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Altruism Born of Suffering: The Roots of Caring and Helping After Victimization and Other Trauma

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Research on altruism has focused on its positive roots, whereas research on the effects of victimization and suffering has focused on aggression and difficulties in functioning. However, anecdotal evidence, case studies, and some empirical research indicate that victimization and suffering can also lead people to care about and help others. This article examines the relation of "altruism born of suffering" to resilience and posttraumatic growth, and proposes potentially facilitating influences on altruism born of suffering during, after, and preceding victimization and trauma. These include experiences that promote healing, understanding what led harm doers to their actions, having received help and having helped oneself or others at the time of one's suffering, caring by others, and prosocial role models. We suggest psychological changes that may result from these influences and lead to altruistic action: strengthening of the self, a more positive orientation toward people, empathy and belief in one's personal responsibility for others' welfare. The article critically reviews relevant research, and suggests future research directions and interventions to promote altruism born of suffering. Given the amount of violence between individuals and groups, understanding how victims become caring rather than aggressive is important for promoting a more peaceful world.

Keywords: altruism, victimization, caring, resilience, posttraumatic growth

Experiencing violence often shakes the very foundations of a person's beliefs and can create, in individuals and whole communities, a sense of living in a meaningless and threatening world. Many individuals (and groups), feeling vulnerable and seeing other people as dangerous, become hostile and aggressive. Others show difficulties in functioning, or mental health problems. Yet some who have suffered from violence reclaim meaning and turn toward others, becoming caring and helpful, a phenomenon that has been referred to as *altruism born of suffering* (ABS; Staub, 2003, 2005). In this article we discuss this phenomenon with a focus on experiences and related psychological processes as well as the changes they bring about that may transform past suffering into altruism.

Over the past 40 years, a substantial body of research on helping behavior and altruism has focused almost exclusively on the positive roots of prosocial feelings, values, and actions. This research has examined how a loving, supportive environment and positive guidance can lead to personal characteristics and psychological processes that give rise to helping (e.g., Eisenberg, Fabes & Spinrad, 2006; Staub, 1979, 2005). Conversely, research on the effects of trauma and victimization until recently has focused on the enduring negative consequences of such experiences. Studies with victims of physical or sexual abuse, and of ethno-political violence have shown that these experiences often give rise to violent behavior, withdrawal, social maladjustment, and a host of

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clinical problems such as depression and posttraumatic stress disorder (Gilligan, 1996; Herman, 1992; McCann & Pearlman, 1990; Widom, 1989).

In actuality, however, only a relatively small percentage of those who have had traumatic experiences develop PTSD or other severe symptoms of trauma (Bonano, 2004; Tedeschi, 1999). Moreover, theory and research also has come to focus on resilience after trauma, and on posttraumatic growth (PTG). This literature also mentions empathy and altruism as potential growth outcomes (see Tedeschi, Park, & Calhoun, 1998). The concept of an alternative "survivor mission" also has been proposed, referring to a deep commitment by victims of violence to prevent future suffering (Lifton, 1967, 2003). Moreover, case studies (O'Connell Higgins, 1994), autobiographical writings (Noble & Coram, 1994), the history of important public figures including Nobel Peace Laureates Eli Wiesel and the Dalia Lama, anecdotal evidence (e.g., letters from some of the over 7,000 people who have completed a questionnaire on "Values and Helping" published by the magazine *Psychology Today;* Staub, 1989b, 2003), as well as limited empirical evidence that we review below indicate that some people who have suffered do act in caring, loving, altruistic ways. In letters responding to the Values and Helping questionnaire, some people specifically noted that they want to help others because of the suffering they had endured.

People suffer for many reasons. Some suffering is simply part of life, such as grief due to the death of loved ones, or harm caused by natural disasters. Other suffering is the result of human agency, but without the intention to cause harm and without harm doers being blameworthy, such as in many divorces and car accidents. However, often suffering is the result of intentional human acts. People are victimized by rape or physical assault. Many children are persistently victimized in their families, through physical and emotional neglect or acts that create physical, sexual, or emotional harm. Many people are also greatly victimized as members of identity groups that become the target of devaluation, discrimination, persecution, and violence, including extreme violence such as genocide. Although we are concerned with altruism arising out of the whole range of human suffering, we will focus especially on altruism following persistent, intentional victimization. This is because even when it does not lead to significant trauma symptoms, intentional victimization is likely to create psychological wounds and transformations that turn people away from, and at times against, others. It is likely to make people feel diminished and vulnerable, and to see other people and the world as dangerous. This can lead them to perceive others' actions as threatening or hostile, and to respond with "defensive violence," even when aggressive self-defense is unnecessary (Dodge, 1993; Staub, 1998; Staub & Pearlman, 2006). Victims then become perpetrators, and a cycle of violence and revenge can evolve (Mamdani, 2002), especially as people's violent actions lead to changes in them and increase the likelihood that they commit further violence (Rhodes, 1999; Staub, 1989a). This distinction between the impact of victimization and other types of suffering is also supported, for example, by research in which

> childhood sexual abuse, childhood physical abuse, adult's physical abuse, and domestic violence were all significant predictors of child abuse potential in adult caregivers . . . . On the other hand, exposure to disasters, experiencing motor vehicle accidents, and the death of a loved one were not significant predictors of child physical abuse potential. (Craig & Sprang, 2007, p. 302)

Many people around the world endure persistent harm doing and violence. If a large percentage of them developed in the way described here, we would have to despair for the future of humanity. Our interest in understanding the development of altruism born of suffering arose from our concern with reducing violence. The psychological processes that give rise to altruism tend to make aggression less likely (Feshbach & Feshbach, 1969; Spielman & Staub, 2000; Staub, 2003). Moreover, through ABS, trauma can be transformed not only into a personal asset, but into a community asset (see Bloom, 1998). Thus, developing theory and research on altruism born of suffering will not only expand our knowledge about the roots of altruism, and contribute to the understanding of resilience and PTG. It can also lead to practices and interventions that promote altruism born of suffering, and thereby reduce violence between individuals and groups while enhancing caring, helping others in need, and harmonious relations.

The article aims to address the following questions:

1. What are the experiences, and the resulting psychological changes, through which people who have suffered, especially from significant victimization, may come to care about and help others?

2. How might ABS be promoted?

3. What are the limitations of previous research, and what kind of future research is needed to study ABS?

We attempt to answer these questions in two major sections of the article. In doing so we draw on research in clinical psychology, especially on resilience and PTG, research in developmental and social psychology on helping behavior, and on work in postconflict settings with survivors of mass victimization (particularly in Rwanda: Staub, 2006; Staub & Pearlman, 2006; Staub, Pearlman, Gubin, & Hagengimana, 2005). In the first part, we discuss the conceptual relations between trauma, resilience, PTG, and ABS. We provide a brief characterization of the research on trauma, resilience, and PTG, to differentiate and define the concept of ABS. We then review the relevant evidence of prosocial outcomes both at the time of and in the aftermath of suffering, which provides empirical support of the ABS concept. In the second major part of the article, we discuss the experiences and processes that we expect to promote ABS. These include (a) experiences that promote a positive cognitive and emotional orientation to self and others (healing after suffering, which includes truth and justice processes; understanding the origins of the perpetrator's actions), (b) the supportive and guiding influence of others (help received at the time of victimization; support and loving connections; altruistic role models); (c) the individual's own actions (taking action in one's own or others' behalf in the face of victimization; and helping others in the aftermath, which may become an avenue to personal change); and (d) psychological processes that presumably arise from these experiences and give rise to ABS, such as increased awareness of suffering, empathy, perceived similarity and identification with other victims, and a greater sense of responsibility to prevent their suffering. Methodological issues and requirements and future research are discussed in both parts of the article and summarized in the conclusion.

Trauma, Resilience, PTG, and ABS

The Negative Impact of Family and Political Violence

There is a considerable body of research and clinical literature detailing the negative impact of trauma. Its effects are well documented and include posttraumatic stress disorder (PTSD), probably the most commonly studied effect (see the *Diagnostic and Statistical Manual of Mental Disorders–IV;* American Psychiatric Association, 1994), a defensive, fearful stance toward the world (McCann & Pearlman, 1990), and negative views of the self as helpless and unworthy (Herman, 1992; Janoff-Bulman, 1992). When people are the objects of harm doing, normal human assumptions that the world is benevolent and meaningful are shattered (Janoff-Bulman, 1992). Basic human needs for security, connection and trust, positive identity, comprehension of reality, and feelings of effectiveness and control are deeply frustrated (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995; Staub, 1998, 2003). Particularly in human-induced trauma, there can be an overriding feeling of betrayal, a sense of abandonment, and a view of people as malevolent and the world a dangerous place (Dodge, 1993; Martens, 2005).

Consequently, having been the target of harmful actions often leads to the need for defense, and can motivate revenge. Thus, past victimization can fuel violence (Dodge, Bates, & Pettit, 1990), whether people have been victimized as individuals or as group members. Even the experience of ostracism often leads to aggression and decreased prosocial behavior (Twenge & Baumeister, 2005). Archival studies show that most school shooters in the United States had been bullied by peers (Leary, Kowalski, Smith, & Phillips, 2003). Among violent criminals, the great majority had experienced significant victimization (Gilligan, 1996; Rhodes, 1999; Widom, 1989).

The experience of violence can make people react more readily to perceived threat. Boys who had been harshly treated tended to see actions by others as hostile when their peers did not, and responded to perceived provocation with aggression (Dodge, 1993). The same appears to be true of people who have experienced discrimination and violence because they are members of an ethnic, religious, political, or other identity group. Whereas varied experiences can mitigate this, in the face of new threats individuals and groups with such past experiences are more likely to engage in preemptive, violent "self-defense," thereby becoming perpetrators. Thus, past victimization appears to be one of the influences that contribute to the evolution of mass violence (Mamdani, 2002; Rouhana & Bar-Tal, 1998; Staub, 1998; Staub & Pearlman, 2006; Volkan, 1998).

Resilience

However, some individuals who have had adverse and traumatic experiences exhibit "positive adaptation within the context of significant adversity," which has been defined as *resilience* (Luthar, Cicchetti, & Becker, 2000, p. 543; see also Masten, 2001; Masten & Coatsworth, 1998). Research on resilience has identified numerous protective factors that interact with risk factors to buffer their effect (Christiansen & Evans, 2005), and enable the development of "behaviorally manifested social competence" (Luthar & Cicchetti, 2000, p. 858). In theoretical writings on resilience, altruism and prosocial behavior are also listed among the proposed characteristics of resil-

ient, socially competent individuals (Charney, 2004; Southwick, Vythilingam, & Charney, 2005).

Three categories of variables have been identified in the literature as protective factors contributing to resilience (e.g., Luthar & Cicchetti, 2000; Werner & Smith, 1992). First category: *Individual characteristics* include high self-esteem, internal locus of control, self-efficacy**,** social expressiveness, easy-going temperament, optimism and humor, high problem-solving and learning skills, and good intellectual functioning, which has been identified as an important moderator of risk for antisocial and the occurrence of prosocial behavior (see Masten & Coatsworth, 1998; Southwick et al., 2005; Werner & Smith, 1992). Because these characteristics are assessed in individuals who are identified as resilient, some of them may be the result of experiences that promote resilience, rather than preexisting protective factors. Moreover, in addition to any direct protective influence, some personal characteristics, such as positive temperament, may attract support and create positive experiences during or after traumatic events. The second category: *Family characteristics* promoting resilience include positive parenting practices, characterized by warmth and consistent inductive discipline (Serbin & Karp, 2004), parental monitoring (Christiansen & Evans, 2005), a close bond with at least one competent caregiver (Rutter, 1990), as well as a family that encourages perspective-taking and empathy (Eisenberg et al., 2006). The third category: *Characteristics of the wider social environment*, in particular systems and individuals providing support. They include bonds to prosocial adults outside the family and connections to prosocial organizations (Masten & Coatsworth, 1998; Werner & Smith, 1992), positive peer influence (Werner, 1987), and neighborhood cohesion (Christiansen & Evans, 2005). For example, a single person can help by organizing children for regular soccer games; the Big Brother–Big Sister programs have promoted better functioning in neglected children (Butler, 1997).

The above factors may help people cope with adverse events and limit their negative impact (Westphal & Bonano, 2007), or they may help transform their meaning and change the negative psychological orientation to self and others that often arises from adverse experiences. However, the definition of resilience is minimalist, focusing on normal functioning and the absence of problems in populations at risk for varied reasons, ranging from poverty, to social disorganization and violence. The literature mentions prosocial behavior as a possible, but not as a necessary defining characteristic of resilient individuals. In contrast, central to our concern is unselfish caring and helping by individuals who have experienced substantial suffering, especially through victimization.

Altruism requires a focus beyond the self. It is reasonable to assume that to develop altruism in the context or aftermath of suffering experiences beyond those that foster resilience are necessary. Thus, the experiences we propose as conducive to ABS overlap with, but also extend beyond those that have been identified as promoting resilience.

Posttraumatic Growth (PTG)

As already noted, an emerging field of theory and research has explored personal growth following trauma (see Hobfoll et al., 2007; Linley & Joseph, 2004; Tedeschi et al., 1998). When positive changes occur, they tend to go together with negative effects of traumatic experience—which is likely to be also true of altruism

born of suffering. Seemingly guided by the view that the rebuilding of disrupted schemas is essential to healing from trauma (Janoff-Bulman, 1992; Tedeschi, 1999), the research on PTG has focused on cognitive changes, especially in three domains: perception of self, relationship to others, and philosophy of life (Tedeschi & Calhoun, 1995; Tedeschi et al., 1998).

PTG is assumed to depend not on the nature of the events themselves, but on how people appraise or interpret them. The perception of threat to life, an existential struggle surrounding the events, and their assessment that creates meaning—of experiences that appear meaningless (Herman, 1992; Pearlman & Saakvitne, 1995; Pennebacker, 2000)—are all assumed essential to posttraumatic growth (Westphal & Bonano, 2007). Growth-producing assessment mostly has been attributed to personal characteristics similar to those promoting resilience mentioned above, such as self-confidence, locus of control, and optimism (Tedeschi, 1999; Woodward & Joseph, 2003). Although the role of experiences that can transform the meaning of past suffering has not been a focus of attention, researchers have noted the importance of receiving and providing social support. In one interview study, traumatized people reported that experiences such as the role of a caring teacher, working with and helping children, or other connections that made them feel nurtured, liberated, or validated, were sources of growth (Woodward & Joseph, 2003).

Among other authors, Tedeschi et al. (1998) identified compassion and altruism as likely aspects of PTG:

> when people recognize their own vulnerability, they may be better able to feel compassion and that some trauma may be a kind of empathy training. Out of this . . . may come a need to help . . . . This is likely to occur after certain time has passed. (p. 12f)

From the research mentioned above on aggression after victimization it is apparent, however, that for many people time alone does not lead to compassion and the desire to help others. In this article we propose that certain experiences that occur after victimization and other trauma, experiences at the time of trauma, as well as experiences preceding trauma, will jointly contribute to the growthful effects we refer to as ABS.

PTG is a relatively new area of research and theory, and there are complexities and inconsistencies in research findings (Westphal & Bonano, 2007). For example, although the majority of individuals who have experienced stressful life events report positive changes, in one study such self-reports were not correlated with a greater sense of well-being (Frazier & Kaler, 2006). Moreover, in a study of Jews' and Arabs' reactions to violence and terrorism in Israel during the second Intifada, reports of PTG were associated with heightened PTSD (Hobfoll et al., 2007). This relationship was especially strong for people with low self-efficacy. PTG was also associated with greater "ethnocentrism, authoritarianism, and support for extreme political violence" (Hobfoll et al., 2007, p. 352). These researchers suggested that the positive cognitions people reported on PTG questionnaires may be defensive in nature. However, the ongoing threat and danger during the Intifada may have also contributed to their findings (Butler, 2007; Tedeschi, Calhoun, & Cann, 2007).

Hobfoll et al. (2007) also suggested that genuine growth only occurs when cognitive changes are transformed into action. They studied Israeli settlers in Gaza who, presumably guided by their beliefs, chose to stay and oppose their evacuation when the settlements were demolished. In their case, higher levels of PTG were associated with reduced PTSD symptoms. It is possible that choosing to face adversity, and the strong beliefs that motivated this choice, jointly promoted PTG and lessened PTSD. Thus, motivations, the actions they give rise to, and the meanings attached to them may all be crucial in determining whether growthful outcomes arise from seemingly stressful and potentially dangerous experiences. Limited actions that can have positive psychological meaning are often possible even under overwhelming conditions. For example, in German extermination camps slave laborers could help others through small acts, and at the very least it helped them maintain their feeling of dignity (Frankl, 1958/1984; Kahana, Kahana, Harel, & Segal, 1985).

In contexts in which action is not possible, the way we interpret and assign meaning to events can be of profound significance by itself (Tedeschi et al., 2007). However, it is important to note that although, for example, empathy may change a person's psychological experience of events and also make aggressive behavior less likely, it has a quite different meaning (and impact) than helpful action. Action may often be a hallmark of true change as well as promote further change as individuals learn by doing (Eisenberg et al., 2006; Staub1979, 1989a).

Conceptual Explorations: Resilience, PTG, and ABS

Although ABS overlaps with resilience and PTG, we regard it as an important concept and domain of theory and research in its own right. It is distinctive with regard to at least three foci: its focus on victimization (i.e., intentional harm doing), on the prevention of violence, and on the generation of positive psychological changes that lead to helpful action. The extent to which resilient individuals exhibit ABS has not been examined in the literature; neither has the question whether those who do exhibit ABS have had experiences different from people who do not. PTG theory and research, although noting the importance of social support, has focused on personal characteristics that lead to interpretations that bring about positive cognitive changes after traumatic events. In this article we emphasize certain social experiences as a source of ABS; these may also be important to promote PTG.

Thus, our theoretical focus is on experiences after, during, and to some degree before suffering that foster the psychological orientations that, under appropriate eliciting conditions, give rise to altruism. This involves change in the orientations to self (Karylowski, 1976) and others (Staub, 2003) that tend to result from victimization. We are concerned with two types of changes. First, people who have been victimized must come to see other human beings in a positive light, so that what happens to them matters. They also have to experience the self as strong enough so that attention and care can shift from the self to others in need; and feel empowered enough to act on others' behalf. These processes are likely preconditions for a second type of change, namely increased perspective-taking and empathy (Eisenberg & Miller, 1987; Eisenberg et al., 2006) and increase in "prosocial value orientation" (Staub, 1978, 2003, 2005; see also Feinberg, 1978; Spielman & Staub, 2000). These are important sources of the motivation to act in others' behalf.

In considering ABS it is reasonable to distinguish conceptually between preexisting altruism that is maintained despite suffering and altruism that arises after suffering. This is a meaningful but

empirically difficult distinction. Certain experiences preceding victimization, such as nurturant caretaking and positive human connections, may both contribute to the initial development of altruism, and protect people from pervasive psychological aftereffects of victimization, thereby helping to maintain altruism. However, instead of being maintained through these protective factors, preexisting altruism may also be renewed or recreated as a result of the experiences—during or subsequent to victimization—that we propose as contributors to ABS. To assess altruism despite suffering requires researchers to document altruism preceding the suffering, through information gathered from people in a person's life space. To understand how altruism is maintained or renewed, researchers might compare individuals who have experienced similar traumatic events and had been altruistic before, but differ in posttrauma altruism. Do they also differ in the extent to which they had experiences that we propose might contribute to both the renewal and generation of altruism?

Empirical Support for ABS

Research on ABS is difficult to conduct because suffering cannot be experimentally imposed to study its effects. It is also difficult to plan longitudinal studies comparing behavior before and after suffering because suffering cannot be easily predicted. When it can be, the focus has to be on prevention. Nevertheless, we will suggest some ways to study temporal changes in individuals who are undergoing significant adversity. In addition to the inherent limitations of conducting research on this phenomenon, a fair number of relevant studies have additional methodological limitations, partly because most of the research was not explicitly designed to examine ABS. Thus, the relevant findings we review were often incidental in research addressing other questions.

A good number of the studies are correlational, lack control groups, and have small sample sizes. Even in more systematic studies, the data are often retrospective self-reports. Nonetheless, this body of research helps to identify some of the parameters of this important phenomenon and provides encouraging initial support. We will highlight it when methodological strengths give studies more credibility, and propose research questions and methodologies for future research, especially in the course of evaluating interventions to promote ABS.

One group of studies reviewed below demonstrates helping behavior at the time of and in response to adverse conditions, including both natural disasters and human-induced suffering. Although our primary concern is altruism in the aftermath of suffering, these studies are relevant because one of the experiences we propose as promoting ABS is helping oneself or others at the time of suffering. Research on "learning by doing" (see below) demonstrates that people who have helped under situational influences are subsequently more likely to help. We also review another group of studies that shows helping after victimization and suffering. This body of research demonstrates the phenomenon of ABS, but lacks information about experiences that may have promoted it. We then focus on the experiences we consider important to promote ABS, along with the resulting psychological changes we expect, and review relevant research.

Altruism and Prosocial Behavior at the Time of Suffering

Human caused suffering. Several studies have documented how human beings who are undergoing harm inflicted by others, such as genocide, war, or terrorist attacks, exhibit helpful behavior. In interviews, Holocaust survivors reported that "helping was a prevalent, potent, and essential aspect of the experience of survivors, one which emerged as a necessary condition of their survival" (Kahana et al., 1985, p. 363). Among a sample of 100 Holocaust survivors, 82% reported that they had helped other prisoners in concentration camps. They reported sharing food and clothing and providing emotional support, a large majority describing their motive as altruistic (Kahana et al., 1985). In a large interview study of civilians from 12 war-torn countries, although the researchers did not ask about helping behavior, a systematic content analysis of the interviews revealed many reports of altruistic and prosocial behavior, even toward members of the enemy group (Leaning & Briton, 2004). The motivations respondents described were classified as group affiliation, perceived self-efficacy, the hope for reciprocity, and the desire to maintain moral identity in war.

Natural disasters and other nonhuman caused suffering. "Increased compassion" was reported as a frequent growth outcome among those who have experienced a spinal-cord injury (McMillen & Cook, 2003), or other illnesses or bereavement (McMillen & Fisher, 1998). In these studies, the data consists of self-reported feelings, not actions. High levels of altruism and prosocial behavior have also been documented at times of natural disasters. Some scholars have written about the emergence of an "altruistic community" in the aftermath of hurricanes, floods, or earthquakes, characterized by "higher than usual levels of solidarity, fellowship, and altruism" (Kaniasty & Norris 1995b, p. 94). A structured interview study with a sample of 500 victims of Hurricane Hugo and an equally large control group found that victims reported more prosocial behavior than nonvictims, in particular tangible support (Kaniasty & Norris, 1995a).

The research we reviewed on helping at the time of suffering has not assessed whether long term changes follow from people helping others, or from experiencing mutual help. However, given that people helped at a time when their own need might have led them to focus on themselves, and that helpful actions tend to increase later helping (Eisenberg et al., 2006; Staub, 1979, 2003), it is likely that their actions would promote subsequent altruism.

Altruism and Prosocial Behavior in the Aftermath of Victimization

Because the studies in this section provide information about altruism after victimization, and because their methodologies include control groups or a longitudinal design, they provide a stronger basis for the interpretation that they demonstrate ABS. Although some studies assess motivation, often it is on the basis of post hoc self-reports.

Studies with control groups. Control groups make it possible to compare the extent to which previously victimized and nonvictimized people help. In a correlational, cross-sectional study, undergraduate students in the United States were asked about their own past victimization and suffering. Those who reported that they had suffered from interpersonal violence, group-based violence, or

a natural disaster reported significantly more feelings of empathy for, as well as personal responsibility to help victims of the Tsunami in South East Asia than a control group of students who reported no such suffering (Vollhardt & Staub, 2008, Study 2). They also volunteered to help more, by signing up to join a Tsunami relief group and collect money.

That the average helping by those who suffered in varied ways was greater than by those who have not suffered suggests that ABS may be more common than would be expected on the basis of the literatures on victimization and its effects. In another correlational study that examined prosocial behavior in everyday life, students who had suffered from traumatic life events reported significantly more often than their peers who had not suffered that they participate in volunteer activities. The activities they participated in more tended to involve in direct contact with others in need (elderly, sick, disabled, homeless; Vollhardt & Staub, 2008, Study 2).

A structured interview study (Macksoud & Aber, 1996) explored the psychological adaptation of a sample of 224 Lebanese children, age 10 to 16 years, who had been directly affected by violence. They had been separated from parents, witnessed the intimidation of family members by militia forces, or had seen community members killed or injured. Contrary to the authors' expectations, these children scored higher on a self-report measure of prosocial behavior than children in a control group not directly affected by the violence.

Longitudinal studies. The assessment of change in altruistic attitudes or behaviors from before to after suffering is important as evidence of altruism born of suffering. It is rare however, that such information is available. In a study that was started prior to the war in the early 1990s in Croatia, teachers rated 5- and 6-year old children higher on a measure of prosocial behaviors (e.g., sharing sweets and toys or feeling sorry for other children in need) after a period in which the city was heavily targeted by air-raids, compared to before the war (Raboteg-Šaric, Žužul, & Keresteš 1994). In contrast, ratings of aggressive behavior had not changed. The researchers also included a group to control for developmental effects.

Explicit measures of motivation. Survivors of a terrorist attack in Israel reported that in their life after the attacks, "help[ing] those who feel pain like I do" (Kleinman, 1989, p. 53) reduced their survivor guilt and gave them new meaning in life. A number of studies have suggested a relationship between helping and past experiences of ostracism and social rejection. This has been referred to as *positive marginality* (Unger, 2000); and was found in interview studies with people working in organizations benefiting minority groups and refugees (Borshuk, 2004) as well as among rescuers of Jews during the Holocaust (London, 1970; Tec, 2003). In some of these studies the investigators drew conclusions about the relationship between past suffering and the motivation for helping. In others, helpers reported it. These retrospective studies do not, however, establish the actual motives at the time of helping.

Positive correlations between degree of suffering and prosocial behavior. In line with the altruism born of suffering hypothesis, at times of natural disasters greater suffering was associated with more helping of other victims, even when controlling for relevant variables such as network size, life events, race, sex, age, marital status, and education. Specifically, greater physical harm, material loss, and perceived life threat were associated with providing more tangible and informational support (Kaniasty & Norris, 1995b). Similarly, among a sample of 416 adults who had experienced various adverse life events, self-reported compassion was higher among participants who reported that they had experienced more upsetting and harmful events (McMillan & Fisher, 1998). In research conducted in the United States after 9/11, participants who reported higher stress reactions, that is, suffered more subjectively, also reported donating and volunteering more than those who reported less suffering (Schuster et al., 2001). Similarly, donating and volunteering after 9/11 were predicted by survivor guilt and grief, which can also be viewed as indicators of suffering (Wayment, 2004). These findings are correlational, and we cannot exclude the possibility that they are expressions of personal characteristics, such as greater sensitivity to stressful events and greater dispositional empathy, rather than suffering leading to more caring.

Experiences Promoting ABS

In the following, we discuss the conditions and experiences after victimization or other significant suffering that we regard as important in leading people to caring actions (see Figure 1), and note some ways to foster ABS. Just as experiencing a greater number of adverse conditions makes later psychological and behavioral problems more likely (e.g., Monroe & Simons, 1991), we assume that the greater the number and extensiveness of positive experiences before, at the time of, and in the aftermath of victimization, the more likely it is that ABS develops. The psychological changes that may result from these experiences include a change from vulnerability, mistrust, and the perception of others as dangerous to a stronger sense of self and seeing the world and other human beings in a more positive way. As these changes take place, one's own past suffering can become a source of intense empathy/sympathy for others in need, and of an increased prosocial orientation, a central aspect of which is a feeling of personal responsibility for others' welfare.

Traumatized people differ in the extent to which they have had experiences that foster psychological recovery after the trauma, or in contrast, experiences that exacerbate the negative impact of suffering. Because of victimization and preceding or subsequent experiences, some people may develop such an intensely defensive stance against a hostile world that they cannot recognize or use opportunities that might result in cognitive and emotional changes and are potentially healing (Martens, 2005; Staub, 2005).

Healing or Psychological Recovery After Intense Suffering

Healing from trauma is crucial for the development of ABS. It can open people to other ABS-promoting experiences, and lead to actions that further enhance ABS. A number of the ABS-promoting experiences we describe below that have other positive functions are also likely to contribute to healing. Among the experiences that can promote healing are therapy (Herman, 1992), including creative writing or writing about painful experiences (Pennebaker, 2000), finding social support and significant human connections (Kishon-Barash, Midlarsky, & Johnson, 1999), and learning about the causes and consequences of violence (Staub & Pearlman, 2006; Staub et al., 2005).
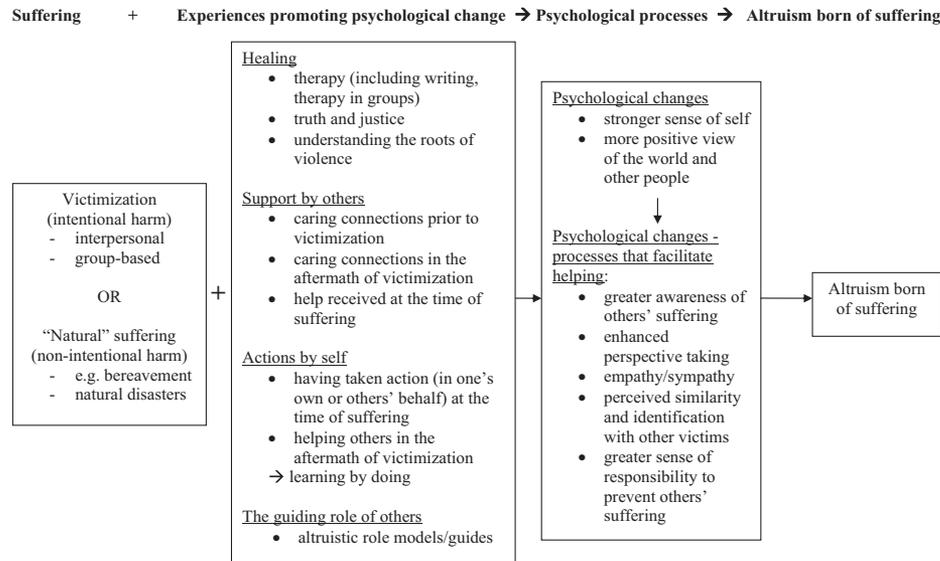
Suffering + **Experiences promoting psychological change** → **Psychological processes** → **Altruism born of suffering**

Victimization (intentional harm)
- interpersonal
- group-based

OR

"Natural" suffering (non-intentional harm)
- e.g. bereavement
- natural disasters

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Healing
- therapy (including writing, therapy in groups)
- truth and justice
- understanding the roots of violence

Support by others
- caring connections prior to victimization
- caring connections in the aftermath of victimization
- help received at the time of suffering

Actions by self
- having taken action (in one's own or others' behalf) at the time of suffering
- helping others in the aftermath of victimization
→ learning by doing

The guiding role of others
- altruistic role models/guides

Psychological changes
- stronger sense of self
- more positive view of the world and other people

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Psychological changes - processes that facilitate helping:
- greater awareness of others' suffering
- enhanced perspective taking
- empathy/sympathy
- perceived similarity and identification with other victims
- greater sense of responsibility to prevent others' suffering

Altruism born of suffering

Figure 1. Experiences and psychological changes leading to altruism born of suffering.

Although there may be exceptions, such as people who have been referred to as *repressors* (Bonano, 2004), engaging with memories of painful past experiences rather than avoiding them, and finding or creating meaning in the course of it, has been identified both by therapists (Herman, 1992; Pearlman & Saakvitne, 1995) and researchers (e.g., Janoff-Bulman, 1992; Pennebaker, 2000; Staub et al., 2005) as important aspects of healing. As people engage with their experiences, among other benefits they can come to believe that they themselves should not have been victimized and that other human beings should not be victimized either. Their painful experiences can acquire meaning by acting to prevent victimization and by helping people who have suffered or are suffering (Herman, 1992; Lifton, 2003; Staub, 2005).

Healing from trauma fosters the fulfillment of basic psychological needs that have been frustrated during periods of suffering. People's feeling of security, their belief in their ability to influence events, their self-concept, their feelings of connections to others, their sense of autonomy and choice, and their comprehension of reality and understanding of their place in the world (Staub, 1989a, 2003; see also Kelman, 1990; Maslow, 1968; Pearlman & Saakvitne, 1995) can all improve. As basic needs are fulfilled, the need for transcendence, that is, the need to focus beyond oneself, may emerge (Staub, 2003). Promoting others' welfare through altruistic actions may be one way this need can be fulfilled.

Some correlational studies have demonstrated a positive relationship between healing and altruism in traumatized and victimized populations. In a study of 100 Vietnam veterans, lower PTSD was associated with more altruistic intention to help (Kishon-Barash et al., 1999). In a study of Holocaust survivors, prosocial behavior was among the variables most highly correlated with well-being (Kahana, Harel, & Kahana, 1988).

Possible interventions. Huge numbers of people are victimized throughout the world, many of them through mass violence. Even if there were sufficient resources for individual therapy, healing in groups, promoted by shared activities, is likely to be more effective (Herman, 1992), especially when the culture is collectivist and the violence was experienced together with other group members (Staub & Pearlman, 2006). Healing and ABS may also be promoted by having people write about relevant experiences. They may start with emotionally less intense material, such as reading and then writing about other people's painful experiences, and continue at first with their own, less painful experiences. Positive reactions to the writing by others in the group can provide valuable support. People writing in groups and sharing what they have written has been a seemingly effective technique in working with disadvantaged groups (Chandler, 2002). Additional topics can be introduced in a controlled manner, relevant to other experiences that we discuss below, such as fostering understanding, and exposure to altruistic models.

Such interventions would also make systematic study of ABS possible. Control groups can be included of people who have not suffered, and of people who have suffered in a comparable way but have not received the intervention. Moreover, such interventions allow the study of the evolution of ABS, of the psychological and behavioral changes over time following the introduction of ABS-promoting experiences. In Rwanda, interventions to promote reconciliation had slightly negative effects in the short run, but significant positive effects in reducing trauma symptoms and creating positive orientation toward the "other" a few months later (Staub et al., 2005).

Truth, justice, and the assumption of responsibility by perpetrators. Truth and justice processes may further contribute to healing after both interpersonal and societal violence. People who have been the object of great harm doing have a profound need to have their suffering be acknowledged (Byrne, 2004; Staub, 1998, 2006). Therapists help clients, in part, by empathically listening to their truth. However, perpetrators of serious victimization rarely acknowledge their responsibility (Staub, 2006). Establishing the truth, for example as it has occurred through the Truth and Reconciliation Commission in South Africa, even if painful to those

who testify about their experiences (Byrne, 2004) contributes to societal reconciliation (Gibson, 2006).

Truth is essential for justice, which is also a central need for victimized people. It helps fulfill survivors' basic needs—for example, for a positive identity as well as security— by showing that what was done to them is not accepted by the world (Proceedings of Stockholm International Forum, 2002). An important form of justice is restorative justice, which aims to restore the relationship between victims and perpetrators (Maiese, 2003). In restorative justice processes the needs of victims are of primary consideration. Victims and perpetrators meet and talk, usually in the presence of people important in their lives. Apology, which acknowledges the victim's suffering and contributes to forgiveness (Strang et al., 2007), is frequent. Accordingly, participation in a restorative justice program has been found to improve psychological and physical health of victims as well as perpetrators (Rugge, 2007). Participation in various restorative justice programs was associated with substantially less fear and anger by victims, and more sympathy for perpetrators in comparison to control participants (Strang et al., 2007). By contributing to healing, promoting a more positive attitude toward perpetrators and helping victimized people begin to let go of anger, restorative justice programs are likely to both strengthen the self and create a more positive attitude toward human beings in general, thereby promoting ABS.

Understanding the roots of one's suffering. Both case studies of individuals abused in their families (O'Connell Higgins, 1994) and research with genocide survivors (Staub, 2006; Staub et al., 2005) indicate that understanding the influences that have led perpetrators to their actions can promote healing. Such understanding contributes to a sense of meaning (Bloom, 1998) and makes it less likely that people who have suffered become perpetrators. Understanding can be gained, for example, through exploration of the harm-doer's history (O'Connell Higgins, 1994), or education about the origins of genocide (Staub et al., 2005).

In Rwanda, fostering both knowledge of the psychological impact of violence and understanding of the influences that lead perpetrators of mass violence to their actions reduced trauma symptoms. It also led to a more positive view of the other group among members of both victim and perpetrator groups as well as to "conditional forgiveness" (Staub et al., 2005). Discussion of the roots of violence also led to comments such as "so what happened to us was not God's punishment" and that "understanding what led to violence enables us to take action to prevent it." Understanding what led perpetrators to their actions provides comprehension and thereby meaning, creates empowerment, and reinstates a person's feeling of humanity. Moreover, changing the view of perpetrators as simply evil, and differentiating perpetrators from other members of their group, fosters a more positive view of human beings in general (Staub, 2006). Facilitating such understanding may therefore be important for promoting ABS after any type of victimization.

Supportive and Guiding Influence of Others

Loving connections and social support before or after victimization. Early positive experiences that fulfill psychological needs for connection and security may protect individuals from the effects of victimization. Generally, social support, both emotional and tangible support, promotes positive outcomes in the development of youth and protects people from adverse consequences of difficult life events (Coie et al., 1993). Accordingly, Werner and Smith (1992) found in a longitudinal study that early secure attachment was associated with resilience. Victimized, traumatized children receiving support has also been associated with resilience (Rutter, 1987). With regard to prosocial behavior, a study among Croatian children found that positive parenting buffered the negative effects of exposure to war on prosocial behavior (Kerestes, 2006). Thus, social support prior to victimization served a protective function.

Experiencing caring by other people in the aftermath of suffering can also be profoundly important. In a study of Vietnam veterans who were suffering from PTSD, support received after the war was positively related to helping (Kishon-Barash et al., 1999). In a case study of Israeli survivors of terrorism, participants who reported altruistic actions also indicated that they had received support from others who had suffered, including Holocaust survivors. The participants reported that the other survivors "understood" them like nobody else in their social network (Kleinman, 1989). Some case studies suggested that people who are victimized can even gain significant benefit from relationships with caring others with whom they have only limited contact (O'Connell Higgins, 1994).

Help received at the time of one's suffering. Receiving help or support at the time of one's suffering may reduce feelings of insecurity and vulnerability, and help maintain a positive view of human beings. In the previously described cross-sectional study of reactions to the Tsunami, participants' reports of help received at the time of their traumatic life experiences were positively correlated with their perceived personal responsibility to help Tsunami survivors (Vollhardt & Staub, 2005). Similarly, in a qualitative interview study, Holocaust survivors in Israel who actively worked for better treatment of Palestinians reported that they had received help in the course of their survival, in comparison to survivors who were not involved in working for peace (Marsa, 2007). One of the survivors reported that German soldiers allowed her and her family to escape from German-held to Russian-held territory in Poland.

Receiving help at the time of victimization can help maintain a belief in human goodness and the possibility of caring and love. The actions of rescuers who endangered themselves to save the lives of potential genocide victims (see Oliner & Oliner, 1988; Tec, 2003), older siblings endangering themselves to protect younger ones from abusive parents, and even kind acts by neighbors toward children who are badly treated at home may have such effects.

Providing and receiving help can also be a mutual process during a traumatic event. For example, a study among victims of natural disasters revealed correlations as high as .71 between providing and receiving help (Kaniasty & Norris, 1995b). People may respond to each other's need guided by reciprocity norms (Gouldner, 1960), by good feelings that result from others' actions, and by the example of others as altruistic role models (see Kaniasty & Norris, 1995b). We would expect their experience of receiving and giving help at a time of great need to contribute to subsequent helping of others.

Altruistic models or guides. When people receive help at the time of victimization, they are exposed to models of helping, which can result in identification with helpers rather than with aggressors, and the imitation of the helpers' actions (see Raboteg-

Šaric et al., 1994). This is in line with a large body of research, ranging from experiments that show how altruistic models can increase helping (see Eisenberg et al., 2006), to studies of rescuers during the Holocaust who reported the influence humane and prosocial parents had on them (Oliner & Oliner, 1988). By communicating prosocial values and providing knowledge of how to help, the presence of altruistic models before, during, or after an individual's victimization is likely to facilitate the development of altruism born of suffering. Others who have suffered and act altruistically are presumably especially powerful models in the development of ABS.

In addition to real life models, in interventions caring and helpful models can be introduced in stories, as we have proposed earlier. In such stories it is important to indicate the challenges that can be involved in helping. One of them is competence, not only in terms of the ability to perform certain actions, but also in terms of the creativity required to generate responses to challenging situations. Another is the requirement of moral courage, the willingness to act on one's values in the face of potential or actual opposition and danger. People telling the stories of their suffering, and in general children and adults finding their "voice," can contribute to moral courage (Staub, 2005).

Individuals' Own Actions

Having taken action in one's own or others' behalf at the time of suffering.   People who have been able to take effective action to help themselves or others at the time of their victimization may feel empowered to take action on behalf of others in the future. In case studies, combat soldiers and psychiatric patients reported that help they performed in response to situational requirements ("required helpfulness"), and under danger, improved their perceived competence to help (Rachmann, 1979). Helping others is also likely to result in a perception of oneself as helpful, increase caring for the people one has helped, and over time generalize to other people in need (Eisenberg et al., 2006; Staub, 1979, 1989a). The Holocaust survivors who were peace activists in Israel reported, in comparison to nonactivists, not only that they received help, but also that they and their families had taken significant actions to help them survive (Marsa, 2007). In a case described by O'Connor Higgins (1994), a girl abused by her mother tried to protect her younger siblings from abuse, and was later cared for by nuns. The combination of having been helped, and having helped oneself or others, may be especially powerful in preparing the psychological ground for altruism born of suffering.

Helping as an avenue to healing and personal or societal change.   As we have noted, one of the ways to derive meaning from suffering is to help others. Engaging in altruistic acts can also help restore shattered assumptions about the benevolence of the world as well as about the value and worthiness of the self (Janoff-Bulman, 1992). Helping others increases self-efficacy (Midlarsky, 1991) and fulfills the need both for effectiveness and positive connection. Helping has been described in the literature as an effective coping mechanism (Midlarsky, 1991) and a possible pathway to healing (Tedeschi et al., 1998). We assume that some prior healing and other experiences we have described create the initial ability and motivation to help others.

The literature provides some examples of this positive relation between altruism and healing. For example, Hernandez (2001,

2002) interviewed eight Colombians who had been significantly affected by political violence. Their way of making sense of their experience included working with other victims of political violence. Their active engagement helped them connect to the community, rebuild personal identity, and heal the wounds of trauma. Thus, actions that contribute to personal healing may also foster positive social change. Bloom (1997, 1998) described many ways in which trauma is transformed in a social context, both through individual relationships and actions as well as group actions. These included education, self-help groups, witnessing and seeking justice, political action, and rescue by others, many of which contributed to both personal and societal change.

The potential of altruism to contribute to healing has also been utilized in therapeutic intervention programs both with people who had traumatic experiences, such as Vietnam veterans (Johnson, Feldman, Southwick, & Charney, 1991; Kishon-Barash et al., 1999), torture victims (Mollica, 2004), survivors of the Cambodian genocide (Mollica, Cui, McInnes, & Massagli, 2002), children who had been exposed to community violence (Errante, 1997), as well as at-risk youth (Canale & Beckley, 1999). These structured and guided opportunities to help others are not only likely to promote healing, but also to further altruism and prosocial behavior through "learning by doing" (Eisenberg et al., 2006; Staub, 1979) that results in increased self-efficacy and competence, a changed self-concept as someone who helps, and increased concern for people in need.

The Psychological Effects of ABS Promoting Experiences

Along with experiences expected to promote ABS, we have discussed psychological changes expected to result from these experiences, involving briefly stated a more positive sense of self and view of others. We will now focus on psychological changes that may increase the motivation to help in the aftermath of victimization (see also Figure 1).

Greater salience and awareness of suffering.   For individuals to become motivated to help, the need of others must be noticed and interpreted as requiring help (Latane & Darley, 1970). Because of their experience with and presumably sensitivity to situations of need, individuals who have suffered themselves may become more easily aware of the suffering of other people. Accordingly, people who had suffered from traumatic life events were more aware of the news about the Tsunami, which in turn mediated the positive relation between suffering and the perceived responsibility to help Tsunami victims (Vollhardt & Staub, 2008, Study 2). In another example, children of parents with manic-depressive disorder were found to be more sensitive to parents' facial expressions of distress than a control group of children with healthy parents. The authors describe this as a "preoccupation . . . with the suffering of others" (Zahn-Waxler, Cummings, McKnew, & Radke-Yarrow, 1984, p. 112). Although these children were not directly victimized, they were exposed to suffering and presumably unpredictable adults and may have lacked reliable caretaking. Their sensitivity to distress cues may indicate empathy, a tendency for personal distress (see below), or may be defensive.

Increased perspective-taking, empathy, and sympathy.   Taking the role or perspective of another person can lead to feelings of empathy and sympathy with those who suffer or need help (Batson & Oleson, 1991; Eisenberg, 1992; Eisenberg et al., 2006; Staub,

1979). One's own experiences of suffering can lead to a greater ability to understand how people who have suffered would feel. For example, women who had experienced rape reported more empathy with other rape victims—who were shown on videos—than women without these experiences did (Barnett, Tetreault, Esper, & Bristow, 1986). However, no differences were observed in empathy for people with other problems (Barnett, Tetreault, & Masbad, 1987). Likewise, people who had experienced traumatic life events were more likely to spontaneously express empathy with Tsunami victims than those who had not suffered (Vollhardt & Staub, 2008, Study 2). Empathy also mediated the relationship between suffering and perceived responsibility to help, whereas personal distress did not (see discussion below about the relation between personal distress and empathy).

Perceived similarity and identification with other victims. Perceptions of common fate lead to increased helping behavior, especially in high-stress conditions (Dovidio & Morris, 1975). We therefore expect that individuals who have suffered and experienced some of the proposed facilitating conditions will tend to perceive similarity to, and identify with others in need. Perceived similarity and the perception of a superordinate group membership increase the probability of helping (Dovidio et al., 1997). Identification with others who have suffered is one possible underlying mechanism of altruism born suffering. Civilians in war-torn countries reported that shared group affiliation, including refugee status, was one of their motivations to help outgroup members during the war (Leaning & Briton, 2004). The awareness of shared victimization across group lines is a particularly important process in explaining the rare but very important occurrences of ABS that also benefits outgroup members (Vollhardt, in press).

Greater sense of responsibility for others' suffering. Theory and research have indicated that perceived responsibility for others' welfare makes helping more likely (Berkowitz & Lutterman, 1968; Latane & Darley, 1970; Staub, 1978, 2003). Experiences of victimization combined with the positive and corrective experiences we have described are likely to lead to an increased feeling of responsibility to alleviate or prevent others' suffering (see also Lifton, 2003). This view is supported by the finding that people who had suffered felt more responsibility to help Tsunami victims (Vollhardt & Staub, 2008, Study 2).

Discussion and Conclusions

We have proposed that a number of conditions and experiences may promote the development of altruism after experiences of intense suffering (see Figure 1). These positive experiences include healing; establishing truth and justice and understanding the influences that led to the actions of harm doers, both of which foster healing; significant connections to and care and support by people before and after victimization; altruistic models and guides; help and support by bystanders at the time of suffering; people having effectively *helped themselves or others at the time of victimization;* and once they are prepared for this by some of these experiences, helping to prevent others' victimization or helping in its aftermath. Although we have referred to the effects of such experiences as transformational, given the significant impact of victimization and trauma the transformation they bring about is likely to be progressive and cumulative.

The concept of altruism points to action motivated by caring and the unselfish desire to benefit others (Batson, 1991; Leeds, 1963). Altruistic action can result in good feelings for the actor, but this is a byproduct, not the primary motivation for action. However, little of the research we have reviewed explicitly examined the motivational bases of helping. Helping can be self-focused, motivated by moral norms that make a person feel obligated to help and an associated desire to feel good about oneself, or by wanting to gain benefits through reciprocation or social approval (Staub, 1978). People who have suffered may develop varied motives for helping. We have focused on altruism because it is the most stable motivation for helping. Reciprocity or social approval motivate helping only when benefits to the self can be expected. Although establishing motivation is difficult, relating personal dispositions such as empathy and prosocial orientation to helping (Staub, 1978, 2005), and measuring psychological states at the time of helping (see Batson, 1991), are useful in inferring motives.

The proximal influences and motivations for helping by people who have suffered, such as awareness of others' need, perspective taking, empathy, and prosocial value orientation might be the same as in the case of altruism that develops through positive socialization. However, once the psychological changes take place that we suggest are necessary to shift from a defensive orientation to concern about others, a person's own suffering can become a source of especially pronounced awareness of human suffering, empathy with others in need, and feelings of responsibility for their welfare, resulting in strong commitment to helping. For example, perspective taking leads a person to understand another's state, their thoughts and feelings, but does not inevitably lead to empathy. However, perspective taking by people who have suffered may give rise to deeper understanding of someone's actual or potential suffering (Staub, 1979), and in turn to empathy or sympathy that enhances helping.

However, will the motivation to help be inclusive, extending to people who have suffered in varied ways or have varied needs as well as to outgroup members? We have so far limited findings on this point. In the study of responses to the victims of Tsunami, both people who had experienced natural disasters and those who had suffered from interpersonal or group-based victimization were more empathic, felt more responsible, and volunteered more frequently to help members of groups living in a different part of the world, compared to people who had not suffered. However, in another study, rape victims were more empathic than control subjects only with other rape victims, and not with people who had different problems.

These seemingly contradictory findings leave open the question, and require further research, regarding the extent to which—and under what conditions—ABS will be inclusive, extending to people who have suffered in different ways, and who belong to different groups. Most past research did not specify whether help was directed at ingroup or outgroup members. It may be that suffering of similar kinds may override prior group boundaries and lead to altruism toward outgroup members; or that altruism after certain types of suffering, such as rape, will show less generality than after some other types of suffering. An additional issue for future research is how relevant (preexisting) individual characteristics and facilitating experiences combine as sources of ABS. Preexisting characteristics relevant to altruism may affect the inclusiveness of altruism born of suffering. Victimization and trauma

leave significant psychological marks, and when people subsequently help others, the nature of their motivation and action tendencies can sometimes be problematic, to the recipients of help or to the helper. One such motivation to which we alluded is a preoccupation with others' suffering. Belief in one's moral duty to help can be a positive motivator, but may also create distress for the helper, especially if it is not accompanied by genuine caring. A person's history of distress can also lead to false empathy, based on misperception or the assumption of distress on the basis of circumstances, even when there is no actual distress.

Researchers in both social and developmental psychology have also distinguished between empathy and personal distress as motivations of prosocial behavior. The latter looks like empathy, but is a distress reaction to another's distress, rather than the vicarious experience of or a sympathetic reaction to this person's distress. People motivated by personal distress will help when it is the only way to lessen their own distress, but will escape from the situation without helping when that is possible (Batson, 1991). Although personal distress has been studied as a consequence of parental socialization and guidance (Eisenberg et al., 2006), a person's own past suffering is another likely source of personal distress, through memories of painful experiences that are triggered by witnessing others in similar situations. When these associations are not appropriately regulated they tend to result in overarousal and prosocial behavior may decrease (Fabes, Eisenberg, & Eisenbud, 1993; see also Carlson & Miller, 1987). Thus, healing, and the increased self-regulation presumably associated with it, is both important in determining whether one's past suffering results in personal distress, or empathy and sympathy. The role of empathy in contrast to personal distress in ABS was also indicated in our study that assessed both and found that only empathy mediated the effects of suffering on prosocial orientation (Vollhardt & Staub, 2008; Study 2).

Unhealed wounds of the past may also give rise to destructive motivations that lead to unnecessary, intrusive, or inadequate helping. Some people who have suffered give themselves over to destructive causes or ideological movements which they believe will improve society or the world. What combination of personal characteristics, background, past or current suffering, and experiences after suffering lead to such negative outcomes—rather than "genuine" and constructive forms of ABS—is important to study.

Throughout the article, we have noted varied directions for further research. Research on interventions to promote ABS provides the best opportunity for the use of methodologies that can establish the causal role of the experiences we proposed. Other important issues that should be addressed in future research include: Demonstrating the cognitive and emotional changes that we have proposed as the result of ABS-promoting experiences; exploring similarities and differences in personal dispositions and motivations leading to help as a result of positive socialization versus past suffering; exploring further the surprising findings in some studies that on average people who have suffered help more than people who have not; and studying how the extent and type of trauma (interpersonal vs. collective violence, victimization vs. naturally occurring traumatizing events, or prolonged exposure vs. isolated incidences of violence) affects subsequent caring and altruism.

Developing theoretically grounded and empirically evaluated interventions can guide parents, teachers, therapists, peers, or people working in postconflict settings to promote caring, helping,

and altruism in people who have suffered. Such interventions could include cognitive elements such as understanding the roots of violence, fostering meaning and engagement with one's experience, and information that increases perceived similarity with other individuals who have suffered. It may also help people who have suffered to realize the extent to which many others have suffered. In Rwanda, learning about other genocides seemed to reinstate people's experience of their own humanity (Staub et al., 2005). Interventions could also include behavioral elements, such as the provision of opportunities for individuals who have suffered to help others. Even in the absence of protective experiences during victimization, subsequent experiences may promote altruism. However, understanding the importance of support may inspire people to be active bystanders who help others when they are victimized, support them in the aftermath, and become active in preventing victimization.

With a great deal of suffering in the world, helping people who have suffered to turn toward others and act altruistically, rather than turn away from or against other people, is an important way to increase both their well-being, and the well-being of the rest of the community. ABS can improve individual lives and contribute to the creation of caring, harmonious and peaceful communities. Beyond practical and theoretical benefits, it has moral meaning to show that people who have suffered are not condemned to indifference, passivity, inhumanity, and violence, and that members of the community can make important contributions to the well-being of those who have suffered.

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Barnett, M., Tetreault, P., Esper, J., & Bristow, A. (1986). Similarity and empathy: The experience of rape. *Journal of Social Psychology, 126,* 47–49.

Barnett, M., Tetreault, P., & Masbad, I. (1987). Empathy with a rape victim: The role of similarity of experience. *Violence and Victims, 2,* 255–262.

Batson, C. (1991). *The altruism question: Toward a social-psychological answer.* Hillsdale, NJ: Erlbaum.

Batson, C. D., & Oleson, K. C. (1991). Current status of the empathy-altruism hypothesis. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 62–85). Thousand Oaks, CA: Sage.

Berkowitz, L., & Lutterman, K. G. (1968). The traditional socially responsible personality. *Public Opinion Quarterly, 32,* 169–185.

Bloom, S. L. (1997). *Creating sanctuary: Toward the evolution of sane societies.* New York: Routledge.

Bloom, S. L. (1998). By the crowd they have been broken, by the crowd they shall be healed: The social transformation of trauma. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun, (Eds.), *Posttraumatic growth: Positive transformations in the aftermath of crisis* (pp. 179–214). Mahwah, NJ: Erlbaum.

Bonano, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59,* 20–29.

Borshuk, C. (2004). An interpretive investigation into motivations for outgroup activism [Electronic version]. *The Qualitative Report, 9,* 300–319. Retrieved February, 4, 2006, from http://www.nova.edu/ssss/QR/QR9–2/borshuk.pdf

Butler, K. (1997). The anatomy of resilience. *The Family Therapy Networker, 21,* 22–31.

Butler, L. D. (2007). Growing pains: Commentary on the field of posttrau-

matic growth and Hobfoll and colleagues' recent contribution to it. *Applied Psychology: An International Review, 56,* 367–379.

Byrne, C. (2004). Benefit of burden: Victims' reflections on TRC participation. *Peace and Conflict: Journal of Peace Psychology, 10,* 237–256.

Canale, J., & Beckley, S. (1999). Promoting altruism in troubled youth: Considerations and suggestions. *North American Journal of Psychology, 1,* 95–102.

Carlson, M., & Miller, N. (1987). Explanation of the relation between negative mood and helping. *Psychological Bulletin, 102,* 91–108.

Chandler, G. E. (2002). An evaluation of college and low-income youth writing together: Self-discovery and cultural connection. *Issues in Comprehensive Pediatric Nursing, 25,* 255–269.

Charney, D. (2004). Psychobiological mechanisms of resilience and vulnerability: Implications for successful adaptation to extreme stress. *American Journal of Psychiatry, 161,* 195–216.

Christiansen, E. J., & Evans, W. P. (2005). Adolescent victimization: Testing models of resiliency by gender. *Journal of Early Adolescence, 25,* 298–316.

Coie, J. D., Watt, N., West, S., Hawkins, J., Asarnow, J., Markman, H. J., et al. (1993). The science of prevention: A conceptual framework and some directions for a national research program. *American Psychologist, 48,* 1013–1022.

Craig, C. D., & Sprang, G. (2007). Trauma exposure and child abuse potential: Investigating the cycle of violence. *American Journal of Orthopsychiatry, 77,* 296–385

Dodge, K. A. (1993). Social cognitive mechanisms in the development of conduct disorder and depression. *Annual Review of Psychology, 44,* 559–584.

Dodge, K. A., Bates, J. E., & Pettit, G. S. (1990). Mechanisms in the cycle of violence. *Science, 250,* 1678–1683.

Dovidio, J. F., Gaertner, S. L., Validzic, A., Matoka, K., Johnson, B., & Frazier, S. (1997). Extending the benefits of recategorization: Evaluations, self-disclosure, and helping. *Journal of Experimental and Social Psychology, 33,* 401–420.

Dovidio, J. F., & Morris, W. N. (1975). The effects of stress and commonality of fate on helping behavior. *Journal of Personality and Social Psychology, 31,* 145–149.

Eisenberg, N. (1992). *The caring child.* Cambridge, MA: Harvard University Press.

Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In W. Damon & R. M. Lerner (Series Eds.) & N. Eisenberg (Volume Ed.), *Handbook of child psychology*: *Vol. 3. Social, emotional, and personality development* (6th ed., pp. 646–718). New York: Wiley.

Eisenberg, N., & Miller, P. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin, 101,* 91–119.

Errante, A. (1997). Close to home: Comparative perspectives on childhood and community violence. *American Journal of Education, 105,* 355–400.

Fabes, R., Eisenberg, N., & Eisenbud, L. (1993). Behavioral and physiological correlates of children's reactions to others in distress. *Developmental Psychology, 29,* 655–663.

Feinberg, J. K. (1978). Anatomy of a helping situation: Some personality and situational determinants of helping in a conflict situation involving another's psychological distress (Doctoral dissertation, University of Massachusetts, Amherst, 1978). *Dissertation Abstracts International, 39*(1–B), 357–358.

Feshbach, N. D., & Feshbach, S. (1969). The relationship between empathy and aggression in two age groups. *Developmental Psychology, 1,* 102–107.

Frankl, V. (1984). *Man's search for meaning.* New York: Pocket/Simon & Shuster. (Original work published 1958)

Frazier, P. A., & Kaler, M. E. (2006). Assessing the validity of self-reported stress-related growth. *Journal of Consulting and Clinical Psychology, 74,* 859–869.

Gibson, J. (2006). The contribution of truth to reconciliation: Lessons from South Africa. *Journal of Conflict Resolution, 50,* 409–432.

Gilligan, J. (1996). *Violence: Our deadly epidemic and its causes.* New York: Putnam.

Gouldner, A. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25,* 161–178.

Herman, J. (1992). *Trauma and recovery.* New York: Basic Books 2.

Hernandez, P. (2001). A personal dimension of human rights activism: Narratives of trauma, resilience and solidarity. (Doctoral dissertation, University of Massachusetts, Amherst, 2001). *Dissertation Abstracts International,* 61 (7–B), 3846.

Hernandez, P. (2002). Resilience in families and communities: Latin American contributions from the psychology of liberation. *The Family Journal, 10,* 334–343.

Hobfoll, S., Hall, B., Canetti-Nisim, D., Galea, S., Johnson, R., & Palmiari, P. (2007). Refining the understanding of traumatic growth in the face of terrorism: Moving from meaning cognitions to doing what is meaningful. *Applied Psychology: An International Review, 56,* 345–366.

Janoff-Bulman, R. (1992). *Shattered assumptions. Towards a new psychology of trauma.* New York: Free Press.

Johnson, D. R., Feldman, S. Southwick, S., & Charney, L. (1991). The concept of the second generation trauma program in the treatment of PTSD among Vietnam veterans. *Journal of Traumatic Stress, 8,* 283–299.

Kahana, B., Harel, Z., & Kahana, E. (1988). Predictors of psychological well-being among survivors of the Holocaust. In J. Wilson, Z. Harel, & B. Kahana (Eds.), *Human adaptation to extreme stress: From the Holocaust to Vietnam* (pp. 171–192). New York: Plenum.

Kahana, B., Kahana, E., Harel, Z., & Segal, M. (1985). The victim as helper: Prosocial behavior during the Holocaust. *Humboldt Journal of Social Relations, 13,* 357–373.

Kaniasty, K., & Norris, F. (1995a). In search of altruistic community: Patterns of social support mobilization following Hurricane Hugo. *American Journal of Community Psychology, 23,* 447–477.

Kaniasty, K., & Norris, F. (1995b). Mobilization and deterioration of social support following natural disasters. *Current Directions in Psychological Science, 4,* 94–98.

Karylowski, J. (1976). Self-esteem, similarity, liking and helping. *Personality and Social Psychology Bulletin, 2,* 71–74.

Kelman, H. C. (1990). Applying a human needs perspective to the practice of conflict resolution: The Israeli-Palestinian Case. In J. Burton (Ed.), *Conflict: Human needs theory.* New York: St. Martin's.

Kerestes, G. (2006). Children's aggressive and prosocial behavior in relation to war exposure: Testing the role of perceived parenting and child's gender. *International Journal of Behavioral Development, 30,* 227–239.

Kishon-Barash, R., Midlarsky, E., & Johnson, D. R. (1999). Altruism and the Vietnam War veteran: The relationship of helping to symptomatology. *Journal of Traumatic Stress, 12,* 655–662.

Kleinman, S. (1989). A terrorist hijacking: Victims' experiences initially and 9 years later. *Journal of Traumatic Stress, 2,* 49–58.

Latane, B., & Darley, J. (1970). *The unresponsive bystander: Why doesn't he help?* New York: Appleton-Crofts.

Leaning, J., & Briton, N. (2004, May). *Altruism and compassion in war.* Paper presented at the Compassionate Love Research Conference of the Institute for Research on Unlimited Love and the Fetzer Insitute, Washington, DC.

Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior, 29,* 202–214.

Leeds, R. (1963). Altruism and the norm of giving. *Merrill-Palmer Quarterly, 9,* 229–240.

Lifton, R. J. (1967). *Death in life. Survivors of Hiroshima.* New York: Vintage.

Lifton, R. J. (2003). *Super power syndrome. America's apocalyptic confrontation with the world.* New York: Thunder's Mouth/Nation Books.

Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress, 17,* 11–21.

London, P. (1970). The rescuers: Motivational hypotheses about Christians who saved Jews from the Nazis. In J. Macaulay & L. Berkowitz (Eds.), *Altruism and helping behavior* (pp. 241–250). New York: Academic.

Luthar, S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology, 12,* 857–885.

Luthar, S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71,* 543–562.

Macksoud, M., & Aber, J. (1996). The war experiences and psychosocial development of children in Lebanon. *Child Development, 67,* 70–88.

Maiese, M. (2003). Restorative justice. In G. Burgess & H. Burgess (Eds.), *Beyond intractability.* Boulder, : Conflict Research Consortium, University of Colorado. Retrieved June 30, 2007, from http://www.beyondintractability.org/essay/restorative_justice/

Mamdani, M. (2002). *When victims become killers: Colonialism, nativism, and the genocide in Rwanda.* Princeton, NJ: Princeton University Press.

Marsa, A. M. (2007, February). *Jewish-Israeli peacebuilders and the Holocaust: Perceptions, national myths, meaning and actions.* Paper presented at the conference Peacebuilding and Trauma Recovery: Integrated Strategies in Post-War Reconstruction. Denver, CO.

Martens, W. H. J. (2005). Multidimensional model of trauma and correlated antisocial personality disorder. *Journal of Loss & Trauma, 10,* 115–129.

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York: Van Nostrand.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56,* 227–238.

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53,* 205–220.

McCann, I. L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy, and transformation.* New York: Brunner/Mazel.

McMillen, J., & Cook, C. (2003). The positive by-products of spinal cord injury and their correlates. *Rehabilitation Psychology, 48,* 77–85.

McMillen, J., & Fisher, R. (1998). The perceived benefit scales: Measuring perceived positive life changes after negative events. *Social Work Research, 22,* 173–186.

Midlarsky, E. (1991). Helping as coping. In M. Clark (Ed.), *Prosocial behavior: Review of personality and social psychology* (Vol. 12, pp. 238–264). Thousand Oaks, CA: Sage.

Mollica, R. (2004). Surviving torture. *New England Journal of Medicine, 351,* 5–7.

Mollica, R., Cui, X., McInnes, K., & Massagli, M. (2002). Science-based policy for psychosocial interventions in refugee camps: A Cambodian example. *Journal of Nervous and Mental Disease, 190,* 158–166.

Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life stress research. Implications for depressive disorders. *Psychological Bulletin, 110,* 406–425.

Noble, C., & Coram, R. (1994). *Bridge across my sorrows.* London: Murray.

Oliner, S. B., & Oliner, P. (1988). *The altruistic personality: Rescuers of Jews in Nazi Europe.* New York: Free Press.

O'Connell Higgins, G. (1994). *Resilient adults overcoming a cruel past.* San Francisco: Jossey-Bass.

Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors.* New York: Norton.

Pennebaker, J. (2000). The effects of traumatic disclosure on physical and mental health: The values of writing and talking about upsetting events. In J. Violanti, D. Paton, & C. Dunning (Eds.), *Posttraumatic stress intervention* (pp. 97–114). Springfield, IL: Thomas.

Proceedings of Stockholm International Forum. (2002, April). *A conference on truth, justice and reconciliation.* Stockholm, Sweden: Regeringskanliet.

Raboteg-Šaric, Z., Žužul, M., & Keresteš, G. (1994). War and children's aggressive and prosocial behaviour. *European Journal of Personality, 8,* 210–212.

Rachman, S. (1979). The concept of required helpfulness. *Behaviour Research and Therapy, 17,* 1–6.

Rhodes, R. (1999). *Why they kill.* New York: Knopf.

Rouhana, N., & Bar-Tal, D. (1998). Psychological dynamics of intractable ethnonational conflicts. The Israeli-Palestinian case. *American Psychologist, 53,* 761–770.

Rugge, T. (2007). The impact of restorative justice practices on participants. *Dissertations Abstracts. Section B: Science and Engineering, 67*(10–B), 6076.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry, 57,* 316–331.

Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. Masten, D. Cicchetti, K. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181–214). Cambridge, England: Cambridge University Press.

Schuster, M., Stein, B., Jaycox, L., Collins, R., Marshall, G., Elliott, M., et al. (2001). A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine, 345,* 1507–1512.

Serbin, L. A., & Karp, J. (2004). The intergenerational transfer of psychosocial risk: Mediators of vulnerability and resilience. *Annual Review of Psychology, 55,* 333–363.

Southwick, S., Vythilingam, M., & Charney, D. (2005). The psychobiology of depression and resilience to stress: Implications for prevention and treatment. *Annual Review of Clinical Psychology, 1,* 255–291.

Spielman, D., & Staub, E. (2000). Reducing boys' aggression. Learning to fulfill basic needs constructively. *Journal of Applied Developmental Psychology, 21,* 165–181.

Staub, E. (1978). *Positive social behavior and morality: Personal and social influences* (Vol. 1). New York: Academic.

Staub, E. (1979). *Positive social behavior and morality: Socialization and development* (Vol. 2). New York: Academic.

Staub, E. (1989a). *The roots of evil: The origins of genocide and other group violence.* New York: Cambridge University Press.

Staub, E. (1989b). What are your values and goals? *Psychology Today,* 46–49.

Staub, E. (1998). Breaking the cycle of genocidal violence: Healing and reconciliation. In J. Harvey (Ed.), *Perspectives on loss* (pp. 231–238). Washington, DC: Taylor and Francis.

Staub, E. (2003). *The psychology of good and evil: Why children, adults and groups help and harm others.* New York: Cambridge University Press.

Staub, E. (2005). The roots of goodness: The fulfillment of basic human needs and the development of caring, helping and nonaggression, inclusive caring, moral courage, active bystandership, and altruism born of suffering. In G. Carlo & C. Edwards (Eds.), *Nebraska Symposium on Motivation: Vol. 51. Moral motivation through the life span: Theory, research, applications.* Lincoln: University of Nebraska Press.

Staub, E. (2006). Reconciliation after genocide, mass killing or intractable conflict: Understanding the roots of violence, psychological recovery and steps toward a general theory. *Political Psychology, 27,* 867–895.

Staub, E., & Pearlman, L. (2006). Advancing healing and reconciliation. In L. Barbanel & R. Sternberg (Eds.), *Applications of psychological knowledge to real world problems* (pp. 213–243). New York: Springer.

Staub, E., Pearlman, L., Gubin, A., & Hagengimana, A. (2005). Healing,

reconciliation, forgiveness and the prevention of violence after genocide or mass killing: An intervention and its experimental evaluation in Rwanda. *Journal of Social and Clinical Psychology, 24,* 297–334.

Strang, H., Sherman, L., Angel., C., Woods, D., Bennett, S., Newbury-Birch, D., et al. (2007). Victim evaluations of face to face restorative justice conferences: A quasi-experimental analysis. *Journal of Social Issues, 62,* 281–307.

Tec, N. (2003). *Resilience and courage: Women, men, and the Holocaust.* New Haven, CT: Yale University Press.

Tedeschi, R. G. (1999). Violence transformed: Posttraumatic growth in survivors and their societies. *Aggression and Violent Behavior, 4,* 319–341.

Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma and transformation: Growing in the aftermath of suffering.* Thousand Oaks, CA: Sage.

Tedeschi, R. G., Calhoun, L. G., & Cann, A. (2007). Evaluating resource gain: Understanding and misunderstanding posttraumatic growth. *Applied Psychology: An International Review, 56,* 396–407.

Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (Eds.). (1998). *Posttraumatic growth: Positive transformations in the aftermath of crisis.* Mahwah, NJ: Erlbaum.

Twenge, J., & Baumeister, R. (2005). Social exclusion increases aggression and self-defeating behavior while reducing intelligent thought and prosocial behavior. In D. Abrams, M. Hogg, & J. Marques (Eds.)*, The social psychology of inclusion and exclusion* (pp. 29–46). New York: Psychology.

Unger, R. (2000). The 1999 SPSSI presidential address: Outsiders inside: Positive marginality and social change. *Journal of Social Issues, 56,* 163–179.

Volkan, V. D. (1998). Tree model: Psychopolitical dialogues and the promotion of coexistence. In E. Weiner (Ed.). *The handbook of interethnic coexistence* (pp. 343–359). New York: Continuum.

Vollhardt, J. (2005, July). *Altruism born of suffering and outgroup altruism in the context of the Tsunami: A survey study.* Poster presented at the annual meeting of the International Society for Political Psychology, Toronto, Canada.

Vollhardt, J. (in press). The role of victim beliefs in the Israeli-Palestinian conflict: Risk or potential for peace? *Peace and Conflict: Journal of Peace Psychology.*

Vollhardt, J., & Staub, E. (2008). *Altruism born of suffering and its inclusiveness: The effects of past suffering on prosocial behavior toward outgroups.* Manuscript submitted for publication.

Wayment, H. (2004). It could have been me: Vicarious victims and disaster-focused distress. *Personality and Social Psychology Bulletin, 30,* 515–528.

Werner, E. E. (1987). Vulnerability and resiliency in children at risk for delinquency: A longitudinal study from birth to young adulthood. In J. D. Burchard & S. N. Burchard (Eds.), *Prevention of delinquent behavior* (pp. 16–43). Newbury Park, CA: Sage.

Werner, E. E., & Smith, R. (1992). *Overcoming the odds. High risk children from birth to adulthood.* Ithaca, NY: Cornell University Press.

Westphal, M., & Bonano, G. A. (2007). Posttraumatic growth and resilience to trauma: Different sides of the same coin or different coins? *Applied Psychology: An International Review, 56,* 417–428.

Widom, C. S. (1989). Does violence beget violence? A critical examination of the literature. *Psychological Bulletin, 106,* 3–28.

Woodward, C., & Joseph, S. (2003). Positive change processes and posttraumatic growth in people who have experienced childhood abuse: Understanding vehicles of change. *Psychology and Psychotherapy: Theory, Research and Practice, 76,* 267–283.

Zahn-Waxler, C., Cummings, E. M., McKnew, D. H., & Radke-Yarrow, M. (1984). Altruism, aggression, and social interactions in young children with a manic-depressive parent. *Child Development, 55,* 112–122.