), the protective effect exerted by the support (a main effect vs. stress-buffering), and the source that provides the support (friends vs. family).

Perceived vs. Received Social Support

Perceived social support refers to the belief that support will be offered when help is needed. Received social support, on the other hand, is defined as support that is actually provided, and it is regarded as less beneficial than perceived social support [6, 7]. Additionally, the influence of received support might be mediated by perceived support, such that the actual received support strengthens one’s perception that future support is available, in turn increasing perceived support [7]. This could be attributed to the fact that recipients of actual support are usually more in need. In addition, high received social support might be related to decreased self-esteem, which is a known risk factor [8].

However, perceived social support is not always beneficial and, under certain conditions, it might even increase stress. One possible explanation for this is that supportive relationships might inherently increase sense of responsibility toward the providers of the support, which in turn may increase one’s stress level and ultimately result in increased symptomology [9].

Main vs. Buffering Effects

Cohen and Wills [10] distinguished between two modalities in which social support might be beneficial: the main effect and the stress-buffering modalities. According to the main effect model, social support is beneficial, regardless of stress. Whereas, as per the stress-buffering effect model, under high perceived social support, stress affects distress less than that under low perceived social support. Support for the latter is lent from researchers’ findings that at low levels of social support, greater exposure to rocket attacks was associated with increased depression, whereas at high levels of social support, greater exposure to rocket attacks was associated with decreased levels of depression [11].

Acute vs. Chronic Stress

An additional important domain of social support is the difference between situations in which the stress is either chronic or acute. The chronicity of a stressor can influence the stress-buffering potential of social support, because the role of social support tends to shift over time, emphasizing the importance of longitudinal studies. In addition, many chronic stressors are resistant to change and thus may require more palliative or emotional types of support. If the given support is from another type (e.g., instrumental support), then support recipients’ perceived support may increase distress. Therefore, the stress-buffering effect of social support might be found if individuals experience primarily acute stressors, rather than if they experience primarily chronic stressors [12].

Source of Social Support

Relations between disasters, terrorism, or other forms of political violence and child development do not occur in a vacuum. The impact can be understood as related to changes in the communities, families, and other social contexts in which children live and in the psychological processes engaged by these social ecologies [13]. It is important to consider the multilayered nature of social ecology to the understanding of adolescents’ perceived social support. The social–ecological theory, as put forth by Bronfenbrenner [14], posits that children, adolescents, and adults develop in the context of multiple, nested social systems: *the microsystem* (interpersonal relations experienced by the developing person in a given direct setting), *mesosystem* (links between various microsystems, e.g., the relations between home and school), *exosystem* (social structures and events impacting the microsystem and mesosystem, e.g., for a child, the relation between the home and the parents’ workplace), *macrosystem* (norms, expectations, and attitudes of culture, expectations of/society, e.g., attitudes of influential political or religious leaders), and *chronosystem* (changes and transformations experienced by individuals over their lifespan, e.g., historical events).

Adolescent Social Support in the Context of Political Violence

Political violence pertains to conflicts which are raging in many regions around the world, often erupting into extreme acts of violence. These conflicts often result in people becoming refugees or immigrants, most of whom are victimized by ethnic–political violence [15]. Adolescents exposed to political violence are at risk of developing a host of physical and psychiatric symptoms, including depression, anxiety, post-

traumatic distress, conduct problems, violence at school, and drug use [3, 16–18•]. Moreover, these effects appear to be long-lasting [19, 20]. According to a United Nations Children’s Fund [21] report, over one billion children under the age of 18 are growing up in armed conflict and politically violent environments [22]. Frequent exposure to racial discrimination leads to the release of stress hormones which decrease smooth muscle tone in the gastrointestinal tract and increase coagulation. Although these processes may have a beneficial effect in the short term, they can cause hypertension, lead to heart disease, and weaken the body’s immune system, when they are overproduced [23], a process called “allostatic load.” In yet another study, it was found that, when parental warmth is low, the relationship between childhood abuse and allostatic load is stronger [24]. Similar results were produced in another study, where it was shown that the lower the family support, the relationship between discrimination and cellular aging through a methylation mechanism was stronger. This effect was consistent with the stress-buffering model of social support: when family support was high, no association between discrimination and epigenetic aging was detected [25].

Some important gender differences in adolescents’ responses to political violence have been revealed. Among Israeli adolescents exposed to a suicide bombing, relational exposure (or knowing others directly affected by a suicide bombing) predicted an increase in depressive symptoms in girls, but not in boys [26]. Also, among Palestinian children in three cohorts (ages 8, 11, and 14), whereas exposure to political violence was related to post-traumatic stress (PTS) symptoms almost equally for both boys and girls and for all of the age groups examined in that study, exposure to political violence seemed to have almost no relation to aggression in girls or in 8-year-olds [27].

In Table 1, we present a list of studies examining the role of social support in the link between adolescents’ exposure to political violence and psychopathological outcomes. In the studies that examined the role of social support as a resilience factor, only perceived support was examined. Furthermore, in most of the studies presented in the table, evidence was found for the stress-buffering effect [11, 28–32].

While most of the studies employ longitudinal designs [3, 11, 19, 29–36], there are some cross-sectional studies [28, 37]. Although the stress-buffering effect was found in one cross-sectional study [28], it is more commonly found in longitudinal studies [11, 29–32, 35]. This might be explained by the fact that longitudinal studies enable researchers to detect the relations between children and their social environment over time and to rule out the possibility that the association between symptoms and support rests on the effect of the former on the latter.

In most of these studies, support from parents or family was shown to have the most protective effect [29–30••]. The effect

of support from peers, however, differed between the studies [28, 31, 32]. For example, in a study among Israeli early adolescents who have witnessed community and terror violence, it was found that support from parents operated as a protective factor, whereas support from friends acted as a risk factor by increasing the likelihood of violent behavior. Moreover, the results of this study found that support from the adolescent’s school can act as either a protective or risk factor, depending on the type of violence on adolescent witnesses [28]. In another study, perceived family social support buffered against the effect of exposure on depression and severe violence, indicating that this support is beneficial when exposure to rocket attacks is high [30••]. Social support from friends has also been found to buffer against the effects of stress: adolescents reporting high bombing-related perceived stress evinced an increase in depression, if they reported low levels of friends’ support, but not in high levels of friends’ support. However, when bombing-related perceived stress was low, social support from friends predicted an increase in depression over time [31].

Boxer and colleagues [36] conducted a longitudinal study from three age cohorts (ages 8, 11, and 14), representing three populations in the Middle East: Palestinians, Israeli Jews, and Israeli Arabs. They found that events in higher-order social ecosystems influence human development through their impact on events in lower-order social ecosystems, lending support to Bronfenbrenner’s [14] social–ecological model, in which ethnopolitical violence increases community, family, and school violence and children’s aggression. Specifically, they found that political violence affects microsystem violence, but that microsystem violence does not affect political violence, and that aggression does not affect exposure to political or microsystem violence. For all age cohorts, exposure to political violence at time 2 was strongly related to exposure at time 1 and had a significant direct effect on aggressive behavior at time 3. In addition, exposure to political violence at time 1 significantly predicted changes in microsystem violence from time 1 to time 2. Microsystem violence at time 2, in turn, significantly predicted aggressive behavior at time 3 for 8-year-olds, with the effects decreasing as the age of the youth increased. This means that violence in the exosystem would impact child development through its role in increasing violence in microsystems.

Adolescent Social Support in the Context of Mass Disasters

Natural disasters may result in adolescents’ impaired functioning, including behavior problems, substance use, and psychopathology such as post-traumatic stress disorder (PTSD), anxiety, and depression [38]. The PTS symptoms resulting from natural disasters tend to be persistent over time, with 35% of

Table 1 Adolescent social support in the context of political violence

Title	Author	Year	The stressor	Quantitative		Main vs. buffering effect	Qualitative	Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?					
We Left One War and Came to Another: Resource Loss, Acculturative Stress, and Caregiver-Child Relationships in Somali Refugee Families	Theresa S. Betancourt, Brandon S. Ito, Grace M. Lilienthal, Saida Abdi, and Naïma Agalab	2015	Being a refugee	-	-	-	Focus groups. Data analysis was conducted using a three-step process derived from grounded theory (Strauss, 1987) and content analysis (Creswell, 2009; Smith, 1992)	Family, peers, community	Family, peers, community	Resilience factors: religious faith, healthy family communication, support networks, and peer support. The community itself became an energy resource for helping less fortunate members get ahead. Stressors: (1) overall adjustment to the new country; (2) object loss—unemployment, poverty and dangerous neighborhoods; (3) condition loss—loss of status, discrimination, and loss of traditional roles; (4) personal resources—language and parent-child communication which caused parent-child changing roles
A pilot study of a family focused, psychosocial intervention with war-exposed youth at risk of attack and abduction in north-eastern Democratic Republic of Congo	Paul O'Callaghan, Lindsay Branham, Ciarán Shannon, Theresa S. Betancourt, Martin Dempster, and John McMullen	2014	The war in the Congo	Longitudinal pre- and post-intervention at 3-month follow-up. Intervention group or a wait-list control group	-	-	-	Perceived	School and parents. Peer support had a negative effect	(1) A small but significant reduction in post-traumatic stress symptoms in the intervention group. (2) A reduction in internalizing symptoms in both the control and intervention groups over time. (3) An improvement in caregiver reports of conduct problems over time for all participants
Israeli Adolescents Exposed to Community and Terror Violence: The Protective Role of Social Support	Kathryn A. Brookmeyer, Christopher C. Henrich, Guina Cohen, and Golan Shihar	2011	Community violence and terror violence in various cities in Southern Israel	Cross-sectional	Social support from parents, friends, and school personnel was measured through an abbreviated form of the Perceived Social Support Scale (DuBois et al., 1994)	Stress buffering	-	Perceived	School and parents. Peer support had a negative effect	(1) For adolescents exposed to terror violence, the effect of witnessing community violence on violent behavior was stronger for those who reported higher levels of friend support. (2) For adolescents who did not witness terror

Table 1 (continued)

Title	Author	Year	The stressor	Quantitative		Qualitative		Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method			
Relations Between Political Violence and Child Adjustment: A Four-Wave Test of the Role of Emotional Insecurity About Community	E. Mark Cummings, Laura K. Taylor, Christine E. Merrilees, Peter Shirlow, Marcie C. Goetze-Morey, and Ed Cairns	2013	The conflict in Northern Ireland	Longitudinal, 4 waves	-	-	-	-	-	<p>violence, the effect of community violence on violent behavior was stronger for those who reported higher levels of support from school personnel. (3) High support from school personnel buffered the effects of witnessing community violence for adolescents who also witnessed terror violence. (4) For adolescents who did not witness terror violence, parent support buffered against the effect of witnessing violence on increased violent behavior</p> <p>Child developmental trajectories in insecurity about community have implications for child adjustment. Specifically, youth in Belfast who had higher initial levels of and less improvement in insecurity over time had greater conduct and emotional problems at wave 4. (1) More conduct problems at wave 1 and more concurrent experience with sectarian antisocial behavior predicted more conduct problems at wave 4. (2) The initial levels of insecurity, the linear change in insecurity, and the quadratic change significantly predicted conduct</p>

Table 1 (continued)

Title	Author	Year	The stressor	Quantitative		Qualitative		Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method			
A Social–Ecological, Process-Oriented Perspective on Political Violence and Child Development	E. Mark Cummings, Marcie C. Goeke-Morley, Christine E. Merrilees, Laura K. Taylor, and Peter Shirlow	2014	The conflict in Northern Ireland	Longitudinal, 6 waves	–	–		Perceived	Not specified	problems at wave 4, even though the average insecurity decreased linearly over time. (3) Participants with higher initial insecurity about community at wave 1 had more emotion problems at wave 4 Family conflict and emotional security about the family fully mediated relations between sectarian community violence and youth's externalizing and internalizing problems
Risk and resilience: The moderating role of social coping for maternal mental health in a setting of political conflict	Laura K. Taylor, Christine E. Merrilees, Ed Cairns, Peter Shirlow, Marcie Goeke-Morley, and E. Mark Cummings	2013	The conflict in Northern Ireland	Longitudinal, 4 waves	The social coping measure contained two subscales—emotional and instrumental coping—of a larger questionnaire designed to test multidimensional strategies in response to stress (Carver, Scheiter, and Weintraub, 1989).	Stress buffering		Perceived	Not specified	Social coping functioned differently for nonsectarian crime and sectarian crime. Greater social coping buffered mothers' psychological distress from the negative effects of nonsectarian crime, but exacerbated maternal mental health problems when facing sectarian crime. Results suggest that social coping is a complex phenomenon, particularly in settings of protracted political violence
Political Violence and Child Adjustment in Northern Ireland: Testing Pathways in a Social–Ecological Model Including Single- and Two-Parent Families	E. Mark Cummings, Alice C. Schermerhorn, Peter Shirlow, Marcie C. Goeke-Morley, and Ed Cairns	2010	The conflict in Northern Ireland	Cross-sectional	(1) Conflict and cohesion scales of the Family Environment Scale (Moos and Moos, 1986). (2) Security in the parent–child relationship, on the basis of the Parental Attachment Security Scale (Davies et al., 2002). (3) The security	Main effect		Parents, family		Sectarian community violence was associated with elevated family conflict and children's reduced security about multiple aspects of their social environment (i.e., family, parent–child relations, and

Table 1 (continued)

Title	Author	Year	The stressor	Quantitative		Qualitative		Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method			
Exposure to Violence Across the Social Ecosystem and the Development of Aggression: A Test of Ecological Theory in the Israeli–Palestinian Conflict	Paul Boxer, Eric F. Dubow, Khalil Shikaki, L. Rowell Huesmann, Simha F. Landau, Shira Dvir Gvirzman, and Jeremy Ginges	2013	The Israeli–Palestinian conflict	Longitudinal, 3 waves: 1 wave per year, for 3 years and 3 populations in the Middle East. Specifically, Palestinians (N = 600), Israeli Jews (N = 451), and Israeli Arabs (N = 450)	subscale of the Security in the Family Scale (Forman and Davies, 2005).	–	–	Perceived	Parents	community), with links to child adjustment problems and reductions in prosocial behavior. By comparison, and consistent with expectations, links with negative family processes, child regulatory problems, and child outcomes were less consistent for nonsectarian community violence. Support was found for a social–ecological model for relations between political violence and child outcomes among both single- and two-parent families, with evidence that emotional security and adjustment problems were more negatively affected in single-parent families (1) Ethnopolitical violence increases community, family, and school violence and children’s aggression. (2) Younger children are at higher risk of developing aggression; although generally, the oldest cohort tended to experience more violence. The oldest cohort, however, was not uniformly more aggressive than were the younger cohorts
Exposure to Political Conflict and Violence and Posttraumatic Stress in Middle East	Eric F. Dubow, L. Rowell Huesmann, Paul Boxer, Simha Landau,	2012	The Israeli–Palestinian conflict	Longitudinal, 3 waves with 1-year intervals	Positive parenting: parents responded to the 4-item index of nonviolent discipline from the Conflict Tactics Scales,	–	–	Perceived	Parents	Greater cumulative exposure to ethnic-political conflict/violence across the first two waves of the study

Table 1 (continued)

Title	Author	Year	The stressor	Quantitative		Qualitative		Perceived/ received support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method		
Youth: Protective Factors	Shira Dvir, Khalil Shikaki, and Jeremy Ginges			parent-child version (Straus, Hamby, Finkelhor, Moore, and Runyan, 1998).					predicted higher subsequent PTS symptoms, even when the child's initial level of PTS symptoms was controlled for. This relation was significantly moderated by a youth's self-esteem and by the positive parenting received by the youth
Exposure to Conflict and Violence Across Contexts: Relations to Adjustment Among Palestinian Children	Eric F. Dubow, Paul Boxer, L. Rowell Huesmann, Khalil Shikaki, Simha Landau, Shira Dvir Gvirzman, and Jeremy Ginges	2009	The Israeli-Palestinian conflict	Cross-sectional, with 3 age cohorts	—	—			(1) Boys and older children exhibited higher levels of aggression. (2) Exposure to political conflict violence and community conflict violence made unique contributions to predicting aggression, whereas school and family violence had no independent effects. (3) For girls, exposure to interadult family conflict was significantly related to aggression, but not for boys
Perceived Family Social Support Buffers Against the Effects of Exposure to Rocket Attacks on Adolescent Depression, Aggression, and Severe Violence	Golan Shahar and Christopher C. Henrich	2016	The war in Gaza in 2009	Longitudinal, for 3 years over 4 annual assessments	An abbreviated form of the Perceived Social Support Scale (Procidano and Heller, 1983) was used	Stress buffering	Perceived	Family	(1) Depression: at high levels of family support, there was no effect of exposure to rocket attacks on depression. At low levels of family support, however, there was a strong effect of exposure to rocket attacks on depression. (2) Aggression: at high levels of family support, rocket attack exposure predicted a decrease in aggression, while at low levels of family support, rocket attack exposure

Table 1 (continued)

Title	Author	Year	The stressor	Quantitative		Qualitative		Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method			
Social Support Buffers the Effects of Terrorism on Adolescent Depression: Findings from Sderot, Israel	Christopher C. Henrich and Golan Shahar	2008	A period of military escalation from May to September 2007 in Gaza	Longitudinal, 2 waves with a 5-month interval	An abbreviated form of the Perceived Social Support Scale (Dubois, 1994) was used	Stress buffering	Perceived	Not specified	predicted an increase in aggression Baseline levels of social support buffered against the effect of exposure to rocket attacks on increased depression. Conversely, social support was associated with increased depression for adolescents who were not exposed to rocket attacks	
Effects of Exposure to Rocket Attacks on Adolescent Distress and Violence: A 4-Year Longitudinal Study	Christopher C. Henrich and Golan Shahar	2013	The Israeli-Palestinian conflict	Longitudinal, 4 annual assessments	-	-	Perceived	Peers	Exposure to rocket attacks in the second wave predicted increased odds of violence commission at the third wave	
Terrorism-Related Perceived Stress, Adolescent Depression, and Social Support from Friends	Golan Shahar, Guina Cohen, Kathryn E. Grogan, John P. Barile, and Christopher C. Henrich	2009	A suicide bombing	Longitudinal, 2 waves (with an 8-month interval), prior to and subsequently after a suicide bombing	An abbreviated form of the Perceived Social Support Scale (Procidano and Heller, 1983) was used	Stress buffering	Perceived	Peers	(1) Bombing-related perceived stress was associated with an increase in continuous levels of depression from before to after the bombing. (2) Pre-bombing social support from friends buffered against this effect. (3) Adolescents reporting high bombing-related perceived stress evinced an increase in depression, if they reported low levels of friends' support, but not in high levels of friends' support. (4) Social support from friends predicted an increase in adolescent depression over time, when bombing-related perceived stress was low	
The relationships between family functioning and	Gadi Zerach and Elkanor Tam	2016	Evacuation from residence in Gaza settlements as	Cross-sectional	The family cohesion and adaptability evaluation scale (FACES III;	-	-	-	(1) The ER group (Israeli evicted residents) reported a higher	

Table 1 (continued)

Title	Author	Year	The stressor	Quantitative		Qualitative		Perceived/ received support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method		
attachment orientations to post-traumatic stress symptoms among young adults who were evacuated from Gaza Strip settlements as adolescents			adolescents, and actively participating in the resistance events		Olson, Portner, and Lavee, 1985) was used				number of PTSD symptoms, as compared with the comparison groups. (2) ER participants did not differ from ENR (evicted nonresident) and NENR (non-evicted nonresident) participants in their perception of family functioning
Family Resilience Among Parent-Adolescent Dyads Exposed to Ongoing Rocket Fire	Shira Pagorek-Eshel and Michal Finklestein	2019	Living in the surrounding Gaza communities in Israel, an area which was exposed to missile fire for 13 years	Cross-sectional	Employed the Family Resilience Assessment Scale (FRAS; Sixbey, 2005)	–			(1) In both groups, higher family resilience was predicted by high individual resilience. (2) Parents' family resilience was predicted by high levels of individual resilience and self-differentiation, whereas adolescents' family resilience was predicted by gender and individual resilience. (3) Adolescents' self-differentiation predicted family resilience, only when parents' level of self-differentiation was high
When do peers matter? The moderating role of peer support in the relationship between environmental adversity, complex trauma, and adolescent psychopathology in socially disadvantaged adolescent	Karen Yearwood, Nicole Vliegen, Cecilia Chau, Jozef Corveleyn, and Patrick Luyten	2019	Living in Villa El Salvador, Lima, Peru. This area is characterized by high levels of poverty and inequality, a low quality and inaccessibility of education, a history of political conflict, and domestic and community violence	Longitudinal, 2 waves with a 1-year interval	The Quality of Relationships Inventory (Pierce, 1994; Pierce, Sarason, and Sarason, 1991)	Stress buffering	Perceived	Peers	Both types of adversity were associated with higher levels of internalizing and externalizing symptoms. Peer support significantly moderated this effect, but only for complex trauma and not for environmental adversity, in that higher levels of peer support were associated with a decreased impact of complex trauma on

Table 1 (continued)

Title	Author	Year	The stressor	Quantitative		Qualitative		Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method			
Testing a social ecological model for relations between political violence and child adjustment in Northern Ireland	E. Mark Cummings, Christine E. Merrilees, Alice C. Schermerhorn, Marcie C. Goeke-Morey, Peter Shirlow, and Ed Cairns	2010	The conflict in Northern Ireland	Cross-sectional	--	--				<p>internalizing and externalizing symptoms</p> <p>(1) Sectarian antisocial behavior (SAB) was directly related to children's increased emotional insecurity in the community and also greater marital conflict. (2) Marital conflict, in turn, was associated with greater insecurity in the interparental relationship. (3) Internalizing problems were most proximally predicted by children's emotional insecurity, with regard to both the community and the marital relationship. (4) Indirect links were identified between SAB and child externalizing problems through parental monitoring and security in the community. (5) SAB was also associated with reduced parental monitoring</p>

children reporting moderate to very severe levels of PTS symptoms 9 months post-disaster and only declining to 29% a year later [39].

In Table 2, we present studies focusing on the role of social support in the link between adolescents' exposure to natural disasters and psychopathological outcomes. In these studies, which examined the role of social support as a resilience factor among adolescents, only perceived support was examined. In a study among Chinese adults who were exposed to a natural disaster, it was found that disaster exposure and received family support were significantly and positively related to depressive symptoms. In contrast, perceived family support moderated the relationship between disaster exposure and depressive symptoms. Yet, no association was found between support from friends and severity of depressive symptoms [6].

Although most of these studies are longitudinal [39–43], there are some cross-sectional studies (e.g., [44]). Unlike the longitudinal studies, which investigated social support in the context of the stress-buffering hypothesis, the cross-sectional studies examined the effects of social support, albeit not via the stress-buffering hypothesis. In addition, the longitudinal studies investigated the effects of social support as a protective factor using prospective designs, whereas the cross-sectional studies employed retrospective designs. These types of studies also differed in their findings of the benefits of social support: while the longitudinal studies found significant effects of social support, the cross-sectional studies (e.g., [44]) found that social support was unrelated to either parent or youth report of their post-traumatic growth (PTG) following the disaster. The authors defended the latter finding by citing that less than half of the studies investigating the effects of social support on PTG in youth found a significant relation [45].

When comparing across different providers of support, most of the studies found that support from parents and peers has the most protective effect. Although some of the studies examined the stress-buffering effect, it was not always supported [40], as can be seen, for example, in a study which examined the impact of daily stressors on Sri Lankan adolescents and the 2004 Indian Ocean tsunami that affected various areas of Sri Lanka. Researchers found that social support buffered the effects of trauma and daily stressors on daily impairment, but not on PTS symptoms or emotional and behavioral problems [42]. This finding could possibly be explained by the *deterioration deterrence model*.

According to this model [46, 47], mass trauma has the potential to disturb victims' ongoing perceptions of support. Because mass trauma affects the entire environment, the need for support may simply exceed the amount of support available, causing expectations to be violated. Thus, exposure is associated with deterioration of perceived support. However, when support is actually provided, perceived support has a

promotive role with respect to psychological distress. Hence, it is critical to strengthen the providers of the support, so that they can have the capacity to be supportive [18, 47], and to also distinguish between episodic and chronic stresses, the latter being likely to erode social support.

This model may explain why children are more prone to suffer from this type of erosion as a function of age: the more an individual is dependent on his/her environment, the more she/he will suffer from deterioration of perceived social support. For instance, Banks and Weems [48] found that among youth whose neighborhoods were almost flooded following Hurricane Katrina, older children reported fewer symptoms of distress than did younger children. In addition, according to social learning theory [49], new patterns of behavior, such as violence, can be acquired through direct experience or by observing others' behavior. This can explain why children are at higher risk than adolescents and adults for developing aggressive behavior after observing violence in their environment.

Additionally, the deterioration deterrence model emphasizes that post-disaster social support is more important than pre-disaster social support. In a study that examined the relation of pre-disaster child characteristics, pre-disaster environmental characteristics, and level of disaster exposure to youths' PTS symptoms in the wake of the 2010 Nashville, Tennessee flood, it was found that the effects of youths' experience of the flood on post-flood trauma symptoms were not moderated by any of the pre-existing child characteristics or pre-disaster environmental variables in this study, including pre-disaster social support from peers [40]. Social support from other providers, however, was not examined in this study.

When it comes to physical health, a more positive T1 parent–child relationship quality (PCRQ) has been shown to be associated with perceptions of their child having better health at both 18 and 30 months after the hurricane. For the global rating of child health, greater exposure and higher PCRQ were jointly associated with perceptions of poorer health, yet this effect was most pronounced for boys whose families were both more affected by the hurricane and enjoyed better relations between parents and children. For the number of medical problems in the past year, for girls, highly exposed families whose parents were closer to their daughters reported more medical problems. For boys, the interaction between exposure and PCRQ resembled the “old reliable” features of social support as a buffer against stressors. While PCRQ did not matter for medical problems when the exposure to the hurricane was low, at higher levels of exposure, boys from families with lower PCRQ presented more medical problems than boys whose parents had high PCRQ. Thus, high PCRQ protected boys from the deleterious influence of natural disasters on a number of medical problems in the following year [43].

Table 2 Adolescent social support in the context of mass trauma

Title	Author	Year	The Stressor	Quantitative		Qualitative		Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative method			
Family and Peer Social Support and Their Links to Psychological Distress Among Hurricane-Exposed Minority Youth	Donice M. Banks and Carl F. Weems	2014	A hurricane being a minority	Used both a large single-time assessment sample (N = 1098) and a longitudinal sample that was followed over a 6-month period (N = 192)	A short form of the Survey of Children's Social Support (SOCSS; Dubow and Ullman, 1989) was used to measure perceived support from family and peers	Main effect		Peers, family	(1) Older children reported fewer symptoms of distress than did younger children. (2) Girls reported more PTSD symptoms. (3) Higher levels of hurricane exposure were significantly related to lower levels of family social support. (4) Social support from peers and family were both significantly negatively related to symptoms of PTSD, anxiety, and depression. (5) Hurricane exposure was associated with PTSD symptoms among those with low and high peer social support; however, the association was stronger among youth with higher levels of peer social support than those with lower levels of peer social support. (6) High hurricane exposure level lowered the positive effect of peer social support against the development of PTSD symptoms, although this difference was rather small. (7) Hurricane exposure remained a significant predictor of psychological distress while controlling for social support, so no evidence was found for mediation. Study 2. (1) There was a significant negative correlation between hurricane	

Table 2 (continued)

Title	Author	Year	The Stressor	Quantitative	Qualitative	Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	Main vs. buffering effect	Qualitative method		
					What measure of social support was used?			
Children's Reactions to the 2010 Chilean Earthquake: The Role of Trauma Exposure, Family Context, and School-Based Mental Health Programming	Dana Rose Garfin, Roxane Cohen Silver, Virginia Gil-Rivas, Javier Guzmán, J. Michael Murphy, Felix Cova, Paulina Páz Rincón, Ana María Squicciarini, Myriam George, and María Paz Guzmán	2014	2010 Chile earthquake	Longitudinal with intervention: 1 year before the earthquake and before the intervention program and approximately 9 months post-earthquake, which was between 3 and 6 months after the intervention	–	Participating in the intervention program	Family, parents, school (intervention program)	<p>exposure and peer social support, but the correlation between exposure and family social support was not significant. (2) Social support from peers was significantly negatively related to both time 1 and time 2 symptoms of PTSD, anxiety, and depression. In contrast, family social support was not significantly related to symptoms of PTSD, anxiety, or depression at time 1 or time 2. None of the interactions were significant, indicating that social support did not moderate the association between hurricane exposure and time 2 PTSD symptoms</p> <p>(1) Children's reports of characteristics of the home environment were positively associated with PTSD symptoms. (2) Children's perceptions of caregiver unavailability to discuss the earthquake were associated with higher ongoing earthquake-related worry. (3) Participation in the mental health intervention was associated with significantly lower earthquake-related worry and appeared to protect at-risk youth from elevated PTSD symptomatology</p>
						Perceived	Peers	

Table 2 (continued)

Title	Author	Year	The Stressor	Quantitative		What measure of social support was used?	Main vs. buffering effect	Qualitative method	Perceived/ received support	Source of support	Main findings
				Cross-sectional/ longitudinal	Friendship social support. The Network of Relationships Inventory: Behavioral Systems Version (NRI-BSV; Furman and Buhrmester, 2009)						
Predictors of Youths' Posttraumatic Stress Symptoms Following a Natural Disaster: The 2010 Nashville, Tennessee, Flood	Nina C. Martin, Julia W. Felton, and David A. Cole	2010	The 2010 Nashville, Tennessee, flood	Longitudinal, 6 months prior to the flood and 10 days after going back to school	Friendship social support. The Network of Relationships Inventory: Behavioral Systems Version (NRI-BSV; Furman and Buhrmester, 2009)	Stress buffering (not found)	Qualitative	Perceived/ received support	Family	(1) Post-flood trauma symptoms (CPSS) correlated significantly with depression, rumination, negative life events, and the experience of the disaster. (2) Two pre-existing child characteristics (wave 1 depressive symptoms and wave 1 rumination) and one pre-disaster environmental variable (negative friendship interactions) significantly predicted PTS symptoms. (3) The effect of youths' experience of the flood on post-flood trauma symptoms were not moderated by any of the pre-existing child characteristics or pre-disaster environmental variables in this study	
Resource loss, self-efficacy, and family support predict posttraumatic stress symptoms: A 3-year study of earthquake survivors	Lisa Marie Wamer, Benicio Gutiérrez-Doña, Maricela Villegas Angulo, and Ralf Schwarzer	2015	The 2009 Cinchona earthquake in Costa Rica	Longitudinal, 2 waves: the first was 1–6 months after the earthquake and the second was 3 years after the earthquake	Received family support was measured at T1 by the UCLA Social Support Inventory (Dunkel-Schetter, Feinstein, and Call, 1986)	Stress buffering	Qualitative	Perceived	Family	(1) Social support buffered resource loss, indicating that only less supported survivors were affected by resource loss. (2) Self-efficacy at T2 moderated the support–stress relationship, indicating that low levels of self-efficacy could be compensated by higher levels of family support	
The Relative Impact of Traumatic Experiences and Daily Stressors on Mental Health Outcomes in Sri	Thyagi Ponnampertuma and Nancy A. Nicolson	2018	The 2004 tsunami and daily stressors	Longitudinal, 2 waves with a 16-month interval (both were post-disaster)	The Multidimensional Scale of Perceived Social Support (MSPS; Zimet, Dahlem, Zimet, and Farley, 1988) measures perceived support from friends,	Stress buffering (only on daily impairment)	Qualitative	Perceived	Not specified	Higher levels of social support were associated with better mental health outcomes, even after controlling for total trauma and daily stressors. Social support	

Table 2 (continued)

Title	Author	Year	The Stressor	Quantitative		What measure of social support was used?	Main vs. buffering effect	Qualitative	Perceived/received support	Source of support	Main findings
				Cross-sectional/longitudinal	Longitudinal						
Lankan Adolescents						family, and a significant other					buffered effects of trauma and daily stressors on daily impairment but not on post-traumatic stress symptoms or emotional and behavioral problems
Hurricane-related exposure experiences and stressors, other life events, and social support: Concurrent and prospective impact on children's persistent posttraumatic stress symptoms	Annette M. La Greca, Wendy K. Silverman, Betty Lai, and James Jaccard	2010	Hurricane Charley	Longitudinal, 2-wave, prospective design, with 384 children 9 months post-hurricane and 245 children 21 months post-hurricane	A short form of the Survey of Children's Social Support (Dubow and Ullman, 1989) was used	Stress buffering		Perceived	Peers	(1) Younger children reported more PTS symptoms than older children at T1. (2) As children's disaster exposure increased, their PTS at T1 also increased. However, this effect was buffered by social support from peers. (3) Initial hurricane-related stressors were related to children's PTS symptoms at T1 through their presumed impact on life events at T1, which, in turn, directly affected children's PTS at T1 and also adversely impacted social support from peers at T1, thereby weakening the social support buffer available to children. (4) Major life events appeared to adversely impact children's levels of social support from peers. However, children's perceived social support did not buffer the effects of major life events on children's PTS symptoms at T1	
Parent-Child Relationship Quality and Gender as Moderators of	Erika Felix, Krzysztof Kaniasty, Sukkyung You, and Glorisa Canino	2015	Hurricane Georges in	Longitudinal, 2 waves with a 1-year interval: the first wave was	The Parent-Child Relationship Quality Questionnaire (Smith	Stress buffering		Perceived	Parents	Hurricane exposure exerted a detrimental influence on physical health at both 18 and	

Table 2 (continued)

Title	Author	Year	The Stressor	Quantitative	Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative	Perceived/ received support	Source of support	Main findings
the Influence of Hurricane Exposure on Physical Health Among Children and Youth			Puerto Rico	18 months after the hurricane		and Krohn, 1995) was employed					30 months after the event. The moderating role of parent-child relationship quality in the relation between hurricane exposure and physical health varied by gender. A more positive TI PCRQ was associated with perceptions of their child having better health and a lower number of medical problems at both 18 and 30 months after hurricane. The moderating role of PCRQ varied by gender primarily at 18 months post-disaster and for global rating of physical health and number of medical problems only. For the global rating of child health, greater exposure and higher PCRQ were jointly associated with perceptions of poorer health, yet this effect was most pronounced for boys whose families were both more affected by the hurricane and enjoyed better relations between parents and children. For the number of medical problems in the past year, highly exposed families whose parents were closer to their daughters reported more medical problems. For boys, the interaction between exposure and PCRQ resembled the

Table 2 (continued)

Title	Author	Year	The Stressor	Quantitative	Cross-sectional/ longitudinal	What measure of social support was used?	Main vs. buffering effect	Qualitative	Perceived/ received support	Source of support	Main findings
Family functioning and posttraumatic growth among parents and youth following wildfire disasters	Erica Felix, Tamara Afifi, Maryam Kia-Keating, Laurel Brown, Walid Afifi, and Gil Reyes	2015	Multiple wildfires and evacuation due to the fires	Cross-sectional	Protective Factors Survey (PFS). The PFS (FRIENDS, 2008) Only the family functioning/resiliency and emotional support subscales were utilized in the present study	Main effect (not found)				For youth, younger age, being female, greater fire stress, more life stressors, and those using more positive reappraisal coping were related to greater post-traumatic growth, as reported by the participants. For parents, family type and perceived fire stress were positively related to post-traumatic growth, with positive reappraisal approaching significance. Surprisingly, social support was unrelated to either parents' or youths' report of their PTG	

Comparing Social Support across the Two Stressors

In both longitudinal and cross-sectional studies, support is predominantly provided by family and peers. The difference between the stressors is found on the dimension of the protective effect exerted by the support. While there is evidence for the stress-buffering model of social support in studies of adolescents exposed to political violence or adults exposed to natural disasters [6, 50], support for this model is less common among adolescents exposed to natural disasters. Considering the different natures of these stressors and in light of the deterioration deterrence and the social-ecological models, one can argue that natural disasters tend to have broader effects and, therefore, erode more of the adolescent's providers of support by eroding social systems from higher orders. Thus, they are less capable to provide social support and mediate the destructive effects of the disaster. Yearwood and colleagues [32] found that peer support significantly moderated the effect of stress on internalizing and externalizing symptoms, only in complex trauma, meaning that the aspects of violence in children can be encountered in their caregiving environment, and not in environmental adversity, which referred to violence in three areas of life: the community, school, and media.

Gaps in the Literature

While most of the studies examined support from different providers of support, there is a considerable amount of studies that either did not differentiate between the different providers [35, 42] or focused only on a single source of support [40]. Differentiating between the different sources of support will enable the protective effects of social support to be revealed.

Although there is a significant amount of both longitudinal and cross-sectional studies, additional longitudinal studies are needed. The importance of longitudinal studies is that they enable researchers to see if there is a possibility that the association between symptoms and support rests on the effect of the former on the latter. One such longitudinal study found that initial hurricane-related stressors (actual life threat, initial loss/disruption) were related to children's PTS symptoms at time 1 through their presumed impact on life events at time 1. This impact on life events at time 1, in turn, directly affected children's PTS at time 1 and adversely impacted social support from peers at time 1, thereby weakening the social support buffer available to children. In addition, major life events appeared to adversely impact children's levels of social support from peers. However, children's perceived social support did not buffer the effects of major life events on children's PTS symptoms at time 1 [39].

Most importantly, although some qualitative studies have been conducted [51], there is still a lack of qualitative- or

mixed-method studies. Using qualitative methods provides a better understanding of complex phenomena such as social support (e.g., what facet of social support is supportive and under which conditions), and this understanding would help to build intervention programs, which in turn may prevent or decrease the development of maladjustment symptoms. In addition, according to the stress-buffering model, under certain conditions (e.g., when there is no stress), social support is less beneficial and might even increase distress. Considering the deterioration deterrence model, when facing an adverse stressor, there is a need to use social support effectively, so the expectations for perceived support will not be violated. Understanding the specific conditions and mechanisms under which support is beneficial will allow this violation to be avoided.

Additionally, while there are some studies being conducted in an attempt to uncover the mechanism behind the protective effects of social support, there are a considerable number of studies that do not refer to any particular mechanism. However, it is possible that different personality attributes and/or different concepts of the self may serve as mechanisms. In a study by Pagorek-Eshel and Finklestein [52••] who aimed to predict variables of family resilience, differences between adolescents' and their parents' resilience were identified. Specifically, high levels of individual resilience and self-differentiation predicted parents' family resilience, whereas gender and individual resilience were found to predict adolescents' family resilience. In addition, the researchers found that only when parents' level of self-differentiation was high did adolescents' self-differentiation predict family resilience. Perhaps, parents with higher levels of self-differentiation were better able to understand the need of their adolescents to develop autonomy, even if emotionally it would have been difficult for them as parents to do so in circumstances of ongoing rocket fire [52••]. This better understanding on their part would in turn increase adolescents' beliefs about their own ability to deal with those circumstances, as well as decrease their guilt toward their parents. In other words, adolescents' self-efficacy will increase and their self-criticism will decrease.

Self-esteem is another type of self-concept that may have either protective or harmful effects, depending on whether it is high or low. Research has shown that the relation of exposure to ethnic-political conflict leading to higher subsequent PTS symptoms is moderated by youth having high self-esteem and by them receiving a high level of positive parenting [29]. Also, poor academic performance, along with witnessing the traumatic event, being a female, and being an older adolescent were significant predictors of PTS symptoms [53]. Thus, perhaps as poor academic performance gives rise to decreased self-esteem, this in turn may lead to adolescents' maladjustment.

Additionally, Liu and Xia [54•] found that T1 interpersonal flexibility—defined as the tendency to deal with interpersonal events contingently and flexibly—predicted T2 perceived social support (i.e., 6 months later). People with high interpersonal flexibility tend to selectively attend to the positive interpersonal information, and they consequently experience their environment as more supportive. Therefore, experiencing the environment as benevolent may increase self-esteem, allowing individuals to benefit more from this protective factor.

Interestingly, another study found that social support buffered resource loss. Namely, the results indicated that (a) resource loss only affected less supported survivors and (b) more family support was associated with lower severity of PTS symptoms, albeit only in those survivors who had medium or lower self-efficacy beliefs. This suggests that low levels of self-efficacy can be compensated by higher levels of family support, as receiving family support at T1 enabled survivors to feel more self-efficacious [41].

Conclusion

Acquiring a better understanding of the mechanism(s) behind social support holds great importance, from a therapeutic point of view. This is reflected in the effects of the Youth Leadership Program, a program that was established as a school community–university partnership after Hurricane Katrina and whose aim was to foster resilience by increasing post-disaster self-efficacy. Self-efficacy scores of students who participated in the YLP were significantly higher compared with the self-efficacy scores of students who did not participate. This intervention revealed a significant self-efficacy by trauma symptoms within-subject effect, such that decreases in trauma symptoms were contingent on gains in self-efficacy. Moreover, this interaction effect was exhibited for both groups of students [55•].

Taking both the deterioration deterrence model and the social–ecological model into consideration, there is a need for intervention programs that are aimed at assisting the individuals from various aspects of life who provide children and adolescents with support. Garfin and colleagues [56] conducted a study on 2nd-grade students from nine different schools, all of which provide government-run mental health intervention programs. They found that, approximately 9 months following the 2010 Chilean earthquake, children’s self-reports of characteristics of their home environment (e.g., conflict with their caregiver, availability or not on the part of the caregiver to discuss the earthquake) were positively associated with PTS symptoms. In addition, higher ongoing earthquake-related worry was shown to be associated with children’s perceptions of their caregiver’s unavailability to discuss the earthquake. However, participation in their school’s government-run

mental health intervention was associated with children having significantly lower earthquake-related worry. Moreover, participation seemed to protect at-risk youth from elevated PTS symptomatology [56]. In another study, it was found that, among 11- to 14-year-old Palestinian students, students who were randomly assigned (by class) to the intervention condition, rather than to the wait-list control condition, reported significant decreases in PTSD, grief, and depression. The control students, on the other hand, reported only small mean reductions for traumatic grief and mental health difficulties, reductions of 0.18 and 0.24, respectively [57]. The benefits of participating in an intervention program were also shown in a study in which Syrian refugee students living in Istanbul attended a group cognitive behavioral therapy (CBT) program delivered by trained teachers. After participating in the CBT program, not only did these students have lower mean anxiety scores than the baseline, but also their post-intervention PTSD total score revealed a significant improvement and a similar improvement was also observed in their intrusiveness and arousal symptoms [58].

Thus, given the positive impact that these types of intervention programs are shown to have, it is essential that the protective factors and mechanisms behind social support be further studied, so that researchers and practitioners may develop and implement appropriate interventions to help those who are most vulnerable: children and adolescents.

Compliance with Ethical Standards

Conflict of Interest Gil Aba, Stephanie Knipprath, and Golan Shahar each declare no potential conflicts of interest.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

References

Papers of particular interest, published recently, have been highlighted as:

- Of importance
- Of major importance

1. Pfefferbaum B, Noffsinger MA, Wind LH, Allen JR. Children’s coping in the context of disasters and terrorism. *J Loss Trauma*. 2014;9(1):78–97.
2. Silverman WK, La Greca AM. Children experiencing disasters: definitions, reactions, and predictors of outcomes. In: La Greca AM, Silverman WK, Vernberg EM, Roberts MC, editors. *Helping children cope with disasters and terrorism*. Washington, D.C.: American Psychological Association; 2002. p. 11–33.
3. Henrich CC, Shahar G. Effects of exposure to rocket attacks on adolescent distress and violence: a 4-year longitudinal study. *J Am Acad Child Adolesc Psychiatry*. 2013;52(6):619–27.

4. Pfefferbaum B, Weems CF, Scott BG, Noffsinger MA, Pfefferbaum RL, Varma V, et al. Research methods in child disaster studies: a review of studies generated by the September 11, 2001, terrorist attacks; the 2004 Indian Ocean tsunami; and Hurricane Katrina. *Child Youth Care Forum*. 2013;42(4):285–337.
5. Cohen S. Social relationships and health. *Am Psychol*. 2004;59(8): 676–84.
6. Hall BJ, Sou K, Chen W, Zhou F, Chang K, Latkin C. An evaluation of the buffering effects of types and sources of support on depressive symptoms among natural disaster-exposed Chinese adults. *Psychiatry*. 2016;79(4):389–402.
7. Wethington E, Kessler RC. Perceived support, received support, and adjustment to stressful life events. *J Health Soc Behav*. 1986;27(1):78–89.
8. Rook KS. Investigating the positive and negative sides of personal relationships: through a lens darkly? In: Spitzberg BH, Cupach WR, editors. *The dark side of close relationships*. Mahwah: Erlbaum; 1998. p. 369–93.
9. Cohen S, Hoberman HM. Positive events and social supports as buffers of life change stress. *J Appl Soc Psychol*. 1983;13(2):99–125.
10. Cohen S, Wills TA. Stress, social support, and the buffering hypothesis. *Psychol Bull*. 1985;98(2):310–57.
11. Henrich CC, Shahar G. Social support buffers the effects of terrorism on adolescent depression findings from Sderot, Israel. *J Am Acad Child Adolesc Psychiatry*. 2008;47(9):1073–6.
12. Gottlieb BH, editor. *Coping with chronic stress*. New York: Springer Science & Business Media; 2013.
13. Cummings EM, Goeke-Morey MC, Schermerhorn AC, Merrilees CE, Cairns E. Children and political violence from a social ecological perspective: implications from research on children and families in Northern Ireland. *Clin Child Fam Psychol Rev*. 2009;12(1): 16–38.
14. Bronfenbrenner U. Ecological models of human development. In: *International encyclopedia of education*, vol. 3. 2nd ed. Oxford: Elsevier; 1994.
15. Dubow EF, Huesmann LR, Boxer P. A social-cognitive-ecological framework for understanding the impact of exposure to persistent ethnic-political violence on children's psychosocial adjustment. *Clin Child Fam Psychol Rev*. 2009;12(2):113–26.
16. Comer JS, Kendall PC. Terrorism: the psychological impact on youth. *Clin Psychol-Sci Pr*. 2007;14(3):179–212.
17. Dubow EF, Boxer P, Huesmann L, Landau S, Dvir S, Shikaki K, et al. Cumulative effects of exposure to violence on posttraumatic stress in Palestinian and Israeli youth. *J Clin Child Adolesc Psychol*. 2012;41(6):837–44.
18. Fang L, Schiff M, Benbenishty R. Political violence exposure, adolescent school violence, and drug use: the mediating role of school support and posttraumatic stress. *Am J Orthop*. 2016;86(6):662–70. **This cross-sectional study found that both PTSD and school support mediate the association between exposure to political violence and risk behavior of adolescents, although the mediation pattern was slightly different for Jewish vs. Arab participants.**
19. Cummings EM, Taylor LK, Goeke-Morey MC, Shirlow P, Cairns E. Relations between political violence and child adjustment: a four-wave test of the role of emotional insecurity about community. *Dev Psychol*. 2013;49(12):2212–24.
20. Zerach G, Tam E. The relationships between family functioning and attachment orientations to post-traumatic stress symptoms among young adults who were evacuated from Gaza Strip settlements as adolescents. *Anxiety Stress Coping*. 2016;29(2):153–72.
21. United Nations Children's Fund. *Machel study 10-year strategic review: children and conflict in a changing world*. New York: Office of the Special Representative of the Secretary-General for Children and Armed Conflict; 2009.
22. Cummings EM, Taylor LK, Merrilees C, Goeke-Morey M, Shirlow P. Emotional insecurity in the family and community and youth delinquency in Northern Ireland: a person-oriented analysis across five-waves. *J Child Psychol Psychiatry*. 2016;57(1):47–54.
23. Geronimus AT, Hicken M, Keene D, Bound J. "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *Am J Public Health*. 2006;96(5):826–33.
24. Carrola JE, Gruenewald TL, Taylor SE, Janicki-Deverts D, Matthews KA, Seeman TE. Childhood abuse, parental warmth, and adult multisystem biological risk in the Coronary Artery Risk Development in Young Adults study. *Proc Natl Acad Sci U S A*. 2013;110(42):17149–53.
25. Brody GH, Miller GE, Yu T, Beach SR, Chen E. Supportive family environments ameliorate the link between racial discrimination and epigenetic aging: a replication across two longitudinal cohorts. *Psychol Sci*. 2016;27(4):530–41.
26. Barile JP, Grogan KE, Henrich CC, Brookmeyer KA, Shahar G. Symptoms of depression in Israeli adolescents following a suicide bombing: the role of gender. *J Early Adolesc*. 2012;32(4):502–15.
27. Dubow EF, Boxer P, Huesmann LR, Shikaki K, Landau S, Gvirsman SD, et al. Exposure to conflict and violence across contexts: relations to adjustment among Palestinian children. *J Clin Child Adolesc Psychol*. 2009;39(1):103–16.
28. Brookmeyer KA, Henrich CC, Cohen G, Shahar G. Israeli adolescents exposed to community and terror violence: the protective role of social support. *J Early Adolesc*. 2011;31(4):577–603.
29. Dubow EF, Huesmann L, Boxer P, Landau S, Dvir S, Shikaki K, et al. Exposure to political conflict and violence and posttraumatic stress in Middle East youth: protective factors. *J Clin Child Adolesc Psychol*. 2012;41(4):402–16.
30. Shahar G, Henrich CC. Perceived family social support buffers against the effects of exposure to rocket attacks on adolescent depression, aggression, and severe violence. *J Fam Psychol*. 2016;30(1):163. **This article found that perceived family social support had the most beneficial stress-buffering effects on depression and violence following exposure to political violence.**
31. Shahar G, Cohen G, Grogan KE, Barile JP, Henrich CC. Terrorism-related perceived stress, adolescent depression, and social support from friends. *Pediatrics*. 2009;124(2):e235–40.
32. Yearwood K, Vliegen N, Chau C, Corveleyn J, Luyten P. When do peers matter? The moderating role of peer support in the relationship between environmental adversity, complex trauma, and adolescent psychopathology in socially disadvantaged adolescents. *J Adolesc*. 2019;72:14–22.
33. O'Callaghan P, Branham L, Shannon C, Betancourt TS, Dempster M, McMullen J. A pilot study of a family focused, psychosocial intervention with war-exposed youth at risk of attack and abduction in north-eastern Democratic Republic of Congo. *Child Abuse Negl*. 2014;38(7):1197–207.
34. Cummings EM, Goeke-Morey MC, Merrilees CE, Taylor LK, Shirlow P. A social-ecological, process-oriented perspective on political violence and child development. *Child Dev Perspect*. 2014;8(2):82–9.
35. Taylor LK, Merrilees CE, Cairns E, Shirlow P, Goeke-Morey M, Cummings EM. Risk and resilience: the moderating role of social coping for maternal mental health in a setting of political conflict. *Int J Psychol*. 2013;48(4):591–603.
36. Boxer P, Huesmann R, Dubow EF, Landau SF, Dvir Gvirsman S, Shikaki K, et al. Exposure to violence across the social ecosystem and the development of aggression: a test of ecological theory in the Israeli-Palestinian conflict. *Child Dev*. 2013;84(1):163–77.
37. Cummings EM, Schermerhorn AC, Merrilees CE, Goeke-Morey MC, Shirlow P, Cairns E. Political violence and child adjustment in Northern Ireland: testing pathways in a social-ecological model including single- and two-parent families. *Dev Psychol*. 2010;46(4): 827–41.

38. Pfefferbaum B, Jacobs AK, Griffin N, Houston B. Children's disaster reactions: the influence of exposure and personal characteristics. *Curr Psychiatry Rep*. 2015;17(7):56.
39. La Greca AM, Silverman WK, Lai B, Jaccard J. Hurricane-related exposure experiences and stressors, other life events, and social support: concurrent and prospective impact on children's persistent posttraumatic stress symptoms. *J Consult Clin Psychol*. 2010;78(6):794–805.
40. Martin NC, Felton JW, Cole DA. Predictors of youths' posttraumatic stress symptoms following a natural disaster: the 2010 Nashville, Tennessee, flood. *J Clin Child Adolesc Psychol*. 2016;45(3):335–47.
41. Warner L, Gutiérrez-Doña B, Villegas Angulo M, Schwarzer R. Resource loss, self-efficacy, and family support predict posttraumatic stress symptoms: a 3-year study of earthquake survivors. *Anxiety Stress Coping*. 2015;28(3):239–53.
42. Ponnampuruma T, Nicolson NA. The relative impact of traumatic experiences and daily stressors on mental health outcomes in Sri Lankan adolescents. *J Trauma Stress*. 2018;31(4):487–98.
43. Felix E, Kaniasty K, You S, Canino G. Parent-child relationship quality and gender as moderators of the influence of hurricane exposure on physical health among children and youth. *J Pediatr Psychol*. 2015;41(1):73–85.
44. Felix E, Afifi T, Kia-Keating M, Brown L, Afifi W, Reyes G. Family functioning and posttraumatic growth among parents and youth following wildfire disasters. *Am J Orthop*. 2015;85(2):191–200.
45. Meyerson DA, Grant KE, Carter JS, Kilmer RP. Posttraumatic growth among children and adolescents: a systematic review. *Clin Psychol Rev*. 2011;31(6):949–64.
46. Wheaton B. Models for stress-buffering functions of coping. *J Health Soc Behav*. 1985;26(4):352–64.
47. Norris FH, Kaniasty K. Received and perceived social support in times of stress: a test of the social support deterioration deterrence model. *J Pers Soc Psychol*. 1996;71(3):498–511.
48. Banks D, Weems C. Family and peer social support and their links to psychological distress among hurricane-exposed minority youth. *Ame J Orthopsychiatry*. 2014;84(4):341–52.
49. Bandura A. *Social learning theory*. Englewood Cliffs: Prentice-hall; 1977.
50. McGuire AP, Gauthier JM, Anderson LM, Hollingsworth DW, Tracy M, Galea S, et al. Social support moderates effects of natural disaster exposure on depression and posttraumatic stress disorder symptoms: effects for displaced and nondisplaced residents. *J Trauma Stress*. 2018;31(2):223–33.
51. Betancourt TS, Abdi S, Ito BS, Lilienthal GM, Agalab N, Ellis H. We left one war and came to another: resource loss, acculturative stress, and caregiver-child relationships in Somali refugee families. *Cult Divers Ethn Minor Psychol*. 2015;21(1):114–25.
52. Pagorek-Eshel S, Finklestein M. Family resilience among parent-adolescent dyads exposed to ongoing rocket fire. *Psychol Trauma*. 2019;11(3):283–91. **This article supports the argument that different personality attributes may be one of the underlying mechanisms to the protective effects of social support.**
53. Lee JY, Kim SW, Bae KY, Kim JM, Shin IS, Yoon JS. Factors associated with post-traumatic stress symptoms among adolescents exposed to the Sewol ferry disaster in Korea. *Psychiatry Res*. 2017;256:391–5.
54. Liu J, Xia LX. The direct and indirect relationship between interpersonal self-support traits and perceived social support: a longitudinal study. *Curr Psychol*. 2016;37(1):73–81. **While the authors' findings lend support to the notion of the relational model of interpersonal traits and perceived social support existing across cultures, they also suggest that indigenous interpersonal traits may uniquely affect perceived social support.**
55. Osofsky H, Osofsky J, Hansel T, Lawrason B, Speier A. Building resilience after disasters through the Youth Leadership Program: the importance of community and academic partnerships on youth outcomes. *Prog Community Health Partnersh*. 2018;12(1S):11–21. **This study highlights the need and importance of implementing post-disaster intervention programs to aid in fostering resilience among adolescents.**
56. Garfin DR, Silver RC, Gil-Rivas V, Guzmán J, Murphy JM, Cova F, et al. Children's reactions to the 2010 Chilean earthquake: the role of trauma exposure, family context, and school-based mental health programming. *Psychol Trauma*. 2014;6(5):563–73.
57. Barron IG, Abdallah G, Smith P. Randomized control trial of a CBT trauma recovery program in Palestinian schools. *J Loss Trauma*. 2013;18(4):306–21.
58. Gormez V, Kılıç H, Oregul AC, Demir MN, Mert EB, Makhouta B, et al. Evaluation of a school-based, teacher-delivered psychological intervention group program for trauma-affected Syrian refugee children in Istanbul, Turkey. *Psychiat Clin Psych*. 2017;27(2):125–31.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.