Chapter 14
The Psychological Impact of Child Soldiering

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Abstract With almost 80% of the fighting forces composed of child soldiers, this is one characterization of the 'new wars,' which constitute the dominant form of violent conflict that has emerged only over the last few decades. The development of light weapons, such as automatic guns suitable for children, was an obvious prerequisite for the involvement of children in modern conflicts that typically involve irregular forces, that target mostly civilians, and that are justified by identities, although the economic interests of foreign countries and exiled communities are usually the driving force.

Motivations for child recruitment include children's limited ability to assess risks, feelings of invulnerability, and shortsightedness. Child soldiers are more often killed or injured than adult soldiers on the front line. They are less costly for the respective group or organization than adult recruits, because they receive fewer resources, including less and smaller weapons and equipment. From a different perspective, becoming a fighter may seem an attractive possibility for children and adolescents who are facing poverty, starvation, unemployment, and ethnic or political persecution. In our interviews, former child soldiers and commanders alike reported that children are more malleable and adaptable. Thus, they are easier to indoctrinate, as their moral development is not yet completed and they tend to listen to authorities without questioning them.

Child soldiers are raised in an environment of severe violence, experience it, and subsequently often commit cruelties and atrocities of the worst kind. This repeated exposure to chronic and traumatic stress during development leaves the children with mental and related physical ill-health, notably PTSD and severe personality

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Statements quoted in the text originate from the authors' own work with formerly abducted children and former child soldiers during diagnostic interviews or therapeutic work in Northern Uganda and the Democratic Republic of Congo in the framework of project interventions of the NGO vivo. All clients have personally given written informed consent for publication of their experiences. Some have in fact urged us to tell the world what happened using their own words.

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changes. Such exposure also deprives the child from a normal and healthy development and impairs their integration into society as a fully functioning member. This chapter presents in detail the cascade of changes that prove to be non-adaptive in a peaceful society. Further, ex-combatants experience social isolation arising from a number of factors, which include host communities' negative attitudes towards ex-combatants and their psychological problems causing difficulties in social interaction. The risk of re-recruitment is high when ex-combatants fail to reintegrate economically and socially into their civil host communities, which may cause substantial economic development issues, and a new turn in the cycle of violence becomes inevitable. We therefore conclude that the provision of extensive mental-health services needs to be an essential part of demobilization and rehabilitation programs. This will improve the individual's functioning, it will build capacity within the affected community, and it may be designed to break the cycle of violence.

In this chapter, we include formerly abducted children's description of selected experiences of child soldiering. The reader might be faced with emotional reactions, due to the detailed first-person reports. All narratives originate from either clinical diagnostic interviews or testimony established during psychotherapy with NET (Narrative Exposure Therapy). All children, who are voicing their life experiences, have been part of an already completed or on-going mental-health project, implemented to psychologically rehabilitate the beneficiaries by the NGO vivo.

Child Soldiers Characterize 'New Wars'

In 2004, political scientists counted more than 42 wars and armed conflicts worldwide, almost all of them in developing countries (Schreiber, 2005). Observers of these current 'new wars' (Kaldor, 1999) or 'complex political emergencies' (Ramsbotham & Woodhouse, 1999) have noted that the main target of the warring parties is the civilian population, and the systematic atrocities, massacres, and bombings are often applied as rational strategies within current warfare. Never before in history have child soldiers played such a prominent role, constituting 80% of the fighting forces. This is one indication that we are witnessing a qualitative change in the way wars are waged and in the way organized violence is exerted; in other words, a transformation in the 'culture of violence' cannot be overlooked. Researchers have noted that the following are new characteristics or trends (Elbert, Rockstroh, Kolassa, Schauer, & Neuner, 2006; Kaldor, 1999):

- Fighting is dominated by irregular forces, including paramilitary units, rebel forces, mercenary troops, and foreign armies that intervene in civil wars. As outlined below, a clear separation between civilians and soldiers disappears. Forcibly recruited child soldiers belong to the usual repertoire of most forces in the new wars. Parties to the conflict are frequently led by powerful warlords, with little or no power of the state.
- Conflicts are justified by identification with ethnic groups, cultures, or religions, while actually the conflicts are driven by economic factors: warring parties get

resources from supporting foreign countries and exiled communities, in order to control local resources, like minerals, oil, or drugs.

- Warfare strategies include systematic atrocities, like massacres and mass rapes, to frighten civilians and to make regions uninhabitable for the group to be expelled. Another reason for the prevalence of atrocities in current wars is the assumption that they help to unite the group committing the atrocities. Easily available small weapons are sufficient for this type of warfare.

Children have increasingly become victims and perpetrators of warfare (Redress, 2006). Crimes against humanity, like hunting humans, mutilations, and mass rape, are not an exception, but may be a characteristic of adolescent gangs that have gotten out of society's control. Some have argued that the ability to be cruel is a way to exert negotiating power in this context, which may explain why there is little intervention of the ruling groups to prevent atrocities. Internationally agreed upon, undesirable, and prohibited war outcomes, which in fact are a hallmark of today's conflicts, have been defined (Hicks & Spagat, 2008) and the phenomenon of child soldiering is one of them.[1]

The proportion of civilian casualties in armed conflicts has increased continuously during the twentieth century and is now estimated at more than 90%. About half of the victims are children (UNICEF, 2002). More than 2 million children have died as a direct result of armed conflict over the last decade. More than three times that number – at least 6 million children – have been seriously injured. Between 8,000 and 10,000 children are killed or maimed by landmines every year (Pearn, 2003; UNICEF, 2005). Of the ten countries with the highest rates of deaths of those under the age of 5 years, seven are affected by armed conflict (UNICEF, 2005). The World Bank reports additionally that the average mortality rate of children under the age of 5 years increased significantly as a consequence of war (Collier, 2003).

War-related injury means wounds in the body and the mind. Traumatic stress can also occur from painful and frightening medical treatments and living with disability, especially in resource-poor countries. It is estimated that 4 million children have acquired disabilities after they were wounded in conflict over the last decade. For example, 75% of the injuries incurred from landmines in rural Somalia are to children between the ages of 5 and 15 years (ICRC, 1994). All of these samples include formerly abducted children and child soldiers. The lack of appropriate and timely

[1] According to Hicks & Spagat, 2008, others are high mortality to civilians versus combatants; increased injuries to civilians versus combatants; torture of civilians or combatants; rape or sexual humiliation of civilians or combatants; sexual humiliation of civilians or combatants; mutilations of civilians or combatants; kidnapping and hostage taking; disappearances; summary execution of captured prisoners; terrorist attacks; assassination of civilian leaders; attacks on religious and medical personnel and on medical units; use of particularly undesirable or prohibited weapons (e.g., landmines and booby traps); suicide bombers disguised as civilians; child death or injury; female civilian mortality or injury; elderly civilian mortality or injury; violence to non-combatant indigenous groups; use of human shields; initiating weapon fire from among civilians; locating headquarters or weapons storage among civilians; combatants taking civilian appearance during military operations (e.g., not wearing uniforms); combatants disguised as humanitarian, peacekeeping, or medical workers; leaving landmines or unexploded ordnance; destroying infrastructure essential for civilian survival (e.g., food, water sources, hospitals).

medical assistance during child soldiering is an additional serious humanitarian issue.

Among a number of at-risk populations, children of war and child soldiers are a particularly vulnerable group and often suffer from devastating long-term consequences of experienced or witnessed acts of violence. Child war survivors have to cope with repeated and thus cumulative effects of traumatic stress, exposure to combat, shelling and other life-threatening events, acts of abuse, such as torture or rape, violent death of a parent or friend, witnessing family members being tortured or injured, separation from family, being abducted or held in detention, insufficient adult care, lack of safe drinking water and food, inadequate shelter, explosive devices and dangerous building ruins in the proximity, marching or being transported in crowded vehicles over long distances, and spending months in transit camps (Barath, 2002; Boothby, 1994; Elbert et al., 2009; Karunakara et al., 2004; Mollica, Poole, Son, Murray, & Tor, 1997; Schaal & Elbert, 2006; UNICEF, 2005; Yule, 2002). These experiences can hamper children's healthy development and their ability to function fully, even once the violence has ceased.

Furthermore, destruction brought by war is likely to mean that children of war and child soldiers are deprived of key services, such as education and health care. A child's education can be disrupted by armed conflict, due to abduction, displacement, absence of teachers, long and dangerous walks to school (e.g. landmines, snipers), and parental poverty (e.g. inability to provide school fees and uniforms and the necessity for children to contribute to household income). Schools can be caught up in conflict as part of the fighting between government forces and rebel groups or can be used as centers for propaganda and recruitment. Attacks on and abductions of teachers and students are a frequent phenomenon of global warfare. The same can be observed for hospitals, doctors, and nursing staff. Health centers often become a direct target, the medical supply is cut off during intense periods of fighting, and health personnels are frequently kept from accessing the sick and injured as a political strategy (Cairns, 1996; Sivayokan, 2006; UNICEF, 2005).

The social consequences of growing up in shattered, war-torn environments include effects like alcoholism, drug abuse, and early unprotected sexual activity (sex for food and security), which can result in teenage pregnancy and the contraction of HIV/AIDS (Kessler, 2000; Yule, 2002). The increased likelihood of HIV transmission in conflict zones is mostly due to the breakdown of family, school, and health systems, with their regulatory safeguards that could counter these risks (UNICEF, 2005).

During 1990 and 2005, an estimated 30 million children were forced by conflict and human right violations to escape their homes and are currently living as refugees in neighbouring countries or as internally displaced within their own national borders. During flight, families may become separated. More than 2.5 million children have been orphaned or separated from their families because of war in the past decade (Pearn, 2003; Southall & Abbasi, 1998; UNICEF, 2005). The poor living conditions, in which fleeing families find themselves, increase children's vulnerability to malnutrition, diarrheal diseases, and infections (Toole & Waldman, 1993). In Africa, crude mortality rates have been as high as 80 times baseline rates among refugees and internally displaced populations (IDP) (Toole & Waldman, 1997).

Often the period of exile runs into years and decades, and in such cases, children may spend their whole childhood in camps and displacement. Nowadays, there are entire generations of children who have never lived at home in Africa and Asia (UNICEF, 2005).

The Use of Child Soldiers in Armed Conflicts

Prevalence and Phenomenon

> A child soldier is any person under the age of 18 who is a member of or attached to government armed forces or any other regular or irregular armed force or armed political group, whether or not an armed conflict exists. Child soldiers perform a range of tasks including participation in combat, laying mines and explosives; scouting, spying, acting as decoys, couriers or guards; training, drill or other preparations; logistics and support functions, portering, cooking and domestic labour; and sexual slavery or other recruitment for sexual purposes (Coalition to Stop the Use of Child Soldiers, 2007).

Hundreds of thousands of children are conscripted, kidnapped, or pressured into joining armed groups. The proliferation of lightweight weapons has made it possible for children under the age of 10 years to become effective soldiers. Compared to earlier weapons, which required strong physical force to be an effective fighter, this is a notable change in technology that has allowed recruiting children as a new class of fighters, which is a defining characteristic of the 'new wars.' The trend in using children in armed conflict as soldiers is not diminishing. An estimated 300,000 child soldiers – boys and girls under the age of 18 – are involved currently in more than 30 conflicts worldwide (Child Soldier, 2001; Jayawardena, 2001). Some 40% or 120,000 child soldiers are girls, whose plight is often unrecognized because international attention has largely focused on boy soldiers. In general, when people speak of 'child soldiers,' the popular image is that of boys, rather than the thousands of girls who comprise the less visible, 'shadow armies' in conflicts around the world (McKay & Mazurana, 2004).[2] While the use of child soldiers as combatants is a

[2]According to the United Nations and Save the Children, key conflict areas where the problem of boy and girl soldiers has been and remains acute today include Colombia, East Timor, Pakistan, Uganda, the Philippines, Sri Lanka, the Democratic Republic of the Congo (DRC), and western and northern Africa. Moreover, in Afghanistan, Chechnya, the West Balkans, Haiti, Liberia, Peru, Rwanda, and Sierra Leone, recruitment and abuse of child soldiers have occurred. Like the boys, typically the majority of girl soldiers are abducted or forcibly recruited into regular and irregular armed groups, ranging from government-backed paramilitaries, militias, and self-defense forces to antigovernment opposition and factional groups, which are often based on ideological, partisan, and ethnic or religious affinity. Children are recruited and used in armed conflict in at least 15 countries and territories at present which are Afghanistan, Burma (Myanmar), Central African Republic, Chad, Colombia, Democratic Republic of Congo (DRC), India, Iraq, Occupied Palestinian Territories, Philippines, Somalia, Sri Lanka, Sudan, Thailand, and Uganda. Countries especially named for sexual exploitation of child soldiers – this includes boys as well as girls – are Afghanistan, Angola, Burundi, Congo, Honduras, Cambodia, Canada, Columbia, Liberia, Mozambique, Myanmar/Burma, Peru, Rwanda, Sierra Leone, Uganda, United Kingdom, and USA (Alfredson, 2001; Human Rights Watch, 2009).

contemporary development, children have continuously served throughout history as servants, messengers, porters, cooks, and to provide sexual services. Some are forcibly recruited or abducted; others are driven to join by poverty, abuse, and discrimination, or to seek revenge for violence enacted against themselves and their families. When children are recruited into combat and servitude, they experience sexual violence and exploitation and are exposed to explosives, combat situations, and the experience and witnessing of killings (Pearn, 2003). Reports abound from conflict zones of girls and boys being abducted and forced into sexual slavery by militias or rebel groups (Southall & Abbasi, 1998; UNHCR, 2003; UNICEF, 2005).

Reasons for Recruitment of Children

The development of light weapons and small arms made it possible, for the first time in history, to recruit children as fighters. Blattman (2007) summarized several reasons why children and young adolescents have become the focus of recruitment, because this possibility arose in the late twentieth century. The following arguments should be interpreted as complementary facets of motivations for child recruitment. First, the current demographic shift in poor countries (in part due to HIV/AIDS) led to the largest population of children and adolescents ever, making this age group most available for recruitment and abduction. Second, commanders (especially African) emphasize stamina, survival, and stealth of child soldiers, as well as their fearlessness and will to fight (International Labor Organization [ILO], 2003). This may be due to children's limited ability to assess risks, feelings of invulnerability, and short-sightedness (Brett & Specht, 2004). It is a fact that child soldiers are more often killed or injured than adult soldiers, which can be explained by their being deployed at the front line, e.g. to lay or clear mines, or as suicide bombers because they provoke less suspicion (Coalition to Stop the Use of Child Soldiers, 2008). Third, child soldiers are cheaper for the respective group or organization than adult ones, because they receive fewer resources, including fewer and smaller weapons and equipment.

From a different perspective, becoming a fighter may be an attractive possibility for children and adolescents facing poverty, starvation, unemployment, and ethnic or political persecution (International Labor Organization [ILO], 2003). Facing these problems, children are 'soft targets' as recruits into armed groups and may be more willing to fight for honour or duty, for revenge, or for protection from violence (Brett & Specht, 2004; Redress, 2006). Fourth, children are also easier to retain in the group. In our interviews (see below), child soldiers and child commanders argue that children are more malleable and adaptable, and hence easier to indoctrinate. They stick more to authorities without questioning them. Moral and personality development is not yet completed in children, reducing their inhibition against performing crimes against humanity. Interviews with rebel leaders of the Ugandan Lord's Resistance Army (LRA) revealed that adults have been the most skilled fighters, but also those who were most likely to desert. Despite being weak

fighters, young children have been most likely to stay, because they were easiest to indoctrinate, while at the same time, it is more difficult for them to plot escape strategies. Adolescents seemed to offer the best fit between malleability or likelihood to stay and effectiveness as fighters (Blattman, 2007). In addition, Somasundaram (2002) stated that military leaders in Sri Lanka prefer younger children because of their suggestibility and fearlessness or weaker ability to estimate dimensions of danger.

Enlistment and Recruitment

Pertinent Laws of War anonymously state that the enlistment, recruitment, use, and/or deployment of child soldiers under the age of 15 are actions that are war crimes according to the 1989 Convention on the Rights of the Child, and the 1998 Rome Statue of the International Criminal Court.

These two guiding, international instruments have even been advanced by the Convention of the Rights of the Child, which states a 'straight 18' approach to recruitment in the 2002 Optional Protocol to the Convention on the Rights of the Child. The 1990 African Charter on the Rights and Welfare of the Child supports the age of 18 as a minimum entry age of soldiering (more information on related topics can be sought in Redress, 2006). There are hardly any systematic investigations of child soldiers, exploring their views, motives, and identities. We therefore have performed semi-structured interviews in several regions of East Africa.

Forced or Voluntary Recruitment and Remaining?

A cautionary note to the reader: the following pages contain interviews with children, some of whom report events that were exceedingly graphic or violent. These children have experienced or observed these horrific events in environments of conflicts or wars, and thus, their first-person accounts, while shocking, are needed to illustrate the nature and depth of the issues. The editor.

K.G., a 16-year-old boy at the time of the interview (South Kivu, Democratic Republic of Congo [DRC], March 2009), was an active recruit for 3 years, i.e. he joined at age 13:

> I think I joined freely. All my friends were already part of this group, even my uncle and many of my cousins. The Mai-Mai had long been around us; in fact they had built shelters next to our community in the forest. One day a friend of mine told me to come to the football grounds for a game. There we saw the Mai-Mai and they were telling us that today would be their pay-day, that a government official of the Congolese army would come and give them their monthly wages and if we joined, we could all get a share of that money. It didn't take me long to decide. In those days I was frightened, since our home was attacked almost every night by bandits and other rebel groups as well, what did I have to lose? Also my parents were too poor to send me to school anymore. My mind was made up fast, I joined my friends and from that day I never went home to my parent's house again. I know you think, how can I not think of home, but I never did. I was totally there in the forest

> with the rebels, I only thought of today and the drugs we got there. One time my parents tried to find me and buy me out with a goat, but I didn't even look at them. Home did not exist anymore you know, I was always under drugs from that day onwards. Also we had a purpose. You know North Kivu is very rich, many people come and want to rule us, they come and want our riches and we need to fight that, we need to fight for our freedom and to fight for our village. Our commander used to talk to us about this every morning when we met for morning assembly.

O.B. received therapeutic treatment for trauma-related mental health when he was an 18-year-old (May 2006). He had served for nearly 5 years after being abducted by the Lord's Resistance Army (LRA) in Northern Uganda at age 14:

> After two days, an assembly took place. Everybody was gathered. They talked about us newly abducted children and they said: "you look like people who plan to escape and we are going to make you rebels now." They told us to lie down. Now we were surrounded by 40 rebels. They said: "do not raise your head or we will kill all of you." We had to stretch our hands forward and put our foreheads to the ground. They started beating my back. 350 strokes were given on my back and buttocks. After a while the pain was so big that I felt that it would be better if I was dead. It was just too much to bear. Coldness started creeping into my body. And the trembling started. And then it happened again. I looked at my body from outside. I knew I would die. I saw death. It was in me. Death takes people's soul. My soul was already outside my body. I could feel pain, deep pain, but it was not from my back, from the strokes, it was everywhere inside me now. Death was trying to take my soul. Pain was everywhere in me. I could see death. You can see it when you are going to die. I couldn't hear anything. I also didn't realise when it was that they had stopped beating me. But then I heard a loud voice: "Get up." I tried, but I couldn't sit. I kneeled for almost one hour. It felt like a very long time. I realised that all other children around me had died in the beating. I could see them lying still and not breathing. They were lying all around me. Their bodies were swollen and full of blood all over. The rebels dragged their bodies and dumped them into the nearby river.

K.K.G., male, 16 years old at time of diagnostic interview (March 2009), spent 3 years as an active recruit, joining Mai-Mai, in North Kivu, DRC at age 13:

> When you would not follow the commander's rule, he could get very angry. People would get beaten terribly for disobedience or if they were trying to escape. When their wounds were open and bleeding, salt was rubbed inside their wound. In that the commander was merciless. You had to follow the rules or you would lose the 'protection'. When people did something really wrong, they got killed as a punishment. . .I have seen 5 people being killed for severe disobedience during my time with the group. They were crucified in the forest. The commander would order them being nailed to trees at their hands and feet higher up on tall trees. The nails were thick ones, like those you would use to nail big logs for the roof of a house. You would first nail through the palms of the hand and later through the feet, just below the ankle and then turn the nail around so as to fix the foot to the tree stem. Sometimes the commander then ordered for people to be burnt with hot plastic again and again until they had real holes in their bodies.

Even if it might appear so to the individual child, from a psychological and social point of view, children's choices to join and remain in armed groups cannot be considered 'voluntary'. In summary we propose the following reasons:

- Children have no or limited access to information concerning the consequences of their choice; they neither control nor fully comprehend the structures and forces that they are dealing with.
- Children have little knowledge and understanding of the mid- and long-term consequences of their actions.
- Children might be told and believe that they have to 'stand up' against an enemy, who would otherwise kill them or hurt their families; they tend to trust and obey caretakers' and families' or key community leaders' judgement on this.
- Children might believe that they have to take the place of a family member, who would otherwise be enlisted, or to avenge a family member, who has been killed by the 'enemy,' which might constitute a emotionally perceived life-threat for the child.
- Conditions of civil war and armed conflict undermine the ability of families and communities to protect the young of both sexes (Druba, 2002); parents might then be driven to give in to the powerful influence of militia leaders of their own ethnic group. Enlistment on the part of the parents or caretakers can never be considered 'voluntary' on part of the child.
- A large number of child victims of social chaos and violence become orphans, refugees, or are only partly protected by adult care, as a result being left alone in their struggle to survive social, emotional, and economic hardship, a potential push factor into recruitment. Interestingly, it is extremely rare for wealthier children from urban areas to be recruited.
- With systematic indoctrination and acculturation, a commander can, over time, replace the position of a caretaker/parent and serve as an adult role model, which children will naturally accept, and in fact, need to attach to for mentorship, guidance, and survival; fellow child combatants can take the place of siblings and/or replace the community peer group; this 'surrogate family' phenomenon does not imply a voluntary choice by the child, but a forced adaptation and might, in fact, be a sign of healthy development in the absence of other choices.
- Children might feel that they have to protect themselves, if the official state structure, community, or family cannot; by perceiving to have no choice, they might try to escape the violence and abuse around them – and enlisting might become a perceived means of survival.
- Girls might think that joining an army might protect them from being raped or harmed by free-roaming 'militia groups'.
- During the initial period, children who have joined armed groups, whether voluntary or forced, are almost always subjected to harsh, life-threatening initiation procedures, such as severe beatings, forced killings, magic-spiritual rituals (e.g. tattooing, scarring, spraying with blood or 'holy' water), and forced drug intake, in order to make them 'proper soldiers' and fear the repercussions of escape; such practices tend to be forced on the new recruit and put children's lives in danger.
- Rarely do demobilized children share with their parents or communities the emotional context of what they have experienced or how they were treated; as a result of the lack of emotional communication, reintegration into local communities is hampered by perceptions of the community's view of the particular armed group

with which the child was associated. The individual needs and unique case of the returning child are rarely considered. Stigmatization levels are high at the time of re-entry into the community of origin and constitute a potential push factor for re-recruitment.

Risk Factors for Recruitment

Known risk factors for becoming a child soldier are poverty, less or no access to education, living in a war-torn region, displacement, and separation from one's family, with orphans and refugees being particularly vulnerable (Beth, 2001). Somasundaram (2002) lists the following factors as catalysts for children to become Liberation Tigers of Tamil Eelam (LTTE) child soldiers in North-Eastern Sri Lanka: death of one or both parents or relatives, family separation, destruction of home or belongings, displacement, lack of food, ill health, economic difficulties, poverty, lack of access to education, no avenues for future employment, social and political oppression, harassment from government soldiers, abductions, and detention. He also describes an emerging pattern of youth violence in the general population after two decades of war in the affected communities. After growing up in a war environment, male youth in displaced camps seemed to drift into anti-social groups and activities when a natural disaster hit the coastal regions. Unemployed and left out of school-based programs, some left to join militant groups, while other started abusing alcohol and formed into violent groups and criminal gangs. Having grown up immersed in an atmosphere of extreme war violence, many had witnessed horrifying deaths of relatives, the destruction of their homes and social institutions, experienced bombings, shelling, and extrajudicial killings (Somasundaram, 2007).

A similar pattern of 'saturation' can be assumed in children who grow up in conflict-stricken communities, which later become recruitment targets of rebel movements. This could constitute a pull factor for joining the movement. Further reasons might be hearing false promises or relatives taking part in the movement. As P.A.N., who was male, 29 years at time of diagnostic interview (March 2009), served 1 year as an active recruit, and joined Mai-Mai in North Kivu, DRC at the age of 15 years, described:

> The whole village was overtaken by Hutu's and even our houses and shambas (fields) were occupied by them. The population of the villagers was living in displacement. My whole family and all my relatives and friends were displaced. So we decided to protect ourselves and our 'earth' and to fight. All young men were in this, family members, friends, the whole community. You see our parents could not support us, there were no more school fees and no more home. When I was 16 years old, I joined the Mai-Mai. We fought to eliminate the Hutus, and there were two groups of them, the old Hutus who had come earlier and those who came during the genocide of Rwanda in 1994. So I joined to help create a resistance movement and to protect our home. During my time in the group, things changed of course and later I stayed on also because I was afraid to be killed if I fled. But there was also the other voice in me, which wanted to stay and learn as best I could to be a good combatant and especially learn how to have enough inner discipline to be strong for the rest of my life, so as to never be helpless again.

The Consequences for Children Who Have Been Combatants

Exposure to Traumatic Stress

Severe and traumatic stress and its deteriorating effects for mental health, such as the development of post-traumatic stress disorder (PTSD), a debilitating psychiatric condition, gain more and more importance in the description of societies affected by the new wars' human rights violations. Our research has highlighted the role of a 'building block effect': traumatic experiences build upon each other and cumulatively increase the chance of developing PTSD and depression (Karunakara et al., 2004; Kolassa & Elbert, 2007; Kolassa et al., in press; Onyut et al., 2009; Schaal & Elbert, 2006; Schauer & Elbert, 2010; Schauer, Neuner, & Elbert, 2005; Schauer et al., 2003). PTSD patients have developed a 'fear network,' composed of interconnected, trauma-related memories, in which even only peripherally related trauma stimuli can cause a cascading fear response with flash-back properties. Therefore, the cumulative exposure to traumatic stress constitutes a predictor of endemic mental-health issues. We begin our discussion about traumatic stress with an exemplary outline of the type and frequency of traumatic stressors in crisis regions:

V.A., a 20-year-old woman who, at time of therapy (May 2006), had spent 10 years in abduction with the LRA, Northern Uganda, reported:

> I remember my life from around the time when I was 5 years old. I lived with my parents in the hills around Gulu and we had a good time. When I was 7 years old, my mother got poisoned and died. From then on, my step-mother took over the household and I suffered a lot, she used to beat me badly. When I was 9 years old, a boy raped me while I was on the way to the well to fetch water. When I was 10 years old, I got abducted by the LRA. I witnessed how many other children got abducted and we were made to walk towards Sudan. On the way, I saw how he beat many people to death, probably those who could not keep up with the walking and the heavy loads. When we arrived at Kony's place in Sudan, I witnessed the torture and killing of a wizard. I was given to one of the elder women of a commander as a helper. She was nice, but she died soon and from then on I was mistreated by the co-wives. At age 11, I remember the commander coming home to the house early and I had not cleaned-up yet; he beat me severely for that. From that day onwards he would do it regularly. Sometimes so much that I had to go to hospital, but the rebels always took me out again forcefully and brought me back before my wounds were healed. One day when I was 12 years old, we saw how children in a school were forced to eat their own teacher by the LRA; apparently the man had resisted giving food to the rebels. At age 14 years, the commander started raping me and told me that I am now his wife. A few months later I had my first baby. It was a beautiful child, but I did not know how to look after him, so he died soon. In the same year, there was a fierce battle with the UPDF [Uganda People's Defense Force], an air attack, where many of our people in the settlement died. At age 16, I gave birth to another baby. The next morning when I woke up, also he had died. He had been tiny and weak and he probably died from the cold night air, since I had nothing to cover him. One day soon after this we saw how the Lutugu people got hold of enemies and poured boiling water over their bodies until they died. At age 18, I had to take part in a raid on Lira IDP camp. We were trying to get new abductees and food, but people resisted, so 18 of them were killed by our group. At age 20, I gave birth to George in the bush. He is weak, but he is still alive, I so much hope that he will grow up. That same year during an attack by government soldiers, the rebels, including my husband, left me behind. I guess I was a burden to them, since we women with small children were not able to run fast. He never

> explained to me what he was thinking, he just left me behind and the soldiers brought me to this reception center. In the future I hope to do small business. I am a bit worried, since I can't read and write. They want me to go back to my relatives' place, but it is insecure and rebel attacks are frequent. If I could choose, I would choose a safe place to live.

F.O., a 13-year-old boy at time of therapy (April 2006), who had spent 3 years in abduction with the LRA in Northern Uganda, described his experiences:

> I was born in 1994 in a small village in Uganda. My mother used to cook beans so well for me and my father. When I was 6 years old, my parents had a fight and my mother got wounded by my father with a knife. He would always start acting in a funny way when he was drunk, he would act as if he was still a soldier in the bush. At age 7, I finally started going to school, that was a good day. At age 11, I was abducted and that same day they made me kill 3 of my uncles. A few days later, they 'initiated' me to be a soldier and gave me 100 strokes of beating. One year later, I was forced to cut off both hands of a hunter with a hapanga. In the same year, we fought a big battle with the UPDF, where my friend was killed. When I started crying, the commander forced me to lie in his blood. Many battles followed that one in the same year, also air attacks. We were often starving, since there was no time to find food. Once we had to ambush a bus with civilians on the road towards Atiok to get hold of food; many people died and got burnt. Two days later we were asked to attack a camp. We were told to bring food and girls; we found three, but I was forced to kill two since they couldn't manage to carry the heavy loads and keep up. It wasn't long after that incident in the same year that I got a chance to escape during a battle with the UPDF. I was 13 when I reached this center.

In a study by our group (Pfeiffer et al., submitted), which was carried out in a representative selection of IDP camps of Northern Uganda during 2007 and 2008, it was found that of the interviewed sample of 1114 children and young adults, 43% were formerly abducted children and many of them were recruited temporarily as child soldiers. The most common traumatic life events of those who had been abducted were forced to skin, chop, or cook dead bodies (8%), forced to eat human flesh (8%), forced to loot property and burn houses (48%), forced to abduct other children (30%), forced to kill someone (36%), forced to beat, injure, or mutilate someone (38%), caused serious injury or death to somebody else (44%), experienced severe human suffering, such as carrying heavy loads or being deprived of food (100%), gave birth to a child in captivity (33% of women), were threatened to be killed (93%), saw people with mutilations and dead bodies (78%), experienced sexual assault (45%), experienced assault with a weapon (77%), and experienced physical assault including being kicked, beaten, or burnt (90%). The PTSD rate of the children, who were never abducted, was found to be 8.4%; of those who had ever been abducted, 33%, and those who had spent more than 1 month in captivity, the PTSD rate was measured at 48%. In this large, representative study, the children's mental-health impairment had remained chronic, because in a majority of cases, the interviews had taken place years after they had come back from captivity. One out of four former child soldiers reported to be still currently disturbed by different intensities of self-perceived 'spirit possession,' which as our data shows is a way to express and attribute symptoms of trauma-related illness and which in the studied population correlates well with a PTSD diagnosis.

In another large study by Vinck and colleagues (Vinck, Pham, Stover, & Weinstein, 2007), again in Northern Uganda, it was found that 82% of formerly

abducted children presented with PTSD symptoms. A follow-up review of Pham and colleagues (Pham, Vinck, & Stover, 2009) with former abductees showed that 67% met the symptom criteria for PTSD; in those abducted for 6 months or more, this rate rose to 80%.

In 2007, Bayer and colleagues (Bayer, Klasen, & Adam, 2007) carried out a study among former child soldiers in Uganda and Congo. The interviewed 169 children had a mean age of 15 years at the time of being interviewed. All children reported that they had been violently recruited by armed forces at a mean age of 12 years. They had served an average of 38 months in captivity. The most commonly reported traumatic experiences were having witnessed shooting (92.9%), having witnessed somebody being wounded (89.9%), and having been seriously beaten (84%). A total of 54% of the children reported having killed someone, and 28% reported that they were forced to engage in sexual contact. Further, 35% of the interviewed children had exhibited a fully developed post-traumatic stress disorder.

The 2004 Derluyn et al. (Derluyn, Broekaert, Schuyten, & De Temmerman, 2004) findings are the highest symptom scores so far reported in formerly abducted children. The study interviewed 301 former child soldiers who had been abducted. All children were abducted at a young age (mean 12.9 years) and for a long time (mean 25 months). Almost all the children experienced several traumatic events (a mean of six traumatic events): 77% saw someone being killed and 39% had to kill someone themselves.

Amone-P'Olak (2005) examined experiences of war, physical abuse, sexual abuse, and related psychological disorders in formerly abducted girls in 2005. The results demonstrated that 98% of girls had been threatened to be killed when disobeying, 98% had thought that they would be killed, 99% only narrowly escaped from death, 72% had been sexually abused by the rebels (in most cases forcefully 'being given as a wife' from the age of 13 years), 65% witnessed people being killed, 44% of the girls witnessed people being mutilated, 18% of the girls participated in killings, and 7% were forced to participate in killing own relatives. On average, the girls experienced 24 traumatic events during captivity.

The large 'Survey of War Affected Youth – SWAY' study (Annan & Blattman, 2006) found very similar rates and types of traumatic experiences as all of the above mentioned. As an additional item, this study found that 23% of the children had been forced to abuse dead bodies (see Coalition to Stop the Use of Child Soldiers, 2004, 2008 for a more comprehensive description of child soldiers' experiences).

Post-traumatic Stress Disorder

K.K.G., male, 16 years, who, at time of diagnostic interview (March 2009), had spent 3 years as an active recruit and had joined the Mai-Mai, in North Kivu, DRC at age 13 years, reported:

> When I was out in the forest, I was feeling nothing, I was drugged all the time. But after I had come out and now since I stay in this transit center, I get these terrible nightmares.

> They are always about the children we killed, especially their crashed skulls and I hear the voice of my commander telling me to do things. I wake up and get so frightened. My heart is beating strong these days and something in my head is so wrong. On one hand, I have a new life and I have left the forest behind and also all the hardship of those days, on the other, I think of the times and especially the drugs we had. Sometimes at night I walk out of the building, especially when I get the dreams and stare at the sky. I would just wish that my head gets normal again.

According to the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000), a PTSD diagnosis is restricted to individuals who have experienced or witnessed at least one traumatic event in their life, i.e. a stressor that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or other, and the subjective perception of intense fear, helplessness, and/or horror. Victims, as well as eyewitnesses, can enter a psychological alarm state during the traumatic event and a cascade of responses in the body and mind is triggered which can damage both the mind and the body (Schauer et al., 2005).

During life-threat, the defense cascade is activated as a coherent sequence of fear responses that escalate as a function of defense possibilities and proximity to danger. These reaction patterns provide optimal adaptation for particular stages of the imminence of threat. The actual sequence of trauma-related response dispositions acted out in an extremely dangerous situation depends on the appraisal of the threat by the victim in relation to his/her own power to act (e.g. age, gender), as well as the perceived characteristics of the threat or perpetrator (Schauer & Schauer, 2010 this volume; Schauer & Elbert, 2010 this book). Repeated experience of traumatic stress forms a fear network that can become detached from contextual cues, such as time and location of the danger, and thus may lead to psychological disorders or non-adaptation (Schauer et al., 2005). Traumatic events can be man-made or caused by natural disasters. The former may involve state-sanctioned or organized violence (e.g. being in a situation of war and combat, torture riots, terrorism, and mass killing) or interpersonal violence (e.g. experienced or witnessed killing or mutilation, severe physical or sexual assault, sexual abuse, rape, and domestic violence), as well as catastrophes (e.g. car accidents, airplane crashes, and accidents involving poisonous substances). Traumatic natural disasters may be severe floods, hurricanes, earthquakes, or volcanic eruptions. After repeated exposure to traumatic stressors, post-traumatic stress disorder is the most likely psychiatric condition that emerges among a range of possible trauma-spectrum disorders including depression, suicidality, and substance abuse. The considerable similarities and consistencies in the clinical manifestations of psychological disorders across diverse, affected groups globally tend to outweigh cultural and ethnic differences (Garcia-Peltoniemi, 1998; Schauer & Schauer, 2010). Across cultures, defining symptoms of PTSD are reported as follows (APA, 1994; Joshi & O'Donnell, 2003):

(1) Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions (e.g. observable in children's repetitive play or trauma-specific re-enactments); recurrent and distressing dreams (e.g. for children, nightmares with scary content of any nature); acting or feeling as if the

traumatic event was recurring; intense psychological and physiological distress at exposure to internal or external cues (e.g. observable in constriction of affect);
(2) Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness;
(3) Persistent symptoms of heightened arousal and constant alertness. Children often experience this as eating and sleeping problems, increased autonomic arousal (e.g. sweating, raised heartbeat, and concentration difficulties), foreshortened sense of future (e.g. even small children can express hopelessness in relation to ever growing up), recklessness and risk-taking behaviour, hyperactivity, withdrawal, defiance, aggression, and also numerous psychosomatic complaints (e.g. common are stomachaches and headaches) which result from frequent alarm responses, easily elicited by trauma-related cues that may appear in everyday life.
(4) In its most extreme forms, phenomena like derealization, depersonalization, or symptoms that resemble psychosis have been noted.

In order to qualify as a psychiatric disorder, the disturbance must cause clinically significant distress or impairment in emotional, social, occupational, scholastic, or otherwise important areas of functioning. In children, this is also observable as loss of acquired skills (e.g. an impact on the child's developmental functioning, such as the ability to speak), as well as its persistence for a certain amount of time.

Age at traumatization is not a consistent predictor nor a protector from traumatic stress reactions and the expression of symptomatology (Berman, 2001; Elbedour, ten Bensel, & Bastien, 1993). The age of the individual at the time of exposure does not seem to mediate symptom expression over time for a majority of suffering survivors. There are also no significant differences found in PTSD rates across different developmental stages (Fletcher, 1996). Numerous studies suggest that regardless of the passage of time, affected children and adolescents continue to suffer from distressing symptoms, with PTSD being most persistent (Almqvist & Brandell-Forsberg, 1997; Bichescu et al., 2005; Bremner & Narayan, 1998; Dyregrov, Gjestad, & Raundalen, 2002; Elbedour et al., 1993; Goenjian et al., 1999; Hubbard, Realmuto, Northwood, & Masten, 1995; Kinzie, Sack, Angell, Clarke, & Ben, 1989; Kinzie, Sack, Angell, Manson, & Rath, 1986; Marshall, Schell, Elliott, Berthold, & Chun, 2005; McFarlane, Policansky, & Irwin, 1987; Morgan, Scourfield, Williams, Jasper, & Lewis, 2003; Perry & Pollard, 1998; Ruf, Neuner, Gotthardt, Schauer, & Elbert, 2005; Sack, Him, & Dickason, 1999; Schaal & Elbert, 2006; E. Schauer, Catani, Mahendran, Schauer, & Elbert, 2005; M. E. Smith, 2005; P. A. Smith, Perrin, Yule, Hacam, & Stuvland, 2002; Thabet & Vostanis, 2000; Yule et al., 2000).

Post-traumatic Stress Disorder

Investigating more than 3,000 war refugees, we (Neuner et al., 2004; Schauer et al., 2003) found that the greater the number of different types of traumatic events experienced by an individual (e.g. torture, fighting, shelling, abduction, abuse/rape,

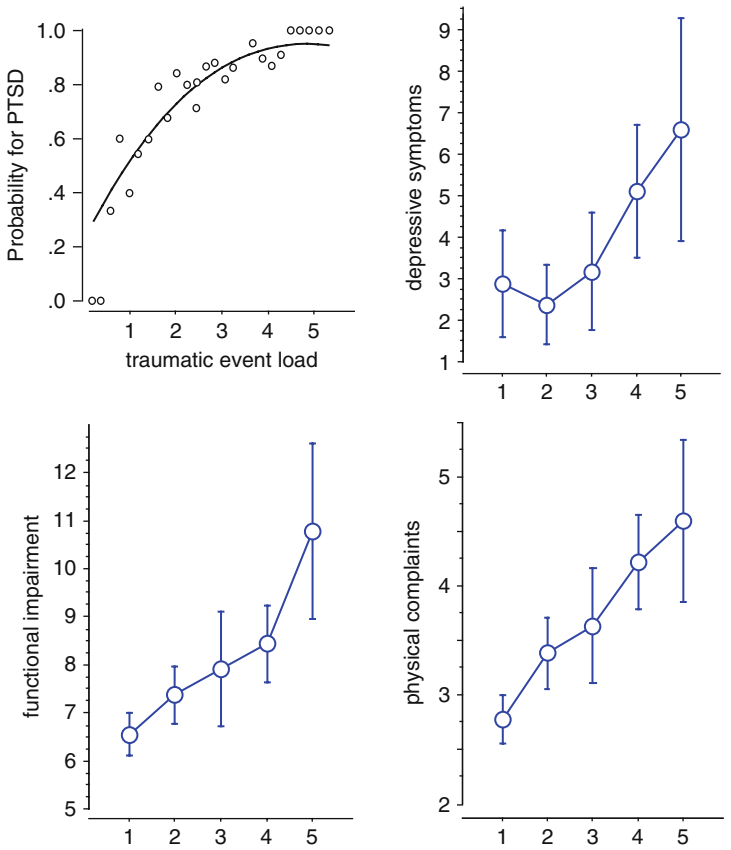

Fig. 14.1 The probability to develop a PTSD increases with cumulative experience of types of traumatic events experienced (*upper left*). Units on the *abscissa* correspond to classes of cumulative experiences of traumatic stressors. The full range is about 25 different types experienced. *Circles* indicate the observed average for PTSD for a particular event load. For those who have developed a PTSD, depressive symptoms, functional impairment, and physical diseases also become more likely with increasing exposure to traumatic stressors). *Graph upper left*: Data from survivors of the Rwandan genocide, Kolassa et al., (in press). *Other graphs*: data from a survey in Sri Lankan school children with PTSD due to the civil war, Schauer, E. (2008)

forcible female circumcision, car accident), the more likely the individual was to have PTSD, with more pronounced symptoms. In our studies, PTSD prevalence rates reached 100% for individuals having experienced a sufficiently large number of different traumatic-event types (see Fig. 14.1). This building-block effect may be a result of the development of a neural fear network, which is strengthened and extended in response to each new traumatic event (Elbert et al., 2006).

During a traumatic event, perceptual and emotional features of the situation are 'burnt' into memory (Elbert & Schauer, 2002), forming the nucleus of a neural network that is associated with the traumatic event. Subsequent traumatic events are

associated with similar elements of a hot memory (i.e. physiological, like heart beating, sweating, as well as an emotional-like feeling, such as helpless and horrified, cognitive, such as I cannot do anything, and even sensory, such as man in uniform, weapon). Network connections are strengthened through synchronous activation, so that activity in one of the memory representations facilitates activity in the other. Thus, memories of specific traumatic events will merge into an indistinct whole and a fragmentation of autobiographic context-memory results (Elbert et al., 2006; Kolassa & Elbert, 2007).

Research repeatedly has demonstrated the significant relationship between the number of traumatic-event types experienced and the likelihood of developing post-traumatic stress disorder and other disorders of the trauma spectrum: the more exposure to trauma, the more likely the development of psychological disorders (Allwood, Bell-Dolan, & Husain, 2002; Catani, Jacob, Schauer, Mahendran, & Neuner, 2008; Catani et al., 2005; Elbert et al., 2009; Kolassa & Elbert, 2007; Kolassa et al., in press; Macksoud & Aber, 1996; Neuner et al., 2004; Schaal & Elbert, 2006; Schauer et al., 2003; Steel, Silove, Phan, & Bauman, 2002). This effect of cumulative exposure makes ex-combatants a highly vulnerable group, as they are exposed to a great number and outstanding diversity of traumatic stressors.

Living with Post-traumatic Stress Disorder and Trauma Symptoms

Literature consistently shows that post-traumatic stress reactions are not transitory entities, but rather persist over time. Studies from Western countries, e.g. with Second World War veterans or political prisoners, found that PTSD has a high long-term stability, up to 40 years after the trauma (Bichescu et al., 2005; Lee, Vaillant, Torrey, & Elder, 1995). Even when a decline in symptoms is observed, it does not equate complete recovery. Presently, we know that the suffering felt by survivors of violence will last a few months, but a countless number of severely traumatized individuals, especially those who have gone through cumulative traumatic events, could suffer for the rest of their lives.

V.O., male, who was 18 years at time of therapy (October 2008), was abducted twice (first time age 4 for 7 years, second time age 13 for 2 years) by the LRA, Northern Uganda. He explained:

> My younger sister Aciro doesn't get those problems that I have, when I forget everything and act in strange ways when the memories from the bush come back. We are alone, since my parents have been killed and living in a small hut in the camp makes life difficult when this thing comes over me. When my mind goes away, then my sister runs out and locks me up in the hut. Later, when I have stopped acting out and lie down to sleep and stay quiet, she comes back. It can happen twice a day that I forget time and wake up in a strange place where I don't know how I got there. . .but this didn't just start when I had reached home. Even out in the bush, when I would sit somewhere, I started to see the film of how I had killed in front of my eyes and I also started thinking of how my father and mother were killed by the rebels, especially how they were cut. The memories came back so much and it is all mixed in my mind. Sometimes I would sit and a cold feeling would creep into my body and I would start

> shivering and from a distance pictures of the killings came to appear in front of my eyes. I used to cry so much and a great sadness had come into me. Problem now is that people in the community think I am crazy and they want to take away our ancestral land from us, but digging and harvesting is the only source of income we have.

In terms of magnitude, some research suggests that a critical mass of survivors never recover from PTSD, but that figure can be much higher after exposure to extreme, multiple, or deliberately inflicted psychological trauma. Systematic torture or child soldiering, for example, can result in much higher rates of PTSD; some authors report rates of up to 90% of survivors being affected (Basoglu et al., 1994; Derluyn et al., 2004; Moisander & Edston, 2003; Mollica, McInnes, Poole, & Tor, 1998; Neuner et al., 2009). There is emerging clarity to the question of what type of traumatic experiences will lead most likely to the development of trauma-spectrum disorders. Perpetrator events, as well as surviving rape and cruel torture, seem to have a predictive power in terms of likelihood of development of psychological disorders. One example is given by O.B., a male, 18 years at time of therapy (May 2006), whose time as an active recruit was 5 years, and who was abducted by LRA, Northern Uganda, at age 14:

> Around 5 pm, we found more people. It was a man and his wife. In the distance, I saw two children playing, boys of school-going age. I cannot say whether they had seen us coming. The parents, however, looked so frightened when they saw us. People know that rebels do bad things. The commander "A. Smart" said, come here and sit down. He asked them: "what were you doing?" The people said: "we were just at home." He replied: "we are going to kill you." The people looked frozen. Smart said: "look down." Then he recruited two people, Okello and me and he said: "Cut off their necks or I will kill you." I was trembling with fear. I knew that those who don't kill will be killed themselves. These rebels had spent a long time in the bush and had grown beards. I hadn't even been in the bush for 1 year. I was still considered newly recruited. Everybody had a gun, except me. I felt different to them. I didn't have a friend in the group. I also had different thoughts. Many of them had no fear and no mercy. They liked killing. The commander gave me the hapanga and told me to kill the man. Okello was given the woman. Rebels don't kill people twice, they do it in one stroke. So I knew it had to be one stroke. They had shown us at other times when they killed how to do this. I cut hard and through the bones in the back. The head did not come off completely, but the man was sinking forward. I was trembling. I looked around and I saw that Okello had killed the woman. Then I saw the children. They had come closer and they saw their parents now. They started crying. I still held the hapanga in my hand. All the rebels noticed the children. Nobody spoke. I started thinking of my mother and became sad. The memories of the day of my abduction and how the rebels had killed my mother came back. Then the command for movement was given. I moved with the hapanga in my hand as we went away. If you show how you feel you will be killed.

Another example is provided by F.O., a male, who was 13 years at time of therapy (April 2006), and who had spent 3 years in abduction, with the LRA, Northern Uganda:

> One day, when I was 10 years old, I had gone to collect firewood outside in the bush with my 3 uncles. As we were just tying up the logs, the rebels came. We had not heard them coming. They told us to sit down. There were 5 of them. In fact, they were younger than my uncles, all between 12 and 15 years. They were wearing dark green uniforms and had dread locks and gum boots. They had guns and they were pointing them at us. They said: "who are you?" And we tried to tell them that we are village people trying to collect firewood. They

tied my uncles' arms on their back and seated us apart. Since they did not tie me up, I was sure they would kill me first. My heart was racing, I had such fear. I started shaking all over my body. They told me to bend forward to the ground while being seated. That way I could not see a lot anymore what was going on around me. I could not hear anything anymore; there was this high tone in my ear. A gun was pressing into the back of my neck. Next, we were told to get up and carry the luggage, which they fixed on my uncle's head. . .When morning came, we stopped near a river. We were told to sit down. I looked at my uncles and felt such pity for them. They looked as if they knew that they are going to die. . .now two rebels got up and we were all told to get up. We walked some distance to a clearing under a tree. They told my uncles to lie down on their stomachs face down about three meters apart. They gave me a big stick and told me to kill them: "hit them on the back of their heads". I was starting to shake. I threw the stick away and said: "I cannot do that. I have never killed anybody." I was so frightened my body was gripped by fear. They picked the stick back up and handed it to me: "You hit or you will be killed first." There was no escape. The gun was pointed at me. I aimed and closed my eyes. I started hitting the back of my uncles' heads. I hit three times on my first uncle. He kept so quiet. No sound from him. The rebels stood behind me: "if you hit slow we will stab you from behind." Again, three times on the back of the head of my next uncle. I was shaking with helplessness. Great sadness came over me. The rebels said: "if you cry now we will kill you." I hit my third uncle on the head. Again complete quietness. There was blood and a cracking noise every time I hit. Finally the rebels pulled me away. I prayed for the dead, as I was sitting there in sadness. I thought of my mum, I was sure she could have helped me if she would have been here. I feel so frightened that the spirit of the dead will come and haunt me. I have seen children in our tent here in the center at night getting haunted by the spirits. They shout and scream and get possessed. But then I remembered my uncles well. There was Opio, the oldest, he was a nice man; he would even wash my clothes for me and cook for me. Then there was Okumu, he was a clever and kind man; he taught me how to read and write. Then there was Robert, a good man; he would bathe with me in the river and treat me like a brother. I know they would never mean to harm to me. I know they would never send a bad spirit for me.

Another example is given by M.O., a male, who was 19 years at time of therapy (May 2006), and whose time as an active recruit was 8 years, having been abducted by LRA at age 7 in Northern Uganda:

My sister was crying hard and she said: "I cannot walk anymore. See my feet, see how they are swollen. Carry me, please carry me." Our commander Bosco heard this. He was angry now and said to me: "tell her to walk." I was trying to pull my sister up, to make her stand on her feet. I was so helpless and fearful. We were both crying now. I was a small boy, I was eight years at the time and I could do nothing. My sister was six and she was tired, she could not stand anymore. Then I saw Bosco bringing a hapanga. My mind was racing, I thought he will kill both of us now. I had such fear in my chest. My heart was racing. He gave the hapanga to me. Now I realized what would happen. Bosco said: "Cut your sister or you both will die." I didn't move. Bosco slapped me with the blade of the hapanga on my back. I just stood still. I didn't move. Then he got the gun. He pointed it at me, "cut her and do it fast," was what he said. I saw three other rebels coming now. They all had guns and they all pointed at me. I thought: "let me die as well." I was not ready to move. Then I heard them firing the guns just above my head. My heart dropped. I was full of fear, I started trembling. They would not wait long now. I raised my hand and in this moment my sister cried. She shouted: "Don't cut me. We are one." I was crying and shaking and I replied: "Forgive me, I am forced to do this." Bosco gave me a kick again. I raised my hand and now the hapanga came down on the back of my sister's neck. She lay there flat on her stomach with her arms stretched out widely to both sides. Blood was coming out. She was still alive, the hapanga had not killed her. Now the others took over and killed her. They had big wooden logs and also took the hapanga and hit her hard on her head and she died. I looked at my little sister

> how she laid there, arms stretched out, quiet now. My heart was racing. And her voice was still with me, the way she had pleaded for her life. Such sadness settled now in me. My sister was left on the ground and her voice was with me for a long time. Then it got dark. I sat under a tree next to a mountain. There was food, but I could not eat. I also could not sleep. I was thinking and thinking. The pictures were there and the voice of my sister in my ear. I cried. In the morning, they gathered the group and the commander said: "if you don't walk, we will kill you just like we killed a person yesterday." I could not get out of this confused state for almost one week.

Yet, another example is given by A.A., a female, who was 15 years at time of therapy (May 2006), and who was abducted at age 13 by the LRA in Northern Uganda:

> The commander looked around and saw me and my friend sitting in some distance and he said: "call those two seated over there." He called us to come in front. And he told us: "A girl should be killed by a girl. Get the sticks and beat her to death." I got so frightened and started to shake. I said: "I don't want to kill, I don't know how to do this, I have never harmed a person." And he replied: "if you keep talking like this, then it will be Doris beating you to death and not the other way around." I feared so much now and they saw me shaking and crying. They told us to lie down on the floor on our stomach and we received 10 canings each from a boy, so as to make the fear and the crying stop. In my heart, I did not want to kill. I knew I did not want this. Doris was lying on the ground next to us on her stomach. We got up and lifted the sticks. They were about as thick as my hand wide and as long as my arm. We started beating her. On her buttock, on her shoulders, on her back. I heard her crying and shouting for help. Everybody was watching us. The commander sat right next to us. We hit her again and again. I was shaking. It was such hard work, I was so helpless. Doris cried and pleaded for help. The commander said: "if you don't stop crying now, then you have to kill a boy as soon as you are finished with her." I felt so helpless. Then Doris cried out my name. She shouted: "You are killing me, we are such good friends and now you are killing me." I slowed down the beating as much as I could and I answered her: "I did not want to do this, I am forced to do this. If it was me, I wish I would not have to do this." After that she kept quiet. She was not crying anymore. We did not know when to stop the beating, but the commander said: "Now she is dead, take her by the arms on each side and pull her over to that place in the bush, then leave her there." Finally we were allowed to leave the place. I went to where people were seated. I sat next to an older woman. Girls who have freshly killed are not allowed to sit next to the boys. But there are older women, who have killed often and know what to do, so you sit next to them. She consoled me and she took me by the arm and told me not to cry. She said to me: "stop crying or else they will kill you." She sat near me and held my hand. After you kill you shouldn't cry.

A study by Gloeckner (2007) found that the more violence children had been forced to commit against others, the more PTSD symptoms could be expected. Nader and colleagues (Nader, Pynoos, Fairbanks, al-Ajeel, & al-Asfour, 1993) found that children who reported 'hurting another human being' scored highest in terms of development of PTSD symptoms in war-exposed children in Kuwait. Derluyn and colleagues (Derluyn et al., 2004) reported a prevalence of 97% post-traumatic stress reactions of clinical importance in former child soldiers, among who 39% had to kill a person themselves and 77% of the children had witnessed killings while in captivity. Other studies in veterans have furthermore shown that witnessing abusive violence and enormous cruelty was of especially high-traumatic valence (Hiley-Young, Blake, Abueg, Rozynko, & Gusman, 1995; Nader et al., 1993).

The Impact of Trauma on the Body

Beyond psychological suffering from the symptoms of PTSD, traumatized populations show significantly elevated levels of physical morbidity and mortality. As outlined above, in recent years, evidence has mounted that severe anxiety states – stress at a traumatic level – lead to a functional and structural alteration of the brain (Eckart et al., submitted; Kolassa & Elbert, 2007). The co-occurrence of several pathogenic processes includes a permanent alteration of bodily processes, due to a state of persistent readiness for an alarm response. Psychobiological abnormalities in PTSD are observed as psychophysiological, neurohormonal, neuroanatomical, and immunological effects (Boscarino, 2004; Kolassa et al., 2007; Neuner et al., 2008; Schnurr & Jankowski, 1999). Trauma survivors, including child soldiers, frequently report high rates of physical illness, involving a variety of physiological systems. In a recent study (Sommershof et al., 2009), we observed a substantial and clinically relevant change in immune function, based on a 34% reduction of naïve and a 54% reduction of regulatory T cells following war and torture-related PTSD. Thus, there seems to be a positive correlation not just between developed psychiatric illnesses and prior trauma, but also a significant relationship between the amount of traumatic exposure and poor physical health outcomes. An emerging body of literature is successfully exploring the relationship between trauma-spectrum disorders, foremost PTSD and increased somatic complaints, such as cardiovascular, pulmonary, neurological, and gastrointestinal complaints; various types of somatic pain; susceptibility to infectious diseases; vulnerability to hypertension and atherosclerotic heart disease; abnormalities in thyroid and other hormone function; increased risk of cancer and susceptibility to infections and autoimmune disorders; and problems with pain perception, pain tolerance, and chronic pain (Altemus, Dhabhar, & Yang, 2006; Boscarino, 2004; Dyregrov & Yule, 2006; Elbert et al., 2009; Escalona, Achilles, Waitzkin, & Yager, 2004; Ford et al., 2001; Ironson et al., 1997; Joshi & O'Donnell, 2003; Karunakara et al., 2004; Kessler, 2000; McEwen, 2000; Neuner et al., 2008; S. J. Roberts, 1996; Rohleder & Karl, 2006; Schnurr & Jankowski, 1999; Seng, Graham-Bermann, Clark, McCarthy, & Ronis, 2005; Somasundaram, 2001; van der Veer, Somasundaram, & Damian, 2003). It is important to keep in mind that in post-disaster/conflict regions, children and their parents, who remain in the area or are forced to migrate (asylum seekers, refugees, IDPs), have not only survived an unusual number and types of traumatic stressors, but also had to endure poverty related or other social stressors and adversities, such as domestic violence, family separation, and child labor (Catani et al., 2008; Catani et al., 2009). Child soldiering additionally contributes to the already heightened stress load due to adversity. Taking into account the absence of health services in this context, high child, adolescent, and adult mortality, epidemic rates of disease transmission, as well as low life expectancy rates in many of today's (post-)conflict settings come as no surprise (AACAP, 1998; Dyregrov & Yule, 2006; Ehntholt & Yule, 2006; Elbert et al., 2009; Karunakara et al., 2004; Miranda & Patel, 2005; Neuner et al., 2008; Neuner, Schauer, Catani, Ruf, & Elbert, 2006; Odenwald et al., 2007).

Further Psychological Consequences of Trauma Exposure

There are a multitude of further psychological consequences of experiencing traumatic life-threat. In sum, the response to war-related trauma by ex-combatants and former child soldiers in countries directly affected by war and violence is complex and renders the survivors vulnerable to various forms of psychological disorders, whereby stressors may have a different impact during different developmental periods. During childhood and adolescence, the mind and brain are particularly plastic and hence, stress has a great potential to affect cognitive and affective development. Exposure to significant stressors during sensitive developmental periods causes the brain to develop along a stress-responsive pathway. As a consequence, the brain and mind become organized in a way to facilitate survival in a world of deprivation and danger, enhancing an individual's capacity to rapidly and dramatically shift into an intense angry, aggressive, or fearful fleeing/avoiding state when threatened. This pathway, however, is costly because it is associated with increased risk of developing serious medical and psychiatric disorders, like the aforementioned PTSD, and is unnecessary and non-adaptive in peaceful environments (Elbert et al., 2006; Teicher, Andersen, Polcari, Anderson, & Navalta, 2002).

Chronic danger or exposure to extreme stress requires costly developmental adjustment in children. Though the core symptoms of PTSD are the most extensively studied psychological consequences of war, they are clearly not the only ones. In addition to associated features like survivor's guilt or shame and changes in personality, survivors may also suffer from substance-use disorders, affective disorders, including major depression, suicidal ideation, and various forms of anxiety disorders (Bichescu et al., 2005; Boscarino, 2004, 2006; Catani et al., 2009; Johnson & Thompson, 2008; Keane & Kaloupek, 1997; Lapierre, Schwegler, & Labauve, 2007; Odenwald et al., 2007; Schauer, 2008). Surviving traumatic experiences might be followed by social withdrawal, loss of trust, major changes in patterns of behaviour or ideological interpretations of the world, and feelings of guilt and shame (Dickson-Gomez, 2002; Janoff-Bulman, 1992).

Drug Abuse

> Parallel to the trafficking of light weapons, the global commerce of illicit pharmacological stimuli served as an effective catalyst of war. (Maclure & Denov, 2006), p. 127

Systematic drug taking is especially reported among West African-based militia movements. In fact, some authors consider hallucinatory drug intake a critical factor that has contributed to the desensitization of boy soldiers during their prolonged exposure to violent aggression and to prepare them for combat.

Utas and Jorgel (2008) described, in their account of the 'West Side Boys' child soldiers of Sierra Leone, how most fighters used drugs in abundance: crack cocaine, smoked heroin, ephedrine, benzodiazepines, and marijuana:

> Drugs were used in military navigation both to enable soldiers to act courageously and ultra-violently, and also to make fighters relax in extreme settings of fear. (Utas & Jorgel, 2008, p. 502)

Drug abuse may also develop as a means of coping with PTSD (Chilcoat & Breslau, 1998; Shipherd, Stafford, & Tanner, 2005). Gear (2002) notes that substance abuse can be seen as a way to escape the emotional burden associated with extreme poverty and unemployment, at the same time being an attempt to cope with trauma-related symptoms, and thus, is a form of self-medication. In several samples of Somali (ex-)combatants, our group (Odenwald, Hinkel, & Schauer, 2007; Odenwald et al., 2007) found that those with PTSD used more drugs in order to 'self-medicate,' especially those who indicated that drug use helped them forget stressful war experiences (Odenwald et al., 2005). The main drug (ab)used in Somalia are the leaves of the khat shrub that contain the amphetamine-like cathinone. In these studies, we could clearly demonstrate that PTSD leads to higher khat intake and this, in turn, leads to a higher risk for the development of psychotic symptoms, such as paranoia. In a large cross-sectional household survey, involving 4854 randomly selected persons of the general population of Hargeisa, Somaliland, we (Odenwald et al., 2005) observed that 12 years after the end of the liberation war and 6 years after the last fighting, 16% of the ex-combatants were severely impaired by complex psychological suffering, mostly severe psychotic disorders intermingled with drug abuse, trauma-related disorders, and emotional problems. In most cases, uncontrollable behaviour, like aggressive outbreaks, had led to the situation that helpless family members had chained them for years to concrete blocks or trees in the backyard of their compounds or that they had ended up in prison. Among the male adult population, former combatants with civilian war survivors and persons who never had been confronted with war (i.e. those who managed to flee abroad before the war) were compared. The rate of 8% of PTSD, depression, and drug abuse disorder in the civilian war survivors doubled among the group of ex-combatants, and reached less than 3% in those without direct war exposure. In a city like Hargeisa the Capital of Somaliland, every fourth household had to care for one severely affected, dysfunctional young man in the household, drawing resources from all members of the household and forcing the household to lose out on the support and capacity of one male family member.

Depression and Suicidality

The significant correlation between post-traumatic stress disorder and clinical depression is scientifically well known. In a large study by Vinck and colleagues (Vinck et al., 2007) in Northern Uganda, it was found that 52% of formerly abducted children suffered from depression symptoms. A follow-up review of Pham et al. (Pham et al., 2009) with former abductees showed that 40% fulfilled the symptom criteria for major depression. In our study (Pfeiffer et al., submitted), using a child soldier sample again from Northern Uganda, 16% of children who were ever

abducted had a fully developed major depression, with this rate increasing to 24% in those who had stayed in captivity 1 month or longer.

The most disturbing finding is the risk of suicidality in the former child soldier sample of Pfeiffer and colleagues (Pfeiffer et al., submitted). In this group, 34% of children showed a risk of suicidality (17% of children at high risk), with this rate rising to 37% (25% at high risk) in those who were forced to stay in captivity for 1 month and longer. Post-Vietnam studies showed highly elevated risks of suicide among ex-combatants and veterans of war (Hendin & Haas, 1991; Kang & Bullman, 2008; Lester, 2005). Having been an agent of killing and having been a failure at preventing death and injury of others are especially related more strongly to general psychiatric distress and suicide attempts (Fontana, Rosenheck, & Brett, 1992).

The few investigations that there are among children indicate a significant correlation between a childhood diagnosis of PTSD and suicidal ideation. Guilt might play an important mediating factor. In the case of child soldiers, the guilt about having killed members of the family, friends, or community members emerged as a key predictor of suicidal ideation (Pfeiffer et al., submitted). Authors suggest that suicidal ideation may be increased additionally when the child's functioning is impaired (Famularo, Fenton, Kinscherff, & Augustyn, 1996). In an epidemiological study in the LTTE-controlled areas of North-Eastern Sri Lanka (Elbert et al., 2009), we observed a highly significant relationship between PTSD and risk for suicide, which was diagnosed for 26% of the children with PTSD, but only for 7% of children without PTSD. The reasons for these epidemic proportions are unclear. Researchers suggest that for some youngsters, self-poisoning seemed to be the preferred or only method of dealing with difficult situations (Eddleston, Sheriff, & Hawton, 1998). Child soldiers might simply lack adequate coping or interpersonal skills, such as the ability to communicate anger and sadness, or might not be able to place trust in supportive and positively guiding relationships with adults.

Dissociation and Derealization

Another, so-called associative feature of severe child traumatization, often seen in former child soldiers, is the phenomenon of 'dissociation.' During times of trauma, fight or flight responses are rarely options for children, as they are often physically unable to defend themselves or escape. The most readily accessible response to the pain of trauma may be to activate dissociative mechanisms, involving disengagement from the external world. Biological defense mechanisms are activated by the central nervous system, such as depersonalization, derealization, numbing, and in extreme cases, catatonia and 'tonic immobility' (Perry & Pollard, 1998). The individual cascade of defense mechanisms that a survivor has gone through during the traumatic event can replay itself whenever the fear network, which has evolved peritraumatically, is activated again by internal or external triggers. Whereby some survivors have experienced mainly peritraumatic sympathetic activation

(fleeing-feeling anxious; fighting-feeling angry and acting out), others went through the whole defense cascade, with parasympathetic dominance as an end point (e.g. tonic immobility, no more voluntary movement, sensory de-afferentation, loss of muscle tonus, fainting) (Schauer & Elbert, 2008).

Thus, peritraumatic dissociation might be allowing the child to psychologically and physically survive the trauma. Over time, however, it often becomes non-adaptive, emerging at inappropriate times during, for example, situations that may trigger verbal or nonverbal/bodily memories of earlier trauma or at any other time of perceived emotional threat. Children who have learned to cope with trauma by dissociating are vulnerable to continuing to do so in response to minor stresses. The continued use of dissociation as a way of coping with stress interferes with the capacity to fully attend to life's ongoing challenges. During dissociative episodes, the child may stare off and appear as if he or she is daydreaming (Sack, Angell, Kinzie, & Rath, 1986). Such children may be misdiagnosed, e.g. as suffering from ADHD, inattentive type (Joshi & O'Donnell, 2003). Other children may freeze in response to certain activating stimuli. Caregivers or teachers may misinterpret this reaction as an act of defiance. If confronted, more anxious children can quickly escalate to feeling threatened, 'frozen,' and ultimately resort to a classic fight or flight response by becoming aggressive or combative over relatively minor events (Joshi & O'Donnell, 2003; Schauer & Elbert, 2010). Other children may react to stressors by dissolving into regressed, dissociative states that may contain micro-psychotic episodes, including auditory command hallucinations. It is not uncommon for severely traumatized children to hear voices commanding them to harm themselves or others, which is a dangerous, unpredictable condition. Consequently, such adolescents can be erroneously misdiagnosed as suffering from a primary psychotic disorder, such as schizophrenia.

Anti-social and Disruptive Behavior

PTSD is also significantly associated with negative behavior against an individual's own family, the expression of anger and hostility to others, and self-harm (Burton, Foy, Bwanausi, Johnson, & Moore, 1994; Deykin, 1999; Deykin & Buka, 1997; Dodge, 1993; Dutton et al., 2006; Friedman & Schnurr, 1995; Golding, 1999; Joshi & O'Donnell, 2003; Lewis, 1992; Perry & Pollard, 1998). Research shows that former child soldiers have difficulties in controlling aggressive impulses and have little skills for handling life without violence. These children show on-going aggressiveness within their families and communities, even after relocation to their home villages (Wessels, 2006). In a qualitative study, Magambo and Lett (2004) reported that former child soldiers in northern Uganda mainly applied physical violence to resolve conflicts. Although the children sympathized with victims of violence, they could not even think of non-violent alternatives, reflecting an absence of adequate social skills.

Most former child soldiers have spent several critical years of their development in captivity, under the constant threat of abuse and manipulation by their

commanders. Most probably, this period affects the development of a personal and collective identity (Kanagaratnam, Raundalen, & Asbjornsen, 2005). In general, children exposed to war and child soldiering show a strong identification with their own group (Gloeckner, 2007; Jensen & Shaw, 1993) and develop a worldview dominated by political and nationalistic categories (Punamaki & Suleiman, 1990), which often includes pro-war attitudes (Feshbach, 1994). In the Gloeckner (2007) study, it emerged that the longer children had stayed in abduction, the stronger was their rebel-related collective identity. But it may be that their collective identification might occur post hoc after return to their home communities. Gloeckner explained that questions and discussions of family and community members about the cruelty of the LRA's actions may activate a process of reasoning about what had happened. Former beliefs about 'right' and 'wrong' actions might clash with current ones, and in order to regain cognitive homeostasis, identification with the rebel group is aspired. Interestingly, this study showed a positive correlation between collective identification and reactive aggression (physical and verbal aggression and anger). In addition, Gloeckner (2007) reported that formerly abducted children with PTSD might be especially vulnerable to accepting simplistic models of 'good versus bad' – a black and white worldview, which is a known cognitive distortion. Although a rigid political view might be protective during exposure to war events, it might facilitate violent behavior after returning from the fighting to individuals' home communities.

Children living in conditions of political violence and war have been described as 'growing up too soon' and 'losing their childhood' (Boothby & Knudsen, 2000; UNICEF, 2005, 2006). Levels of conscience seemed to be significantly related to the severity of PTSD symptomatology, but also with negative schematizations of self and others and lower self-efficacy ratings (Goenjian et al., 1999; Joseph, Brewin, Yule, & Williams, 1993; Saigh, Mroueh, Zimmerman, & Fairbanks, 1995).

Ideological Commitment

There is also the discussion on ideological commitment of former child soldiers to a cause and its influence on mental health. Some studies (Muldoon & Wilson, 2001; Punamaki, 1996) indicate a protective mechanism, associating strong ideology with good mental health in adolescents, however, mainly in individuals who were exposed to low levels of political violence. A recent study among Tamil child soldiers shows that this protective mechanism only worked in the group of those who were not among the highest exposure intensity group, e.g. length of exposure, being wounded, having killed, having tortured, direct combat (Kanagaratnam et al., 2005). Tibetan refugee children also reported that the sense of participating in their nation's struggle against an oppressor and their strong Buddhist beliefs would have protected them against mental-health difficulties and accelerated the healing process (Servan-Schreiber, Le Lin, & Birmaher, 1998). Cognitive appraisals of experiences seem to matter in symptom development in various forms

and strong feelings of guilt and responsibility might increase trauma symptoms. In Kanagaratnam's study (Kanagaratnam et al., 2005) personal achievement in combat, popularity, knowledge and experience acquired by being a combatant, friendship, and the support of the community were considered as the best of combat life by the youngsters; death of friends, killings of their own people, guilt of being responsible for unnecessary killings, and being confronted with morally conflicting situations were the worst experiences for most of them.

Cognitive, Educational, and Occupational Impairment

When comparing abductees with non-abductees, Blattman (2006) came to the conclusion that especially traumatic experiences during abduction had an adverse impact on education, less years of schooling, greater reading problems, lower occupational functioning, and lower work quality later in life. What research has shown is that exposure to trauma in formative years may affect the maturation of the central nervous system and the regulatory neuro-endocrine systems, as outlined above.

Resulting from exposure to traumatic stress and PTSD, the inability to concentrate and learn often translates into a refusal to attend school and eventual drop-out (Dodge, 1993). In a study by Duncan (2000), college enrollment rates continued to drop at each subsequent semester until, by their senior year, only 35% of students who had suffered multiple abuses were in attendance. In addition, adolescents with PTSD, compared to adolescents who have suffered a stressful experience but did not develop PTSD, were shown to have significantly lower scores on a standardized achievement test compared to their controls (Saigh, Mroueh, & Bremner, 1997).

A study by McFarlane and colleagues (McFarlane et al., 1987) showed that 18% of surveyed children after a disaster were underachieving educationally after 8 months; this figure had a statistically significant increase to 25% at 26 months. The underachieving children were also those with the highest trauma symptom scores and with the most days absent from school, reporting headaches, stomachaches, and feeling miserable and worried as their reasons for absenteeism. Perez & Widom (1994) asserted that child abuse represents a significant risk factor for poor long-term intellectual and academic outcomes, e.g. lower IQ and reading ability. Findings of low IQ in traumatized children were also described by Mannarino and Cohen (1986). In his book '*Scarred minds*,' Somasundaram (1998) presented a list of psychosocial problems in adolescents, sampled from six different schools and colleagues across the war-affected North-Eastern educational zones of Sri Lanka. Within that study, 28–65% of children reported loss of memory, 33–60% loss of concentration, and 35–60% loss of motivation to achieve in education.

Besides psychometric testing for psychiatric disorders, our group (Elbert et al., 2009) undertook cognitive and memory tests in a sub-sample validation group of Tamil school children, residing at the time in the LTTE-controlled areas of North-Eastern Sri Lanka. This region had been affected by two decades of civil war at the time of assessment in 2002. All traumatized children with a diagnosis of PTSD

in the sample reported lasting interference of experiences with their daily life. The neuropsychological testing and the investigation of school grades validated mental-health outcomes further and accentuated some specific cognitive problems that were associated with PTSD, especially the deficiency in memory functions. In fact, the affected children's performance decreased with the number of traumatic events experienced. The children's grades in school, when averaged separately for the two groups and across disciplines, reflected that the problems in functioning were mental in nature, with a focus on deficits in the verbal abilities.

Employment possibilities are already scarce in post-war societies, and researchers observe that finding a job is even more difficult for ex-combatants (Gear, 2002; Heinemann-Gruder, Pietz, & Duffy, 2003). Mogapi (2004) reported from the South African DDR program that ex-combatants, who suffer from a trauma-spectrum disorder, have clear-cut difficulties on the job, suffer increased concentration problems, and are more likely to act out aggressively in difficult situations, which eventually leads to job loss. In turn, the situation of unemployment causes feelings of helplessness and thus aggravates symptoms of depression in a downward-spiral effect.

Transgenerational Effects

Psychological exposure and suffering from trauma can cripple individuals and families, even into the next generations. After having experienced organized violence, affected parents can leave an imprint in their grandchildren's generation (Yehuda, Halligan, & Bierer, 2001). Concern about consequences for offspring, whose mothers were stressed during pregnancy, derives from evidence gained in experimental biology, as intrauterine stress shows to affect neurodevelopment in animals, which are thought to be relevant to cognition, aggression, anxiety, and depression in humans (Seckl & Holmes, 2007). Chronic maternal stress during pregnancy, for example, interrupts healthy regulation of hormonal activity including cortisol, which easily crosses the placenta during the first two trimesters (Phillips, 2007; Sandman, Wadhwa, Chicz-DeMet, Porto, & Garite, 1999; Sandman et al., 1999; Weinstock, 1997, 2005). Changed hormonal regulation then can promote a range of emotional and cognitive impairments (Sapolsky, Krey, & McEwen, 1985; Sapolsky, Uno, Rebert, & Finch, 1990). While the genome, the DNA sequence, remains unaffected by acute stress responses, its readability (i.e. epigenetic alterations) may be manipulated by a variety of conditions, notably stress hormones (Meaney, Szyf, & Seckl, 2007). If a pregnant mother is affected by severe and chronic stress, epigenetic modifications in the child may act as a molecular or cellular memory that tune the offspring for one or several generations for survival in a hostile environment, making generations more vulnerable for mental illnesses, including suicide (Szyf, McGowan, & Meaney, 2008). The quality of how a mother is able to attach to and care for her child alters the expression of genes in the child that regulate behavioral and endocrine responses to stress, as well as hippocampal plasticity and

development. These effects may contribute to the development of differences in stress reactivity and certain forms of pathologic cognition.

Literature shows that boys and men with war and combat experiences are more likely to exhibit violent behavior (Begic & Jokic-Begic, 2001; Bryne & Riggs, 1996; Catani et al., 2008; Glenn et al., 2002). The same can be expected for men who have a history of child soldiering. In families where men show violent behavior against women, children are maltreated as well (Edleson, 1999; Levendosky & Graham-Bermann, 2001). In fact, domestic violence against the child's mother during the first 6 months of life elevates the risk of physical child abuse three times, while doubling the risk of emotional abuse and neglect of the child (McGuigan & Pratt, 2001). Additionally, babies born to traumatized and socially stressed mothers, which certainly can include formerly abducted child-mothers (i.e. women who gave birth to babies in captivity), are born with a deformed stress regulating system (HPA-a), which translates into babies' higher and faster arousal peaks, longer intervals of crying and irritability, and impaired affect regulation (Sondergaard et al., 2003). Such behavior by infants is a challenge for any new parent, but is a major challenge for a parent who her/himself suffers from a disorder of the trauma spectrum, has little or no social support and lives in poverty. Parents of 'highly stressed' babies report less confidence and joy in their role as caregivers and the phenomenon of 'negative reciprocity' starts to develop (Papousek & von Hofacker, 1998). In fact, research shows that behaviourally inhibited children, who are fearful and have a tendency to withdraw, were regarded by their mothers as hard to soothe and received less care and less maternal sensitivity as a result. This, in turn, heightened the children's sensitivity to stress and changed their internal stress-diathesis system towards a biased attention to threat (Fox, Hane, & Pine, 2007).

A child with reduced abilities for affect regulation, in combination with one or two traumatized primary caregivers, is a very great potential risk constellation. Internalized affects of violent and neglectful caretaker models deform the psyche and can also imprint on the next generation. As a result, the family suffers from heightened levels of stress, and psychiatric symptoms can be evoked in people who live with an individual who suffers from PTSD. Violence and trauma at the time of parents' childhood may result in problematic attachment relationships that have long-term consequences for mental health and interpersonal relationships for their children. An intergenerational cycle of dysfunction is set in motion (Bowlby, 2004; Grossmann, Grossmann, & Waters, 2005; Lewis, 1992; Qouta, Punamaki, & Sarraj, 2003; Smith, Perrin, Yule, & Rabe-Hesketh, 2001; Solomon, 1988; Zuravin, McMillen, DePanfilis, & Risley-Curtiss, 1996).

The amount of stress encountered in early life sensitizes an organism to a certain level of adversity; high levels of early-life stress may result in hypersensitivity to stress later, as well as to adult depression. Beyond epigenetic factors, fearfulness and nurturance are transmitted from generation to generation through maternal behaviour (Parent et al., 2005). Traumatized parents are challenged in providing secure attachment, because post-traumatic symptoms of emotional numbing might be hindering emotional closeness. Symptoms of hyperarousal, such as irritability,

might make it even more challenging to regulate babies and their own affect adequately. Parental sensitivity in pre-empting a child's need might be impaired, and 'high expressed emotions' without sufficient verbalization of the context can render a small child helpless in understanding parental motivation and intention. It has been shown that if children live in such unpredictable reward–punishment environments, their psycho-physiological arousal is significantly heightened and will over time lead to a changed hypothalamic–pituitary–adrenal axis. Beyond coincidence, researchers clearly note higher rates of psychiatric morbidity in children of survivors, compared with non-traumatized comparison groups (Ben Arzi, Solomon, & Dekel, 2000; Bramsen, van der Ploeg, & Twisk, 2002; Dekel & Solomon, 2006; Dirkzwager, Bramsen, Ader, & van der Ploeg, 2005; Franciskovic et al., 2007; Solomon et al., 1992; Weinstock, 1997).

A partner, father, or grandmother suffering from traumatization can behave like a distant, fearful stranger, who cannot tolerate closeness or emotional expression, even within the family unit. Survivor's intense and bizarre way of self-expression in form of irritability, jumpiness, or hypervigilance may be so extreme as to appear like paranoia and can engender fear, confusion, and a sense of powerlessness in family members (Al-Turkait & Ohaeri, 2008; MacDonald, Chamberlain, Long, & Flett, 1999). On the other hand, children of survivors can be equally affected by their parents' symptoms of numbing and avoidance, which are associated with substantial decrements in parent–child relationship quality and which prevent normal emotional expression and closeness (Lauterbach et al., 2007). Consequently, children are forced to operate within a domestic context in which intimacy, as well as affect regulation, is severely impaired (Almqvist & Broberg, 2003). Avoidance symptoms seem to have an additional deleterious effect on the parent–child relationship satisfaction. Studies on fathers, who have experienced numerous war events, show that feelings of detachment and numbing can carry over to their children, leading to behavioural problems in the child (Ruscio, Weathers, King, & King, 2002; Samper, Taft, King, & King, 2004). Based on the vulnerability of surviving a war or growing up in a post-conflict setting, children, in turn, might also become more vulnerable to forces that incite violence (Somasundaram, 2002; Uppard, 2003).

Social Stigma of Returning Girls and Women

Between the years 1990 and 2003, girls were present in fighting forces (government forces, paramilitary/militia, and armed opposition groups) in 55 countries, and in 38 of these countries they were involved in situations of armed conflict (McKay & Mazurana, 2004). Girls' roles typically overlap and include working as spies and informants, in intelligence and communications, and as military trainers and combatants. They are health workers and minesweepers, and they may conduct suicide missions. Other support roles include raising crops, selling goods, preparing food, carrying loot and weapons, and stealing food, livestock, and seed stock. It is important to understand that underlying these various roles and

activities, girls' participation is central to sustaining a force because of their productive and reproductive labor. As such, they replicate traditional societal gender roles and patriarchal privilege, whereby girls (and women) serve men and boys. Honing their labor is a foundation, upon which fighting forces throughout the world rely (McKay & Mazurana, 2004). The following are three examples of the participation of girls. The first is described by V.A., a female, 20 years at time of therapy (May 2006), who had spent 10 years in abduction with the LRA, Northern Uganda:

> There were many other battles, but this had been the worst one I had been in. This time they had sent us out to do work in Atiak at night. We separated in smaller groups and were told to loot the IDP camp there. We were just about to enter when the dogs barked. I squatted down with others and waited in some distance. The boys went ahead. The idea for us girls was to shoot and scare soldiers and make the group seem larger. I had a newly abducted girl with me. A bomb came so fast that I didn't realise it even detonating. My body was paralyzed and the bomb particles entered my body. My left arm, the inside of my left leg and my right leg got wounded. We tried to flee, but I could just move a small distance. The aeroplane came back to attack us, I ran, taking the newly abducted with me. . .

J.A. is a female, 15 years at time of therapy (May 2006), who spent 1 year in abduction with the LRA, Northern Uganda:

> It was evening and we were waiting along the roadside. We were many. Most of the rebels had guns, just like government soldiers. We were in Anaka, hiding in the grass. We had formed two groups on either side of the road. The rebels with guns were in the front line, then the other children were seated further behind in the bush. I was in the back. The men are the ones who do the shooting. Us girls were told to wait and ambush. The command for the boys was to look out for army vehicles and shoot those. Then we heard the sound. It was a lorry. It was noisy and colored like an army car. There were people seated in the cabin, but also many on the back of the truck. My heart was bumping. I feared that these were government soldiers and that they would attack us. But I saw civilians and calmed down. The command for shooting was given. Then we saw the truck burning. There was a big fire and people burnt. We took the loads and ran. . .

A.A. is a female, 15 years at time of therapy (May 2006), who spent 3 years in abduction with the LRA in Northern Uganda:

> They untied me and I was told to sit with a man. He was a lot older than me, he looked mature, like a grown-up. I was 13 years at the time. I didn't like him at first sight, but I had to sit down next to him. He told me that he had sent the boys to go and get him a girl to be his wife and that I am the one. Then he asked my name only. He spoke no more. My heart was beating much. I was scared, since I was not sure what he meant. Some people were cooking greens and I ate some food. After a while the man asked me to come with him. We went to a clearing under a tree. First, I thought that he takes me aside from the others, because he wants to kill me. He told me to lie and said that we would sleep there. I lied down on my side, like going to sleep. He was upset about this and started to beat me. I was surprised. He slapped my face and head. He said: "Don't act stupid. You know what I want from you." Then he pushed me unto the ground and laid on me. My heart was beating really fast now. He had a bad body smell. Then he forced himself into me. He said: "if you cry, I will kill you." When I heard his words, I got so scared that I actually started crying. This made him put a gun to my head. He warned me. I could feel the gun. I stopped crying. He continued raping me and when he was finished he left me alone. He told me to get up. I was not able to. Everything in my body pained. From then on, he raped me every night. I realised that this is how it would be for me. Every night we went to that tree.

Key gender-based experiences of both women and girls during armed conflicts consist of sexual violence, including torture, rape, mass rape, sexual slavery, enforced prostitution, forced sterilization, forced termination of pregnancies, giving birth without assistance, and being mutilated (United Nations, 2002). Girls in fighting forces in Mozambique, Northern Uganda, and Sierra Leone reported sexual violence, and abducted girls were almost universally raped (McKay & Mazurana, 2004). As was the situation in Sierra Leone, sex labor in Angola was integral to the function of girl soldiers (Stavrou, 2005). Again, depending on the context, when they reach puberty, girls may supply reproductive labor through giving birth to and rearing children, who become members of the force. For example, in the LRA fighting force in Northern Uganda, the leader Joseph Kony has been prolific in fathering large numbers of children, who have grown up in his force. Physically, girl soldiers are challenged to survive as they cope with illnesses, exhaustion, wounds, menstrual difficulties, complications from pregnancy and birth, sexually transmitted diseases, and a host of other maladies, such as malaria, intestinal parasites, tuberculosis, anaemia, diarrhea, malnutrition, disabilities, scars, and burns (McKay & Mazurana, 2004; Stavrou, 2005).

Returning women, who are perceived to have had sexual relations with combatants, whether forced or voluntarily and/or bring back children from such encounters, belong to the most stigmatized group of survivors. An example is given by M.K., who is a female, 22 years at time of diagnostic interview (January 2009), and who had been abducted for 6 months by Interahamwe groups, North Kivu, DRC:

> Since I was able to run from the Interahamwe and have managed to survive the time in the forest, my husband does not talk to me anymore. They found me in a village and brought me to this hospital. Now I am pregnant from the many weeks of rape in the forest and I am infected, there is a white liquid running from my vagina and great pain in my abdomen. One of the nurses gave me a mobile phone the other day and I called my husband in Goma, but he hung the phone up on me when he heard my voice; even though he was there the night I was raped and abducted by the rebels from our own house. The worst thing is that I had to leave my two small children behind that night. How are they doing without me? My son was only 9 months old at the time and I was still breastfeeding him. Sometimes I miss him so much that I have visions of him lying in a corner of the room here in the hospital all naked and hungry and crying and I go there and take him into my arms and console him until one of the women wakes me up from this day dream, I notice that I have tears running from my eyes.

Most communities regard the illegitimate children as a shame, not only on the child and mother, but also on the family and the community as a whole, sometimes forcing mothers to choose either between their child or their community (Redress, 2006). Schalinski and research team (Schalinski et al., submitted) found that a great number of returning women in Eastern Congo are living in forced separation from their husbands and experience homelessness after they are back from captivity. This is especially the case when they are feared infected with STDs and HIV and if they bring back a child from the time in the forest. In many cultural settings, girls are unable to get married or re-married and find it difficult to enter a new supportive partnership, within which to bring up their children in civilian life. The environments into which girls reintegrate are also problematic. Domestic violence

and sexual violence are more common in IDP camps and communities of war-torn areas, as men can be traumatized, depressed, alcoholic, or otherwise aggravated, due to the strain of war, which can contribute to violent behaviour (Redress, 2006).

Demobilization and reintegration services are still a novelty for formerly abducted girls and women. Gender disparities that privilege boy soldiers over girls mean that few girls enter or benefit from formal demilitarization and demobilization or from rehabilitation and reintegration programs where the re-adjustment process can be fostered. These programs are mainly designed to restore security, and as female combatants are not seen as a major security threat, they are insufficiently targeted (Bouta, 2005). In a study conducted in five provinces of Eastern Democratic Republic of Congo, 23 girls, as compared with 1,718 boys, were demobilized by four international NGOs, despite girls being recruited or abducted as extensively as boys; it was estimated that girls comprise 30–40% of children in fighting units (Verhey, 2004). Girls' and women's full reintegration most likely encompasses a much more holistic approach, including mental health, reproductive health and vocational training interventions, because it can not be assumed that traditional socioeconomic support within marriage is an option for most female returnees.

The Challenges of Demobilization and Reintegration of Child Soldiers

Most children get freed from captivity or from armed groups during combat. A significant number has stayed out in the bush for several years during key phases of their development, making them feel unfamiliar and at times afraid of civilian life. Three examples follow. The first is K.K.G.'s experience, who is a male, 16 years at time of diagnostic interview (March 2009), and who spent 3 years as an active recruit, joining at age 13 years:

> How did I get out? The MONUC freed me together with many others. It was a fierce battle that day, but they won over us. My commander was freed too and he could go his way. I think he lives in Kinshasa today. Those over 18 years could just take off after a few days, they were given amnesty and some got offers by the Congolese army to join them. But we children were taken to different child rehabilitation centers in the province. That is how I ended up in Bukavu. When I was taken away the commander said to the UN people: "You know that you are taking my son. I will get him back that is for sure. You just wait for me". Since that day I am afraid. I know he has made his way to Bukavu. He has already once waited for me outside the gates of the children's center, telling me to come back to the bush with him. I don't know what I should do? I fear him greatly, but I also fear this new life.

B.O. is a male, 15 years at time of therapy (May 2006), who spent 4 years as an active recruit, abducted by the LRA at age 12 in Northern Uganda:

> On the 25th of December, Christmas day, we had gone out to get sugar cane. It was 6 pm in the evening, just before it was getting dark. As we were already in the fields and harvesting, the UPDF started firing. There were 7 of us rebels, but the soldiers were many. They were all hiding in the ground. The firing started and I tried to escape. Suddenly a bullet hit me on

> my back and it came out in the front, just above my heart. I started vomiting blood. There was this piercing, sharp pain. When I was breathing, it felt like air was coming through the hole. I was sure that now the time had come, I would die. I kept bleeding, I just let the blood. I knew I must run, so I made it up to the end of this garden. I was so afraid that the soldiers would come and get me. I had been left alone. The others had left me. I laid down again with my face down on the ground and fell unconscious. Soldiers saw me and caught me the next day. I was so frightened of them, you never knew whether they would kill you now. They brought me to the nearest IDP camp, where they had a small military post. They asked: "Where is your gun?", "Where is your commander?" "Where are the other rebels?" I told them how we got separated, that I had been alone. . .I slept in the barracks for two more nights together with the soldiers. Finally they brought me to Gulu. . .Tomorrow I will go back home. First my father has told me to see him in Kitgum, but he is a man who likes alcohol much, he drinks a lot and is poor. I finally hope to live with my dear mother. The thing that is most important for me is my education. I think I can make it, I want to go back to school so much. I just have to find the necessary money. I am sure I will. And one day I will be a tailor.

A. A. is a female, 15 years at time of therapy (May 2006), who was abducted at age 13 by the LRA in Northern Uganda:

> We were cooking as the intelligence boy came and told us that soldiers were moving towards our settlement. We abandoned everything and UPDF started to chase us. We had been crossing a swamp when we found the soldiers hiding. We were running on one side and soldiers on the other. I could see them and at some point we just scattered. The UPDF saw me also, but they did not aim at me. They saw that I was a girl. I saw many rebel children falling and dying that day though. Ojok was also there. I liked him a lot. He had been the one who abducted me. Ojok never got used to killing. He even refused to do it. I liked him for that. He had a rank in the rebel group. Whenever Ojok saw me being sad, he came over to me and told me that he will think of a plan to take me home. He was like a brother to me. I saw him running and ran behind him. I got so frightened. Ojok told me that we are safe and that I should not worry, but I knew it was not true. I knew we might die any moment. We kept running. After some time I was hiding under a tree. Ojok saw that, he looked at me and said: "Get up, we will go home now." As we started off, we met another girl. We took her along as well. In a way, both of us were afraid of Ojok. We could not be sure that he would deliver us. Would he trick us? He reassured us that he would release us. We were so far from a place of release. We had to walk another night and day to get there. On the way we passed an old military camp. The soldiers called us and we went to them. They said: "don't fear, you are home now."

Psychiatric distress and malfunctioning, especially when expressed as outward aggression, irritation, an acting out of intrusions (e.g. flash-backs) and dissociation, exacerbates ex-combatants' difficulties in reintegrating into communities and the wider society (Pfeiffer et al., submitted). Ex-combatants suffering from psychiatric distress might face double stigmatization for having engaged in combat and for being noticeably psychologically affected. Beyond the multitude of psychological problems that former child soldiers might be struggling with, there are other hindrances that can adversely affect the successful reintegration. Child soldiers carry a special burden of simultaneously being the recipient and perpetrator of violence (Boothby & Knudsen, 2000); they are, therefore, a distinct group among children and adolescents in war regions. They are victimized twofold, because they first are exposed to traumatic experiences and later are blamed and stigmatized for the atrocities they have committed (Bayer et al., 2007). In many cases child soldiers are forced

to commit atrocities against civilians, at times against own family and community members, which they are required to do so as to cut-off return routes and to inflict increased terror and psychological harm on home communities. These practices may force the recruited soldiers to violate their own moral principles and to break from any social attachment (Amone-P'Olak, 2007), ultimately resulting in a pull factor for re-recruitment. This fact alone challenges their integration and re-acceptance.

However, after such traumatizations, not just the formerly abducted child, but also the community has changed. On the communal level, the reintegration of ex-combatants is a reciprocal process that happens within the host communities where the former fighters are settled. The attitudes of the host communities towards the ex-combatants are of particular importance for reintegration success (Kingma, 2000). In some cases, because of assumed or actual abusive violence that combatants have perpetrated against civilians during war times, the attitudes of host communities towards former combatants are negative. There is no doubt, and there is empirical evidence, that adequate social support and other supportive community practices are truly important mediators of the expression of trauma-related symptoms (Ahern et al., 2004; Basoglu et al., 1994; Brewin, Andrews, & Valentine, 2000; Coker et al., 2002; Johnson & Thompson, 2008; Kovacev & Shute, 2004; Mollica, Cui, McInnes, & Massagli, 2002). A strategy of social support can be an additional supportive element for affected communities, who have lost children to abduction and child soldiering; yet, this is possible only when a sufficient number of adult community members remain at least partly protected from the psychological impact of armed conflict, organized violence, and forced displacement. However, many key community members, such as parents, teachers, elders, counselors, nurses, lawyers, and doctors in post-conflict settings suffer from physical, as well as mental impairment, incapacitating their normal, healthy ability to function as caretakers, providers, and role models. Neither local healers nor religious leaders, who have traditionally offered health-related services, or carried out re-integration measures for individuals who had committed harm in the community, nowadays have remained unaffected by the stressors of war and violence (Glenn et al., 2002; Human Rights Watch, 2000; Kenyon Lischer, 2006; Pittaway, 2004; Solomon, 1988; UNHCR, 2003; van de Put, Somasundaram, Kall, Eisenbruch, & Thomassen, 1998; Widom, 1989). As members of the Children and War Foundation (Dyregrov, Gupta, Gjestad, & Raundalen, 2002, p. 138) state:

> There are some war situations that are so unprecedented, i.e. massacres in the community, that no cultures have societal healing or coping mechanisms to apply.

Thus, the culturally indigenous mechanisms of healing and reconciliation at the family and community level, which might have served in the rehabilitation of returning child soldiers, are in most settings not available anymore. It is not surprising that former abductees report difficulties when coming home to their community after abduction, especially those who met criteria for symptoms of PTSD. Researchers (MacMullin & Loughry, 2004; Pham et al., 2009) have found that formerly abducted children in Northern Uganda do experience difficulties in psychosocial adjustment,

especially when suffering from clinical symptoms of the post-traumatic stress syndrome and depression. Affected youngsters not only experience more feelings of hopelessness and fear, but also more difficulties with regard to peer interaction, family interaction, and community activities, when compared with less clinically impaired non-abductees.

In reintegration programs, ex-combatants with PTSD are considered an especially problematic group. Recent studies, which have examined the prevalence of psychological effects after conflict, suggest that traumatic exposure and resultant symptoms of PTSD and depression can influence how individuals perceive mechanisms aimed at promoting justice and reconciliation. In 2004, Pham and colleagues (Pham, Weinstein, & Longman, 2004) investigated this association in 2074 adult survivors of the Rwandan genocide. The findings indicated that traumatic exposure and PTSD symptoms were associated with negative attitudes towards reconciliation. Bayer's group (Bayer et al., 2007) undertook a similar research, in that they tried to understand the association of trauma and PTSD symptoms with openness to reconciliation and feelings of revenge among former Ugandan and Congolese child soldiers. The results indicated that those among the group of former child soldiers (girls and boys alike), who showed clinically relevant symptoms of PTSD, had significantly less openness to reconciliation and significantly more feelings of revenge than those with fewer symptoms. Likewise, the children with PTSD symptoms might regard acts of retaliation as an appropriate way to recover personal integrity and to overcome their traumatic experience. In the former Yugoslavia, Basoglu and team (Basoglu et al., 2005) similarly found that PTSD severely impedes processes of reconciliation and reintegration: war survivors exposed to war-related traumata displayed stronger emotional responses to perceived impunity, including anger, rage, distress, and desire for revenge, than those who did not experience war. Moreover traumatized survivors showed less belief in the benevolence of people and reported demoralization, helplessness, pessimism, fear, and loss of meaning in and control over life. Vinck et al.'s (2007) study found a very similar association between survivors' symptoms of PTSD and depression and their attitude toward peace. Those who met the PTSD symptom criteria were more likely to favor violent means to end the conflict, while those with depression symptoms were less likely to identify non-violence means to achieve peace. In these populations, psychological symptoms associated with the trauma may be closely related to a desire for retribution, rather than restorative ways to deal with past violence.

There seems to be also a link between symptoms of traumatization, aggression, and perceived stigmatization in returning, former child soldiers (Allen & Schomerus, 2006; Annan & Blattman, 2006; Corbin, 2008; Pfeiffer et al., submitted). In the United States, attitudes of the home environment were found to have a high impact on adult ex-combatants' ability to cope with war and trauma and the subsequent psychopathological development. This effect has been conceptualized as the 'home-coming reception' (Fontana & Rosenheck, 1994). Having belonged to a faction that was very abusive towards civilians during the civil war in Sierra Leone had a significant negative effect on reintegration (Humphreys & Wienstein, 2005). Our study (Pfeiffer et al., submitted) showed that stigmatization of any kind (e.g.

being called names, such as 'killer,' being accused by community members to have an 'evil rebel mind' or 'disturbed mind,' or being forcefully pushed away from the well while fetching water) is reported by 73% of the formerly abducted youths. In this study, stigmatization was also found to be associated with symptoms of PTSD and clinical depression, as well as with elevated levels of aggression. Stigmatization was connected more closely to heightened levels of psychopathology than to the mere fact of having been abducted. The authors' assumption is that children, who have a mental illness as a result of their time in the bush and show symptoms of the trauma spectrum, are the ones who are stigmatized, primarily because they behave 'different', e.g. experience nightmares, behavioural acting out, are prone to bizarre-looking forms of dissociation, and choose to stay alone and distant from others. In the same sample, increased levels of aggression (e.g. verbal, physical, anger, and hostility) were found in the group of former abductees, with 31.6% showing heightened aggressiveness. Aggression was associated with having a history of abduction, an increased level of perceived stigmatization, heightened symptoms of psychological disorders, and having survived a higher number of traumatic experiences. The score on aggression additionally showed a connection to higher identification with the rebel group. Interestingly, having been forced to kill and the duration of abduction did not predict heightened aggression, suggesting that it is the overall score of psychological symptoms, resulting from traumatic experiences during abduction, which drives levels of aggression and stigmatization, as well as identification with the rebel group. There were no gender differences in these findings.

Social isolation and the formation of ex-combatants as a distinct civilian subgroup area consequence of the combined effects of factors, which include host communities' negative attitudes towards ex-combatants and their psychological problems causing difficulties in social interactions. The risk of re-recruitment heightens when ex-combatants fail to reintegrate economically and socially into their civil host communities. When a sufficiently large number of former combatants and of civilians are affected by war-related psychological problems, and remain without assistance for psychological rehabilitation, the opportunity to initiate self-sustained ways of living and with it, substantial economic development, will be considerably reduced. Another round in the cycle of violence seems inevitable if psychological wounds are not addressed. Children know that hidden weapons and former comrades are always waiting somewhere out there.

Recommendations

> I often think of all these children out there who still suffer and try to survive. So many people out there went through the same thing as I did. When I go through town here, there are so many children I recognize from the bush and they recognize me. Those who know me from the bush when we meet say, "we came back, and now you are also back, who would have thought?" If they can manage, I can also survive. When you ask me about 5 years from now where I would like to be in life, then I say, if all goes very well I will survive and be alive." V.O., male, 18 years at time of therapy (October 2008), who was abducted twice (first time at age 4 for 7 years, second time at age 13 for 2 years) by the LRA, Northern Uganda.

Social and traumatic stress, caused by multiple experiences of violence, has a severe negative impact for the reintegration of ex-combatants and child soldiers on several levels. Rehabilitative efforts on all related levels are needed to increase the successful reintegration of former combatants into civil society; most importantly, their mental-health needs must be attended to. A most likely, but largely unstudied, driver of the cycle of violence might be the detrimental impact of experiencing massive violence and abuse on individuals' psychological functioning, and the related social dynamics and consequences for communities. Reconciliation and peace building might be impeded by the psychological problems of a critical mass of individuals. In particular, large-scale violence may cause patterns of emotional and cognitive processing, which might feed into further violence (Schauer & Schauer, 2010 this volume). War-related severe stress, even though transient, indelibly changes an individual on various levels. On a cognitive level, traumatic experiences shatter the most fundamental beliefs about safety, trust, and self-esteem, which lend instability and psychological incoherence to the individual's internal and external worlds (Janoff-Bulman, Berg, & Harvey, 1998). As a consequence of a shattered belief system, the world is perceived as basically unsafe, frightening, and evil. Victims feel weak, dependent, and without the control and competence that is vital for the psychological and cognitive coping with the environment. Severely psychologically affected, formerly abducted children need more clinical, therapeutic attention, rather than unspecific psychosocial or social approaches. In reality, current rehabilitation interventions for former child soldiers focus on brief vocational training, family tracing, and reunification. The latter two are done with the assumption being that once a child lives with his or her family again, the psychological wounds will automatically heal.

It must be clearly understood that as of today, no structures are in place to adequately address the psychological rehabilitation needs of formerly abducted children and child soldiers in the Great Lakes region of Africa or any other resource-poor, conflict-stricken region of the world. In fact, child combatants have a particularly high risk of being left out or marginalized by international programs in the reintegration process (Colletta, Boutwell, & Clare, 2001). They are especially vulnerable for reintegration failure. Only in recent years, the fact that both these vulnerable groups and ex-combatants in post-conflict countries suffer from psychological problems has been recognized. The acknowledgement that many of them are unable to profit from standard reintegration tools, due to severe psychological distress, daily malfunctioning, and gender-based discrimination, is slowly leading to the inclusion of special program steps for this group. The lack of programs is a clear neglect of the international community's obligation to psychologically rehabilitate former child soldiers, according to Article 39 of the United Nations Convention on the Rights of the Child (United Nations, 1987).

In the absence of psychological rehabilitation services, efforts to promote social reconstruction may be undermined, because rates of abduction are near 50% of the overall population in war-affected regions, such as Northern Uganda, Angola, and parts of the Democratic Republic of Congo (Pfeiffer et al., submitted; Roberts, Ocaka, Browne, Oyok, & Sondorp, 2008; Vinck et al., 2007). A critical mass of

affected persons in a given society can, therefore, be assumed lost as potential pro-active, mediating community agents for change and development (Schauer & Schauer, 2010 this volume). These child ex-combatants are, to a great extent, impaired in their daily functioning. This outcome of traumatization has far-reaching consequences for the process of reconciliation, peace building and development within their communities and post-war areas at large. It might even fuel cycles of violence, reaching into following generations. Providing them with specific, trauma-focused, public mental-health services (see Chapters 9, 16) might be a key component for breaking this vicious circle.

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