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Efforts to Promote Reintegration and Rehabilitation of Traumatized Former Child Soldiers:

Reintegration of Former Child Soldiers in Sierra Leone: The Role of Caregivers and Their Awareness of the Violence Adolescents Experienced During the War

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Abstract

This article explores the role of caregivers in the reintegration of former child soldiers from Sierra Leone. Using data on 282 youth and their respective caregivers, our aim is to focus on the caregiver–child relationship after reintegration. We investigate the extent to which caregivers know about child soldiers' experiences of direct and indirect violence, as well as involvement in war activities. We further examine variables that might shape the degree of caregiver knowledge of child's war experiences. Finally, we examine if caregiver knowledge of war experiences is associated with child's psychosocial outcomes. Findings highlight the importance of developing thoughtful programs that consider the needs of the child in the context of the family and caregivers with whom he or she is reunified.

Keywords

child soldiers; exposure to violence; family; mental health; Sierra Leone; war

The mental health consequences of exposure to violence during childhood and adolescence are well documented (Kerig & Wainryb, 2013, this issue). Across diverse cohorts of war-affected youth exposed to different levels of violence and trauma, studies have reported high rates of internalizing problems (anxiety, depression, post-traumatic stress disorder [PTSD]) as well as externalizing problems (aggression, hostility, delinquent behaviors; Kinzie, 2006; Kinzie, Sack, Angell, Clarke, & Ben, 1989; Thabet & Vostanis, 2000). A growing body of research is now focusing on a subset of war-affected youth, those who are forcefully conscripted or involved in armed groups as soldiers, otherwise known as children associated with armed forces and armed groups (CAAFAG; Annan, Green, & Brier, this issue;

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Betancourt et al., 2010; Derluyn, Broekaert, Schuyten, & De Temmerman, 2004; Kohrt et al., 2008). These youth endure some of the most severe exposures to violence and trauma, and when conflicts come to an end they face the negative consequences of war and the difficult transition to civilian life.

Despite the widely documented link between witnessing or being a victim of violence and subsequent maladjustment, not all adolescents who experience severe traumatic experiences follow negative adjustment trajectories. Resilient mental health outcomes and social functioning have been documented among former child soldiers as well (see Boothby & Thompson, 2013; Morley & Kohrt, 2013; Wainryb & Kerig, this issue). For instance, Bayer, Klasen, and Adam (2007) studied 169 former child soldiers in rehabilitation centers in Uganda and the Democratic Republic of Congo. They found that despite the violence and trauma children had experienced, about two thirds of those who participated in the study did not exhibit symptoms of PTSD. Similarly, Boothby (2006a, 2006b) followed a group of 39 former child soldiers from Mozambique over 16 years following their war exposure. He showed that the majority of these youth became productive and caring adults, with few signs of persistent distress over time.

Such studies suggest that processes of protection and resilience are at play among returning child soldiers, but do not provide enough evidence of the active ingredients in such processes. In peaceful and war-affected societies, research has underscored the significant influence parents exert over their child's development and welfare (Ager, 2006; Bronfenbrenner, 1979; Garbarino, 2001). Numerous studies emphasize the home as an ecological setting of great importance, where parents can play a critical role in helping their children cope with external violence or traumatic events (Ager, 2006; Masten & Obradovic, 2008). The family presents a good opportunity for exploring potential protective variables that might offset the negative impact of war on subsequent adjustment among returning child soldiers (see also Boothby & Thompson, 2013; Morley & Kohrt, 2013; Veale, McKay, Worthen, & Wessells, this issue).

Two bodies of literature inform this research. The first body of literature is focused primarily on the role of parental monitoring and parent–child communication in shaping children's well-being. The second body of literature pertains to parental response to children's experience of trauma and the possible benefits of parent–child communication and parental reassurance regarding traumatic experiences.

Parent–Child Communication and Parental Monitoring

Among the most studied aspects of the parent–child relationship is the notion of parent–child communication and parental monitoring. These aspects of supportive parenting have been linked to lower levels of children's externalizing behaviors, including their involvement in violence, drugs, and other high-risk behaviors (Stanton et al., 2000; Yang et al., 2006), as well as the promotion of their psychosocial adaptation (Brookmeyer, Henrich, & Schwab-Stone, 2005; Howard, Cross, Li, & Huang, 1999; Resnick et al., 1997).

A number of studies have explored the role of parental monitoring and parent–child communication by looking at concordance between parent and child reports regarding the child's experiences with violence. Richters and Martinez (Martinez & Richters, 1993; Richters & Martinez, 1993), who studied adolescents in disadvantaged violent neighborhoods, reported that overall parents underestimated their children's exposures to violence. They argued that these discrepancies are linked to a higher risk of youth developing maladaptive psychosocial responses. In addition, lack of parental knowledge of adolescent experiences with violence was associated with lower parental ability to protect their children from subsequent exposures or to help children in coping with traumatic events. Howard et al. (1999) demonstrated similar findings. They studied 349 adolescent and parent dyads in low-income communities and demonstrated that caregivers largely underestimated the extent to which their children were victims of or witnesses of violence. In families characterized by low concordance between parents and adolescents, youth tended to report higher levels of distress symptomatology and delinquent behaviors, as well as lower levels of self-esteem and problem-solving capacity, as compared to their counterparts in families characterized by high concordance (or parental awareness of child's experiences and distress). These findings underscore the link between parental monitoring and open communication and the positive psychosocial well-being of the child.

Caregiver awareness of negative adolescent experiences has a lot to do with the caregiver's ability to observe and monitor the child. However, in the context of former child soldiers, who have experienced years of separation from their caregivers, the notion of a child's readiness and willingness to confide in his or her caregiver is equally important. Communicating about things that have happened could depend on multiple variables, including age and gender of the child (Hill & Jones, 1997; Howard et al., 1999), as well as the child's connection to his or her caregiver—be that a biological parent, a relative, or foster parent. More important perhaps, the type of war experiences can determine the level of confiding that develops between a child and his or her caretaker (Bradley, 2007; Kliewer, Murrelle, Mejia, Torres de, & Angold, 2001). For instance, adolescents might be more reticent to share with their families instances of participation in killing others, or intimate acts of violence perpetrated against them because of the stigma and shame attached to these experiences.

Caregiver Response to Child's Experiences with Violence or Trauma

Studies have shown consistently that parental support and proximity in the midst of violence or chaos are beneficial to a child's subsequent adjustment; however, there is less conclusive evidence on the ways in which caregivers can best assist their children to cope with past experiences of violence (Bradley, 2007; Kaplow, Dodge, Amaya-Jackson, & Saxe, 2005). In fact, Barenbaum, Ruchkin, and Schwab-Stone (2004) asserted just how difficult it is to specify what parents should do to help alleviate distress associated with experiences of violence.

A number of clinical studies with child trauma victims emphasize the importance of parental reassurance and talking about traumatic experiences for the child's psychosocial recovery (Booth & Amato, 2001; Bradley, 2007; Kliewer, Lepore, Oskin, & Johnson, 1998). For

instance, Kliewer et al. (1998) found that talking about their experiences with community violence was especially helpful for child victims in Western settings. In contrast, violence exposure had the strongest negative effects on youth who reported high levels of social constraints (i.e., feelings they could not disclose their experiences, fears, or concerns to their caregivers). The importance of communicating with children and adolescents about their experiences with trauma has been supported further by researchers looking at children affected by divorce, loss, or medical trauma (including child cancer; Booth & Amato, 2001; Kelly & Emery, 2003).

It is not clear, however, whether communication will necessarily be helpful with all forms of violence or traumatic events experienced by children (Bal, Crombez, Van Oost, & Debourdeaudhuij, 2003; Bal, van Oost, de Bourdeaudhuij, & Crombez, 2003; Bradley, 2007). Barenbaum et al. (2004) asserted that the type of distressing event is important to take into consideration. The diversity of emotional responses children might have to different events makes it difficult to “prescribe” a specific parental approach that would alleviate distress. For instance, research with victims of sexual abuse has shown that communication with children who have been sexually assaulted can be complicated by victims' sense of shame and uncertainty regarding whether they are believed by others, including their immediate family (Feiring, Taska, & Lewis, 2002; Harvey, 2002). In those instances, talking about the experience, or “debriefing,” with the child might not necessarily alleviate feelings of distress or anxiety. Similarly, in the context of bereavement, Bonanno and Kaltman (1999) pointed out that the majority of children make rather healthy adjustments to the loss of loved ones and that, for them, too much focus on dealing with grief can be counterproductive.

In summary, the literature on child psychopathology and community violence implies that if parents or caregivers do not communicate with children and are unaware of children's experiences with violence and distress, the probability that youth will exhibit negative sequelae could increase. On the other hand, the relative benefit of caregiver–child communication about traumatic experiences is not as clear when it comes down to specific traumatic experiences. Additionally, the majority of studies already cited were conducted with Western populations of youth, where the clinical approach to trauma healing is more popular (Bradley, 2007). In Sierra Leone, however, a different set of cultural ideas and norms might guide appropriate parental response to children who have experienced traumatic events. These aspects of the caregiver–child relationship have not been explored in populations of former child soldiers, but certainly bear relevance as having potential positive effects in the reintegration processes.

This article explores the role of the family, caregivers in particular, in the reintegration of former child soldiers from Sierra Leone, where war ended officially in 2002 but where the process of adjustment is arguably still under way. Using data collected in 2004 on 282 former child soldiers and their respective caregivers, the aims of the article are to (a) explore the extent of the caregivers' knowledge and understanding of the direct and indirect violence and atrocities their children experienced or participated in; (b) examine variables that could be related to caregiver's knowledge, or lack of knowledge, of the child's exposure to war-related events; and (c) examine whether caregiver knowledge of child soldiers' experiences

during the war is associated with their psychosocial outcomes. Implied in this study of caregiver knowledge of child exposure to war is the level of communication and disclosure between caregivers and former child soldiers.

Methods

Participants

The data used in this study were collected as part of a larger longitudinal study of Sierra Leonean war-affected youth, launched in 2002 by the second author in collaboration with the International Rescue Committee (IRC). In 2002 (1 year after peace agreements were signed), baseline interviews were conducted with 260 former child soldiers (11% female, 89% male) who had been affiliated with the Revolutionary United Front in Sierra Leone and who had been processed through IRC's Interim Care Centers in various parts of the country. The initial sample for this research was obtained by pooling IRC registries and creating a master list of all youth who had been processed through the Interim Care Centers in Bo, Kenema, and Kono districts of Sierra Leone during the most active 6-month period of demobilization, from June 2001 to February 2002. At the follow-up data collection (in 2004), 59% (n = 154) of the participants from the original pool were reinterviewed and a sample of 128 self-reintegrated former child soldiers (50% female, 50% male) was added to the study. This self-reintegrated sample was obtained through outreach lists provided by international agencies in the Makeni region. Each child went through a screening process to ensure that he or she had in fact self-reintegrated without assistance.

Follow-up surveys were administered to caregiver–youth dyads. The caregiver was defined as the biological parent, legal guardian, or other adult responsible for the study youth at the time of the interview. The full sample interviewed at follow-up in 2004 included 282 former child soldiers and 281 caregivers. This study presents a cross-sectional analysis of data collected in 2004. The 2004 cross-sectional sample was selected for this analysis given that caregiver–child dyads were only interviewed at follow-up.

Procedures

Data for all participants at both waves were collected in face-to-face interviews conducted by a team of trained Sierra Leonean research assistants who were monitored by the study principal investigator and IRC staff. All research staff participated in intensive training on research procedures and ethical practices relevant to working with vulnerable populations. A team of IRC social workers traveled with the research team to respond to cases requiring additional attention due to severe emotional or physical health needs. The survey received institutional review board approval from Boston University Medical School/Boston Medical Center, where the principal investigator was based at the time.

Measures

War experiences—To assess individual-level exposures to violence, an adapted version of the Child War Trauma Questionnaire (CWTQ) was used. The instrument was initially developed with Lebanese war-affected youth (Macksoud & Aber, 1996) and was adapted in the field to capture the context of the war in Sierra Leone (e.g., items on bombing and

shelling were removed and items on machete attacks, raids on one's school and home, and sexual assault were added). The adapted instrument contained a total of 42 questions regarding child's experience of war-related events. Only four items were excluded from analysis because no participant endorsed them or because the items were redundant. War experiences were coded for their occurrence versus no occurrence.

We used a rational construction approach to organize the 38 war experiences in a set of meaningful and theoretically useful categories based on their severity and the nature of their influence on child development and mental health outcomes. A rational approach was chosen over the more traditional empirical approach for deriving war exposure categories because of recent critiques and limitations associated with the empirical approach (Barenbaum et al., 2004; Netland, 2001, 2005). Five broader categories of war experiences were formed: (a) displacement (e.g., having to change location within Sierra Leone because of the war); (b) indirect exposure to violence or witnessing of violence (e.g., witnessing raids or others being beaten); (c) direct experience of violence and deprivation (e.g., being beaten, chased, or threatened to be killed; being without food for more than 2 days); (d) involvement with fighting forces (e.g., carrying arms, spying, or directly involved in fighting); and (e) killing or perpetration of violence (e.g., injuring or killing another person).

Caregiver knowledge of child's experience with violence—The CWTQ, which was administered to the children, was also administered to caregivers. They were asked to report their knowledge of their child's experiences during the war. The same conceptual groupings of war exposures developed for the child reports were applied to summarize the caregiver data, again computing individual sum scores within each war category. Agreement (concordance) between caregiver and adolescent reports was then observed.

Psychosocial adjustment—To assess psychosocial adjustment, we used a measure developed by researchers at the Oxford Refugee Studies Program (MacMullin & Loughry, 2004). The measure was drawn from several standardized child mental health instruments and was adapted for use among former child soldiers from Sierra Leone and northern Uganda using participatory methods. The measure used in this study contained 46 items: three subscales that seek responses describing mental health problems experienced by the child (anxiety, depression, and hostility) and two subscales that seek an assessment of positive adjustment outcomes for the child (confidence/self-agency and prosocial attitudes). This instrument had good internal consistency across subscales. The Cronbach's α was .67 for the anxiety subscale (8 items), .69 for the depression subscale (8 items), .86 for the hostility subscale (12 items); .80 for the prosocial attitudes subscale (10 items), and 0.71 for the confidence and self-agency subscale (8 items).

Sociodemographic measures—A range of sociodemographic data were collected on both youth and caregivers. Relative wealth of the family was assessed using a locally derived measure that sought to describe the family's economic stability. The measure consisted of four questions, each pertaining to the following categories: food, shelter, clothing, and money or belongings. The measure had very good internal consistency (Cronbach's α = .76).

Data Analysis

Data analysis proceeded in three stages, mapping onto the three research questions explored in this study. To address the first research question, unadjusted tests of association were conducted between caregiver and child reports for each war exposure item and paired *t* tests were used for the war exposure subscales. These analyses allowed us to summarize specific as well as systematic over- or underreporting of different types of war experiences by the caregivers relative to the children. Positive differences indicated that the adolescents reported higher exposures than caregivers on a specific war category. In this analysis, we used the youth report of war experiences as the reference category against which the caregiver reports are compared. Because the analysis refers to events that happened to the children themselves, in most cases while they were with the fighting forces and away from their caregivers, it is fair to assume the children themselves had more accurate knowledge of what happened to them.

To address the second research question, we calculated the difference between caregiver and adolescent war exposure scores. This obtained difference then indicated the level of discordance between the adolescent and caregiver reports, with negative differences indicating caregiver overestimation of the child's exposure to a particular category of war violence and positive differences indicating caregiver underestimation of child's exposures. Caregivers were then assigned to one of three classifications: (a) underestimating exposures, (b) overestimating exposure, or (c) adequate knowledge of exposures. The 25th and 75th percentile values of the score differences on each war exposure category were used to determine caregiver assignment. Using analysis of variance (continuous characteristics) and contingency table analysis (categorical characteristics), differences were observed in selected sociodemographic characteristics of adolescents and caregivers across these three caregiver classifications.

To address the third research question, multiple regression analyses were used to examine the relationships between psychosocial dependent variables (anxiety, depression, hostility, prosocial attitudes, and confidence/self-agency) and caregiver–adolescent concordance on each of the war exposure categories (independent variables). Because one goal of the article is understanding how knowledge of war experiences of different severity might have different effects on psychosocial outcomes, we fitted separate regression models with each war category as an independent variable predicting each psychosocial dependent variable. Sociodemographic covariates were included in the models.

Results

Table 1 presents the sociodemographic characteristics of the sample of former child soldiers and their caregivers. This study included 202 boys and 80 girls. Ages ranged from 10 to 22 years, with a mean age of 16.6 years ($SD = 2.60$). Average age of abduction into the fighting forces was 10.55 years ($SD = 2.87$), and average length of abduction was 2.53 years ($SD = 2.46$). Fifty-four percent of the young people in the sample reintegrated with assistance from the IRC. At the time of interview 59% of participants were living with immediate family (natural mother, father, or both parents), 10% were living with a sibling and the family of their sibling, 25% were living with extended families (e.g., uncles, aunts, grandparents), and

only 6% were living with foster or stepparents. In terms of caregiver participants, 55% were female, 32% were mothers of the adolescent participants, 20% were fathers, 11% were siblings, and 37% were extended family members. Twenty-two percent of nonbiological caregivers reported they had been in charge of the child's care for 1 to 2 years, most likely since the child's return from the war; 54% reported caring for the child for 3 to 5 years; and 21% had cared for the child for more than 6 years, suggesting that these caregivers likely had responsibilities for the child prior to child's abduction into the fighting forces.

Adolescent and Caregiver Concordance on Individual War Exposure Items

Table 2 summarizes the extent to which caregivers estimated accurately youth's specific war experiences. Caregivers' knowledge of their child's exposure to indirect or direct violence during the war was weak even though many of these forms of violence were ubiquitous among the war-affected population. The proportion of caregivers underestimating child's witnessing of beating, violent injury, or violent death was 43%, 48%, and 45%, respectively. Sixty-six percent of caregivers underestimated child's exposure to stabbing at a close distance and 81% underestimated child's witnessing of amputation. Only about 50% of caregivers accurately estimated adolescents' personal experience of being beaten, being chased by armed forces, or being arrested. Only 26% accurately estimated that their child had taken drugs. Only 52% of caregivers accurately reported that their child had experienced sexual abuse, and 48% underestimated the experience. Adolescent involvement with the fighting forces was also greatly underestimated by caregivers.

Perpetration of violence is a difficult category to endorse both for youth and caregivers. Given community and family stigma related to killings, as well as youth's desire to be accepted, it is plausible that youth themselves underreported their experiences with perpetration of violence during the war. Similarly, caregivers might have had a difficult time admitting in an interview that they had knowledge of their child's participation in atrocities. With these limitations in mind, few youth reported having perpetrated violence against others, with 27% admitting to having killed a stranger, 4% having killed someone they knew, 9% having killed a close friend, and less than 2% reported killing of a relative. Caregivers of these youth underestimated grossly their child's involvement in killing or injuring others. Only 25% of caregivers accurately reported their child's participation in killing a stranger and only 18% of caregivers were aware of their child's involvement in violence against a close friend.

As can be expected, concordance between caregiver–adolescent dyads was much higher among adolescents who had not experienced specific war events. Across all war categories, caregivers were much better at adequately reporting “nonexposure” versus exposure to direct or indirect types of violence as well as involvement in fighting.

Adolescent and Caregiver Group Differences on War Exposure Subscales

Youth and caregivers reported significantly different mean scores on all war exposure subscales. As seen from Table 3, caregivers on average underestimated adolescent experiences on all five categories of war exposures. These group differences between adolescents and caregivers are in accordance with the item per item analysis discussed

earlier. It is important to note, however, that differences between caregiver and adolescent reports ranged from positive to negative for almost all war exposure categories. In other words, although on average caregivers tended to underestimate adolescent experiences, a proportion of caregivers overestimated adolescent war experiences.

Sociodemographic Variables Associated with Concordance Between Caregiver and Adolescent Reports

Exploration of sociodemographic variables that might be associated with the magnitude and direction of the differences between youth and caregiver reports revealed very few significant relationships. Of the child-level variables explored, only age of the child appeared to be associated with the overall adequacy of caregiver report, such that caregivers of older youth were more likely to underestimate exposure to direct and indirect violence. Gender of the adolescent, length of abduction, and reintegration manner did not appear to impact caregivers' accuracy in estimating youth exposure to any kind of violence. In terms of caregiver-level variables, female caretakers were more likely to underestimate their child's participation in violence against others as compared to their male counterparts (29% vs. 14% of male caregivers), $p < .05$. Gender did not determine caregiver's ability to estimate adequately child's exposure to other types of violence.

Psychosocial Adjustment and Caregiver Knowledge of War Exposures

Table 4 displays the results of regression analyses examining the effect of caregiver knowledge about adolescents' war experiences on adjustment outcomes. Regression analyses suggest that caregivers' knowledge of adolescents' exposure to displacement or indirect violence is not significantly associated with any of the psychosocial outcomes explored in this study. Caregivers' knowledge of direct experiences with violence during the war was significantly associated with positive adjustment outcomes as well as with levels of depression. In particular, adolescents whose caregivers underestimated direct experiences with violence reported lower levels of prosocial attitudes ($\beta = -1.64$, $p < .05$) and confidence and self-agency ($\beta = -1.43$, $p < .05$) as compared to youth whose caregivers had adequate knowledge of their child's experiences with violence and deprivation. On the other hand, caregiver overestimation of such experiences was associated with lower levels of depression symptoms ($\beta = -1.73$, $p < .05$).

Turning to involvement with the fighting forces, we see that adolescents whose caregivers overestimated their child's involvement with the fighting forces, on average, reported significantly higher levels of prosocial attitudes ($\beta = 1.63$, $p < .05$) as compared to their counterparts whose caregivers adequately reported their involvement history. In addition, underreporting of involvement was negatively associated with symptoms of anxiety among adolescents ($\beta = -1.97$, $p < .05$). Knowledge of perpetration of violence appears to impact both positive and negative outcomes among youth, although in slightly unanticipated ways. Adolescents whose caregivers over-reported their participation in killings exhibited, on average, higher levels of anxiety symptoms ($\beta = 2.34$, $p < .05$) as compared to youth whose parents had adequate knowledge of their child's participation in killing. In addition, youth whose caregivers overestimated perpetration reported higher prosocial attitudes ($\beta = 3.17$, $p < .01$) and confidence and self-agency ($\beta = 3.04$, $p < .01$). On the other hand, we note that

underestimating perpetration resulted in lower levels of prosocial attitudes ($\beta = -3.09$. $p < .01$) as well as lower levels of confidence and self-agency ($\beta = -2.00$, $p < .10$).

Discussion

The first research question investigated how much caregivers know about their child's war-related experiences during their time with the fighting forces. Across all war categories, caregivers were much better at adequately reporting “nonexposure” versus exposure to different kinds of violence. In other words, caregivers of children who reported high levels of exposure to violence tended to underestimate experiences quite often, resulting in much lower levels of concordance within dyads. This was particularly true for items that were more severe in terms of their nature and implications for the child or his or her family, such as direct involvement in fighting, perpetration of violence, and the use of drugs. Comparison of the mean scores on each war category among youth and caregivers showed that, on average, caregivers tended to underestimate adolescent exposure to all categories of war experiences, regardless of severity or gravity of the experiences making up each war subscale. These findings confirm research with populations of youth affected by community violence, which has consistently shown caregivers' tendency to underestimate youth's exposure to violence, and exposure to direct violence or perpetration of violence in particular (Hill & Jones, 1997; Howard et al., 1999; Martinez & Richters, 1993; Stanton et al., 2000).

The tendency of caregivers to underestimate experiences with more severe war exposures, such as being forced to take drugs, being sexually abused, or perpetrating violence against others, was in line with what we hypothesized. For example, 74% of caregivers underestimated the use of drugs. Additionally, over 50% of caregivers whose children reported being raped were not aware of that experience, with that percentage being much higher among boys who reported rape (70%) as opposed to girls (44%). Children's fear of stigma, rejection, or shame might explain the low incidence of agreement between caregiver and adolescent reports on these items that are much more personal or intimate in nature.

Further, the significant discordance between dyads in terms of perpetration of violence (e.g., 75% of caregivers underestimated child's participation in killing a stranger) can be explained in a few ways. Given the widespread fear and negative perception of child soldiers on their return home (Betancourt et al., 2010; Derluyn et al., this issue; Korht & Morley, 2013; Thomson & Boothby, 2013), it is not surprising that children might have chosen to withhold information or not to share their specific involvement and participation in atrocities. Qualitative data provide evidence for the way child soldiers were perceived by people in their communities upon returning home: “Well they looked upon us negatively; even when we were passing around there was no respect for us. People were pointing fingers at us saying that this one killed my father, this one killed my mother, that other one burnt down our house” (Younger male adolescent). Former child soldiers are also likely to feel shame related to their participation in violence against others (see Kerig, Wainryb, Twali, & Chaplo, 2013; Wainryb & Kerig, this issue) and might not be ready to discuss these experiences with their caregivers even 2 years postconflict, when these data were collected:

"At times I sit and reflect on the past events of the war and how I used to treat people … and I feel so bad" (Older male adolescent).

Second, caregivers' tendency to underestimate adolescent participation in killings might be due to the fact that they did not want to admit their child's involvement in atrocities in front of the interviewers. Although interviewers were carefully trained in confidentiality and ethics, they were local Sierra Leoneans, who had gone through difficult war experiences. In other words, caregivers might not have felt at ease to disclose information about their child for fear of being judged or looked on negatively. Issues of stigma and shame are likely at play not just for the youth involved in violent acts, but also for the family with whom they live.

Although we found that on average caregivers tended to underestimate exposures to all types of traumas, mean differences between dyads ranged from positive to negative, indicating that the direction and magnitude of disagreements between individual caregiver–youth pairs is important to consider. The majority of researchers have focused on documenting levels of agreement between adolescents and caregivers. Far fewer studies have explored levels of disagreement (e.g., under- and overestimation), and even less attention is paid to the direction and magnitude of these disagreements (Hill & Jones, 1997; Howard et al., 1999; Stanton et al., 2000). In our study from Sierra Leone, some caregivers overestimated exposures, even as others reported relatively high concordance with their children. As subsequent regression analyses revealed, this type of distinction appears important, especially in the context of former child solders.

There are a number of reasons why caregivers in this study might be overestimating their child's exposures to violence. On one hand, overestimation might indicate that caregivers have an inaccurate view of what their children experienced during the war. Because of the extreme brutality and horror that characterized the war in Sierra Leone, caregivers might be over-generalizing the intensity of exposures their children went through while with the fighting forces. On the other hand, overestimation might also indicate that youth themselves were not comfortable revealing the "truth" about some of their experiences during the interview, but their caregivers did. In other words, it is possible that overestimation on behalf of the caregivers on some of the war items actually provides a more accurate picture of adolescent exposures to violence.

The second research question sought to explore potential sociodemographic variables that might shape caregiver knowledge about their child's exposure to violence. Our analysis found that many of the hypothesized variables did not determine the accuracy of caregiver reports. Of the child-level variables we explored, only age of the child was associated with caregiver's knowledge about child's experiences, such that caregivers of younger adolescents were a bit better attuned to child exposures versus caregivers of older adolescents, who were more likely to underestimate war exposure to direct and indirect violence. This finding confirms studies of Western populations of youth (Howard et al., 1999) and fits with developmental theory and research suggesting that the relative importance of family networks changes across adolescence and that the role of the family as a main source of emotional support and intimacy is likely to shift during that period (Furman & Buhrmester,

1992; Smetana, 2010). Instead, peer support and intimacy with friends become more important for older adolescents (Morley & Kohrt, 2013). This trend was also confirmed in our qualitative study from Sierra Leone, where many of the young people that we interviewed talked about the importance of peer groups and peer relationships, especially as these relate to sharing of current or past experiences: “If I have a problem, or if I have done something bad, I would first go to my friend and talk to him about it. … He will advise me and listen to me” (Older male adolescent).

It is interesting to note that the gender of adolescents did not seem to determine caregivers' accuracy in estimating youth exposure to any kind of violence. This finding is in contrast to findings in Western populations, where researchers have found a statistically significant gender effect in terms of concordance within dyads. In a study with low-income African-American youth, Howard et al. (1999) found that caregivers of male adolescents tended to consistently underestimate children's experiences with violence, whereas caregivers of female adolescents were more than two times as likely to report high levels of concordance with their children as compared to caregivers of male adolescents. It is possible that the lack of similar pattern of association in our study can be explained by the smaller sample of females who participated (30% as compared to 70% male). Alternately, this type of gender dynamic might simply not be relevant in the context of postconflict Sierra Leone.

In terms of caregiver-level variables, the study found that female caretakers were more likely to underestimate their child's involvement in perpetration of violence as compared to male caregivers, a pattern that has already been documented in Western populations of youth (McKinney & Renk, 2008). This finding suggests that either youth are more likely to share information regarding their involvement in violence against others with their male caretakers or that female caretakers are more protective of their children and prefer not to reveal their child's participation in atrocities as readily as their male counterparts.

The third research question we addressed examined the impact of concordance between caregiver and adolescent reports on specific categories of war experiences on psychosocial adjustment outcomes among former child soldiers. No empirical work has documented the way in which caregiver–child communication about war experiences might impact adjustment outcomes among former child soldiers. This study provides some support for the hypothesis that caregiver–child communication and disclosure, or more broadly caregivers' adequate knowledge about war-related experiences, has a positive impact on adolescent mental health outcomes.

The study found no significant impact of caregivers' knowledge of indirect exposure to violence or displacement on any of the mental health outcomes explored. These categories of war experiences were the most ubiquitous among youth in Sierra Leone, given the length and brutality of the war. Most caregivers knew that their child had experienced indirect violence and displacement without the need for the child to disclose these experiences with them. Therefore we did not anticipate that knowledge of these experiences would prompt caregivers to provide more than usual emotional support or encouragement to their child.

On the other hand, caregiver's adequate knowledge of direct violence was predictive of reported levels of depression among adolescents and of positive adjustment outcomes—prosocial attitudes and confidence and self -agency. Adolescents whose caregivers adequately assessed their child's history with direct violence and deprivation, on average, reported higher levels of prosocial behaviors and confidence as compared to youth whose caregivers underestimated direct experience of violence. In the context of child soldiers, it appears that caregiver awareness of their child's experience of brutal acts of violence, such as rape, beatings, and torture, can be beneficial for the youth's positive adjustment outcomes. Caregiver insight into these more extreme types of violence could very well serve a protective role in a child's transition to civilian life. Literature on victimization suggests that a common response that can be seen among victims of traumatic experiences is social withdrawal and lack of self-esteem or confidence (Avinger & Jones, 2007; Banyard & Williams, 2007; Swanston, Nunn, Oates, Tebutt, & O'Toole, 1999). Talking to a supportive adult, however, might help children reverse these tendencies. A supportive caregiver might help children make sense of their experiences, share coping strategies, and help them gain control over their emotions, resulting in less social withdrawal and more confidence (Kliewer et al., 2001).

It is interesting to note a negative relationship between overreporting of direct violence and symptoms of depression in this sample, such that youth whose caregivers overreported their experiences tended to exhibit lower levels of depression as compared to youth whose caregivers accurately reported their child's experiences with violence. If caregivers respond with more empathy and supportive parenting knowing that their child was a victim of direct violence, overestimation of such experiences might simply result in more supportive attitudes on behalf of the caregivers, resulting in lower levels of depression among youth.

In terms of involvement in fighting forces and perpetration of violence—arguably the two most severe categories of war experiences—the study revealed that caregiver knowledge of these exposures did not seem to affect substantially mental health outcomes (depression, anxiety, hostility). Recent literature on adolescent disclosure (Smetana, 2010) also alludes to the issue that disclosing very personal and impactful events might not necessarily be associated with improved mental health outcomes among adolescents. On the other hand, inaccurate reporting of children's involvement and participation in atrocities seems to affect positive adjustment outcomes (confidence and prosocial behaviors). Specifically, youth whose caregivers overestimated their child's participation in atrocities reported higher levels of prosocial attitudes and confidence and self-agency as compared to their counterparts. Interestingly underestimation of perpetration was associated with significantly lower levels of prosocial behaviors and marginally significant lower levels of confidence and self-agency. There is at least one plausible explanation for these findings. Youth who have caregivers aware of (or overestimating) their participation in killings are motivated to counter any negative perceptions of them by acting in more positive, socially appropriate ways. Additionally, caregivers who are aware of their child's participation in violence, or who believe their child was involved in inflicting violence, might be more sensitive to the ways in which their child might be perceived in the community (Boothby & Thompson, 2013). Thus, in their parenting caregivers might be reinforcing prosocial behaviors and positive social

adjustment as a way for youth to deal with the social stigma associated with the experiences of fighting or killing others:

> Upon his return, my child still had some of the bad habits he picked up in the jungle, but with my efforts and the help of God he [the child] is doing fine now … I told him how to behave and how to be polite. … Community thought that because they [child soldiers] were killers they might have the tendency of killing again. However, since they did not continue their bad behavior, we are happy with them and we are living peacefully. (Caregiver of a younger male adolescent)

In other words, our analyses suggest that caregiver–child open communication about traumatic experiences, and perpetration of violence in particular, might have a beneficial effect on positive adjustment outcomes.

Conclusion and Limitations

The results of this study broadly indicate that caregivers of former child soldiers did not have good knowledge of what children had experienced during the war, and in many cases grossly underestimated children's experience of direct violence and participation in atrocities. Our results emphasize the importance of considering caregiver–child communication about war experiences in the process of reintegration. The study suggests that caregiver insight about particularly serious and personal war experiences (rather than more ubiquitous war exposures) affects children's adjustment and thus a more nuanced perspective of caregiver–child communication postwar is needed.

Currently, reintegration programs are focused primarily on the child. The lack of focus and efforts directed toward ensuring that the family with whom the child is reintegrated is appropriately prepared to receive and support him or her is a large gap in the current strategies used to help child soldiers adjust to civilian life. After the initial reunification visit (where the child is formally brought to the family), social workers leave it up to the caregivers to decide to what extent to communicate with the child about experiences during the war and how to support the child's emotional well-being. Clearly, cultural context will greatly influence the way caregivers connect with their children and the way closeness is defined and realized. Regardless of specific contextual factors around disclosure, disarmament, demobilization, and reintegration programs should recognize the need to involve caregivers and families in tangible ways. Programs should consider fostering the caregiver– child connection and providing basic caregiver support and guidance around the psychological and emotional impact of war on children and adolescents. This might be particularly important in the context of kinship placements, where extended family caregivers might be less responsive to or invested in the child's emotional needs. In addition, service programs should also consider providing support for caregivers who themselves could be suffering from trauma and distress.

Two methodological considerations need to be emphasized in the context of this article. First, we used the youth report as the gold standard against which caregiver reports were compared to determine accuracy of caregiver report. Researchers have suggested that children might underreport violent experiences because of deliberate attempts to keep such

events a secret to avoid retribution, future harm, or stigma (Guterman & Cameron, 1997; Guterman, Cameron, & Staller, 2000). This might be the case for youth in this sample who were involved in violent acts against others or who have experienced sexual assault. By the same token, caregivers under- or overestimated violence experiences of their child. Overestimating on behalf of caregivers is especially interesting and implicates the possibility of youth underreporting certain war exposures and that caregiver reports were more accurate in those instances.

The second methodological issue is that in studying caregiver knowledge of adolescent exposures to violence, we assume that such knowledge represents, to some extent, the level of communication and disclosure between caregivers and adolescents. However, because of the uncertainty related to accuracy of child and caregiver reports, we cannot be sure that concordance of reports necessarily represents the caregiver's accurate knowledge. Nor can we be certain that discordance between reports represents poor awareness on behalf of caregivers. Future studies should consider measuring communication between parent–child dyads in more than one way to arrive at a more valid and sound understanding of such variables. Future studies should also take into consideration the complex family processes that take place during reintegration of former child soldiers and attempt to unpack and understand better the effect of caregiver–child communication on adolescents' reintegration trajectories and well-being.

The results of this study should also be considered in light of some sampling limitations. Specifically, the sample of child soldiers who participated in this study was not randomly selected from the population of all formerly abducted youth in Sierra Leone. However, this sample is drawn from more than five districts in Sierra Leone, located in different parts of the country; thus the sample is reflective of experiences of child soldiers in these diverse districts.

Despite these limitations, this study has much to contribute to hypothesis generation and initial findings related to questions that are very pertinent to the reintegration and well-being of a growing segment of war-affected children. We found partial evidence that caregivers' knowledge about adolescent exposure to serious types of violence during the war is important for the positive adjustment of these youth. These findings are important to consider in light of the very scant research on this topic.

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Table 1

Descriptive Statistics on the Sociodemographic Characteristics of Adolescent and Caregiver Participants

Characteristic	*N*	%	*M*	*SD*
Adolescents				
Age at interview, y			16.57	2.60
Age of abduction, y			11.15	3.08
Years with armed forces, y			3.07	2.38
Gender				
Females	80	28%		
Males	202	72%		
Research group				
NGO reintegrated	154	54%		
Self-reintegrated	128	46%		
Religion				
Christian	130	46%		
Muslim	152	54%		
Literacy				
Poor	25	10%		
Functional	133	55%		
Moderate	59	24%		
Excellent	27	11%		
Who the child lives with now				
Own family (mother, father)	166	59%		
Siblings' family	27	10%		
Extended family	72	25%		
Other family (foster, stepparent)	17	6%		
In school at interview	220	79%		
Caregivers				
Gender				
Females	154	55%		
Males	127	45%		
Religion				
Christian	129	56%		
Muslim	152	54%		
Relationship to child				
Mother	85	32%		
Father	53	20%		
Sibling (brother or sister)	31	11%		
Extended family (e.g., uncle)	98	37%		
Other (e.g., foster parent)	1	0%		
Family received support from NGOs	142	53%		

Characteristic	*N*	%	*M*	*SD*
Family relative socioeconomic status			9.44	2.21

Note. y = youth; NGO = nongovernmental organization.

Table 2

Adolescent and Caregiver Concordance on Individual War Exposures

War category	Adolescents reported experiencing war event		Adolescents did not war report experiencing event		*P* value[a]
	Caregiver-adolescent agreement	Caregiver underreporting of event	Caregiver-adolescent agreement	Caregiver oveneporting of event	
Displacement					
Forced to change location in Sierra Leone	252 (97%)	9 (3%)	1 (20%)	4 (80%)	.05
Forced to move to another country	38 (49%)	39 (51%)	161 (89%)	19 (11%)	<.0011
Forced to change schools	44 (54%)	38 (46%)	147 (84%)	29 (16%)	<.0011
Indirect exposure to violence					
Witnessed beating, intimidation	88 (57%)	67 (43%)	38 (62%)	23 (38%)	.01
Witnessed violent physical injury	49 (52%)	46 (48%)	95 (77%)	29 (23%)	<.0011
Witnessed violent death	70 (55%)	58 (45%)	60 (66%)	31 (34%)	.003
Witnessed bomb at close distance	93 (57%)	71 (43%)	53 (62%)	32 (38%)	.004
Witnessed stabbing at close distance	34 (34%)	66 (66%)	124 (83%)	26 (17%)	.003
Witnessed shooting at a close distance	105 (60%)	71 (40%)	49 (67%)	24 (33%)	.0001
Witnessed massacres of many people	39 (32%)	83 (68%)	104 (82%)	23 (18%)	.01
Witnessed amputation	16 (19%)	70 (81%)	143 (88%)	20 (12%)	*ns*
Witnessed a child's home raided	25 (32%)	54 (68%)	143 (84%)	27 (16%)	.004
Witnessed a child's school raided	10 (29%)	25 (71%)	204 (95%)	10 (5%)	<.0011
Witnessed a village raid	77 (53%)	68 (47%)	70 (67%)	34 (33%)	.001
Witnessed indiscriminate firing	81 (52%)	76 (48%)	67 (73%)	25 (27%)	.0002
Direct experiences with violence					
Beaten by armed forces	90 (58%)	65 (42%)	66 (64%)	37 (36%)	.0005
Threatened to be killed	86 (52%)	81 (48%)	57 (62%)	35 (38%)	.04
Chased by armed forces	60 (51%)	58 (49%)	122 (87%)	19 (13%)	<.0011
Forced to take drugs	24 (26%)	68 (74%)	151 (90%)	16 (10%)	.0004
Chopped or stabbed	3 (12%)	22 (88%)	232 (99%)	2 (1%)	.0001
Shot	15 (34%)	29 (66%)	207 (96%)	8 (4%)	<.0011
Kidnapped	81 (60%)	54 (40%)	90 (73%)	34 (27%)	<.0011
Held in detention	39 (43%)	51 (57%)	142 (84%)	27 (16%)	<.0011

War category	Adolescents reported experiencing war event		Adolescents did not war report experiencing event		*P* value[a]
	Caregiver-adolescent agreement	Caregiver underreporting of event	Caregiver-adolescent agreement	Caregiver oveneporting of event	
Arrested	82 (58%)	60 (42%)	88 (75%)	29 (25%)	<.0011
Exposed to looting of own home	28 (33%)	58 (67%)	141 (81%)	32 (19%)	.01
Raped or sexually abused by armed forces	22 (52%)	20 (48%)	200 (92%)	17 (8%)	<.0011
Without food for 2+ days	182 (84%)	34 (16%)	15 (35%)	28 (65%)	.003
Without water for 2+ days	31 (41%)	44 (59%)	151 (82%)	33 (18%)	<.0011
Without shoes/clothes/shelter for 2+ days	171 (85%)	30 (15%)	30 (52%)	28 (48%)	<.0011
Involvement with fighting forces					
Cooked, cleaned	143 (81%)	34 (19%)	28 (56%)	22 (44%)	.0003
Canied arms	70 (63%)	42 (37%)	71 (62%)	43 (38%)	.0002
Recruited and trained by armed forces	23 (36%)	41 (64%)	140 (86%)	22 (14%)	.0001
Involved in spying, relating information	21 (29%)	51 (71%)	145 (94%)	9 (6%)	<.0011
Directly involved in fighting	24 (36%)	42 (64%)	152 (95%)	8 (5%)	<.0011
Perpetration of violence or killing					
Injured or killed stranger	13 (25%)	38 (75%)	133 (96%)	6 (4%)	<.0011
Injured or killed someone you knew	3 (43%)	4 (57%)	181 (99%)	2 (1%)	<.0011
Injured or killed extended family	0 (0%)	3 (100%)	183 (98%)	4 (2%)	*ns*
Injured or killed close friend	3 (18%)	14 (82%)	166 (96%)	7 (4%)	.02

[a]Pearsons's chi-square tests performed to compare caregiver and adolescent reports.

Table 3

Adolescent–Caregiver Sample Differences on War Exposure Subscales

	Adolescent			Caregiver			Adolescent–caregiver differences				
War category	**Range**	***M***	***SD***	**Range**	***M***	***SD***	**Range**	***M***	***SD***	***t* statistic[a]**	***p* value**
Displacement	0–3	1.59	.72	0–3	1.47	.68	−2–2	.12	.77	2.55	.01
Indirect exposure or witnessing of violence	0–12	6.01	3.31	0–11	4.35	3.21	−8–11	1.56	3.58	6.24	<.0001
Direct experience of violence and deprivation	0–14	6.01	3.32	0–11	4.91	2.67	−9–10	1.23	3.37	5.71	<.0001
Involvement with fighting forces	0–5	2.19	1.25	0–5	1.73	1.07	−3–5	.44	1.41	4.73	<.0001
Perpetration of violence	0–3	.43	.75	0–3	.19	.58	−3–3	.21	.76	3.81	.0002

[a] *t* statistic and *p* value derived from the paired *t* test performed to compare caregiver and adolescent reports.

Table 4

Multiple Regression Analysis Examining the Effect of Caregiver Knowledge about Adolescent War Experiences on Adolescent Adjustment Outcomes

	Anxiety	Depression	Hostility	Prosocial attitudes	Confidence and self-agency
Displacement					
Intercept	16.88***	10.72***	19.28***	35.72***	22.55***
Underreporting of displacement	−3.04	−.42	−2.61	−3.22	−1.71
Overreporting of displacement	.12	1.05	−.38	−2.06**	−1.01
R^2 statistic	.05	.13	.08	.14	.11
Indirect exposure to violence or witnessing					
Intercept	17.06***	11.29***	20.13***	33.95***	22.42***
Underreporting of indirect exposure	−.47	.65	−.74	−.99	−1.24
Overreporting of indirect exposure	1.11	−.18	−.15	.84	.03
R^2 statistic	.06	.14	.08	.11	.12
Direct experiences with violence and deprivation					
Intercept	17.23***	13.14***	22.02***	33.47***	22.12***
Underreporting of direct experiences	−.98	.22	−1.47	−1.64*	−1.43*
Overreporting of direct experiences	.15	−1.73*	−1.41	.32	.41
R^2 statistic	.04	.12	.09	.12	.10
Involvement with fighting forces					
Intercept	16.87***	11.61***	21.00***	31.09***	21.08***
Underreporting of involvement	−1.97*	−.84	−1.62	−.73	−.88
Overreporting of involvement	.90	−.09	−.86	1.63*	1.16~
R^2 statistic	.05	.08	.10	.13	.15
Perpetration of violence					
Intercept	19.27***	12.51***	21.46***	32.50***	22.45***
Underreporting of perpetration	.18	.90	1.46	−3.09**	−2.00~
Overreporting of perpetration	2.34*	−.11	1.45	3.17**	3.04**
R^2 statistic	.21	.19	.33	.13	.14

Note. Each regression model includes covariates describing the child's gender, age and manner of reintegration. The fitted intercept in each model represents the value of adjustment outcomes for the youth in the reference category, in this case "youth whose caregivers' adequately assessed their exposure to violence." On the other hand, the fitted parameters associated with the dummy predictors "Underestimating exposure" and "Overestimating exposure" represent the difference in the predicted value of each of the outcomes between youth whose caregivers adequately assessed exposure and youth whose caregivers under-and overestimated their exposure, respectively.

$^{\sim}p < .10$.

$^{*}p < .05$.

$^{**}p < .01$.

$^{***}p < .0001$.